

# Rider 42 Professional Development Research Study

Presented to the Texas Education Agency  
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# **Rider 42 Professional Development Research Study**

**January 2011**

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*Texas Education Agency*

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# Table of Contents

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Acknowledgments.....	ii
Contributing Authors .....	ii
Table of Contents.....	iv
List of Acronyms.....	v
List of Tables .....	vii
List of Figures .....	ix
Executive Summary.....	1
Background .....	1
The Rider 42 PD Research Study.....	2
Conclusions and Recommendations.....	11
Continuing Evaluation Activities .....	13
Chapter I. Introduction .....	15
Section 1. Legislative and Program History .....	15
Section 2. Summary of the Literature on Teacher Professional Development .....	38
Section 3. The Rider 42 Professional Development Academies .....	41
Chapter II. The Rider 42 PD Research Study .....	47
Section 1. Background of the Study.....	47
Section 2. Research Objectives and Associated Questions .....	51
Section 3. Data Sources and Methods of Data Collection .....	54
Section 4. Analytic Approaches.....	64
Chapter III. Key Findings.....	65
Training-of-Trainers Participants .....	65
Summer PD Academy Participants .....	66
Chapter IV. Detailed Findings by Research Question .....	75
Section 1. Quality of the Face-to-Face PD Academies’ Content.....	75
Section 2. Delivery of the Face-to-Face PD Academies .....	83
Section 3. Participation in the Face-to-Face PD Academies .....	133
Chapter V. Continuing Evaluation Activities .....	141
References .....	151
Appendices.....	153

# List of Acronyms

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AR	Algebra Readiness
ARI/AMI	Accelerated Reading/Math Instruction
AU	Academically Unacceptable
CARS	Center for Academic and Reading Skills
CCRS	College and Career Readiness Standards
CLASS-S	Classroom Assessment Scoring System for Secondary
ELA	English Language Arts
ELAR	English Language Arts and Reading
ELLs	English Language Learners
ELPS	English Language Proficiency Standards
EOC	End-of-Course
ESC	Education Service Center
FY	Fiscal Year
HB	House Bill
IMI	Intensive Mathematics Instruction
IRI	Intensive Reading Instruction
KTRAs	Kindergarten Teacher Reading Academies
LBB	Legislative Budget Board
LEP	Limited English Proficiency
LMT	Learning Math for Teaching
MSTAR	Middle School Students in Texas: Algebra Ready
NSDC	National Staff Development Council
OPD	Online Professional Development
OTRA	Online Teacher Reading Academies

## List of Acronyms (continued)

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PD	Professional Development
PDRS	Professional Development Research Study
RtI	Response to Intervention
SB	Senate Bill
SSI	Student Success Initiative
SSIG	Student Success Initiative Grants
Rider 42	Rider 42 in Article III of the General Appropriations Act in 2009
Rider 44	Rider 44 in Article III of the General Appropriations Act in 2007
TAAS	Texas Assessment of Academic Skills
TAKS	Texas Assessment of Knowledge and Skills
TALA	Texas Adolescent Literacy Academies
TEA	Texas Education Agency
TEKS	Texas Essential Knowledge and Skills
TMA	Teacher Math Academies
TMSFA	Texas Middle School Fluency Assessment
TOTs	Training-of-Trainers
TPRI	Texas Primary Reading Inventory
TRAs	Teacher Reading Academies
TxRCFP	Texas Response to the Curriculum Focal Points
UTD-ERC	University of Texas at Dallas Education Research Center
VGCLA	Vaughn Gross Center for Reading and Language Arts at the University of Texas at Austin

# List of Tables

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Table 1.1. Timeline of SSI-Related Programs by Year.....	16
Table 1.2. History of State Appropriations for the SSI.....	18
Table 1.3. State Appropriations for ARI/AMI by School Year.....	23
Table 1.4. History of State Appropriations for TALA by Fiscal Year.....	26
Table 1.5. Professional Development Programs Developed Under Rider 42.....	32
Table 2.1. State Trainings Observed.....	57
Table 2.2. Regional Training Survey: Response Rate by PD Academy TOT.....	62
Table 2.3. Teacher PD Participant Response Rate by Academy.....	63
Table 3.1. Number of Rider 42 PD Academy Sessions and Teacher Attendees.....	67
Table 4.1. Structure and Delivery of TOT Sessions Were of High Quality.....	89
Table 4.2. Comparison of Selected Survey Items by Academy TOT Session.....	90
Table 4.3. Coverage of Key Content and Project Share in TOT Session.....	91
Table 4.4. Usefulness of Training Resources and Materials.....	93
Table 4.5. Trainings-of-Trainer Participants by Region and Number of Academies Attended.....	97
Table 4.6. Regional Trainers’ Primary Place of Employment.....	98
Table 4.7. Regional Trainers’ Experience Providing PD and as an Online Facilitator.....	99
Table 4.8. Number of TOT Participants by Rider 42 PD Academy.....	99
Table 4.9. Suggestions for Improving Promotion/Advertising Efforts.....	102
Table 4.10. Teacher Recruitment Targets Among 10 ESCs Reporting Setting Recruitment Goals.....	102
Table 4.11. Comparison of ESC Promotion and Support with Other PD Efforts for Teachers.....	103
Table 4.12. Promotion of PD Academies.....	104
Table 4.13. Comparison of Promotion/Advertisement.....	105
Table 4.14. Reasons for Attendance.....	105
Table 4.15. Comparison of Interest in PD Academies.....	106
Table 4.16. Delivery of Teacher Training.....	107
Table 4.17. Challenges Faced When Training Teachers.....	108
Table 4.18. Preparedness of Teachers.....	109
Table 4.19. TEA’s involvement in Academy Promotion/Advertisement.....	110

## List of Tables (continued)

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Table 4.20. Preparation for Training on Project Share.....	111
Table 4.21. Delivery of Training Was of High Quality.....	112
Table 4.22. Adequacy of Training Site.....	113
Table 4.23. Instructor Competence.....	114
Table 4.24. Coverage of Key Content.....	115
Table 4.25. Perceived Increase or Improvement in General Teacher Knowledge.....	116
Table 4.26. Perceived Increase or Improvement in Academy-Specific Teacher Knowledge.....	117
Table 4.27. MSTAR Math Academy for Grades 5-6 Universal Screener Knowledge.....	118
Table 4.28. Perceived Increase in Classroom Instruction Knowledge.....	119
Table 4.29. Project Share Coverage by Academy.....	120
Table 4.30. Resources Utilized During the Project Share Training.....	121
Table 4.31. Coverage of Project Share Uses.....	122
Table 4.32. Preparedness to Use Project Share.....	123
Table 4.33. Interest in Using Project Share.....	124
Table 4.34. Number of Rider 42 PD Academy Sessions and Teacher Attendees.....	134
Table 4.35. Percent of Academy Participants that also Attended the ELPS Academy and the Science TEKS Overview Academy for Grades K-12.....	135
Table 4.36. Demographic Characteristics of Rider 42 PD Academy Attendees Compared to all Texas Teachers.....	137
Table 4.37. Rider 42 PD Academy Attendance by Region (Number of Attendees and Percent of 2009-10 Teachers Who Taught Each Content Area).....	138
Table 4.38. Campus Characteristics of Rider 42 PD Academy Attendees Compared to Characteristics of Campuses without a PD Attendee.....	139
Table 5.1. CLASS-S Domains and Dimensions.....	146

# List of Figures

---

Figure 2.1. Evaluation Logic Model.....	50
Figure 3.1. Regional Trainers’ Perception of Preparedness to Deliver Training to Others.....	69
Figure 3.2. Average Observer Fidelity Ratings of Teacher PD Academies.....	70
Figure 3.3. Overall Quality Rating of Teacher PD Academies.....	71
Figure 3.4. Participants’ Opinions of the Impact of PD Academy on Their General Knowledge.....	72
Figure 3.5. Participants’ Opinions of the Impact of PD Academy on Academy Specific Knowledge...	73
Figure 3.6. Participants’ Opinions of the Impact of PD Academy on Classroom Knowledge.....	73
Figure 4.1. Observer Ratings of Indicators of Presenter Delivery.....	126
Figure 4.2. Observer Ratings of Indicators of Interactions between Presenters and Participants.....	127
Figure 4.3. Observer Ratings of Indicators of Training Climate.....	128
Figure 4.4. Mean Capsule Ratings by Academy .....	129
Figure 4.5. Observer Ratings of Indicators of Fidelity.....	131
Figure 4.6. Overall Fidelity by Academy.....	132

# Executive Summary

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The purpose of the first interim report is to present findings related to the first research objective of the Rider 42 Professional Development Research Study (PDRS): “Assess the content of, delivery of, and participation in face-to-face PD Academies.” The report first provides an overview of the legislative and program history of the Student Success Initiative (SSI) as the context in which Rider 42 Professional Development (PD) Academies were developed. The report continues with a description of the research, a presentation of the key findings of the study, and recommendations based on the findings. To provide additional formative feedback for program staff, the report also presents more detailed findings related to each research question. Finally, the report describes the next steps in the execution of the comprehensive evaluation of the Rider 42 PD Academies.

## Background

### History of the Student Success Initiative

The Rider 42 PD Academies are the latest in a series of steps by the Texas Legislature to focus efforts (both in dollars and in programming) to better support districts in educating students and ensuring they meet standards of proficiency in English language arts, mathematics, and science. Large portions of funding dollars from the Texas Education Agency (TEA) have recently been focused on the creation and implementation of PD Academies under the umbrella of the SSI, originally launched in 1999 with Senate Bill 4, during the 76<sup>th</sup> Legislative Session. The majority of the earlier SSI programming and funding were targeted to districts through the Accelerated Reading/Math Instruction grant programs (ARI/AMI). The purpose of those grants was to provide districts with additional financial resources to provide immediate, targeted instruction to students who demonstrated difficulty in reading and/or math. Later, the Intensive Reading Instruction (IRI) and Intensive Mathematics Instruction (IMI) grants were created under the SSI to provide further support for student achievement in campuses that had failed to improve students’ Texas Assessment of Knowledge and Skills (TAKS) reading and math scores.

Since these initial student-focused efforts, the SSI has shifted to focus on statewide teacher professional development programs. This began in 2007 when the 80th Texas Legislature passed HB 2237 and created the Texas Adolescent Literacy Academies (TALA) under the SSI umbrella. In 2009, the 81<sup>st</sup> Texas Legislature, through Rider 42, appropriated nearly \$152 million for the SSI with a particular emphasis on professional development for middle school and high school teachers. Rider 42 provided for the development, implementation, and evaluation (the study described here, PDRS) of the Rider 42 PD Academies and an online platform, Project Share, that extends teacher professional development opportunities. Rider 42 also provided for the Algebra Readiness Grant program.

### Rider 42 PD Academies

The Rider 42 PD Academies developed by TEA in spring 2010 and implemented in summer 2010 included the MSTAR Math Academy for Grades 5-6, the MSTAR Math Academy for Grades 7-8, the Algebra I End-of-Course (EOC) Success Academy, the Science Academy for Grades 5-8, the Science Texas Essential

Knowledge and Skills (TEKS) Overview K-12 Academy, the Biology EOC Success Academy, and the English I and II EOC Success Academy. These Academies were designed to provide teachers with in-depth training in mathematics, English language arts, and science, with a particular emphasis on:

- Data-driven instructional planning.
- Alignment of instruction to the TEKS.
- Interventions for struggling students, namely Response to Intervention (RtI).
- Research-based strategies to improve the academic language skills of English language learners, the Texas English Language Proficiency Standards (ELPS).
- The new high school EOC assessments (beginning in 2011-12).
- Integration of the Texas College and Career Readiness Standards (CCRS).
- Introduction to Project Share, an online environment for future professional development opportunities.

### **Algebra Readiness Grant Program**

Rider 42 also provides for the Algebra Readiness grant program for a subset of campuses in eligible Texas school districts and charter schools. This program is designed to deliver a more intensive professional development and support program to middle schools with a history of low, but improving, student math achievement. Funding is to be used for specific activities including but not limited to extended learning time for math, instructional coaching, and common planning time. As part of this grant program, math teachers in these schools are required to participate in face-to-face and online Rider 42 PD Academies, including the Algebra I EOC Success Academy, and the MSTAR Math Academy for Grades 5-6 or MSTAR Math Academy for Grades 7-8.

### **Project Share**

In coordination with the development of the PD Academies, TEA has partnered with Epsilen (an e-learning platform) and the New York Times Knowledge Network to develop and implement Project Share. Project Share is a collection of Web 2.0 tools and applications that deliver ongoing PD courses and facilitate online professional learning communities for teachers across Texas. Teachers can also access digital content repositories (e.g., the *New York Times*, PBS Digital Learning Library, Smithsonian Education, etc.) that include articles, videos, images, podcasts and other interactive features as well as state-adopted instructional materials.

### **The Rider 42 PD Research Study**

#### **Background of the Study**

The PDRS is being conducted by the University of Texas at Dallas Education Research Center (UTD-ERC) under contract with TEA. In response to the legislative guidance, the contract requires that the evaluation:

1. Determine the degree to which each PD Academy is translated into classroom practice.
2. Determine the most effective method for supporting each PD during the school year.
3. Provide constructive feedback to improve the quality and effectiveness of each PD.
4. Determine the effectiveness of each PD to positively affect student achievement outcomes.

To meet these requirements, the UTD-ERC, through a competitive process, partnered with Gibson Consulting Group, Inc. (Gibson), and Gibson's research partners ICF International and American Institutes for Research, to plan and execute the study.

The PDRS is a comprehensive formative and summative evaluation of seven PD Academies developed by TEA under Rider 42. The formative component of the evaluation describes the development and implementation of each Academy in terms of quality and fidelity. The summative component seeks to determine the effectiveness of each PD in terms of positively impacting teacher practices and student achievement. Additionally, the evaluation seeks to identify district and campus supports, including those funded by the Algebra Readiness Grant program, which may contribute to positive changes in teacher practices and student outcomes.

This evaluation is being conducted in three phases. Phase I of the evaluation began in February 2010 and concluded with the development of a comprehensive evaluation plan in May 2010. Phases II and III involve execution of the project plan, with Phase II beginning in April 2010 and concluding at the end of August 2011 with a report on the impact of the fiscal year 2010 PD Academies on changes in teacher instructional practices and on student achievement results. Contingent upon additional funding, Phase III will begin in September 2011 and continue through August 2013.

## **Research Objectives and Questions**

In order to measure the impact of the PD on teacher practices and student achievement, the evaluation team proposed a research design that includes five research objectives:

- 1) Objective 1: Assess the content of, delivery of, and participation in face-to-face PD Academies.
- 2) Objective 2: Assess the content of, delivery of, and participation in online PD through Project Share.
- 3) Objective 3: Assess the impact of PD on teacher knowledge, changes in instructional practices, and changes in collaborative behavior.
- 4) Objective 4: Determine the impact of PD received on student achievement outcomes.
- 5) Objective 5: Determine the impact of district and campus supports on teacher knowledge, changes in instructional practices, changes in collaborative behavior, and ultimately student achievement outcomes.

The current interim report focuses only on Objective 1, specifically addressing the quality of PD delivered to regional trainers at training-of-trainers (TOTs) sessions, the quality and fidelity of training

that was turned around and delivered to teachers, teacher participation levels, and the extent to which district and campus supports impacted teacher participation rates in face-to-face PD. Ten specific research questions are addressed in Objective 1:

- 1A. What types of content and activities were included as part of each level of training (i.e., training of state and regional trainers, as well as training of teachers)?
- 1B. To what extent does the content of each Academy reflect best practices for teacher professional development?
- 1C. To what extent does the content of each Academy reflect best practices for instruction in respective subject areas?
- 1D. To what extent is the content of each Academy aligned with national and state standards in respective subject areas?
- 1E. What is the quality of the training provided to the regional trainers?
- 1F. What are the professional characteristics of the regional trainers?
- 1G. In what ways, and to what extent, was each Academy promoted to teachers across Texas?
- 1H. What is the quality of the training provided to teachers?
- 1I. To what extent is the PD training implemented with fidelity to teachers across the regional education service centers?
- 1J. What are the professional characteristics of the teachers who participated in face-to-face training?

## Data Sources and Methods of Data Collection

The data sources and methods necessary for answering Objective 1 research questions include:

- A. **Meetings with TEA program staff and PD developers and implementers:** Information collected through interviews with TEA program staff, PD developers, and PD implementers provided the team with critical information that helped to tailor the evaluation plan to fit the specific contexts of each individual Academy.
- B. **Document review and analysis:** The research team reviewed pertinent documents to gain a more thorough understanding of the various elements of the development and implementation of each Academy.
- C. **Expert reviews of training materials:** Three panels of nationally recognized experts (one for each academic content area covered by the summer 2010 Rider 42 PD Academies) reviewed the PD Academy curriculum materials to provide an external assessment of the quality of the PD. The experts used the National Staff Development Council (NSDC) Standards<sup>1</sup> to assess how the

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<sup>1</sup> For more information regarding the NSDC Standards used for this project, see <http://www.learningforward.org/standards/index.cfm>

various Academies aligned with best practices in terms of content, context and process standards for PD. The experts' feedback was analyzed and synthesized into brief points about each set of materials for each Academy highlighting those components that were considered to be in strong, moderate or weak alignment with national standards for professional development and national and state standards for instruction.

- D. **Observations of state-level meetings:** At least one member of the evaluation team attended each of the state trainings that were held by PD content developers with representatives from education service centers (ESCs) to refine the PD content and help them better understand the purpose and design of each Academy.
- E. **Observations of regional TOTs:** Members of the evaluation team observed at least one the regional TOT session for each Academy to collect qualitative and quantitative data about the content and delivery of TOT sessions.
- F. **Observations of teacher professional development:** Members of the evaluation team observed the training delivered by the regional trainers to PD participants in a subsample of 29 PD sessions across Texas. Individual observation protocols were customized for each Academy to measure the fidelity of how training was delivered to classroom teachers. The protocols also included items that were common across all Academies including training delivery, interactions of the presenters and participants, and training climate. Ratings (on a scale of 1 to 4) were assigned in each of four domains: training fidelity, training delivery, interactions between presenters and participants, and training climate. In addition, observers assigned an overall capsule rating on a scale of 1 to 5 where 1 means "ineffective PD" and 5 reflects "exemplary PD."
- G. **Collection of participant data and information:** Each ESC submitted attendance records of the TOT trainer participants and the participants at each of the summer 2010 trainings. Additional teacher demographic data were obtained from ERC databases. The TOT data were used to calculate the number of sessions conducted within each Academy and the proportion of trained trainers who turned around training to teachers. The PD participant data were used to describe the characteristics of the teachers who attended the Academies and the extent to which they are representative of teachers across the state.
- H. **Survey of ESC administrators:** The ESC Administrator Survey collected information about the different ways in which ESCs across the state marketed and advertised the Academies to teachers, as well as the nature and extent of TEA's and ESCs' involvement in the implementation of the Academies.
- I. **Survey of regional trainers:** The regional trainers responded to questions about the quality of the TOT sessions as well as their preparedness and actual experience delivering the training to teachers. Data from survey items that addressed the same topic were combined to create summary scores.

- J. **Survey of professional development participants:** PD participants responded to questions about the quality and effectiveness of the PD Academies, the utility of Project Share and the anticipated changes in teacher knowledge and classroom practices. As with the regional trainer survey, data from similar items were combined to create summary scores.

## Preliminary Findings

### *Rider 42 PD Academy Content*

#### **Research Question 1A: What types of content and activities were included as part of each level of training (i.e., training of state and regional trainers, as well as training of teachers)?**

The format of the PD materials was standard across all Academies in that detailed presenter guides, participant guides, and PowerPoint presentations were provided for trainers and participants. Unique to each Academy was a specific focus on particular content and concepts. For example, the materials for the two MSTAR Math Academies (Grades 5-6 and Grades 7-8) and for the Algebra I EOC Success Academy included learner profiles that highlighted common student mistakes as well as activities to encourage participant discussions about instructional practices. The Math Academies also contained content designed to improve teachers' depth of understanding of particular mathematical concepts with a focus on fractions and ratios for the MSTAR Math for Grades 5-6 Academy, a focus on proportions and percentages for the MSTAR Math for Grades 7-8 Academy and a focus on functions (linear), equations, and inequalities for the Algebra I EOC Success Academy. Both MSTAR Academies provided instruction for teachers on how to administer the MSTAR Universal Screener to their students and all Math Academies provide an overview of the Project Share website.

The Science Academy materials included an emphasis on improving teacher participants' understanding of the new science TEKS and how this understanding could be integrated into teachers' classroom practice. Activities encouraged participant discussion and thinking about ELPS, CCRS, and RtI strategies when developing and implementing science lessons. The Science Academies for Grades 5-8 and the Biology EOC Success Academy included sample lessons that participants went through during the training. Participants were able to look at content and standards from both a teacher and student perspective.

The focus of the English Language Arts (ELA) Academy varied considerably compared to the other Academies. The ELA Academy was designed to provide an overview of the English I and II EOCs, to explain the connections between the EOCs and tools (support frameworks and standards, including TEKS, CCRS, and ELPS) that are available to teachers to help students succeed, and to orient participants in upcoming PD courses that will be available through Project Share.

## **Research Question 1B: To what extent does the content of each Academy reflect best practices for teacher professional development?**

### **Math Academies**

The panel of math experts indicated a strong alignment of the materials across the three math Academies to the “quality teaching,” “collaboration,” and “learning” standards for staff development (for definitions of these standards please see the interim report). In addition, the “data driven” standard for Algebra I EOC Success Academy was strongly reflective of best practices for teacher PD due to the sample assessment items that were shown with right and wrong answers. Experts reported moderate alignment between the math Academies materials and four of the standards for staff development – “equity,” “learning communities,” “research-based,” and “design.” The expert panel report indicated a weak alignment with “data-driven” standards for the two MSTAR Academies and with the “resources” standard across all three Academies. The experts attributed these weaker alignments to a need for more information on the Universal Screener and Project Share.

The greatest concern of experts across the math Academies pertained to insufficient activities for participants to develop conceptual understanding and computational mastery. The math panel experts also unanimously expressed a need to strengthen the level of content instruction. They indicated that teachers would benefit from exposure to curriculum/content that is beyond their present grade level as well as how their grade-level materials fit into the broader discipline of math.

### **Science Academies**

The science experts concluded that the content and activities of the science Academies were well aligned with national standards and would provide useful activities for teachers. The experts indicated a strong alignment of the materials across the three science Academies to the “quality teaching,” “learning communities,” “design,” “learning,” and “collaboration” standards for staff development and a moderate alignment between the science Academies materials and three of the standards: “equity,” “data-driven” (for Science TEKS Overview Academy for Grades K-12), and “research-based.”

Science expert panel members, however, addressed some weaknesses with the Science Academy sessions. They found weak alignment with the “resources” standard in that little to no information on Project Share was provided in any of the science Academies’ materials. The experts also noted that some of the instructions need more clarification and that the materials could be strengthened by providing participants with more opportunities to “practice” integrating the activities into a classroom environment.

### **ELA Academies**

ELA experts indicated that the materials for the ELA Academy were reflective of best practices for teacher PD across all but one standard (“data-driven”). ELA experts recommended the materials be enhanced by ensuring that teachers understand specifically how to use their awareness of the state standards to strengthen their instruction. All experts indicated that greater specificity is required so teachers understand how to translate key ideas into quality classroom practice. Experts also

recommended that the developers include samples of student work that demonstrate key concepts communicated during training.

### **Research Question 1C: To what extent does the content of each Academy reflect best practices for instruction in respective subject areas?**

Overall, the expert panels indicated a strong or moderate alignment of the materials with best practices in instruction for each of the areas under review, including the alignment to national and state standards. Some of the common themes that were highlighted by experts include active engagement of participants (and ultimately students), modeling of hands-on activities, and creating feedback loops between presenters and participants to generate understanding and to correct misconceptions.

Math and science experts indicated that they noticed a strong correlation between the content and the state standards (the TEKS) in their respective subjects. Additionally, there were several activities that were determined to be beneficial for student learning. There was consensus among the experts, however, that if increased student achievement is the aim of the Academies, there must be a concentrated effort to increase the conceptual understanding of the teacher participants and provide numerous opportunities throughout the Academies to practice the various concepts that are covered in the Academies.

### ***Delivery of the Face-to-Face PD Academies***

### **Research Question 1E: What is the quality of the training provided to the regional trainers?**

Observers reported that the master trainers presenting to the regional trainers at the TOTs were very knowledgeable about the subject matter and had exemplary presentation skills. At both the State Trainings and TOTs, there was high level of emphasis placed on turning around the PD with a high degree of fidelity at each of the ESCs across Texas. At each of the TOTs, the majority of the content was provided to regional trainers in a manner that would enable them to effectively conduct the training. For the Project Share portion of the TOT, the observers reported that the master trainers were less familiar with this new platform for PD and, as a result, could not fully convey the tool's functionality to attendees.

As indicated in the regional trainer survey responses, participants expressed broad satisfaction with the delivery and quality of the TOT sessions they attended. More importantly, the majority of participants also responded that the TOT sessions prepared them to train teachers and was a good use of their time. Comparisons of the trainers' survey responses from each Academy revealed that the Algebra I EOC Success Academy and Science for Grades 5-8 Academies had higher ratings of quality than any of the other Academy TOTs, while the MSTAR Math Academy for Grades 7-8 and English I and II EOC Success Academy TOTs tended to receive the lowest ratings. With the exception of the ELA trainers, the majority of respondents indicated that the Project Share system was covered only to a moderate or minimum extent at the TOT they attended and reported low levels of satisfaction with the Project Share portion of the Presenter's Guide.

### **Research Question 1F: What are the professional characteristics of the regional trainers?**

A total of 1,313 individuals attended at least one Academy's TOT session to become trained as a regional trainer. Of these, 44% conducted a PD session during summer 2010 (as of August 6<sup>th</sup>, 2010). Approximately two-thirds of the trainers are employed by schools or districts within an ESC region, 19% were ESC employees, and the remaining 15% were categorized as "other" (e.g., contractors, consultants). The education and experience levels of the regional trainers was high, with over two-thirds holding a Masters or Doctorate degree, 93% indicating that they have over six years of experience as a K-12 teacher, and slightly more than 75% reporting more than 60 hours of experience providing professional development. However, very few reported experience in the online facilitation of courses or training.

### **Research Question 1G: In what ways, and to what extent, was each Academy promoted to teachers across Texas?**

ESCs did not report any unique or innovative method of communicating the PD Academies. ESC administrators generally felt the PD Academies were promoted similarly to how other PD efforts are promoted. A clear challenge in promoting these Academies was the short amount of time ESCs had to announce the PD offerings and recruit teachers. Many ESCs commented that promotion efforts could be improved by starting earlier in the year. Teachers most commonly learned about the PD Academies through their school principal or another colleague at their campus, and approximately 20% reported that they learned about the PD Academies through their regional ESC's website.

### **Research Question 1H: What is the quality of the training provided to teachers?**

Overall, the regional trainers provided high quality professional development. Observers of the summer PD Academies rated the trainers highly in "presenter delivery," "interactions between presenters and participants," and "training climate." Observers also gave favorable overall ratings of each of the PD Academies. Of note are the particularly high overall ratings given to the Algebra I EOC Success Academy PD and the Science Academies for Grades 5-8. While observers rated the PD Academies particularly high on the indicators of PD delivery, such as giving clear directions, circulating around the room, collegiality, and active engagement, the observers gave moderate ratings on the more challenging indicators of PD delivery, such as instructors' modeling of effective instructional strategies, and use of questioning strategies, and the intellectual rigor of participants' responses. If teachers are to effectively use these higher level strategies to facilitate higher level thinking with their students, follow-up PD may need to focus more specifically on these skills.

Analysis of the regional trainer survey shows most regional trainers were positive about their delivery of training to teachers, with the majority reporting that they were able to follow the materials and activities in the presenter's guide and incorporate what they learned from their TOT session. In addition, regional trainers, particularly trainers of the three-day long Biology EOC Success Academy, MSTAR Math Academy for Grades 5-6, and Algebra I EOC Success Academy, were moderately to greatly confident that teachers they trained would be well prepared to effectively teach the concepts presented in the

Academies and improve student outcomes. However, across all Academies, they were less positive about the extent to which they could address participants' concerns and differentiate instruction. This could be due in part to some of the trainers' perceptions that there was not enough time to cover the material, a concern most frequently reported by Algebra I EOC Success Academy trainers.

The responses of PD participants to survey questions about the quality of the training they received are consistent with the generally positive results from the regional trainer survey and from the observer ratings. An overwhelming majority of respondents indicated high levels of satisfaction with the training delivery and with instructor competence. The PD participants were also positive about the content of the PD with 80% to 85% of respondents for all Academies except ELA reporting most frequently that the PD covered key content (the TEKS), EOC assessments, CCCR, ELPS and RtI to a moderate or great extent. ELA participants reported lower ratings with 35% indicating that key content was not covered at all or covered to a minimal extent. In response to questions about how the PD impacted their teaching, a similar pattern emerged. A large majority of respondents for all Academies, with the exception of ELA, reported that the PD had positively impacted their general knowledge, their content specific knowledge, and their knowledge related to classroom instruction. In contrast, higher percentages of ELA participants indicated that the PD had no impact or minimal impact on their teaching. It is also of note that math teachers were less positive about the impact of the training on their knowledge of the Universal Screener, with the majority indicating that the PD increased their knowledge to a minimal or moderate extent.

With the exception of the English I and II EOC Success Academy, PD participants reported that Project Share was either not covered as part of the PD Academy or it was given minimal to moderate exposure (less than 20 minutes). A relatively small proportion of teachers (approximately one in five) indicated that they were prepared or very prepared to use Project Share after the training they received. More than 75% of respondents indicated they were either somewhat interested or interested in Project Share as a potential PD platform, and another 7% of teachers indicated that they were very interested in Project Share. Thus, it appears there is interest among teachers in using the Project Share system, but additional marketing and training may be required.

### **Research Question 1I: To what extent is the PD training implemented with fidelity to teachers across the regional education service centers?**

Overall, the Rider 42 PD Academies were implemented across the state with a reasonably high degree of fidelity. Observers noted the strongest evidence of fidelity in terms of the presenters' use of the content and standards handouts, as well as presenting videos when appropriate. There was a slightly lower rating for observations regarding the extent to which presenters followed the materials/activities in the Presenter Guide as planned. Of the three support frameworks introduced at the Academies, RtI and ELPS appear to have been implemented with greater fidelity than CCRS. The lowest rated indicator of fidelity was the orientation to Project Share. As discussed earlier, limited information about Project Share was available to trainers at the time of the PD Academies. There is some noticeable variation in the evidence of fidelity overall across the various Academies with the Science Academies for Grades 5-8

receiving the highest average rating on fidelity and English I and II EOC Success Academy receiving the lowest.

### *Participation in the Face-to-Face PD Academies*

#### **Research Question 1J: What are the professional characteristics of the teachers who participated in face-to-face training?**

As of August 6<sup>th</sup>, 2010, over 19,000 participants attended one of the seven subject-specific Academies targeted in this research study. Teachers across the state also participated in other SSI-related Academies that are not part of this evaluation (e.g., TALA, ELPS). The PD Academy participation rates varied substantially across regions ranging from less than 10% of teachers attending in some regions to greater than 50% in others. With the exception of English I and II EOC Success Academy, the participants represented approximately one-quarter or more of the number of 2009-10 teachers. Participation in middle school Academies was particularly high with approximately 39% of 2009-10 middle school science teachers attending the Science Academies and approximately 38% of 2009-10 middle school mathematics teachers attending a MSTAR Math Academy. This focus on middle school bodes well for Texas in ‘building a base’ of learning that students can take with them to higher grades. Additionally, a number of teachers attended both their subject Academy and either the ELPS Academy or the Science TEKS Overview Academy for Grades K-12, possibly enhancing or reinforcing the impact of the content specific PD. This possibility will be examined in the future analyses of teacher and student outcomes.

Demographic data (e.g., gender, ethnicity, teaching experience) suggest that, with few exceptions, the PD Academies participants are representative of teachers and campuses across the state. With the exception of the MSTAR Math Academies, the campuses of the PD participants were similar to those of non-participants in terms of 2009 TAKS passing rates, and student socio-economic status. If TEA seeks to target teachers from a more at-risk sample of campuses, these data suggest that more work may need to be done so that these campuses are over-represented in the sample.

### **Conclusions and Recommendations**

The evaluation results indicate that, over a short time period, the PD developers were successful in preparing PD programs in the core content areas of math, science, and ELA that were well aligned with national standards for PD and best practices for content instruction and TEKS. From the expert reviews, it is evident the content of the PD was of good quality, would engage teachers with the presenters and with each other, and would enhance teaching. In their efforts to improve future PD, staff should consider and address the expert reviewer comments regarding poor alignment with the PD standards for “resources” reported for each of the math and science Academies and the poor alignment with “data-driven” standards reported for the English I and II EOC Success Academy and MSTAR Math Academies for Grades 5-6 and Grades 7-8. There was consensus among the experts for PD developers and TEA staff to make a concentrated effort to increase the conceptual understanding of the teacher participants and provide numerous opportunities throughout the Academies to practice the various concepts covered in the Academies.

Based on observations of the PD delivery, future training for both the regional trainers and for teachers could benefit from added focus on the more challenging indicators of quality PD such as use of questioning strategies, and the intellectual rigor of participants' questions. The PD could also be improved with additional focus on college and career readiness standards and more examples of student work, particularly in the area of ELPS. The roll-out of Project Share is likely to improve the alignment of the PD in these areas, particularly for the MSTAR Math Academies with the recent implementation of Universal Screener training for Middle School math teachers via Project Share. Similarly, ELA alignment with "data driven" standards should also improve as program staff continues with their plans for implementation of online ELA courses through Project Share.

In addition to developing quality PD content over a short time period, TEA and ESC staff successfully recruited and trained large numbers of highly qualified regional trainers who delivered the PD to over 19,000 teachers across the state. The teacher PD participants represented approximately one-quarter or more of the number of 2009-10 teachers with the highest participation at the middle school level (38% for MSTAR Math Academies for Grades 5-8 and 40% for Science Academies for Grades 5-8).

Across all Academies, the majority of the regional trainers reported high levels of satisfaction with the quality and fidelity with which they delivered the training. Observations of training delivery confirmed these perceptions with overall high ratings of quality and fidelity across all observations. Teacher survey responses also indicate the training was well-delivered, covered key content and impacted teachers knowledge and instructional practices to a moderate or great extent. Of concern are the lower levels of satisfaction and preparedness to train others reported by ELA and MSTAR Math 7-8 regional trainers and the lower levels of satisfaction and impact reported by participants at the English I and II EOC Success Academies. Of additional concern is the lack of evidence that the CCRS standards were implemented with fidelity in the PD training. Being able to teach to these higher standards is increasingly important not only because of the higher accountability standards coming with the new statewide tests but also because of the increasing need for students to be better prepared for college and career challenges. TEA program staff should review the CCRS portions of the PD, including recommendations from the expert panels to determine what improvements should be made for future TOT sessions. With the increasing use of Project Share for online PD, program staff will have additional opportunity to provide specific reinforcements and support in these areas.

As TEA and ESC staff plan new training for summer 2011 and supplement the current training through the rollout of Project Share, the evaluation results highlight a critical need to prepare trainers to facilitate teachers' use of Project Share. The regional trainers reported that they do not have much experience in facilitating online PD and reported that they received lower levels of preparation in this area than in the delivery of face-to-face PD.

TEA has achieved a high capacity for delivering PD with over 13,000 trainers across the state prepared to support the ongoing PD implementation throughout the school year. Given the costs associated with training so many regional trainers, TEA and ESC staff should determine how best to recruit more teacher participants, and tap into this group of trainers to deliver more face-to-face trainings. Results from the

ESC administrator survey suggest that staff are already considering ways to increase teacher participation including starting promotion efforts earlier in the year and utilizing social networking media to reach more participants. With additional training in the delivery of online PD, program staff could also use these trainers to provide more support for the use of Project Share in districts across the state. Particular attention should be paid to increasing high school teacher participation rates in anticipation of the coming shift to EOC exams. The roll out of Project Share, already in progress, will provide an opportunity for increased teacher participation without having to wait for another series of summer sessions.

## **Continuing Evaluation Activities**

As noted earlier, this Interim Report presents findings related to Research Objective 1, answering research questions addressing the content of, delivery of, and participation in the seven PD Academies implemented during the summer of 2010. As described below, research activities over the coming months will continue to more comprehensively address the first research objective, and new activities will commence that address the remaining research objectives.

Future activities will include the collection and analysis of PD participant (teacher) survey data in spring 2011. The research team will also continue to collect and analyze of PD participant data for teachers attending Rider 42 PD Academies offered after August 5, 2010. Finally, as required by the contract between TEA and the UTD-ERC, data will be collected for the 2011 PD Academies (e.g., Geometry, Algebra II, English III, Chemistry and Physics EOC Academies) to ensure data are available in the event the evaluation is extended by the 82<sup>nd</sup> Legislature.

The research team will also conduct a document review and analysis of Project Share planning and implementation materials with input from an expert panel of reviewers. Future survey administrations will gauge region and district staffs' exposure to, fluency in, and usage and support of the online system. Last, the research team will collect and analyze usage data (e.g., number of log-ins, time online, content areas accessed, courses completed) available through the online system.

The spring 2011 teacher survey mentioned above will address teachers' perceptions of their teaching knowledge and practices after they have had the opportunity to implement instructional strategies taught in the PD Academies and participate in online PD and collaborative activities through Project Share. The research team will also conduct classroom observations of teachers who attended the Rider 42 PD Academies and comparable teachers who did not attend PD. A final measure of change in teacher knowledge, practices, and behavior will come from a comparison of scores on the Learning Math for Teaching assessment between middle school math teachers who have attended PD and those who have not.

In addition to the content-specific Academies under review as part of this study, the research team will assess the impact of participating in *both* an ELPS Academy and a related content-specific Academy on teacher instructional practices and student achievement results.

As a first step, sophisticated statistical analyses will be employed to determine the extent to which teacher participation in training (both online and face-to-face) impacted student achievement. Since a variety of factors could influence the extent to which the professional development impacts teacher practices and student achievement, data collected from sources previously described will be used to examine the extent to which various factors, such as the presence or absence of particular campus or district supports, increase or decrease the effectiveness of participating in professional development. These analyses will be exploratory in nature but are expected to provide important insights into the contexts within which PD is most likely to positively affect instructional practice and student outcomes.

# Chapter I. Introduction

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The purpose of this first interim report is to provide a status update and initial findings from the Rider 42 Professional Development Research Study (PDRS). First, an overview of the legislative and program history of the Student Success Initiative (SSI) is presented to provide context for the development of the Rider 42 Professional Development (PD) Academies. Chapter I is organized into three sections. Section 1 includes a legislative and program history, Section 2 provides a summary of the existing literature on teacher PD, and Section 3 provides individual descriptions of PD programs under Rider 42. Chapter II then presents the evaluation methodology used to address the first of five research objectives. Following the methodology section, key findings are presented in Chapter III, with detailed findings by research questions provided next in Chapter IV. Chapter V then describes the ongoing and future research and evaluation activities for the Rider 42 PD study.

## Section 1. Legislative and Program History

The Rider 42 PD Academies implemented and evaluated herein are the latest in a series of steps by the Texas Legislature to focus efforts (both in dollars and in programming) to improve support for districts in educating all of their students and ensure they meet standards of proficiency in English language arts, mathematics, science, social studies and the English Language Proficiency Standards (ELPS). Large proportions of funding dollars from the Texas Education Agency (TEA) have recently been focused on the creation and implementation of these PD academies under the umbrella of the Student Success Initiative, which represents a shift in spending SSI dollars from student-intervention programs, such as the Accelerated Reading and Math Instruction grants. SSI grants to schools represent a smaller percentage of SSI dollars than the previous Accelerated Reading and Math Instruction grant funding. In the early years of the SSI (1999-2003), considerable resources were dedicated to teacher professional development (particularly in reading strategies, and to a lesser degree for math instruction) to help ensure that teachers were equipped with the tools and resources for students to be successful on the state assessments in reading and math. However, after this initial emphasis on teacher professional development, there was a lull in teacher training activities in Texas until the implementation of Texas Adolescent Literacy Academies (TALA) was funded by the 80<sup>th</sup> Legislature in 2007, after initial work on adolescent literacy was initiated by the 79<sup>th</sup> Legislature in 2005.

The SSI has been the mechanism through which substantive programs have been implemented towards the goal of meeting students' basic academic proficiency targets; however it is not the only funding source or support structure to help ensure students are prepared to meet the legislatively mandated grade advancement requirements. Other Legislation, including House Bill (HB 1144) (77<sup>th</sup> Texas Legislature, 2001) and HB 2237 (80<sup>th</sup> Texas Legislature, 2007), which included statutory language that related directly to teacher professional development among other provisions, also serve to support the goal of students meeting specific levels of academic proficiency in core subject areas.

The following sections detail the development of SSI programming over the past decade in order to provide a context for understanding the landscape within which the Rider 42 PD Academies were created and implemented in 2010.

## History of the Student Success Initiative

While over the past decade dozens of grant programs and initiatives have been launched by TEA to support the needs of struggling learners, Table 1.1 provides a timeline for the implementation of the major programs designed specifically to support the SSI.

Table 1.1. Timeline of SSI-Related Programs by Year

School Year(s)	Program
1999-2000 to 2002-03	Teacher Reading Academies (K-3)
1999-2000 to present	Accelerated Reading Instruction (now SSI Grants)
2000-01 to 2001-02	Teacher Math Academies (Grades 5-7)
2003-04 to present	Accelerated Math Instruction (now SSI Grants)
2003-04 to 2008-09	Intensive Reading Instruction
2005-06 to 2008-09	Intensive Mathematics Instruction
2007-08 to present	Texas Adolescent Literacy Academies
2009-10 to present	Rider 42 PD Academies
2009-10 to present	Algebra Readiness Grant

### *The Student Success Initiative: 1999-2003*

Beginning in 1997, during the 75<sup>th</sup> Texas Legislative Session, the Governor’s Reading Initiative sparked the beginning of a statewide focus on improving early reading skills through the design and implementation of reading diagnostic tools, as well as teacher professional development related to research-based reading strategies. The goal of these initiatives was to increase and improve the quality of direct interventions aimed at struggling students. The Governor’s Reading Initiative called for the development and dissemination of diagnostic reading assessments (the Texas Primary Reading Inventory) in early grades to provide a tool by which to measure student progress and ensure that students were meeting basic levels of reading proficiency. This effort was expanded in 1999 with Senate Bill (SB) 4, during the 76<sup>th</sup> Legislative Session, which launched the SSI and provided performance requirements for grade promotion, and provided standards for the provision of academic supports to students and professional development for teachers.

The SSI provided the legislative framework to ensure that all students in Texas receive the instruction and support required to be academically successful in reading and mathematics at grade level. The initial legislation required that TEA execute the following mandates:

1. Implement requirements that students meet the following standards to qualify for promotion to the next grade (beginning with the first cohort of students entering kindergarten during the 1999-2000 school year):
  - Pass Grade 3 Texas Assessment of Knowledge and Skills (TAKS) in reading to be promoted to Grade 4 (this would first be applied to the Grade 3 class of 2002-03).
  - Pass Grade 5 TAKS in reading and math to be promoted to Grade 6 (this would first be applied to the Grade 5 class of 2004-05).
  - Pass Grade 8 TAKS in reading and math to be promoted to Grade 9 (this would first be applied to the Grade 8 class of 2007-08).
2. Create research-based diagnostic assessments (i.e., the Texas Primary Reading Inventory, and its Spanish equivalent, Tejas Lee) to determine students' progress toward K-2 reading standards.
3. Develop and implement high-quality PD Academies (supported by teacher stipends) to ensure that K-3 teachers were knowledgeable about scientifically-based reading strategies and scientifically validated instructional practices.
4. Develop and implement high-quality PD Academies (supported by teacher stipends) to ensure that Grade 5-6 and Grade 7-8 teachers were knowledgeable about best practices in mathematics instruction.
5. Provide additional funding for school districts to provide the necessary resources and supports for students struggling in reading and math (through the Accelerated Reading Instruction and Accelerated Math Instruction (ARI/AMI) programs).

Given the scope of these changes, programs and standards developed under SSI were designed and implemented to support that first cohort of students entering kindergarten in 1999-2000 which would then be impacted by changes in grade promotion standards (beginning in spring 2003 with the first administration of the TAKS). Thus, the first group of students for which new grade promotion standards applied was the Grade 3 class of 2002-03. District support (ARI/AMI funding) and teacher PD were designed to follow that first cohort of students and the subsequent cohorts of students. In other words, programs impacted kindergarten students and their teachers in 1999-2000, kindergarten and Grade 1 students and teachers in 2000-01, kindergarten and Grades 1 and 2 students and teachers in 2001-02, and so on.

Because of the timing aspect of the implementation of programs and standards, it was expected that the 1999 legislation was only the beginning of sweeping changes. Thus, the SSI provided an umbrella under which additional funding streams and academic programs would seek to meet its goals over time. Over the ensuing years, SSI funding was supplemented and further expanded, both by House and Senate bills that created programs, and by Article III appropriation riders that funded these programs. The SSI rider itself also represented a funding stream and has been used since 1999 to accomplish the goals laid out in that year.

### ***SSI Funding History: 1999-2011***

Since the inception of the SSI in 1999, nearly \$1.5 billion in state funds has been appropriated by the Texas Legislature to fund the initiative. SSI funding for the 1999-2000 school year was approximately \$66 million when the first cohort of kindergarten students was impacted by new programs, and reached a peak funding level of \$158 million per year during the biennium covering fiscal years (FY) 2005-06 and 2006-07. Table 1.2 provides an overview of state appropriations for the SSI over the history of the initiative, and denotes the grades impacted by the program in each year.

Table 1.2. History of State Appropriations for the SSI

School Year	Funding Level	Grades Impacted
1999–00	\$65.99 million	Kindergarten
2000–01	\$107.29 million	Kindergarten – Grade 1
2001–02	\$110.28 million	Kindergarten – Grade 2
2002–03	\$120.00 million	Kindergarten – Grade 3
2003–04	\$82.35 million	Kindergarten – Grade 4
2004–05	\$82.35 million	Kindergarten – Grade 5
2005–06	\$158.01 million	Kindergarten – Grade 6
2006–07	\$158.01 million	Kindergarten – Grade 7
2007–08	\$154.50 million	Kindergarten – Grade 8
2008–09	\$154.50 million	Kindergarten – Grade 9
2009–10	\$152.00 million	Kindergarten – Grade 10
2010–11	\$152.00 million	Kindergarten – Grade 11

Source: Texas Legislative Budget Board, 2010

### ***SSI Grade Promotion Requirements***

As mentioned above, the initial SSI legislation created new standards for grade promotion. Specifically, these standards dictated that students in Grades 3, 5, and 8 must pass TAKS (Reading only in Grade 3, Reading and Math in Grades 5 and 8) in order to be promoted to the next grade. In order to closely monitor student progress, if a student continued to fail the state assessment after two attempts, a grade placement committee was required to be established. This grade placement committee was then charged with: a) determining the student interventions necessary to help the student perform up to grade level, and b) to decide whether or not to promote the student to the next grade if he or she continued to fail the state assessment after the third attempt. Districts could administer an alternative assessment (approved by the Commissioner of Education) on the third try, and

those students could be promoted if they performed at grade level on the alternate assessment instrument. SSI standards were to be applied to all students taking the TAKS in English or Spanish, and those taking the then State-Developed Alternate Assessment II, which has since been replaced by the TAKS-Modified and the TAKS-Alternative.

Among students failing to meet state standards at certain grade levels, promotion to the next grade had to be determined through a systematic process, the default result of which was grade retention. If the grade placement committee unanimously determined that the student was likely to perform at grade level if promoted, they were given the authority to promote the student.

In this way, the SSI created more rigorous standards of academic achievement for Texas students. The implementation of these high-stakes grade promotion requirements was supported by a number of programs designed to ensure school districts and teachers had the necessary resources to enable students to meet state standards on the grade and content-specific tests subject to grade promotion requirements. Programs included the creation and dissemination of diagnostic assessment tools, professional development programs for teachers, and intervention programs for students. These supports are described in further detail below. While some of these support structures were created in 1999 with the initial SSI legislation, others were added in later years with different funding streams, but still created under the umbrella of the SSI.

### Diagnostic Assessments

The first diagnostic instrument created through Texas Reading Initiative funding to support SSI was the Texas Primary Reading Inventory (TPRI), which assesses students in kindergarten, first, second and third grade on their progress toward attaining grade-level reading standards. The TPRI was developed based on suggestions by the National Reading Panel<sup>2</sup>, which identified five essential components of reading instruction considered to be critical for students to develop the skills necessary to become successful life-long readers. This instrument, demonstrated as reliable and valid,<sup>3</sup> is designed to be administered one-on-one by the classroom teacher to determine if a student is on track for meeting minimum reading standards by the end of the school year. At all four grade levels, the TPRI consists of both a Screening Section and an Inventory Section. Screening provides an easy way to identify students who have mastered critical reading skills for that grade level so that time can be focused on gathering more detailed information for the student who may not have mastered these skills at the appropriate pace to be considered reading “on grade level.” The Inventory engages the student with inviting tasks and entertaining stories, while giving the teacher an opportunity to gather more data to help match reading instruction with specific student needs. Once each student’s needs have been identified, the Intervention Activities Guide gives the teacher effective instructional activities appropriate for each student, based on a student’s unique needs.

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<sup>2</sup> A national panel, convened at the direction of Congress in 1997, to assess the effectiveness of different approaches used to teach children to read. For more information see <http://www.nationalreadingpanel.org>

<sup>3</sup> For technical information see [http://www.tpri.org/Researcher\\_Information/](http://www.tpri.org/Researcher_Information/)

The Spanish language counterpart to the TPRI, the Tejas Lee, was also developed through Texas Reading Initiative funding to support SSI. Tejas Lee, again demonstrated as reliable and valid, measures a student's reading and comprehension skills in Spanish. The instrument is designed for use with students in kindergarten through Grade 3 who receive primary instruction in Spanish. Just as the TPRI is intended to be used, the Tejas Lee allows teachers to identify early reading difficulties or risks for reading difficulties in Spanish at an early age (Grades K-3) so that appropriate interventions can be developed to meet their unique needs.

Through SSI, Texas school districts were provided with their choice of diagnostic instruments from the Commissioner's List of Early Reading Instruments to determine student needs and monitor progress toward passing the Grade 3 TAKS for reading. These assessments were made available to school districts at no cost, and were started as early as kindergarten so that teachers could appropriately identify struggling students long before they were at risk of failing the third grade TAKS test. While other assessment tools are available to school districts, the TPRI is currently used by the majority (approximately 75%) of school districts in Texas to assess the reading abilities of K-3 students (Texas Education Agency, 2009).

#### Professional Development for K-4 Teachers in Reading

An essential support for the original SSI legislation was to ensure that teachers received necessary training on research-based instructional strategies that could be utilized in the classroom to improve student performance in reading and math. The vehicle by which this was accomplished early on was through the Teacher Reading Academies (TRAs) and to a lesser degree, through the Teacher Math Academies (TMAs), which were not fully implemented due to funding constraints.

While SSI legislation in 1999 outlined the need for programs that provide PD to teachers in reading and math, that legislation would not provide funding for such programs until September of 1999. Recognizing the need to roll out PD to teachers during the summer of that year, the 76<sup>th</sup> Legislature passed SB 472, which provided emergency funding to develop the first TRA that summer prior to the date any traditional funding by the 76<sup>th</sup> Legislature would be available for use (i.e., September 1, 1999). This first TRA would be made available to kindergarten teachers who would be providing instruction to the first cohort of SSI students (i.e., the first group of students who would be required to pass the Grade 3 TAKS test in reading). The TRAs were expanded one grade each year, to include Grade 1 teachers in the summer of 2000, Grade 2 teachers in the summer of 2001, and Grade 3 teachers in the summer of 2002. Over the 1999-2002 period, over 60,000 teachers were trained in scientifically-based instructional reading strategies. Each of these Academies is described briefly below. The TRAs were based on the five essential components of reading:<sup>4</sup>

- Phonemic Awareness – Recognizing the sounds in spoken language and how they can be segmented, blended, and manipulated.

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<sup>4</sup> National Reading Panel, 2000; Snow, Burns, & Griffin, 1998

- Phonics and Word Study – Identifying the letters of the alphabet, understanding that the sequence of sounds in a spoken word is represented by letters in a written word, and understanding phonics elements (letter-sound correspondence, spelling patterns, syllables, and meaningful word parts).
- Fluency – Reading text with speed, accuracy, and prosody.
- Vocabulary – Understanding word meanings.
- Comprehension – Understanding information presented in written form.

### *Kindergarten TRA*

TEA Office of Statewide Initiatives, the Texas Center for Reading and Language Arts at the University of Texas at Austin (renamed the Vaughn Gross Center for Reading and Language Arts at the University of Texas at Austin (VGCRLA)), and the education service center (ESC) Region XIII collaborated to create the kindergarten Teacher Reading Academies (KTRAs). The KTRAs provided kindergarten teachers throughout the state with the knowledge and activities that promote early reading success. Vocabulary and oral language development, phonological awareness, alphabetic understanding, print awareness, read alouds, listening comprehension and writing were all topics covered in the KTRAs.

### *Grade 1 and 2 TRAs*

Again, TEA and VGCRLA were involved in the development of the Grade 1 and 2 TRAs, along with the Center for Academic and Reading Skills (CARS) at the University of Texas Health Science Center, the Center for Improving the Readiness of Children for Learning and Education at the University of Texas at Houston Health Science Center (now the Children’s Learning Institute) and ESC Region XIII.

The Grade 1 TRA was established in summer 2000, and provided knowledge and activities aimed to prevent reading difficulties in children who may be struggling as they are learning to read. Its second purpose was to vertically align the kindergarten and first grade teacher Academies scientific research-based content so that Texas children received reading instruction presented in an explicit, systematic continuum. The Academy content included current information on scientifically research-based practices developed around English Language Learners (ELLs), features of effective instruction, identification of dyslexia, phonological awareness, alphabetic principle, phonics, spelling, fluency, wide reading opportunities, vocabulary, comprehension, and written expression.

The Grade 2 TRA was initiated in summer 2001 and enhanced teachers' knowledge of scientific research-based practices for teaching students who are struggling to learn to read. It focused on effective intervention instruction for all students and particularly those who continued to have difficulty learning to read. This TRA emphasized vocabulary development, comprehension, fluency, word study and spelling, foundations of reading, writing, wide reading opportunities, grouping for instruction, and planning effective lessons.

### *Grade 3 TRA*

TEA, ESC Region XIII, ESC Region IV, and CARS collaborated on the development of the Grade 3 TRA. The training was first offered to third grade teachers in summer 2002. The content of the Grade 3 TRA was based on scientific research-based reading instruction proven to be effective with all types of learners.

### *Grade 4 TRA*

The Grade 4 TRA was developed by TEA, VGCRLA, ESC Region XIII, and ESC Region IV in 2003. Grade 4 teachers learned instructional practices that can help students move from “learning to read” to using “reading to learn.” Grade 4 TRA training materials were developed but funding was not available to conduct the Academies as intended during summer 2003. These materials became the foundations for the Online Teacher Reading Academies (OTRA) for Grade 4 teachers in Texas.

### *Professional Development for Grades 5-7 Teachers in Mathematics*

Parallel to the reading initiative, the Texas Legislature also recognized the need to address student learning needs in math, as the 1999 cohort of students would be required to pass the Grade 5 TAKS-Math in spring 2005. The creation and implementation of the math Academies came later, as the first cohort of SSI students were not required to meet math proficiency standards under SSI until Grade 5. Thus, HB 1144, passed by the 77<sup>th</sup> Legislature in 2001, still under the umbrella of the SSI, created the Texas Math Initiative program, providing math teachers with best practices and research-based models for mathematics instruction, and a clear understanding of math skills expected of students and instruction strategies to improve student performance. TMAs were delivered in summer 2002 for teachers in Grades 5 and 6, and in summer 2003 Grade 7 teachers were added.

### *Funding for Districts to Assist Students Struggling in Reading and Mathematics*

#### *Accelerated Reading/Math Initiative*

Charged with providing school districts with the necessary resources and supports for students struggling in reading and math, TEA created the Accelerated Reading/Math Instruction grant programs (ARI/AMI) beginning in 1999. The purpose of these grants was to provide districts with additional financial resources to provide immediate, targeted instruction to students who demonstrate difficulty in reading and/or math. This targeted instruction was to be delivered as one-on-one, small group, or large group tutoring sessions, before, during or after school.

Since the launch of the SSI in 1999, the Texas Legislature has appropriated significant funding to TEA to support district-led programs for struggling reading students through ARI grants and struggling math students through AMI grants. During the first year of Implementation, only kindergarten students were provided with accelerated instruction in reading. With each successive year, an additional grade was added to the program. Funding levels have been based on student performance on the first administration of the state assessment (TAKS or Texas Assessment of Academic Skills (TAAS), depending upon the year) in reading for Grade 3, with districts receiving a specified amount based on the number of Grade 3 students failing the state assessment, and the total amount of funding

available for the program. For the first four years of the program, 1999-2000 through 2002-03, funds were used only to address the needs of struggling readers.

In 2003-04, accelerated math instruction was implemented, serving students in Grades K-4. Similar to reading, with each successive year, an additional grade was added to the program and more and more students were being served. AMI funding was based on student performance on the first administration of the state assessment (TAKS or TAAS, depending upon the year) in math for Grade 5, with districts receiving a specified amount for each Grade 5 student who failed to meet state standards on the state assessment for mathematics. While funding was calculated separately for districts based on the number of students failing the state assessment in reading and math, beginning in 2003-04, a single ARI/AMI grant award was made to school districts which could allocate the resources toward either reading or math services, depending upon local needs.

Table 1.3 reflects how ARI and AMI have accounted for the vast majority of SSI funds over the history of the initiative.

Table 1.3. State Appropriations for ARI/AMI by School Year

School Year	ARI/AMI Funding Level	Grades Served
1999–2000*	\$65.2 million	Kindergarten
2000–01*	\$57.5 million	Kindergarten – Grade 1
2001–02*	\$106.4 million	Kindergarten – Grade 2
2002–03*	\$75.1 million	Kindergarten – Grade 3
2003–04	\$80.9 million	Kindergarten – Grade 4
2004–05	\$144.1 million	Kindergarten – Grade 5
2005–06	\$149.5 million	Kindergarten – Grade 6
2006–07	\$144.2 million	Kindergarten – Grade 7
2007–08	\$124.9 million	Kindergarten –Grade 8
2008–09	\$123.3 million	Kindergarten – Grade 9
2009-10	\$44.2 million**	Kindergarten –Grade 12
2010-11	\$44.4 million**	Kindergarten – Grade 12

Source: Texas Education Agency, 1999 – 2011.

Note: The funding levels from the 1999-2000 school year through the 2005-06 school year were obtained from previously published ARI/AMI evaluation reports. The funding levels from the 2006-07 through the 2010-11 school year were obtained from funding budgeted amounts authorized by TEA management.

\*ARI funding only.

\*\*Now called Student Success Initiative Grants.

### *Intensive Reading Instruction/Intensive Math Instruction*

Four years after the SSI was authorized in 1999, the 78th Texas Legislature set aside \$12 million for intensive reading instruction programs for schools that had failed to improve student performance in reading. The legislation stated that the Commissioner would, upon determining which schools had achieved the least gains in reading performance, require those schools to submit a reading improvement plan detailing proposed efforts to improve reading performance as a condition of receiving funding. The reading improvement plan was required to establish the performance outcome of complete literacy among its student population and outline specific steps that would be taken to achieve that goal.

Thus, the Intensive Reading Instruction grant (IRI) (and later the Intensive Mathematics Instruction (IMI) grant) was created under SSI to provide further support for student achievement. IRI (and later IMI grants) funded the purchase of proprietary, stand-alone programs (from a list of Commissioner-approved programs identified through a Request for Qualifications process) designed to provide additional support to struggling readers and to students having difficulty with mathematics in Grades 4-7.

During the next two legislative sessions, the 79th (2006-2007 biennium) and 80th (2008-2009 biennium) Texas Legislatures expanded the initiative by appropriating funds for both IRI (\$15 million) and IMI (\$5 million) programs in campuses that had failed to improve students' TAKS reading and mathematics scores. The IRI/IMI program was not funded by the 81<sup>st</sup> Legislature in 2009.

### **Shifting Focus: Away from Student Interventions toward Teacher PD Programs and Targeted Campus Support Programs**

During the first eight years of the SSI, the majority of SSI funding was distributed directly to districts by TEA through the ARI grant program and later the ARI/AMI grant program to provide direct intervention services to struggling students. In fact, after the initial TRAs, funded through the Texas Reading Initiative to support SSI, were implemented over the 1999-2003 period and the TMAs were implemented during the summers of 2002 and 2003, the appropriations riders that funded SSI activities did not call for any major teacher professional development activities until 2007. In 2005, the Adolescent Literacy Initiative was created by the 79<sup>th</sup> Legislature and was funded through the SSI appropriations rider. Funds (\$2 million) were dedicated for the development of a supplemental diagnostic screening instrument and intensive reading instruction programs for students determined at risk of failing to perform at proficient levels on the Grade 8 TAKS-Reading. This work served as the building blocks to the TALA, which began the shift back to teacher professional development to support student learning and the SSI requirements. In 2007, the 80th Texas Legislature passed HB 2237 and funded TALA through the SSI appropriations rider, and the teacher PD initiative (including the continuation of TALA) was continued into the current biennium when the 81<sup>st</sup> Texas Legislature passed Rider 42 in Article III of the General

Appropriations Act in 2009 (Rider 42). Specifically, HB 2237 created TALA under the SSI umbrella, which represented the beginning of the shift in focus away from student interventions towards the implementation of statewide teacher professional development programs. Rider 42 outlined a series of programs designed to support the SSI through teacher professional development and campus supports with the creation of the Rider 42 PD Academies.

### ***HB 2237: Development and Implementation of Texas Adolescent Literacy Academies***

#### **TALA Overview**

HB 2237 took effect during the 2007-08 school year, and the intention of the legislation was to develop programs that would help improve high school success and increase college readiness in Texas public schools. This included the development and implementation of TALA. The development of TALA was a major shift for the Legislature in that they began moving SSI dollars away from intervention services and towards a model that focused efforts on strengthening classroom instruction to all students through professional development to teachers. TALA was created to provide reading academies for teachers who provide instruction to students in Grades 6-8. The general instruction program is based on the concept that “students who can read effortlessly with comprehension are better equipped to understand literature, science, social studies, and mathematical word problems.”<sup>5</sup> In other words, developing basic reading skills will assist in the overall understanding of what is being read in the content areas.

Through Rider 44 of Article III of the General Appropriations Act passed by the 80<sup>th</sup> Legislature in 2007 (Rider 44), almost \$13 million was appropriated in FY 2008 for the TALA program, and another \$21 million was allocated for FY 2009. These funds were used to develop, administer, and implement TALA from summer 2008 through fall 2009. Rider 44 development funds were used to create training materials and the Texas Middle School Fluency Assessment (TMSFA), while administration funds were provided to ESC Region XIII to conduct TALA regional trainings-of-trainers (TOTs) and to select and train educators to facilitate the TALA trainings. This model provided the capacity for TEA to implement TALA statewide through the 20 ESCs. Funds were awarded to ESCs based on the number of teachers in each region eligible to attend TALA. ESCs received grant funds for implementing TALA to teachers in their regions.

In 2010, this initiative was continued with another \$5.35 million allocated for further development and implementation of TALA. These funds are currently being used to conduct a validation study of the TMSFA, for revisions and updates to current TALA and TMSFA materials, for converting TALA materials into online courses, and to complete preparation of the OTRA for integration into Project Share. Project Share is an online instructional system designed to deliver ongoing support that was created in 2010 through Rider 42 appropriations from the 81<sup>st</sup> Legislature (discussed in more detail below). 2010 implementation funds allocated for TALA are being used by the 20 ESCs to provide TALA training sessions for teachers through June 2011. Table 1.4 illustrates the history of funding appropriations for TALA by fiscal year.

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<sup>5</sup> [http://www5.esc13.net/literacy/TALA\\_Reading\\_Academies.html](http://www5.esc13.net/literacy/TALA_Reading_Academies.html)

Table 1.4. History of State Appropriations for TALA by Fiscal Year

Fiscal Year (Grant/Project Period)	Purpose	Funding Level	Grades Impacted
FY2008 (9/1/07 to 8/31/08)	Development	\$817,923	Grade 6
FY2008 (9/1/07 to 8/31/08)	Administration	\$941,325	Grade 6
FY2008 (9/1/07 to 8/31/08)	Implementation	\$11,126,250	Grade 6
FY2008 (9/1/07 to 8/31/08)	<b>TOTAL</b>	<b>\$12,885,498</b>	
FY2009 (9/1/08 to 8/31/09)	Development	\$1,144,732	Grades 7-8 (new), Grade 6 (continuing)
FY2009 (9/1/08 to 8/31/09)	Administration	\$1,181,625	Grades 7-8 (new), Grade 6 (continuing)
FY2009 (9/1/08 to 8/31/09)	Implementation	\$18,593,000	Grades 7-8 (new), Grade 6 (continuing)
FY2009 (9/1/08 to 8/31/09)	<b>TOTAL</b>	<b>\$20,919,357</b>	
FY2010 (1/1/10 to 12/31/10)	Development	\$902,000	Grades 6-8 (combined, including online)
FY2010 (1/1/10 to 12/31/10)	Administration	\$0	Grades 6-8 (combined, including online)
FY2010 (1/1/10 to 12/31/10)	Implementation	\$4,423,000	Grades 6-8 (combined, including online)
FY2010 (1/1/10 to 12/31/10)	<b>TOTAL</b>	<b>\$5,325,000</b>	

Source: Texas Education Agency, Report on Implementation of HB 2237 (March 1, 2007)

### TALA Design and Implementation

The reading intervention strategies included in TALA are based on principles of intervention for struggling readers, and focus on improving teaching which directly benefits students. TALA provides English language arts reading and content area teachers with “successful, research-based strategies for improving their students’ academic literacy.”<sup>6</sup> The legislative requirements were that the program must provide training in:

- Strategies to be implemented in English language arts and other subject areas for multi-syllable word reading, vocabulary development, and comprehension of expository and narrative text.

<sup>6</sup> [http://www5.esc13.net/literacy/TALA\\_Reading\\_Academies.html](http://www5.esc13.net/literacy/TALA_Reading_Academies.html)

- An adaptation framework that enables teachers to respond to differing student strengths and needs, including adaptations for students of Limited English Proficiency (LEP) or students receiving special education services.
- Collaborative strategies to increase active student involvement and motivation to read; other areas identified by the Commissioner as essential components of reading instruction.
- Administration and interpretation of the reading instrument and scientific research-based strategies for effective reading instruction, for long-term intensive intervention to target identified student needs in word recognition, vocabulary, fluency, and comprehension.
- Strategies for incorporating reading instruction into the curriculum for the subject area taught by the teacher (for content area teachers).

In addition, the Academies were framed within a school-wide approach to addressing the needs of struggling adolescent readers.

From 2008 to 2010, there were two separate TALA Academies for teachers of students in Grades 6-8: 1) the English language arts (ELA) Academy for ELA and reading teachers; and 2) the Content Area Academy for teachers of mathematics, science, and social studies. The ELA Academy focused on content literacy strategies, intensive intervention strategies; and reading assessment to inform instruction/intervention. The Content Area Academy focused on content literacy strategies within each specific subject. Grade 6 teachers attended TALA Grade 6 ELA and content area academies beginning in the summer of 2008, while Grade 7 and Grade 8 teachers attended TALA Grades 7-8 ELA and content area academies beginning in summer 2009. HB 2237 also stated that the Academies were required for teachers who teach reading, mathematics, science, or social studies at campuses that are Academically Unacceptable (AU) in reading at any grade level at the campus.

In 2011, TALA Grade 6 and TALA Grades 7-8 will be combined into TALA for Grades 6-8. In addition, the TALA materials will be converted into online courses for the OTRA that will be integrated into Project Share.

The TALA ELA Academy provides training on the administration and use of the TMSFA, a diagnostic and progress monitoring instrument for Grades 6-8 students who do not meet the standard, or score below 2100, on the TAKS-Reading. For Grade 7 students who failed the TAKS reading test as Grade 6 students, the administration of a diagnostic instrument is mandatory during the first six weeks. Texas school districts are expected to administer the assessment to students in Grade 7 who did not demonstrate reading proficiency. Additionally, districts are to provide intensive instruction and intervention to these students based on the results of the assessment.

Overall, HB 2237 provided guidelines to develop and implement statewide adolescent literacy Academies for middle school teachers. Through linking with the TMSFA, the legislation also provided educators with a tool to identify students who are struggling with literacy skills. These efforts were continued during the 81<sup>st</sup> legislative session, not just with additional funding for TALA, but with the creation of the Rider 42 PD Academies. In fact, the general framework for the Rider 42 Academies is

based on the TALA model in several ways, from the goals, materials, and diagnostic assessments, to the statewide implementation framework flowing through the 20 ESCs. However, the design of the Rider 42 PD Academies also benefited from lessons learned from TALA. The next section provides more specifics on Rider 42, followed by a description of each of the Rider 42 PD Academies.

### ***81st Legislature, Article III of the General Appropriations Act, Rider 42: Professional Development Academies and Campus Supports***

The 81<sup>st</sup> Legislature continued support of the SSI by appropriating nearly \$152 million in each year of the biennium (FY 2010 and FY 2011) with a consistent focus on reading, math, and postsecondary readiness. However, unlike previous SSI appropriation riders, Rider 42 placed a strong emphasis on middle school and high school professional development and campus support initiatives. The following programs represent the major components of Rider 42:

- As described above, continuation of TALA for teachers in Grades 6-8 who have not previously attended, and training in teaching reading across content areas for Grades 6-8 math, science and social studies teachers (\$11.15 million for the 2010-2011 biennium).
- Development and implementation of what has come to be known collectively for the purposes of this evaluation as the Rider 42 PD Academies, including:
  - Creation of Math Academies for Grades 5-8, which TEA named the MSTAR Math Academies for Grades 5-6 and the MSTAR Math Academies for Grades 7-8 (\$10.1 million in each year of the 2010-2011 biennium).
  - Establishment of the following Teacher PD Academies: Algebra I and Algebra II End-of-Course (EOC) Success Academy, Geometry EOC Success Academy, Science Academies for Grades 5-8, Science Texas Essential Knowledge and Skills (TEKS) Overview for Grades K-12, Biology EOC Success Academy, Physics EOC Success Academy, Chemistry EOC Success Academy, English I, II, and III EOC Success Academy, Social Studies TEKS Overview Academy for Grades K-12, US History EOC Success Academy, World History EOC Success Academy, and World Geography EOC Success Academy.<sup>7</sup> In addition, an online instructional component (Project Share) to provide ongoing support during the school year for those teachers who complete the Academies was created through a partnership with Epsilon (\$50 million for the 2010-2011 biennium).
- Establishment of teacher academies to provide all content area teachers, not just bilingual/ESL, with PD in ELPS, which outline English language proficiency level descriptors and student expectations for ELLs, and instructional practices (\$10 million for the 2010-2011 biennium).

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<sup>7</sup> Not all Academies were intended to be created and implemented at once. Some were chosen for development and implementation for summer 2010, while the others will be developed for and implemented in for summer 2011.

- Development of a supplemental diagnostic screening instrument to help diagnose and develop interventions for students not performing well in Grades 5-8 math, which TEA named the MSTAR Universal Screener Grades 5-8 (\$1.7 million in each year of the 2010-2011 biennium).
- Creation of a competitive grant program aimed at improving student achievement in mathematics and preparing students to meet the Algebra I EOC standard for local education agencies with students identified as unlikely to meet the EOC standard in Algebra I. Through these funds, TEA created the Algebra Readiness Grant Program, which provided funding to 176 campuses in 62 districts across Texas (\$50 million was appropriated for the 2010-2011 biennium).<sup>8</sup>
- Creation of technology-based supplementary math instruction programs for students in Grades 5-8 (\$1.5 million in each year of the 2010-2011 biennium).<sup>9</sup>
- Creation of a program to provide targeted assistance to promote student success and close achievement gaps at campuses with disproportionately high numbers of students who have been identified as unlikely to achieve college readiness standards by the end of Grade 11, including technical assistance from individuals with demonstrated expertise in improving student college readiness among academically struggling students and students with historically lower college success rates. Through these funds, TEA developed the College Readiness Initiative for Middle School Students and awarded grants to 81 districts serving 116 campuses (\$14.4 million for the 2010-2011 biennium).
- Creation of School Leadership Academies for Grades K through 12 to develop and provide professional development trainings to district and campus leadership regarding the best ways to evaluate campus and classroom needs, monitor instruction, implement campus and classroom improvement activities, ensure fidelity in implementation of strategies learned through professional development, and support their teachers and their needs for success in the classroom (\$5 million for the 2010-2011 biennium).
- Provision of direct support to districts through Student Success Initiative Grant (SSIG) funding (\$44.2 million for 2010-11 and \$44.4 million for the 2011-12 school year).

#### Rider 42 Professional Development Academies

The first of the Rider 42 PD Academies developed by TEA in spring 2010 included the MSTAR Math Academy for Grades 5-6, the MSTAR Math Academy for Grades 7-8, the Algebra I EOC Success Academy, the Science Academy for Grades 5-8, the Science TEKS Overview Academy for Grades K-12, the Biology EOC Success Academy, and the English I and II EOC Success Academy. These Academies were designed to provide teachers with in-depth training in mathematics, English language arts, and science instruction. The goals of the PD include helping teachers to:

- Facilitate the appropriate use of data to drive instructional planning.

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<sup>8</sup> Approximately \$41 million in Algebra Readiness Grant funds were distributed to participating school districts in Texas.

<sup>9</sup> A total of \$1.2 million was awarded to the vendor for this project.

- Align instruction to the TEKS.
- Accelerate instruction or provide interventions for struggling students.
- Transition into an online environment for future professional development opportunities.
- Incorporate research-based strategies to improve the academic language skills of English language learners.

In addition, the PD Academies will help teachers understand the new high school EOC assessments that will be administered beginning in 2011-12. Lastly, the Rider 42 PD Academies include targeted instructional strategies so that teachers can better support every student in Texas, and help those students achieve success in core academic subject areas. These strategies include the integration of three sets of standards and support frameworks: the Texas College and Career Readiness Standards (CCRS), the Texas English Language Proficiency Standards (ELPS), and Response to Intervention (RtI).

### *Texas College and Career Readiness Standards*

The 79<sup>th</sup> Texas Legislature passed House Bill 1, the “Advancement of College Readiness in Curriculum,” Section 28.008 of the Texas Education Code, to increase the number of students who are college and career ready when they graduate from high school. The CCRS that resulted from that legislation were developed and assessed by vertical teams composed of secondary and postsecondary faculty across the content areas of English/language arts, mathematics, science, and social studies. Vertical teams used a multi-level framework that focuses on subject matter and the way it is organized and presented in the classroom.

The CCRS emphasize secondary-level content knowledge that stimulates students to engage in deeper levels of thinking. Incorporation of CCRS into the TEKS was a multi-year process and was based on a series of gap analyses conducted by TEA.

- There was a gap analysis completed on the English language arts and reading (ELAR) CCRS and ELAR TEKS in 2008 and the CCRS are addressed in those TEKS.
- The gap analysis of the CCRS and Math TEKS resulted in a revision of the Math TEKS in 2009.
- The gap analyses of CCRS and science and social studies TEKS were completed as part of the TEKS review process and the CCRS were incorporated into the science and CTE TEKS in 2009 and the social studies TEKS in 2010.

The framework of the CCRS recognizes that at a postsecondary level, students must: (1) have core foundational knowledge of a discipline and be able to use that knowledge with facility and fluency; and (2) be able to understand the vertical structure of a discipline and how knowledge expands from the initial study of a topic.<sup>10</sup>

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<sup>10</sup> Source: Biology EOC Success documentation.

### *English Language Proficiency Standards*

The ELPS outline English language proficiency level descriptors and student expectations for ELLs. School districts are required to implement the ELPS as an integral part of each subject in the required curriculum. The ELPS are published along with the TEKS for each subject in the required curriculum (ELA/reading, math, science, social studies).<sup>11</sup> The importance of the ELPS is further highlighted by the fact that they are not only included as one of the key support frameworks of the Rider 42 PD Academies, but also as a standalone ELPS Academies focusing on the four core content areas.

### *Response to Intervention*

RtI integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RtI, schools identify students at risk for poor learning outcomes and monitor individual student progress. In addition, schools provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness. RtI also helps schools identify students with learning disabilities or other disabilities.<sup>12</sup>

Additional Rider 42 PD Academies that will be developed in spring 2011 for implementation beginning in summer 2011 include: the Geometry EOC Success Academy, the Algebra II EOC Success Academy, the Physics EOC Success Academy, the Chemistry EOC Success Academy, the English III EOC Success Academy, the Social Studies TEKS Overview K-12, the U.S. History EOC Success Academy, the World History EOC Success Academy, and the World Geography EOC Success Academy. Table 1.5 lists each of the Rider 42 PD Academies, along with information about targeted grade levels, vendors that developed Academy materials, and timelines for the development of the training materials, regional TOTs, and initial timeline for the PD to be implemented with teachers across Texas.

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<sup>11</sup> Source: Texas Education Agency, <http://ritter.tea.state.tx.us/curriculum/biling/elps.html>.

<sup>12</sup> Source: National Center on Response to Intervention, <http://www.rti4success.org/>.

Table 1.5. Professional Development Programs Developed Under Rider 42

PD Subject	Targeted Grade Levels	Vendor	Development Timeline	TOT Timeline	PD Timeline
<b>Mathematics</b>					
MSTAR Math Academies for Grades 5-6 (Algebra Readiness)	5-6	Region XIII (while ESC XIII contracted with writers from various other entities, ESC XIII received the grant for all math academies )	October 02, 2009 to April 20, 2010	April 20, 2010 to May 30, 2010	June 01, 2010 to May 31, 2012
MSTAR Math Academies for Grades 7-8 (Algebra Readiness)	7-8	Region XIII	October 02, 2009 to April 20, 2010	April 20, 2010 to May 30, 2010	June 01, 2010 to May 31, 2012
Algebra I (EOC Success; Readiness for higher level math courses)	MS/HS	ESC Region XIII	October 02, 2009 to April 20, 2010	April 20, 2010 to May 30, 2010	June 01, 2010 to May 31, 2012
Geometry EOC Success	HS	ESC Region XIII	August 01, 2010 to April 20, 2011	April 20, 2011 to May 30, 2011	June 01, 2011 to May 31, 2013
Algebra II EOC Success (College Readiness)	HS	ESC Region XIII	August 01, 2010 to April 20, 2011	April 20, 2011 to May 30, 2011	June 01, 2011 to May 31, 2013
<b>English Language Arts</b>					
English I EOC Success	HS	Institute of Public School Initiatives, University of Texas System	September 02, 2009 to April 20, 2010	April 20, 2010 to May 05, 2010	June 01, 2010 to May 31, 2012
English II EOC Success	HS	Institute of Public School Initiatives, University of Texas System	October 02, 2009 to April 20, 2010	April 20, 2010 to May 30, 2010	June 01, 2010 to May 31, 2012
English III EOC Success (College Readiness)	HS	Institute of Public School Initiatives, University of Texas System	September 2010 to March 2011	March 28, 2011 to April 27, 2011	June 01, 2011 to May 31, 2013

PD Subject	Targeted Grade Levels	Vendor	Development Timeline	TOT Timeline	PD Timeline
<b>Science</b>					
Science TEKS Overview Academy for Grades K-12 (including earth and space science, environmental and aquatic science, life, earth and physical sciences in K-5 and 6-8)	K-5, 6-8	ESC Region IV	September 05, 2009 to April 20, 2010	April 20, 2010 to May 05, 2010	June 01, 2010 to May 31, 2012
Biology EOC Success	HS	ESC Region IV	September 05, 2009 to April 20, 2010	April 20, 2010 to May 05, 2010	June 01, 2010 to May 31, 2012
Chemistry EOC Success	HS	ESC Region IV	August 01, 2010 to April 20, 2011	April 20, 2011 to May 05, 2011	June 01, 2011 to May 31, 2013
Physics EOC Success	HS	ESC Region IV	August 01, 2010 to April 20, 2011	April 20, 2011 to May 05, 2011	June 01, 2011 to May 31, 2013
<b>Social Studies</b>					
K-12 Social Studies TEKS Overview	K-12	ESC Region VI	Currently Planned for Summer 2011 Release; Not Part of this Research Study	Currently Planned for Summer 2011 Release; Not Part of this Research Study	Currently Planned for Summer 2011 Release; Not Part of this Research Study
US History EOC	HS	ESC Region VI	Currently Planned for Summer 2011 Release; Not Part of this Research Study	Currently Planned for Summer 2011 Release; Not Part of this Research Study	Currently Planned for Summer 2011 Release; Not Part of this Research Study
World History EOC	HS	ESC Region VI	Currently Planned for Summer 2011 Release; Not Part of this Research Study	Currently Planned for Summer 2011 Release; Not Part of this Research Study	Currently Planned for Summer 2011 Release; Not Part of this Research Study

PD Subject	Targeted Grade Levels	Vendor	Development Timeline	TOT Timeline	PD Timeline
World Geography EOC	HS	ESC Region VI	Currently Planned for Summer 2011 Release; Not Part of this Research Study	Currently Planned for Summer 2011 Release; Not Part of this Research Study	Currently Planned for Summer 2011 Release; Not Part of this Research Study
<b>English Language Proficiency Standards</b>					
English Language Proficiency Standards (math, ELA, science, social studies)	K-12	ESC Region XX	September 05, 2009 to April 10, 2010	April 8, 2010 to June 17, 2010	June 1, 2010 to May 31, 2013

### Algebra Readiness Grant Program

An additional campus support program for mathematics is being provided to a subset of campuses in the state through the Algebra Readiness (AR) grant program to eligible Texas school districts and charter schools as part of Rider 42. AR Cycle 1 grants were awarded to 32 districts that are serving math teachers at a total of 73 campuses, with funding beginning in January 2010 and lasting through May 2012. To prepare teachers and students for the transition to an EOC exam in Algebra I, this program is designed to deliver a more intensive professional development and support program to middle schools with a history of low math achievement. Cycle 1 of the AR grant program provides funding to middle schools which had 65% or fewer students in Grades 7 and 8 who met the passing standard for the math portion of the TAKS over the preceding three school years. Funding may be used for any of the following activities:

- Extended learning time for mathematics
- Instructional coaching
- Common planning time
- Effective supplemental resources
- Effective professional development
- Administrator training
- Appropriate technology
- Active ongoing student engagement
- Guidance and communication with parents

As part of this grant program, math teachers in these schools are required to participate in the appropriate face-to-face and online Rider 42 PD Academies, including the Algebra I EOC Success Academy, and the MSTAR Math Academy for Grades 5-6 or MSTAR Math Academy for Grades 7-8. In addition to Cycle 1 grantees, TEA is in the process of awarding Cycle 2 grants to approximately 76 campuses representing 41 school districts, as well as 21 grants to 27 campuses representing 22 school districts through the Algebra Readiness for Small and Rural Schools grant competition.

### ARI/AMI Funding

As previously mentioned, the ARI/AMI program, renamed the SSIG, is the mechanism by which TEA has allocated most of the SSI funding to school districts over the past decade. This funding stream allows districts to provide intensive one-on-one, small group, or whole class instruction to students struggling with reading or math. There is substantial discretion at the district and campus level in how these funds are used. Historically, school districts have used the vast majority of their ARI/AMI funding on four primary budget items (supplemental curriculum, teacher pay, tutor pay, and other supplies and materials) and have focused their efforts on small group instruction. Funding for this program went from approximately \$65 million in its first year (2000-01) to around \$120- \$150 million per year over the 2004-05 to 2008-09 periods. While funding for direct services to students was maintained through the

establishment of the SSIG program for 2009-10 and 2010-11, it is no longer the primary vehicle for expenditure of SSI funding.

### Project Share

In coordination with the development of the PD Academies, and along with the AR grant program, TEA has partnered with Epsilen (an e-learning platform) and the New York Times Knowledge Network to develop and implement Project Share. Project Share is a collection of Web 2.0 tools and applications that will provide high quality PD in an interactive and engaging learning environment. Project Share leverages existing and new PD resources for K-12 teachers across the state and will serve as a mechanism for building professional learning communities where educators can collaborate and participate in online learning opportunities. In this online environment, teachers can access digital content repositories (e.g., the *New York Times*, PBS Digital Learning Library, Smithsonian Education, etc.) that include articles, videos, images, podcasts and other interactive features, as well as access state-adopted instructional materials. This platform facilitates online content delivery through teaching, collaboration, and networking.<sup>13</sup> Project Share is being utilized to deliver ongoing PD courses and to facilitate online professional learning communities for participants in all Rider 42 PD Academies.

As of the end of 2010, approximately 250,000 Project Share teacher accounts had been created. Many of those teachers with Project Share accounts were introduced to the system and joined the online platforms after attending face-to-face PD Academies during summer 2010. Teachers across the state are taking the “Texas Tour”, an online presentation which introduces new Project Share members to the online platform.

TEA has developed a timeline for the 2010-11 school year related to the launch of online courses in Project Share. Over the October-December 2010 period, a total of 11 online courses in the math content were launched, with 12 additional courses (e.g., science, math, English I and II, ELPS) scheduled for launch in January and February 2011. The English I and II EOC Success online course is scheduled for a January 2011 launch and will address expository reading and writing in high school. The first participants will be ESC ELA specialists and possibly ELA coordinators from the largest districts. After ESC participants complete the course, they will receive training in how to facilitate online courses, and then they will be asked to turn the online training around to eligible teachers in their region. The course is designed to be a facilitated course so that ESC specialists can provide feedback and additional information as participants discuss and ask questions. Going forward, TEA plans to continue online course development through the life of the content development grants (ending February 2013), and they will work with ESCs to distribute and advertise courses.

### MSTAR Universal Screener Grades 5-8, or Math Supplemental Diagnostic Screening Instrument

The MSTAR Universal Screener is a formative assessment system administered to Grades 5-8 students to support instructional decisions. Information about this screener is integrated in the MSTAR Math Academy for Grades 5-6 and Grades 7-8 and is part of the AR Initiative. The purpose of the MSTAR Universal Screener is to help guide instructional decisions in relation to students’ readiness for algebra.

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<sup>13</sup> Source: Texas Education Agency, <http://tea.epsilen.com/Public/Home.aspx>.

Results from the MSTAR Universal Screener can be used to help teachers determine if students are on-track or at-risk for meeting curricular expectations in algebra and for pre-algebra. Results from the MSTAR Universal Screener also help teachers determine the intensity of the instructional support students might need if they have been identified as at-risk for not meeting curricular expectations in algebra and for algebra-readiness. Teachers will be able to monitor students' risk status by administering comparable forms of the MSTAR Universal Screener in fall, winter, and early spring.

The MSTAR Universal Screener Overview, an online Project Share course, assists participants in understanding how to interpret the results obtained from the screener to make instructional decisions. The MSTAR Universal Screener Overview emphasizes the screener's ability to help teachers identify students who might not be ready for algebra and identify the intensity of support needed for students who might be at risk for not meeting expectations in algebra. The course has detailed lessons for both teachers and administrators.

In a related project funded by the Meadows Foundation, the Institute for Public School Initiatives at the University of Texas along with the Meadows Center for the Prevention of Educational Risk has supported the MSTAR Intervention Project. The goal of the MSTAR Intervention Project is to create sample intervention lessons for use in teaching students who need extra support in Grades 5-8 mathematics. These sample lessons are being placed in the Project Share platform for use by all Texas teachers. Phase two of the continuing MSTAR Math Academies will include an introduction to the MSTAR Universal Screener as well as an overview of the MSTAR Intervention lessons.

Thus, with the establishment and creation of these teacher PD and campus support programs, Texas is shifting its focus for SSI dollars from student-based intervention programs to a teacher development-focused approach. Building on experiences and successes implementing the TALA program from the 80<sup>th</sup> legislative session, Rider 42 from the 81<sup>st</sup> session provided funding to continue those efforts, as well as to substantially build and expand PD programs. The AR grant provides a system of campus supports designed to maximize the potential positive impacts of the PD itself. These structures include mentoring and coaching, which will help teachers make the most out of the PD they receive at the Academy. In addition, the creation of Project Share will provide a mechanism by which PD can be delivered throughout the course of the year, both in terms of content, as well as providing teachers with unique ways of networking and building professional learning communities in an online context. It is through this investment in teacher development that Texas strives to improve high school success and increase college readiness in Texas public schools.

It is clear from this summary of the legislative and programmatic history of the SSI, that an enormous amount of funding (i.e., approximately \$1.5 billion) and resources have been allocated to programs designed to support students across the state to ensure that they have the necessary assistance to be successful on the state assessments in reading and math. During the past two legislative sessions, there has been a renewed focus on the quality of instruction and campus-level teacher supports (i.e., coaching, extended learning time, etc.) as evidenced by the establishment of statewide teacher PD programs, such as TALA and the various Rider 42 funded content-specific PD Academies, and large scale grant programs like the Algebra Readiness Grant Program designed to provide math teachers with

additional supports from trained and experienced math coaches. In addition, the way in which SSI-related teacher training is implemented will be changing with the advent of Project Share. Teachers will have unlimited opportunities to engage in interactive online PD and become active participants in professional learning communities (providing them with the ability to interact with and share information with other teachers across the state) through Project Share.

## **Section 2. Summary of the Literature on Teacher Professional Development**

While Section 1 of this chapter provides a detailed description of the evolution and transformation of SSI from a model by which the majority of funds were provided to districts to support student intervention to a model where the majority of funds are geared toward teacher professional development, it is important to understand the literature related to impact of teacher professional development on improvements in student learning.

In a recent article on the state of research on teacher PD, renowned PD researcher Thomas Guskey (2009) discussed the gap between common beliefs about what it means for PD to be considered effective and the existing evidence supporting these beliefs, concluding that:

Currently, valid and scientifically defensible evidence on the relationship between professional development and improvements in student learning is exceptionally scarce. Still, we are now in a better position than ever to organize and conduct professional development activities that not only yield valid evidence on the effectiveness of current practice but also inform future endeavors (p. 231-232).

Despite gaps in our collective understanding of how PD produces impacts, contemporary research on professional development highlights the importance of sustaining PD throughout the school year, the need to help teachers translate learning from PD into classroom practice, and how PD can positively affect student achievement outcomes. An understanding of the research on traditional, or face-to-face PD, as well as online PD, helps to frame the evaluation of the Rider 42 PD Academies.

### **Research on Face-to-Face Teacher Professional Development**

Students need well-prepared teachers to implement curriculum or instructional strategies. To implement research-based instructional methods effectively, teachers need exposure to such approaches and support as they learn to implement them (Benton & Benton, 2008). Teacher professional development is a common approach used to improve student achievement, school performance, and teacher quality (Benton & Benton, 2008; Colbert, Brown, Choi, & Thomas, 2008). Professional development that focuses on research-based instructional routines, involves active learning by the teachers, and allows teachers to adapt the instructional routines to their classrooms has been found to be effective in improving student achievement (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007).

Short-term professional development is not usually effective, however (Firestone, Hayes, Robinson, & Shalaby, 2008). For teacher professional development to be effective, considerable time must be

allotted, and “that time must be well-organized, carefully structured, purposefully directed, and focused on content or pedagogy or both” (Guskey & Yoon, 2009, p.499). Nonetheless, Guskey and Yoon also point out that workshops “are not the poster child[ren] of ineffective practice that they are often made out to be” (p. 497). In other words, workshops can play a role in improving teacher practice as one component of an efficacious approach to PD.

In their review of the existing evidence on how teacher PD affects student achievement in elementary grades, the Regional Educational Laboratory Southwest found support in nine of the studies meeting What Works Clearinghouse evidence standards that teachers who receive an average of 49 professional development hours can increase students’ academic performance by approximately 21 percentile points (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007).

It is difficult to measure the effects of professional development on student outcomes without accounting for the influence of teacher beliefs and school leadership (Putman, Smith, & Cassady, 2009). School leadership is one of the most critical components in the effective implementation of initiatives (Leithwood, Jantzi, & McElheron-Hopkins, 2006; Murphy, 2004). In addition, effective continuation of PD throughout the school year often includes securing support from campus administrators.

School reform researcher Robert Slavin and his colleagues (2008) recently reviewed the research on best practices for middle and high school reading programs. This review focused on four types of programs: (a) reading curricula, (b) computer-assisted instruction, (c) programs that combined large and small group instruction with computer activities, and (d) programs that focused on providing teachers with professional development to implement specific instructional routines. This review revealed that programs designed to change teaching practices in the classroom were the most effective and had positive achievement effects.

In a study on mathematics and science PD commissioned by the Council of Chief State School Officers, researchers reviewed reports from evaluations of 25 teacher professional development programs in 14 states. Findings suggested that one-third of the projects had “measurable effects of teacher professional development” including increasing teacher content knowledge, teacher development leading to student outcomes, and instructional practices of teachers (Blank, de las Alas, & Smith, 2008, p.26).

The research literature provides some guidance about what high quality professional development looks like. For example, in a study examining the effects of different characteristics of professional development on teachers’ learning (Garet, Porter, Desimone, Birman, & Yoon, 2001), results indicated that three core features of professional development activities have significant, positive effects on teachers’ self-reported increases in knowledge and skills and changes in classroom practice. These are: (1) focus on content knowledge; (2) opportunities for active learning; and (3) coherence with other learning activities.

## **Research on Online Teacher Professional Development**

From online courses, webinars, discussion groups, social networks, blogs, wikis, and web-based workspaces, the electronic education marketplace has undergone an explosion in offerings in the past

few years. This rapid expansion provides a unique opportunity to expand access to professional development to more teachers. However, research suggests that in order for this professional development to be effective, it should be based on some of the same lessons learned about high quality face-to-face professional development.

Cercone (2008) maintains that high-quality online course design models should do the following:

- Connect new knowledge to prior learning.
- Maintain collaboration and social interaction between students.
- Promote a self-reflective environment.
- Include current or immediate applications.
- Advance self-regulated learning.

These components in the design of an online course lead to deep learning as opposed to just surface learning (Fink, 2003; Majeski & Stover, 2007). Deep learning is more likely to be successful because it provides satisfaction by engaging the whole learner in the learning process, socially, cognitively, and affectively (Fink, 2003; Garrison, Anderson & Archer, 2000).

Practitioners from EdTech Leaders Online (<http://edtechleaders.org/>), an online professional development program launched by the Center for Online Professional Education at the Education Development Center in 2000, disseminated key lessons from their experience helping school districts, state departments of education, regional service providers, and other educational organizations incorporate technology into their educational programs (Treacy, Kleiman, & Peterson, 2002). They assert that the success of an online professional development (OPD) program depends on organizers' success in doing the following:

- Assess local professional development needs and develop an OPD plan based on these needs.
- Connect OPD with other ongoing, face-to-face professional development activities.
- Carefully select and train OPD-specialist team members.
- Build a strong local team.
- Provide incentives for participation.
- Publicize the OPD program and involve local stakeholders.
- Provide readily available and reliable access to technology and support.
- Foster a rich, interactive online learning community.
- Integrate online workshops with face-to-face meetings.

Based on empirical experience, EdTech Leaders Online also compiled Ten Tips for Effective Virtual Course Facilitation once a program has been developed. These are:

1. Make all students feel welcome and heard – create a comfortable environment.
2. Establish clear goals and expectations early in the course.
3. Provide behind-the-scenes support via email.
4. Foster communication between students.
5. Model participation and discussion techniques for students.
6. Keep the discussion alive – prevent stagnancy.
7. Keep the discussion on topic.
8. Guide students through the curriculum.
9. Make sure the audience and the curriculum are in sync.
10. Bring closure to each session before moving on.

In conclusion, the contemporary research base suggests that teacher professional development has the potential to change teacher practice and improve student outcomes. However, the research also indicates that PD is more likely to be effective if it explicitly attends to changing practice, is ongoing, and provides sufficient time for teachers to refine their new skills and test their new knowledge.

### **Section 3. The Rider 42 Professional Development Academies**

As previously discussed, Rider 42 from the 81<sup>st</sup> Legislative session mandated the creation of PD Academies, which would be further supported through the development of an online PD delivery system to encourage continued PD throughout the year, the establishment of a supplemental grant program to further support the PD teachers received on a subset of campuses, the development of a math screener, etc. During the spring of 2010, seven of these Academies were developed for summer implementation, in addition to the development of the ELPS Academies. Following is an overview of each of these Academies, as well as a brief description of the ELPS Academies.

#### **MSTAR Math Academies for Grades 5-6**

The goal of the MSTAR Math Academies for Grades 5-6 is to improve overall mathematics instruction and student achievement in order to meet EOC Algebra I standards in Grade 9/high school and to ensure postsecondary readiness.<sup>14</sup> In this three-day Academy, participants examine the “big ideas” in the Grades 5-6 math TEKS and learn strategies to prepare students for success in algebra. Participants explore hands-on, student-centered lessons designed to provide connections to, and strengthen participants' knowledge of, the middle-school mathematics that is critical for success in algebra, the CCRS, ELPS, and RtI. Participants practice applying ELPS- and RtI-based instructional strategies to promote student success at working with fractions and ratios. These two topics were identified by TEA and the Academy developers as topics that needed to be addressed in terms of improving teachers' instruction and student understanding.

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<sup>14</sup> Source: Professional development Academy materials.

Participants discuss what it means for a student to be ready for algebra, investigate the Texas Response to the Curriculum Focal Points (TxRCFP), and become familiar with some recommendations for improving student success in algebra (e.g., the National Math Advisory Panel recommendations). Participants also have the opportunity to understand (a) the relationship of the MSTAR Universal Screener to the TxRCFP and algebra readiness; (b) the purpose of the MSTAR Universal Screener; and (c) the knowledge representations used in the MSTAR Universal Screener.

This Academy provides Texas teachers and administrators with an overview of Project Share, which allows educators to continue to learn about math instruction and to build online professional learning communities for further development and growth.<sup>15</sup>

The MSTAR Math Academies for Grades 5-6 training materials were developed in early 2010. The MSTAR Math Academies for Grades 5-6 consisted of three days of face-to-face training, and teachers started participating in this training in June 2010. Face-to-face training is being followed by on-line follow-up training (using Project Share) that began in fall 2010.

### **MSTAR Math Academies for Grades 7-8**

The goals, structure, framework, and objectives of the three-day MSTAR Math Academies for Grades 7-8 are identical to the MSTAR Math Academies for Grades 5-6. Participants examine the “big ideas” in the Grades 5-6 math TEKS and learn strategies to prepare students for success in algebra. Participants explore hands-on, student-centered lessons designed to provide connections to and strengthen participants' knowledge of the middle-school mathematics that is critical for success in algebra, the CCRS, ELPS, and RtI. Activities with the MSTAR Universal Screener and Project Share were identical to those in MSTAR Math Academies for Grades 5-6.

The major difference between MSTAR Math Academies for Grades 7-8 and MSTAR Math Academies for Grades 5-6 is the activities on the second two days of the training. MSTAR Math Academies for Grades 7-8 focuses on proportionality, and spends more time on the development of teachers' content knowledge on this topic. On day two, participants discuss how and when proportional reasoning is taught; articulate the concepts of ratio, rate, and proportionality (focal point and content); and trace the proportionality focal point through Grades 7 and 8. Then participants learn to differentiate between proportional situations versus situations that are not proportional, discuss algebraic thinking and tie in student errors, identify the structure of word problems, and review research connections with RtI and ELPS. Participants practice debugging faulty thinking regarding percent and proportionality and make connections using hands-on activities focused on geometric probability, geometry and measurement, and connecting ratio and proportion to geometric probability.

On day three of the Academy, participants gain experience connecting geometry to proportionality; explore multiple representations of percentages, percent change, and proportionality; and explore proportionality by solving problems, reviewing conclusions from the research, and posing final questions regarding proportionality.

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<sup>15</sup> Source: Texas Education Agency (May 2010). *Curriculum Update* (Newsletter), Issue I, Volume 1.

The MSTAR Math Academies for Grades 7-8 training materials were developed in early 2010. The MSTAR Math Academy for Grades 7-8 consisted of three days of face-to-face training, and teachers started participating in this training in June 2010. Face-to-face training is being followed by on-line follow-up training (using Project Share) that began in fall 2010.

### **Algebra I EOC Success Academy**

In the Algebra I EOC Success Academy, participants examine the concepts in the Algebra I TEKS and learn strategies to prepare students for success on the Algebra I EOC assessment based on the blueprint for this assessment that shows the five objectives of the assessment.

The Algebra I EOC Success Academy also provides connections to and strengthens participants' knowledge of CCRS, ELPS, and RtI. Project Share is discussed and participants are given an orientation to the online system and the follow-up activities in which they can participate. Participants explore hands-on, student-centered lessons.<sup>16</sup> The focus of this two-day training is on having participants investigate students' understandings and misunderstandings of specific objectives, and build a conceptual understanding and address misunderstandings and obstacles for student understanding of these objectives. Ultimately, this is to help them build awareness of differentiation and enrichment strategies within Tier 1 instruction of the RtI support framework. Objectives that are addressed included functional relationships, linear functions, the properties and attributes of functions, linear equations and inequalities, and quadratic and other nonlinear functions.

The Algebra I EOC Success Academy materials were developed in early 2010. The Algebra I EOC Success Academy consists of two days of face-to-face training, and teachers started participating in this training in June 2010. An online version of the Algebra I EOC Success Academy is also available through Project Share. Face-to-face training is being followed by on-line follow-up training (using Project Share) that began in fall 2010. In the online follow-up course, Algebra I EOC Success Academy: Additional Lessons, participants review a lesson study model developed to support implementation of the six lessons from the face-to-face professional development and the four additional lessons found within the online course. Participants apply this lesson study model to one of the additional lessons and analyze archival student data.

### **Science Academies for Grades 5-8**

In the Science Academies for Grades 5-8, participants experience a total immersion into the new 2010 Science TEKS for Grades 5-8. These sessions provide connections to and strengthen participants' knowledge of CCRS, ELPS, and RtI. Participants explore four hands-on, student-centered lessons (one for each grade level) that are framed in the research-based 5E instructional model (engage, explore, explain, elaborate, evaluate), each with a focus on integrating the three support frameworks (CCRS, ELPS, and RtI). Specifically, the four lessons are:

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<sup>16</sup> While the developer created two lessons for each EOC objective, only one was presented during the PD Academies, while the others may be put on Project Share for future trainings.

1. **Grade 5 Lesson: “Constant Changes”** – A sample lesson on Earth’s changing surface using the 5E model while helping participants understand how ELPS can be incorporated into a science lesson.
2. **Grade 6 Lesson: “Moving and Shaking”** – A sample lesson on plate tectonics and earthquakes/ volcanoes using the 5E model to show how the RtI framework can help support instruction and student learning in the science classroom.
3. **Grade 7 Lesson: “Texas, Our Texas”** – A sample lesson on the various eco-regions in Texas using the 5E model to demonstrate how the RtI framework can help support instruction and student learning in the science classroom.
4. **Grade 8 Lesson: “An Elevated View”** – A sample lesson on interpreting topographic maps using the 5E model and exploring how the lesson components relate to CCRS in the science classroom.

The Science Academies for Grades 5-8 materials were developed in early 2010. The Science Academies for Grades 5-8 consisted of three days of face-to-face training, and teachers started participating in this training in June 2010. Face-to-face training is being followed by on-line follow-up training (using Project Share) that began in fall 2010.

### **Science TEKS Overview Academy for Grades K-12**

In the Science TEKS Overview Academy for Grades K-12, participants examine the new 2010 Science TEKS while strengthening their knowledge of the CCRS, RtI, and ELPS in this one-day training.

Participants explore models of vertical alignment that strengthen their knowledge of science concepts and processes. This training also provides an opportunity for participants to garner professional support from other educators through shared resources and ongoing academic networking through Project Share, although this is less of a focus compared to the other Rider 42 PD Academies. Specific activities include:

- **Types of Investigations** – Participants define types of scientific investigations (descriptive, comparative, and experimental), describe key words used to differentiate each type of study, practice identifying types of investigations, and identify the types of investigations included in the 2010 TEKS.
- **Integration of Tools and Equipment** – Participants investigate the grade levels at which tools and equipment are first introduced in the science classroom.
- **Support Frameworks** – Trainers deepen participants’ understanding of Support Frameworks (CCRS, ELPS, and RtI) for student success by providing opportunities to review information on the frameworks, discuss the frameworks, and to understand how the frameworks support student success using student profiles.
- **Rigor/Relevance Analysis** – Participants use the Rigor/Relevance Framework to analyze the concept student expectations of the Science TEKS.

- **Assessments** – Trainers provide information about the new state assessments (State of Texas Assessments of Academic Readiness and EOCs).

The Science TEKS Overview Academy for Grades K-12 materials were developed in early 2010. The Science TEKS Overview Academy for Grades K-12 consisted of one day of face-to-face training, and teachers have been participating in this training since June 2010.

### **Biology EOC Success Academy**

In the Biology EOC Success Academy, participants examine the concepts in the new 2010 Science TEKS for Biology and learn strategies to prepare students for success on the Biology EOC assessment. This Academy also provides connections to and strengthens participants' knowledge of CCRS, ELPS, and Rtl. Trainers lead participants through an analysis of the Science TEKS by looking at specific changes from the 1998 TEKS and the 2010 TEKS in terms of the introductory statements and concept statements, then the process skills and when the types of investigations are introduced. Trainers discuss implications for classroom instruction and student learning. Participants explore hands-on, student-centered lessons framed in the research-based 5E instructional model. Specific lessons include:

- **Lesson: The Role of Enzymes** – A sample lesson on the role of enzymes using the 5E model.
- **Lesson: Energy and Matter in Ecosystems** – A sample lesson on energy and matter in ecosystems using the 5E model.
- **Lesson: Evidence for Evolution** – A sample lesson on evidence for evolution using the 5E model.
- **Lesson: Energy and Matter in Cells** – A sample lesson on energy and matter in cells using the 5E model.

The Biology EOC Success Academy materials were developed in early 2010. The Biology EOC Success Academy consists of three days of face-to-face training, and teachers have been participating in this training since June 2010. Face-to-face training is being followed by on-line follow-up training (using Project Share) that began in fall 2010.

### **English I and II EOC Success Academy**

In the English I and II EOC Success Academy, participants receive an overview of the English I and II EOC assessment and see the integration of the TEKS for ELAR, ELPS, and the CCRS. Sessions also provide participants with an orientation to Project Share and follow-up activities that are available. In addition, participants are able to start building online professional learning communities for further development and growth, as well as create an e-portfolio that can be added to throughout their careers. The majority of the time is spent providing teachers with the opportunity to investigate how the ELAR TEKS align and correlate with the English I and II EOC assessments based on the blueprint for this assessment.

The English I and II EOC Success Academy was developed in early 2010 and was presented to teachers as a one-day training. During the training, teachers received an overview of the English I and II EOC assessments as well as an introduction to the Project Share/Epsilon platform. During the first half of

training, participants examined the proposed structures for future English I and II EOC assessments and discussed what was known about the preliminary design. During initial training, the English EOC assessments were still under development. Participants also reviewed the K-12 ELAR and K-6 Spanish Language Arts and Reading Vertical Alignment and related ELPS as well as the CCRS from the perspective of how the standards and assessments are related. The training emphasized what students will need to know and be able to do in order to succeed on the EOC assessments.

During the second half of the training, participants were introduced to the Epsilon platform, created personal accounts and began work on ePortfolios. To ensure that further information about the English I and II EOC assessments is distributed in a timely manner, state-level trainers were invited into the ELA EOCs Trainers' Group in Project Share/Epsilon and joined a state-level ELA professional learning community. Revisions to training materials, announcements and answers to questions have been posted in the ELA EOCs Trainers' Group folders. There are currently 240 members in the ELA EOC Trainers' Group. Teachers who participated in training at any of the 20 ESCs were also invited to join regional online professional learning communities so that they can continue to communicate, share resources and receive updates following face-to-face training.

Currently, online courses for English I and II EOCs are being developed and will be available through Project Share in early spring 2011.

### **English Language Proficiency Standards Academies**

Participation in ELPS Academies, in conjunction with participation in one of the content-specific Rider 42 PD Academies, will be reviewed as a potential contributing factor to study outcomes, such as impact on instructional practices and student achievement results. As such, a description of the ELPS Academies is being provided in this section. The ultimate goal of the ELPS, CCRS, and RtI PD is that the strategies are all incorporated into the delivery of the content PD academies. While The ELPS PD Academies were ultimately "taught" separately, it is the TEA's intent to take this content to the next level and make it an automatic component of all statewide PD for teachers in Texas.

ELPS Academies are geared toward teachers in specific subject areas (ELPS ELA, ELPS math, ELPS science, and ELPS social studies), but all ELPS Academies have common purposes and activities. In the ELPS Academies, participants explore ways to increase achievement for English language learners using the ELPS. The ELPS require specific focus on developing academic language in the content areas through four domains – reading, writing, speaking, and listening – in grades K-12. In this Academy, participants examine the ELPS and use them to practice writing language objectives using the four domains. The resources contain specific strategies that enable teachers to incorporate the ELPS in their classrooms.

# Chapter II. The Rider 42 PD Research Study

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The Rider 42 PDRS is being conducted by the UTD-ERC under contract with TEA. The PDRS is funded through Rider 42, which provided guidance to TEA on what should be included in and accomplished through this study. Specifically, the guidance in Article III indicated that funds should be used as follows:

The Commissions shall set aside an amount not to exceed \$2,000,000 for the biennium to conduct an ongoing evaluation based on school district and open-enrollment charter school reporting of data on cohorts of teachers being sent to the training to determine: 1) the value of the training in terms of the ability to translate training to practice; 2) how training can be supported through the school year; and 3) how the training can be revised to better inform practice and instruction.

Rider 42 also indicated that the Legislative Budget Board (LBB) must approve the evaluation methodology for the PDRS and that the intent of the Legislature is for the PDRS to focus on student achievement outcomes. The Rider 42 PD research study includes a comprehensive assessment of seven PD Academies developed by TEA under Rider 42:

- MSTAR Math Academy for Grades 5-6
- MSTAR Math Academy for Grades 7-8
- Science TEKS Overview Academy for Grades K-12
- Science Academies for Grades 5-8
- Algebra I EOC Success Academy
- Biology EOC Success Academy
- English I and II EOC Success Academy

The evaluation of the ELPS Academies is being handled differently than the Rider 42 PD Academies noted above. Participation in the ELPS Academies, in conjunction with participation in one of the content-specific Rider 42 PD Academies, will be reviewed as a potential contributing factor to study outcomes, such as impact on instructional practices and student achievement results.

The evaluation also includes an assessment of the impact of campus support to middle school math teachers provided through the Algebra Readiness Grant Program in place at 73 campuses across Texas.

## Section 1. Background of the Study

### Decision to Conduct Evaluation

To conduct this legislatively mandated study of the Rider 42 PD Academies, TEA contracted with the UTD-ERC. In December 2009, the UTD-ERC issued a competitive Request for Proposals to assist them in the design and execution of the complex statewide evaluation of the PD Academies. After review and

scoring of proposals, the project was awarded to Gibson, and Gibson's research partners ICF International, and American Institutes for Research, to collaborate with UTD-ERC on the planning and execution of the study.

## **Goals of the Study**

The goals of the PDRS are to provide formative feedback and a summative assessment of the Professional Development provided through the Rider 42 PD Academies and Project Share. Specifically, the contract requires the evaluation team to:

1. Determine the degree to which each PD program is translated into classroom practice.
2. Determine the most effective method for supporting each PD during the school year.
3. Provide constructive feedback to improve the quality and effectiveness of each PD.
4. Determine the effectiveness of each PD to positively affect student achievement outcomes.

The purpose of the formative feedback is to describe the development and implementation of each Academy while assessing the fidelity of implementation. This type of feedback will enable TEA and the Academies' developers to make important development and implementation decisions pertaining to the second round of trainings scheduled for summer 2011, as well as to inform future PD efforts for all stakeholders.

The summative assessment will seek to determine the effectiveness of each PD in terms of positively affecting student outcomes. As is detailed below, the evaluation plan developed by the research team seeks to identify mechanisms of change through which PD is expected to impact student achievement, so that summative analyses can effectively and appropriately identify the behaviors, knowledge, perceptions, and attitudes of teachers that are impacted by PD, which turn around to exert an influence on student learning. This summative approach goes beyond the question of whether or not PD is effective, by seeking to identify 'under what conditions' and 'how' each PD is effective.

## **Evaluation Framework**

This evaluation is being conducted in three phases. Phase I of the evaluation began in February 2010 and concluded with the development a comprehensive evaluation plan in May 2010. Phases II and III involve execution of the project plan, with Phase II beginning in April 2010 and concluding at the end of August 2011 with a report on the impact of the FY 2010 PD Academies on changes in teacher instructional practices and on student achievement results. If funding for the evaluation continues, Phase III will begin in September 2011 and continue through August 2013.

During Phase I, the research team worked closely with TEA staff to develop a logic model to guide the design and execution of the evaluation plan. For each step of the logic model, associated evaluation activities were designed to assess the quality, implementation, and effectiveness of the Rider 42 PD Academies. During the planning phase, the research team obtained a richer understanding of the design and intent of the PD Academies, the curriculum materials being developed and used, the training model

being implemented, the selection processes for participation, the goals of the Academies from the perspectives of various stakeholders, and details regarding the availability of data required for the evaluation. These details enabled the evaluation team to create a comprehensive evaluation plan specifying the data sources, analytic approaches, and reporting formats for each research question.

The evaluation logic model developed during Phase I (Figure 2.1) illustrates the mechanisms of change through which PD is theorized to impact teacher classroom behavior and ultimately, student achievement. The two blue boxes on the left side of the diagram begin the logic model by simply illustrating that this program is a statewide initiative that is flowing through the regional education service centers for implementation. Next, each of the green rectangular boxes represent qualities of the PD itself that will impact outcomes, such as PD format, quality of content, quality of facilitation, and extent of usage. These four elements of the PD were conceptualized as independent variables because they can exert influence on a set of intermediate variables (indicated as purple diamonds) that are both outcomes (in that they are influenced by variation in the first set of variables described) as well as predictors (in that they exert influences on outcomes). Intermediate variables include teacher behaviors, teacher knowledge, and classroom practices. These three intermediate variables are the theorized mechanisms of change in that those changes to teacher behaviors, knowledge, and practices should impact the primary outcome of interest: student achievement (orange triangle).

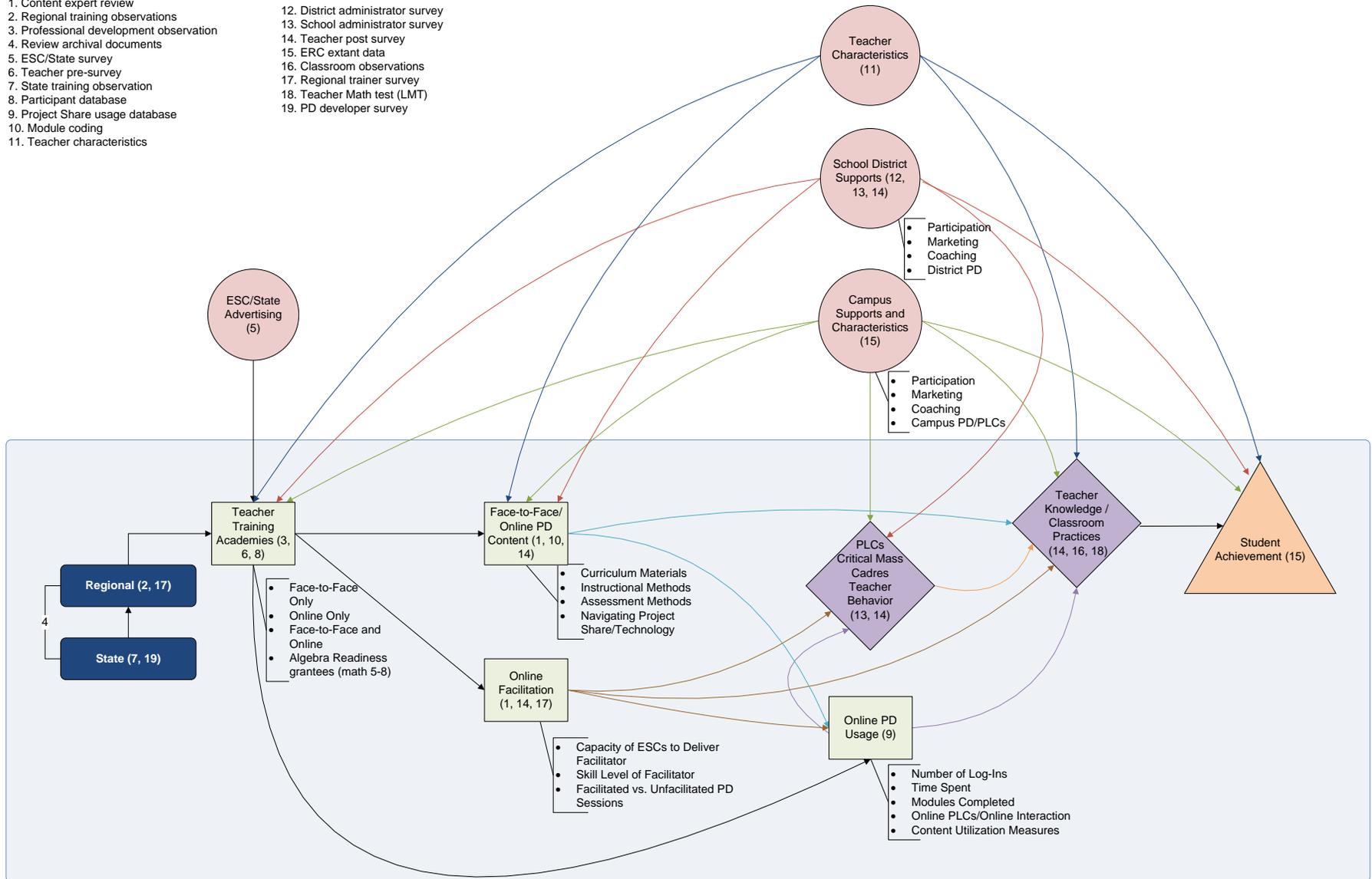
Finally, this proposed model exists within important contextual factors that exert their own, independent influences across every level of the model. These include ESC-level, school-level, district-level, and teacher-level characteristics (indicated as circles in the model). Throughout the model, arrows are used to illustrate the direction of effects, and the complicated network of connections and influences among variables. For example, while student achievement is hypothesized to be influenced by teacher knowledge and classroom behavior (which itself is influenced by the PD), it is also influenced independently by individual differences in teacher characteristics, and by characteristics of the schools and districts students attend. Statistical models used to analyze the impact of PD will attempt to model, and ultimately tease apart, these various influences on outcomes.

A logic model such as this assists in the development of an evaluation's design by outlining the theorized mechanism through which change is expected to occur. Thus, examining this model, one can see the importance of measuring each of the aspects of the professional development, the intermediate variables, the contextual variables, and the outcomes. Each element of the logic model is accompanied by a number code corresponding to a measurement tool/data source that will be used to collect data for that particular variable of interest. All measures are listed in the top left corner and are explained in more detail throughout this report.

Figure 2.1. Evaluation Logic Model

Measures

- |   |                                   |
|---|-----------------------------------|
| 1. Content expert review                | 12. District administrator survey |
| 2. Regional training observations       | 13. School administrator survey   |
| 3. Professional development observation | 14. Teacher post survey           |
| 4. Review archival documents            | 15. ERC extant data               |
| 5. ESC/State survey                     | 16. Classroom observations        |
| 6. Teacher pre-survey                   | 17. Regional trainer survey       |
| 7. State training observation           | 18. Teacher Math test (LMT)       |
| 8. Participant database                 | 19. PD developer survey           |
| 9. Project Share usage database         |                                   |
| 10. Module coding                       |                                   |
| 11. Teacher characteristics             |                                   |



## Section 2. Research Objectives and Associated Questions

### Research Objectives

The ultimate goal of the PD Academies and Project Share is to positively impact student achievement in core subject areas. In order to measure the impact of the PD on student achievement, the evaluation team proposed a research design that includes five research objectives.

- 1) **Objective 1: Assess the content of, delivery of, and participation in face-to-face PD Academies.** This evaluation assesses the quality of PD delivered to regional trainers at TOT sessions, the quality of training that was turned around and delivered to teachers, and the fidelity with which each of the Rider 42 PD Academies was delivered, according to its statewide training model. In addition, the evaluation will examine teacher participation levels, and the extent to which district and campus supports impacted teacher participation rates in face-to-face PD.
- 2) **Objective 2: Assess the content of, delivery of, and participation in online PD through Project Share.** This evaluation analyzes teachers' usage of the Project Share system to access additional online PD courses and collaborative knowledge sharing opportunities with other teachers, as well as exploring the degree to which district and campus supports impacted teacher online PD participation rates.
- 3) **Objective 3: Assess the impact of PD on teacher knowledge, changes in instructional practices, and changes in collaborative behavior.** The evaluation will examine the degree to which the Rider 42 PD Academies impacted teachers' content knowledge, classroom instructional practices, and collaboration with other teachers.
- 4) **Objective 4: Determine the impact of PD received on student achievement outcomes.** The evaluation will assess the degree to which changes in teacher knowledge, instructional practices, and collaborative behaviors (resulting from the PD and district/campus supports) are associated with changes in student achievement in the core subject areas addressed by the PD.
- 5) **Objective 5: Determine the impact of district and campus supports on teacher knowledge, changes in instructional practices, changes in collaborative behavior, and ultimately student achievement outcomes.** The evaluation will examine the degree to which district and campus supports (e.g., instructional coaching, support of campus leadership team, integration of Academy concepts into campus faculty meetings and local PD, extended learning time and other Algebra Readiness Cycle 1 grant program features) impacted teacher knowledge, instructional practices, collaboration, and student achievement.

Each objective has a specific purpose related to the formative assessment (Objectives 1 and 2) and summative assessment (Objectives 3, 4, and 5) as part of the overall study. To further guide evaluation plans, specific research questions were developed for each objective.

## Research Questions

For each research objective, a series of more granular research questions were developed to operationalize exactly how each element of the evaluation plan would be measured. Research questions for each objective are detailed below:

### *Objective 1: Assess the content of, delivery of, and participation in face-to-face PD Academies*

#### Research Questions:

- 1A. What types of content and activities were included as part of each level of training (i.e., training of state and regional trainers, as well as training of teachers)?
- 1B. To what extent does the content of each Academy reflect best practices for teacher professional development?
- 1C. To what extent does the content of each Academy reflect best practices for instruction in respective subject areas?
- 1D. To what extent is the content of each Academy aligned with national and state standards in respective subject areas?
- 1E. What is the quality of the training provided to the regional trainers?
- 1F. What are the professional characteristics of the regional trainers?
- 1G. In what ways, and to what extent, was each Academy promoted to teachers across Texas?
- 1H. What is the quality of the training provided to teachers?
- 1I. To what extent is the PD training implemented with fidelity to teachers across the regional ESCs?
- 1J. What are the professional characteristics of the teachers who participated in face-to-face training?

### *Objective 2: Assess the content of, delivery of, and participation in online PD through Project Share*

#### Research Questions:

- 2A. What types of content and activities were included in the online courses for each of the PD Academies?
- 2B. To what extent does the content of each online Academy reflect best practices for professional development?
- 2C. To what extent does the content of each online Academy reflect best practices for instruction in respective subject areas?

- 2D. What is the quality of the training provided to teachers regarding the use of the Project Share system?
- 2E. What is the quality of the online facilitation provided to teachers through the Project Share system, and did the quality/extent of facilitation vary geographically across the state?
- 2F. To what extent did teachers participate in the online training through the Project Share system, and what content areas were most frequently utilized?
- 2G. To what extent is the online PD training implemented with fidelity to teachers across the education service centers?
- 2H. What are the professional characteristics of the teachers who participated in online PD Academies?
- 2I. To what extent are participants in the face-to-face training likely to participate in online PD and collaborative activities through Project Share?

**Objectives 3, 4, and 5:** Because these three objectives are inter-related, research questions addressing all three have been combined:

- Objective 3: Assess the impact of PD on teacher knowledge, changes in instructional practices, and changes in collaborative behavior.
- Objective 4: Determine the impact of PD received on student achievement outcomes.
- Objective 5: Determine the impact of district and campus supports on teacher knowledge, changes in instructional practices, changes in collaborative behavior, and ultimately student achievement outcomes.

#### Research Questions:

- 3A. Is there a relationship between participation in the professional development and changes in classroom instruction?
- 3B. What factors (e.g., administrator support, proportion of teachers participating in a school) moderate the relationship between participation in professional development and changes in instructional practices?
- 3C. Is there a relationship between participation in the professional development and how teachers interact with other teachers in their school?
- 3D. Is there a relationship between changes in teacher instructional practices resulting from PD Academies and student achievement?

Because of the large scope of this evaluation, and the timing of the evaluation itself, this Interim Report is focused solely on Objective 1, assessing the content of, delivery of, and participation in face-to-face PD Academies.

### **Section 3. Data Sources and Methods of Data Collection**

The use of various data sources and methods of data collection is necessary to answer the broad-reaching research questions central to this evaluation. The data also provide evidence that allows an impact assessment of the PD Academies at each stage of development and implementation, thus allowing TEA to observe strengths and challenges for each step. Because this interim report is focused only on Objective 1, data sources and research methods employed to answer research questions related to Objective 1 are described herein. Additional methods of data collection pertinent to answering research questions under Objectives 2 through 5 that are not included here will be included in detail in future reports. Data sources and methods of data collection necessary for answering questions under Objective 1 included:

- A. Meetings with TEA program staff and PD developers and implementers (including an informal survey)
- B. Document review and analysis
- C. Expert reviews of training materials
- D. Observations of state-level meetings
- E. Observations of regional TOT's
- F. Observations of teacher professional development
- G. Collection of participant data and information
- H. Survey of PD developers
- I. Survey of ESC administrators
- J. Survey of regional trainers
- K. Survey of professional development participants

Each of these methods is described in detail below. Key findings from the data analyses are presented in Chapter III and a more detailed presentation of the findings related to each research question is presented in Chapter IV.

#### **Meetings with TEA Program Staff and PD Developers and Implementers**

The evaluation team held meetings with the developers and implementers of each Rider 42 PD Academy to gain an understanding of the goals, design and implementation of the PD Academies (see Appendix 1 for a list of meeting attendees) and requested documents they had created or collected as part of the development and implementation planning of each Academy. Later in the planning phase, the research team also sent out an informal survey to developers (see Appendix 2) to gather additional information that was used in developing the evaluation methodology and data collection instruments. The evaluation team reviewed and analyzed the information collected through these meetings to assess how the developers collaborated with TEA, designed materials, and established and tracked progress against

project timelines. Furthermore, these meetings provided an understanding of how developers and implementers planned to train the regional trainers at regional TOTs and planned to deliver the content curriculum to ESCs for implementation to the teachers. Information collected through interviews with TEA program staff and PD developers provided the team with critical information that helped to tailor the evaluation plan to fit the specific contexts of each individual Academy.

## **Document Review and Analysis**

The research team requested and reviewed pertinent documents that would help the evaluation team gain a thorough understanding of the various elements of the development and implementation of each Academy. The reviewed documents included proposals, planning documents, meeting minutes (e.g., advisory committee meeting minutes), PD curriculum materials (including hard copy materials and online courses), reports to TEA, grant applications and progress reports from Algebra Readiness Cycle 1 grantees, and other relevant documents that the developers provided. Information was also collected about the Project Share system that will help describe the online activity of participants as part of the second evaluation objective. Appendix 3 shows the materials received for each Academy.

The focus of this review and analysis was on:

- Planning and implementation strategies for the summer 2010 Rider 42 PD Academies.
- Specific details of the TOTs and how that training would translate into teacher training at the ESC level.
- Desired strategies for recruiting trainers and teachers.
- Specific timelines for implementation.
- Data that will be available for the evaluation (including trainer and teacher participation records, teacher demographic data, and student outcome measures).
- Any other details of the planned project pertinent to the evaluation plan.

## **Expert Reviews of Training Materials**

The PD Academy curriculum materials were the basis for the expert review. The evaluation team partnered with three panels of experts to conduct an external review of the Rider 42 PD Academy training curriculum materials. First, an overview of the purpose of the expert reviews is presented along with a general description of how the panels were established and experts selected. Then, a description of the selected panel members, along with their qualifications, is included for each panel. Last, the expert review process is described, along with any additional information specific to individual panels or Academies.

### ***Purpose of Expert Reviews***

The expert reviews focused on the content of the training materials. The purpose of the expert reviews was to help answer four of the research questions posed, as part of Objective 1, for this study. Specifically, for each of the seven Academies, members of each expert panel described the types of

content and activities that were included as part of each level of training (Research Question 1A), and ascertained the extent to which the content of each Academy:

- Reflected best practices for teacher professional development (RQ 1B).
- Reflected best practices for instruction in respective subject areas (RQ 1C).
- Aligned with national and state standards in respective subject areas (RQ 1D).

The evaluation team worked closely with TEA to organize three high quality expert panels (one for each academic content area covered by the Rider 42 PD Academies included in this phase of the evaluation, namely ELA, math, and science). These nationally recognized experts were selected for the panel based on their expertise and experience in the development and/or evaluation of teacher professional development materials and understanding of national industry standards (in their respective content area and national standards for teacher professional development). Three content experts and practitioners in each area were selected to review the training materials for all Academies in that area. When selecting expert panel members, efforts were made to include both college and middle school faculty members, individuals who possess a superior command of the subject matter, as well as those who are recognized as distinguished educators. The research team invited subject experts to join the panel, collaborated with them to define their role on the project, and developed protocols to guide their review of materials (see Appendix 4). A list of the expert panel members and their biographical statements are included in Appendix 5.

### ***Development of Expert Review Documents***

Panelists were provided with several resources to ensure that they possessed a thorough understanding of the background of the project. Specifically, panel members in all three content areas received an overview of the Rider 42 legislation, the goals and descriptions of the Rider 42 PD Academies, access to state and national standards including TEKS, NCSD, CCRS, ELPS, and RtI. In addition, ELA panel members were provided with access to state and national standards for English Language Arts and Reading, and National Council of Teachers of English/International Reading Association. Math panelists were provided with access to state and national standards for Texas Response to Curriculum Focal Points (Grades K-8), National Council of Teachers of Mathematics, and National Mathematics Advisory Panel 5E Instructional Model. For science, state and national standards included National Science Education Standards, American Association for the Advancement of Science Benchmarks for Science Literacy, and the Biological Sciences Curriculum Study 5E Instructional Model.

Each panelist received a protocol to guide their review of materials (Appendix 4), which was developed based upon the research questions pertaining to Objective 1 of the study. They also received a portable flash drive with all training materials including participant guides, presenter notes, PowerPoint presentations, and handouts. TEA reviewed and approved the expert review protocol prior to its distribution to panelists.

### ***Expert Panel Review Process***

Expert reviewers were instructed to record their findings using the review protocol specific to their content area as a template. A report was submitted by each panelist in each content area, and the panel members were able to review each others' reports. Conference calls were then scheduled, one for each content area, including all reviewers from that area to discuss their findings as a group. Particular attention was given to the exploration of common themes and items that required additional clarification. An informal conceptual analysis was conducted to analyze key themes for the purposes of creating this report.

### **Observations of State-Level Meetings**

At least one member of the evaluation team attended each of the State Trainings (i.e., “dry runs” or “dress rehearsals”) that were held by developers with representatives from other ESCs in order to document and better understand the purpose and design of each Academy. These observations also informed the development and adaptation of protocols for conducting observations of the regional TOTs, and ultimately the observations of the PD Academies themselves. Data were collected in the form of descriptive field notes, which focused mostly on the content and activities included in each State Training for each Academy. Field notes were analyzed to describe the training content and activities and to document what happened during each state training. Table 2.1 lists the state trainings attended by members of the evaluation team.

Table 2.1. State Trainings Observed

<b>Academy</b>	<b>Location</b>	<b># Days</b>	<b>Dates</b>
Biology EOC Success Academy, Science Academies for Grades 5-8, and Science TEKS Overview Academy for Grades K-12	Austin	2	04/12/10 to 04/13/10
English I and II EOC Success Academy	Austin	1	04/07/10
Epsilen/Project Share	Fort Worth	1	04/08/10

### **Observations of Regional Trainings-of-Trainers**

Members of the evaluation team developed a draft observation template, based on the review of the training materials and the observation of the state training, to pilot during the observation of the regional TOT sessions across all Academies. Existing PD training observation protocols used in similar studies were adapted to collect qualitative and quantitative data about the content and delivery of TOT sessions. Other data were collected in the form of semi-structured descriptive field notes, which included general domains and characteristics for trained observers to take into account while observing the TOT sessions. Specifically, the evaluation team members collected information about each regional TOT session around the following topics:

- **Content** – What was covered in the TOT?
- **Project Share** – What information was provided about Project Share?

- **Support Frameworks** – What information was provided about ELPS, CCRS, and RtI?
- **Training Delivery** – What was the quality of the “Master” trainers?
- **Training Viewpoint Practice** – Did trainers get the opportunity to work from different viewpoints (trainer, teacher participant, and student)?
- **Training Fidelity** – What were the trainers told about fidelity?
- **Interactions of Participants and Presenters** – How would you describe the interactions between regional trainers and master trainers?
- **Training Climate** – What were the facilities like? Did presenters encourage participation and invite and answer questions?

To ensure that TOTs were conducted consistently at each of the training sites, sessions were observed in Austin, Dallas, and Houston. One member of the evaluation team attended and observed one regional TOT session for each of the seven Rider 42 PD Academies, plus one of the ELPS Academies. The ELPS TOTs were observed to gain a better understanding of how that training may be complementing the other PD Academies. Appendix 6 lists the regional TOT sessions that were observed.

## **Observations of Teacher Professional Development**

Members of the evaluation team observed the transfer of knowledge from the regional trainers to teachers (and other participants, such as instructional coaches, and district staff) across the 20 ESCs in Texas. The draft observation protocol that was piloted in collecting data during the regional TOTs was finalized for use in the observation of teacher training sessions across all Academies. Individual observation protocols were customized for each Academy to measure the fidelity of how training was delivered to classroom teachers. The protocols also included items that were common across all Academies.

In an effort to choose a representative sample of PD sessions to observe, the research team employed an elaborate selection process to select 29 observation sites. The selection process is detailed in Appendix 7. The duration, number of Academies and total number of training days are listed in Appendix 8.

### ***Description of the Observation Protocols***

The project team designed a custom teacher PD training observation protocol (see Appendix 9) for each Academy, taking into account differences in the material to be presented across the various Academies. In addition to an initial section for recording basic information about the session (e.g., number of participants, physical setup), each protocol was organized into the following domains:

- **Training Fidelity** – Focused on observers’ perceptions of how well the presenters followed the materials and suggested pacing for the session (customized for each Academy).
- **Training Delivery** – Focused on presenter behaviors such as “establishing buy-in” (identical for all seven Academies).

- Interactions of Participants and Presenters – Focused on interactions such as “Participants showed intellectual rigor in their responses” (identical for all seven Academies).
- Training Climate – Measured the general atmosphere of the session and contained items such as “Presenter(s) answered participants’ (verbal) questions” (identical for all seven Academies).

A final “Capsule Description of the Quality of the Professional Development Session” asked the observer to assign an overall 1-5<sup>17</sup> rating for the session, with 5 representing the strongest performance (identical for all seven Academies).

Trained observers completed one observation protocol for each day of an Academy, completed related field notes (see Appendix 10), and rated the session on four domains: training fidelity, training delivery, interactions between presenters and participants and training climate. The ratings were given to a series of statements in each domain using a 4-point scale, with a rating of 1 indicating “*No evidence*”, 2 indicating “*Little evidence*,” 3 indicating “*Some evidence*,” and 4 indicating “*Strong evidence*.” Using a scale of 1 to 4, observers also provided synthesis ratings on each of these domains. The synthesis rating was a separate rating for each domain and not a grand mean.

Prior to utilizing the observation protocol during PD Academy observations, an inter-rater reliability exercise was conducted with all observers to measure observers’ fidelity to the observation methodology.

## Collection of Participant Data and Information

### *Training-of-Trainer Participants*

In order to report on the number of individuals who attended TOT training across the state, the research team requested and received lists of TOT participants for each TOT training session from each of the developers and implementers. The lists included last name, first name, TOT attended, email address, and ESC region for each TOT participant. The resulting dataset formed the basis for reporting on TOT attendance, as well as served to identify TOT participants for the survey effort.

The research team also gathered data on which of these TOT participants then conducted trainings for teachers in summer 2010.

### *Academy Participants*

The process for collecting the Academy participant data was determined collaboratively in meetings of the ESC core group, the research team, and TEA staff. First, a process was established at each ESC whereby Academy participants would review and, if necessary, update their contact information from their ESC profile at some point during the Academy session. This profile included the participants’ name,

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<sup>17</sup> For the capsule description of the quality of the PD, observers rated the session as Level 1: ineffective; Level 2: had elements of effective PD, Level 3: beginning stages of effective PD, Level 4: accomplished, effective PD, and Level 5: exemplary PD.

district and campus location (both for 2009-10 and for 2010-11), and email address. Using an Excel spreadsheet template provided by the research team, each ESC submitted their participant data via a secure email system to TEA. TEA matched the participant data to 2009-10 PEIMS demographic data (e.g., ethnicity, gender, experience) and created two separate data files: 1) a data file that maintained identifiable information to: a) form the basis of the participant survey population, and b) enable contacting of individual teachers later for observations, and 2) a data file that was stripped of identifiable data (e.g., participant name and email), but that contained a unique ID that would match to the Texas ERC data warehouse. The first file was sent to Gibson; the second file was sent to UTD-ERC. In both files, 70% of the participants<sup>18</sup> could be matched to existing TEA or ERC data. The data addressed in this report are for all Academies held from May 15<sup>th</sup> to August 6<sup>th</sup>, 2010.

## **Survey of Education Service Center Administrators**

### ***Survey Development***

The ESC Administrator Survey was developed to systematically collect information about the different ways in which ESCs across the state marketed and advertised the Academies to teachers, as well as the nature and extent of TEA's and ESC's involvement in their implementation. The ESC survey primarily featured closed-ended multiple-choice items and was designed to take approximately 20 minutes to complete. The instrument development process and complete instrument can be found in Appendix 11.

### ***Survey Administration and Response Rate***

One survey was sent to each PD contact, with instructions indicating that only one response was requested per ESC. The individual receiving the invitation could forward the survey to others to obtain input on responses, but only one total response per ESC was allowed. During the period of August 25, 2010 to September 15, 2010 responses were received from all 20 ESCs, for a response rate of 100%.

## **Survey of Regional Trainers**

### ***Survey Development***

The primary purpose of the regional trainer survey was to gather information on the quality of the PD Academy TOT sessions conducted for each Academy from participants who took part in these sessions. The survey also sought to elicit feedback from regional trainers on their preparedness and actual experience turning that training around and delivering it to teachers.

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<sup>18</sup> As reported by staff from the TEA Information Analyses Division, mismatches were due to missing or incorrect data in the teacher participant data, multiple entries for some teacher participants and/or new teachers for the 2010-2011 school year whose data were included in the teacher participant files but not yet available in the PEIMS data.

The regional trainer survey contained primarily closed-ended multiple-choice items and was designed to take approximately 30 minutes to complete (see Appendix 12).

### *Survey Administration*

After compiling all attendance records from all ESCs, a total of 1,064 regional trainers composed the survey sample with 819 (77%) individuals attending one PD Academy TOT and 245 individuals (23%) attending more than one. For those who attended multiple PD Academy TOTs, one of the PD Academy TOTs they attended was randomly selected for them to provide feedback on. Upon completion of the survey, these participants were given the opportunity to re-take the survey a second time, with the ability to choose which PD Academy TOT they were answering about. Responses to the second set of surveys were analyzed separately.

Of the 1,064 regional trainers, email addresses were available for 1,059 individuals. Personalized email invitations were sent on August 25, 2010 to all trainers, of which 1,020 (96%) were successfully delivered.<sup>19</sup>

### *Survey Response Rate*

Of the 1,020 email invitations delivered, 807 regional trainer surveys were successfully returned, yielding a total response rate of 79%. Ultimately, 660 survey responses were included in the final sample for analytic purposes.<sup>20</sup> Of respondents to the 660 survey response included in the final sample, 50 volunteered to repeat the survey for an additional PD Academy TOT session they attended. Thus, the total number of surveys completed for individual PD Academy TOTs was 710.

**Response Rate by PD Academy TOT.**<sup>21</sup> At least 57% of regional trainers in each PD Academy TOTs returned a usable survey, with attendees of the English I and II EOC Success Academy and Science TEKS Overview Academy for Grades K-12 having the highest response rates (over 70%) (see Table 2.2). Satisfactory response rates were achieved for each of the seven Academies under review.

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<sup>19</sup> Successful delivery is defined as an email address being valid, and that the email itself being “delivered;” it is unknown what percentage of these emails were filtered into SPAM folders, delivered to unused email accounts, or simply unread. Regional trainers were given until September 15<sup>th</sup> to complete and submit responses.

<sup>20</sup> Of the surveys excluded from analyses: 126 were eliminated due to a mismatch in reported and actual Academy attended; nine provided no item responses; eight repeated the survey twice with widely varied responses; and four reported they did not attend an Academy.

<sup>21</sup> Response rate by region is included in Appendix 13.

Table 2.2 Regional Trainer Survey: Response Rate by PD Academy TOT

PD Academy TOT	Survey Sample*	Total Number of Respondents	Response Rate
MSTAR Math Academy for Grades 5-6	156	89	57.1%
MSTAR Math Academy for Grades 7-8	164	97	59.1%
Algebra I EOC Success Academy	122	82	67.2%
Science Academies for Grades 5-8	232	155	66.8%
Science TEKS Overview Academy for Grades K-12	115	81	70.4%
Biology EOC Success Academy	115	79	68.7%
English I and II EOC Success Academy	160	127	79.4%
<b>Total</b>	<b>1,064</b>	<b>710</b>	<b>79%</b>

Source: Regional trainer survey, 2010

\*Attendees of multiple PD Academy TOTs were asked to complete one survey on a randomly selected subject.

## Survey of Professional Development Participants

### *Survey Development*

The purpose of the fall survey for Professional Development participants was to collect direct feedback from participants (mostly teachers) who attended the PD Academies (see Appendix 14 for complete instrument). Of primary importance was to gather their perceptions of the quality and effectiveness of the Academies and expectations with regard to the utility of Project Share. Unlike the other surveys described thus far, this survey was designed to obtain baseline measures of certain constructs that will be measured again at the end of the 2010-11 school year, in the spring 2011 survey. These constructs address research questions associated with Objectives 1 through 5, which focus on the impact of the PD initiative, as well as district and campus supports, on teacher knowledge, instructional practices, collaboration, and student achievement. These topics will again be addressed in the spring 2011 survey, when teachers have had a chance to process and implement new strategies learned. Some survey questions varied by Academy in order to address the specific instructional content of each Academy. The fall 2010 Professional Development participant survey featured predominantly closed-ended multiple-choice items and was designed to take approximately 20 minutes to complete.

## Survey Administration

Personalized email invitations were sent on October 4, 2010, to all teachers who attended PD Academies during the summer of 2010 and provided an email address (n =16,543). Of these, 15,359 (93%) were successfully delivered.<sup>22</sup>

## Survey Response Rate

Of the 15,359 email invitations delivered, 7,022 surveys were submitted, for a total response rate of 46%. For purposes of reporting, the number of completed surveys is considered to be 6,975 because these surveys contain useable data.<sup>23</sup>

**Response Rate by Academy.**<sup>24</sup> Across the Academies, response rates were similar. Between 42% and 50% of attendees completed a survey. As shown in Table 2.3, attendees of the Biology EOC Success Academy had the highest response rate of all the Academies, with almost 50% of possible respondents completing a survey.

Table 2.3. Teacher PD Participant Response Rate by Academy

PD Academy	Total Number of Invitations	Total Number of Respondents	Response Rate
MSTAR Math Academy for Grades 5-6	2,278	1,076	47.2%
MSTAR Math Academy for Grades 7-8	1,646	759	46.1%
Algebra I EOC Success Academy	1,452	682	47.0%
Science Academies for Grades 5-8	3,258	1,569	48.2%
Science TEKS Overview Academy for Grades K-12	3,972	1,668	42.0%
Biology EOC Success Academy	997	496	49.7%
English I and II EOC Success Academy	1,691	725	42.9%
Academy Not Specified	65	--	--
<b>Total</b>	<b>15,359</b>	<b>6,975</b>	<b>--</b>

Source: PD participant survey, 2010.

<sup>22</sup> Successful delivery is defined as an email address being valid, and that the email itself being “delivered”. It is unknown what percentage of these emails were filtered into SPAM folders, delivered to unused email accounts, or simply unread. Teachers were given until October 25 to complete and submit responses.

<sup>23</sup> Of the 7,022 surveys that were returned, 47 responses were excluded from the analysis. These 47 included 46 completed surveys where the respondent did not indicate if they would be teaching in the core subject on which the Academy they attended focused (Question 2) and one survey in which no Academy was specified (Question 1).

<sup>24</sup> Response rate by region is included in Appendix 15.

## **Section 4. Analytic Approaches**

To answer each of the research questions, various analytic approaches were utilized. In some cases, the descriptions provided in Chapter IV (Detailed Findings by Research Questions) are sufficient to describe how findings were obtained. However, in other cases, more extensive analyses were conducted, such as in the analysis of observation data, participant data, and survey data. These analytical approaches are described in Appendix 16.

## Chapter III. Key Findings

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Chapter III presents a summary of the key findings related to Research Objective 1: assessing the content of, delivery of, and participation in the face-to-face PD Academies. In this Chapter the results related to each research question are synthesized to describe the characteristics of the PD trainers and participants, the content and quality of the training and participants' perspectives of the potential impact of the PD. Chapter IV examines these findings in more detail, systematically discussing the findings for each individual research question under Objective 1. Readers are encouraged to read Chapter III for an overall understanding of the study results to date and then turn to Chapter IV to gain a more thorough understanding of the results that are of most interest to them.

### Training-of-Trainers Participants

Based on participant data submitted by the ESCs and survey responses to a regional trainer survey, it is evident that TEA and ESC staff successfully recruited and trained a qualified pool of trainers to deliver the training to teachers in summer 2010 and throughout the 2010-11 school year. A total of 1,313 individuals,<sup>25</sup> representing all 20 ESCs, attended at least one of 29 TOT sessions (including ELPS trainings) conducted during the months of April, May, and June 2010. Most of the regional trainers (68%) were school or district employees, highlighting the extensive use of district and campus instructional staff to deliver the teacher training. With these numbers of trainers, the ESCs and districts across the state now have a high capacity for supporting the continuing implementation of the PD throughout the school year.

Survey responses from these trainers revealed high levels of education and experience, with two-thirds of the respondents reporting to have a Master's degree and 93% indicating that they have over six years of experience as a K-12 teacher. In addition, three-quarters of the trainers reported more than 60 hours of experience providing PD and 56% of the respondents also reported more than 180 hours. However, when asked to report their experience facilitating online PD, very few (< 20%) reported 20 or more hours of experience facilitating online professional development, and 60% reported no experience at all. Clearly, these trainers are well qualified to deliver the face-to-face training to teachers, but they currently appear to lack the experience necessary facilitate the online component of the PD successfully in the coming year.

Based on the data regarding which of these qualified trainers went on to conduct a training session during summer 2010, it is clear, with only 44% of the trainers actually conducted a training session by the time of the evaluation, that the number of regional trainers trained exceeded the number needed to conduct the summer PD sessions. ESC administrator responses to survey questions about PD promotion efforts suggest that this is due in part to the ESCs either not setting or not meeting their targets for

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<sup>25</sup> See Chapter IV, Table 4.5 for a breakdown of trainers by region.

teacher participation in the summer PD Academies.<sup>26</sup> The ESC administrators (18 of 20) also reported that they used similar promotion efforts for the Rider 42 Academies and other PD that they offered. This finding suggests that additional and/or different efforts may be necessary for ESCs to recruit the number of participants expected for these PD Academies. Results from the ESC administrator survey suggest that staff are already considering ways to increase teacher participation including starting promotion efforts earlier in the year and utilizing social networking media to reach more participants. With additional training in the delivery of online PD, program staff could also use these trainers to provide more support for the use of Project Share in districts across the state.

## Summer PD Academy Participants

Although TEA and ESC staff may not have met their targets for teacher participation in the summer PD Academies,<sup>27</sup> the participation reports provided by the ESCs show high levels of participation over a short time period. A total of 19,010 participants<sup>28</sup> from all 20 ESCs attended 806 PD Academies offered across Texas during a short time period (May 15<sup>th</sup> to August 6<sup>th</sup>, 2010). These numbers are particularly impressive given ESC administrator reports that implementation of the Rider 42 PD Academies was more demanding than other PD efforts. Demographic data suggest that, with few exceptions, these participants are representative of teachers and campuses across the state. With the exception of the English I and II EOC Success Academy, the participants represented approximately one-quarter or more of the number of 2009-10 teachers. Of particular note are the high rates of participation in the MSTAR Math Academies for Grades 5-8 (38%) and in the Science Academies for Grades 5-8 (40%) (see Table 3.1). Although the high school teacher participation rates in Algebra I and Biology EOC Success Academies are also commendable, staff at TEA and the ESCs should increase their efforts to recruit and train high school teachers in anticipation of the coming shift to EOC exams. Particular attention is needed to increase the participation rates of ELA teachers. The roll-out of Project Share (with appropriate support and training) will provide an opportunity for additional training without having to wait for another series of summer sessions.

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<sup>26</sup> The EOC Academies may also have greater attendance rates as EOC utilization draws closer.

<sup>27</sup> See Chapter IV, Table 4.10 for targets by ESC.

<sup>28</sup> Note that these figures only include the Academies listed in Table 3.1, and do not include other Rider 42 Academies such as ELPS.

Table 3.1. Number of Rider 42 PD Academy Sessions and Teacher Attendees

Academy	Number of Sessions	Number of Attendees	% of All 2009-10 Teachers
MSTAR Math Academy for Grades 5-8	87	4,835	38%
Algebra I EOC Success Academy	103	1,776	25%
Science TEKS Overview Academy for Grades K-12	200	5,014	n/a
Science Academies for Grades 5-8	132	4,175	40%
Biology EOC Success Academy	82	1,289	24%
English I and II EOC Success Academy	101	1,921	15%
<b>Total</b>	<b>806</b>	<b>19,010</b>	<b>n/a</b>

Source: Regional ESC attendance records and UTD-ERC data warehouse.

Note: Individuals may have attended more than one Academy, MSTAR academies were combined, and an appropriate population count for comparison for Science TEKS Overview Academy for Grades K-12 was not available.

## Quality of PD Content

Results from the expert reviews of the PD materials suggest that TEA and ESC staffs were successful in the development of PD content that was well aligned with national standards and best practices for professional development.<sup>29</sup> At the same time, results also reveal some areas that are lacking in terms of alignment and quality, underscoring areas for improvement.

From the expert reviews, it is evident that across all Academies, the content of the PD was of good quality, would engage teachers with the presenters and with each other, and would enhance teaching. More specifically, the expert reviewers reported moderate to strong alignment for each Academy to most of the 10 National Staff Development Council (NSDC) standards for PD.

Of note, however, are the expert reviewer comments regarding poor alignment with the PD standards for “resources” reported for each of the math and science Academies and the poor alignment with “data-driven” standards reported for the ELA and MSTAR Math Academies for Grades 5-6 and 7-8. As noted by the reviewers, the poor alignment with “resources” standards is due to lack of information in the PD materials about Project Share, a situation that will likely improve as regional trainers learn more about Project Share and facilitate its use by teachers throughout the school year. The roll-out of Project Share is also likely to improve the alignment of the PD with the “data-driven” standards, particularly for the MSTAR Math Academies with the recent implementation of Universal Screener training for middle school math teachers via Project Share. Similarly, ELA alignment with “data driven” standards should be stronger as program staff continue with their plans to use the face-to-face training as a launching pad for the further implementation of online ELA courses through Project Share, including additional

<sup>29</sup>A full description of expert review findings is included in Chapter IV.

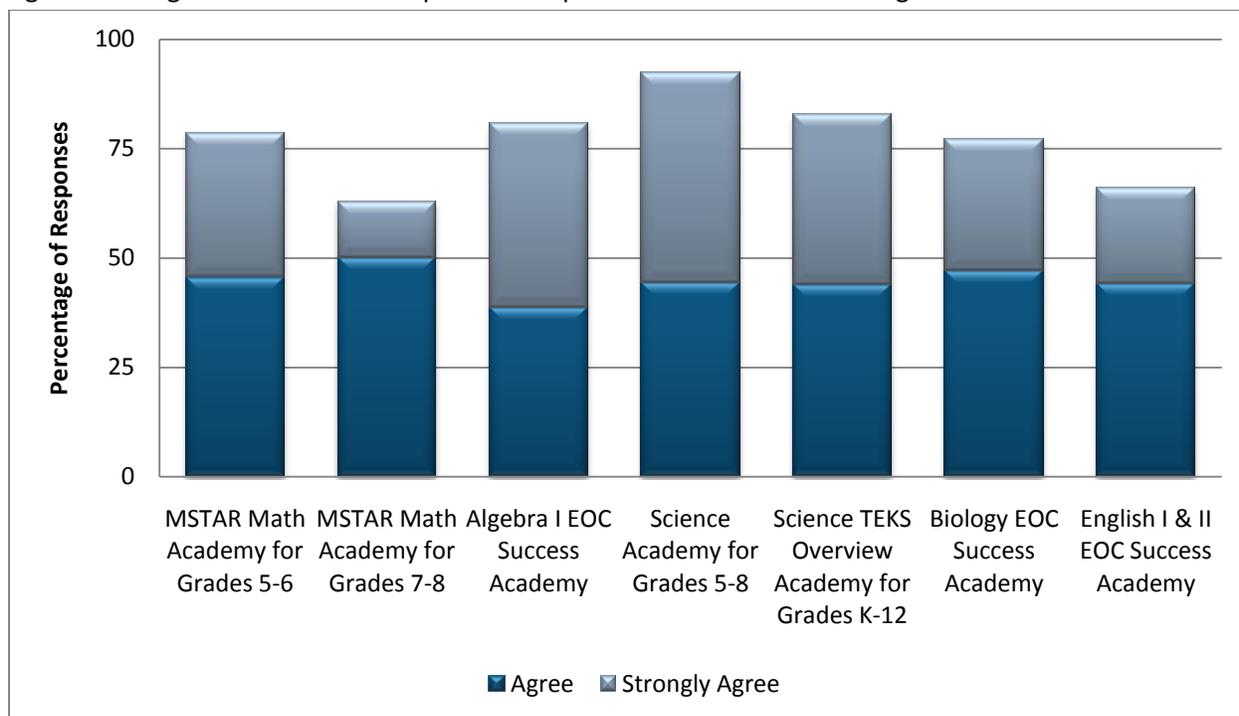
attention to data from EOC field test results. Further analysis of the online materials and feedback from Project Share users will be necessary to determine if PD alignment with the NSDC “resources” and “data-driven” standards improves with the use of Project Share.

In addition to moderate or strong alignment of the PD with most of the NSDC professional development standards, the expert panels also reported moderate to strong alignment with best practices for effective instruction in the respective content areas and moderate to strong alignment with content specific TEKS and national standards for all of the Academies. Considered together, the expert panel results suggest that the PD developers were successful in developing PD content that, if combined with well-trained trainers and subsequent quality delivery to teachers, could positively impact teachers’ classroom practices.

## **Quality and Fidelity of TOTs and PD Academies**

Considered with the earlier conclusion that the regional trainers are well qualified to deliver the PD to teachers, the regional trainer survey results suggest that they were also well trained to deliver the PD to teachers (see Figure 3.1). Across all Academies, the majority of the trainers reported high levels of satisfaction with the quality of the TOTs in terms of the structure and delivery of the TOT sessions, the extent to which the TOT prepared them to train others and the extent to which the TOT adequately conveyed key content about the relevant frameworks (e.g., CCRS, ELPS, and RtI) and teaching strategies. Comparisons of the trainers’ survey responses from each Academy revealed that the Algebra I EOC Success Academy and Science for Grades 5-8 Academies were consistently rated higher than any of the other Academy TOTs across most measures, while the MSTAR Math Academy for Grades 7-8 and English I and II EOC Success Academy TOTs tended to receive the lowest ratings among regional trainers attending the TOTs. These findings are consistent with the expert panel ratings of strong alignment with PD standards for the Science Academies for Grades 5-8 and the lower levels of alignment with PD standards reported for the MSTAR Math Academy for Grades 7-8. Program staff should review these portions of the PD, including recommendations from the expert panels to determine what improvements should be made for future TOT sessions. With the increasing use of Project Share for online PD, program staff will have additional opportunity to provide specific reinforcements and support in these areas.

Figure 3.1. Regional Trainers' Perception of Preparedness to Deliver Training to Others



Source: Regional trainer survey, 2010

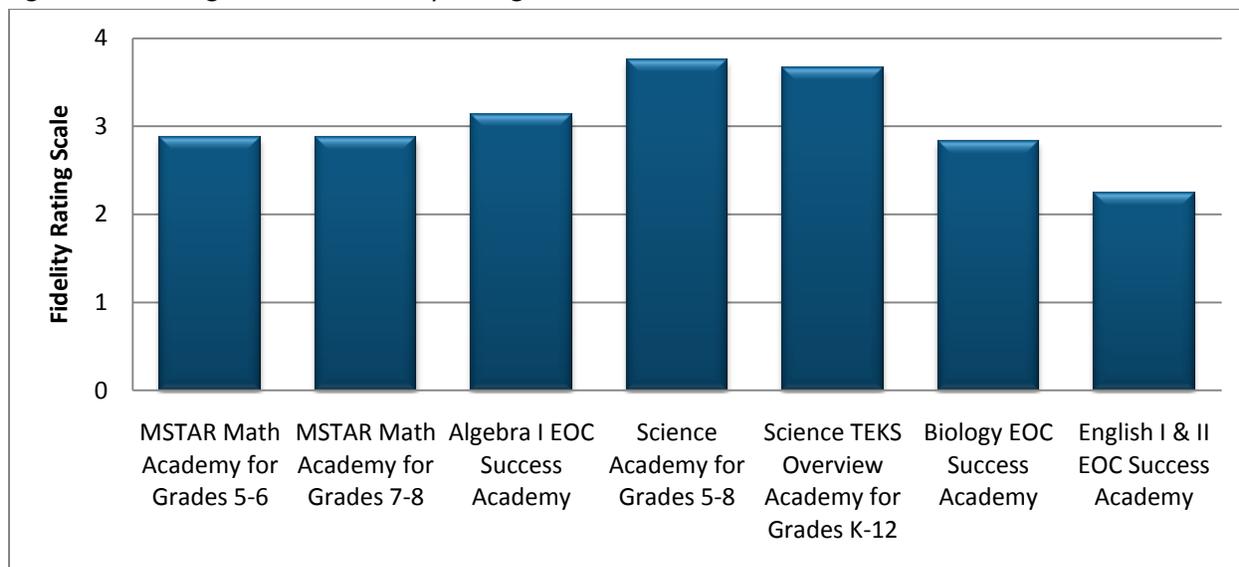
Prior to using Project Share for the delivery of online PD in any form, however, TEA and ESC staff should also consider the responses of the trainers to survey questions about the coverage of Project Share in the TOT sessions and the responses of the teacher PD participants to similar Project Share questions. With the exception of trainers who attended the English I and II EOC Success Academy TOT session, the trainers most frequently reported only moderate or minimal coverage of the Project Share system at the TOT they attended and low levels of satisfaction with the Project Share portion of the Presenter's Guide. The teachers' responses clearly indicate that, with the exception of ELA, minimal attention was given to Project Share in the summer PD Academies. In addition, only 21% of teachers across all Academies reported that they are prepared (19%) or well prepared (3%) to use Project Share. From these results it is clear that teachers are not ready to take full advantage of Project Share and that, although the trainers are prepared to deliver face-to-face training, additional training and support is needed for them to successfully facilitate teachers' use of Project Share. This is a particularly important recommendation given that Project Share is currently being rolled out and plans are being made to increase the use of Project Share as a mechanism for providing PD to teachers across the state. In their responses to questions about Project Share on the ESC administrator survey, ESC administrators expressed awareness of this concern, noting that regional trainers were not well prepared to deliver Project Share training and that, with the exception of English I and II EOC Success Academy participants, teachers in the PD Academies did not have adequate opportunity to learn about Project Share during the PD sessions.

Reflecting on the quality of their own delivery of the training to teachers, the regional trainers were generally positive about the fidelity with which they delivered the training. However, across all Academies, they were less positive about the extent to which they could address participants' concerns

and differentiate instruction. This could be due in part to some of the trainers’ perceptions that there was not enough time to cover the material, a concern most frequently reported by Algebra I EOC Success Academy trainers. Results of the training observations support these perceptions, with observers attributing pacing problems to trainers having too much material to cover.

The finding that the regional trainers were well prepared to deliver face-to-face training to teachers is supported by the overall high ratings (4-point scale) by observers of the summer PD Academies in the areas of “presenter delivery” (3.2), “interactions between presenters and participants” (3.5) and “training climate” (3.5). Observers also noted generally high levels of fidelity in the delivery of the PD, particularly in the use of the content and standards handouts and in the integration of TEKS, Rtl, and ELPS into the PD Academies. Overall fidelity ratings by Academy are presented in Figure 3.2. This level of fidelity is promising and suggests that the PD was delivered consistently across the state.

Figure 3.2. Average Observer Fidelity Ratings of Teacher PD Academies



Source: Research team observation records of PD Academies, 2010

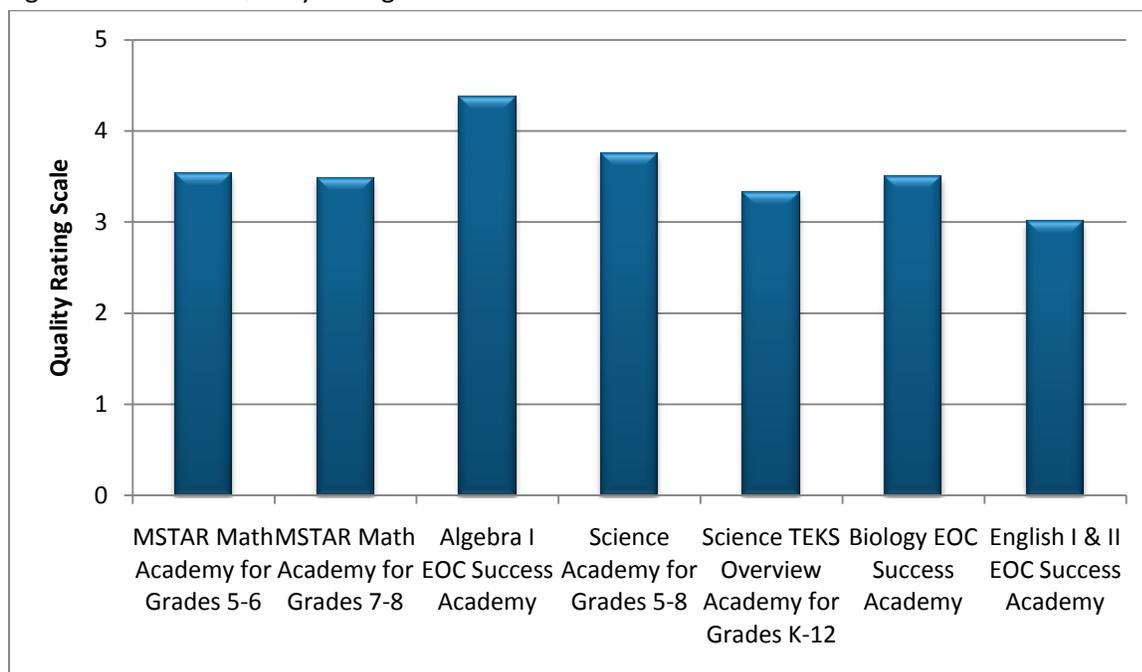
Note: Fidelity was rated on a four point scale (1-no evidence to 4-strong evidence).

Of concern is the lack of evidence that the CCRS standards were implemented with fidelity in the PD training. Being able to teach to these higher standards is increasingly important, not only because of the higher accountability standards coming with the new statewide test, but also because of the increasing need for students to be better prepared for the changing college and career challenges. Given the lack of evidence that CCRS were addressed in the PD, program staff should consider developing specific PD courses in this area as well as a process for ensuring teacher participation.

Observers also gave favorable overall quality ratings of the PD to each of the Academies with mean ratings in the 3.0 to 4.4 range (see Figure 3.3). Of note are the particularly high capsule ratings given to the Algebra I EOC Success Academy PD (4.4) and the Science Academies for Grades 5-8 (3.8). Observers rated the PD particularly high on the basic indicators of quality PD delivery such as giving clear

directions, circulating around the room, collegiality and active engagement. However, the observers gave moderate ratings on the more challenging indicators of quality PD delivery such as instructors' modeling of effective instructional strategies, and use of questioning strategies, and the intellectual rigor of participants' responses. If teachers are to use these higher level strategies to effectively facilitate higher level thinking with their students, follow-up PD may need to focus more specifically on these skills.

Figure 3.3. Overall Quality Rating of Teacher PD Academies



Source: Research team observation records of PD Academies, 2010

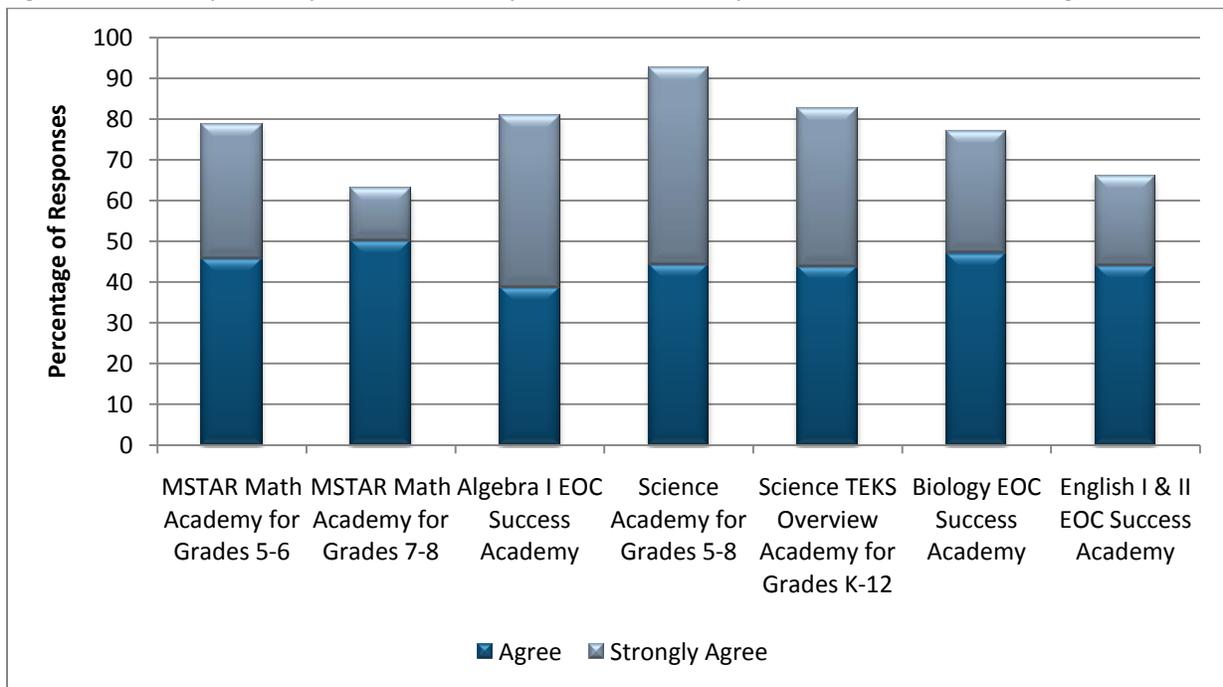
Note: Overall Quality was rated on a five point scale (1-ineffective to 5-exemplary).

The responses of PD participants about the quality of the training they attended are consistent with the generally positive results from the regional trainer survey and from the observer ratings. An overwhelming majority of respondents indicated high levels of satisfaction with the training delivery ( $\geq 90\%$  across all Academies) and instructor competence (86% for English I and II EOC Success Academy and  $\geq 90\%$  other Academies). These findings provide additional support for the conclusion that the trainers were well qualified and well prepared to deliver the face-to-face trainings. The PD participants were also positive about the content of the PD with 80% to 85% of respondents for all Academies except ELA reporting that the PD covered key content to a moderate or great extent. ELA participants reported substantially lower ratings with 35% indicating that key content was *not covered at all or covered to a minimal extent*. In response to questions about how the PD impacted their teaching, a similar pattern emerged.

A large majority of respondents (see Figures 3.4 to 3.6) for all Academies except English I and II EOC Success Academy reported that the PD had positively impacted their general knowledge (72%-84%), their content specific knowledge (85% to 87%) and their knowledge related to classroom instruction

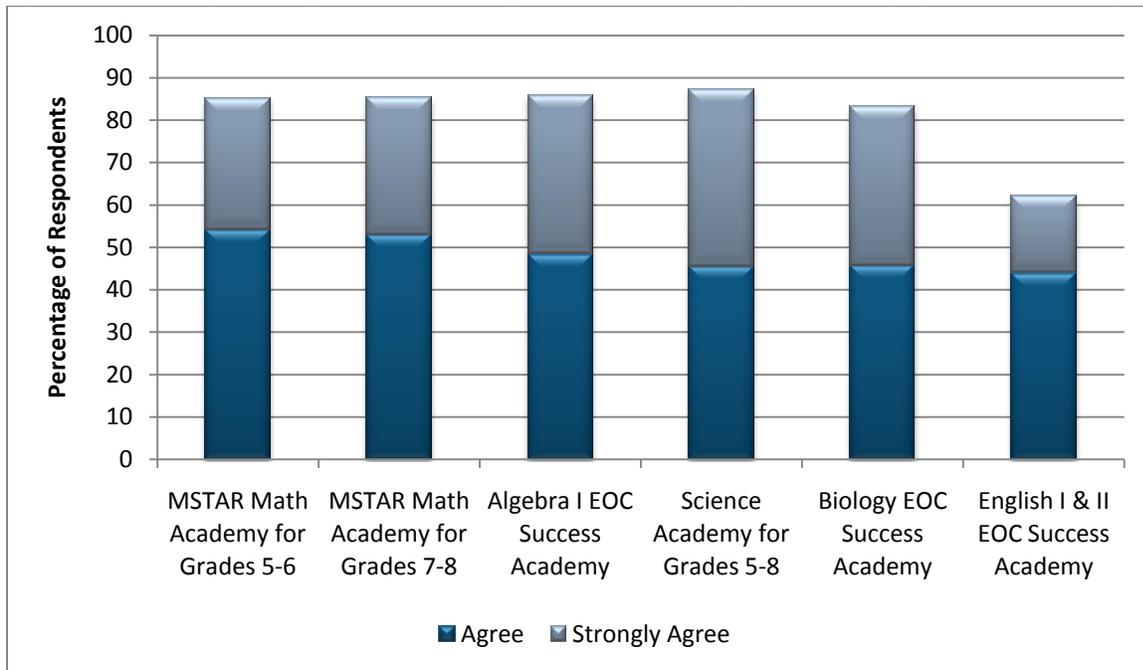
(76% to 88%). In contrast, higher percentages of ELA participants indicated that the PD had *no impact or minimal impact* on their teaching (43% to 55%). These lower ratings reported by English I and II EOC Success Academy participants are consistent with the lower levels of preparedness reported by the English I and II EOC Success Academy regional trainers, and with the recommendation by the expert panel that the English I and II EOC Success Academy PD needed a more in-depth focus on content. These lower ratings are also not surprising given that the English I and II EOC Success Academy summer session was meant to be a launching pad for future online English I and II EOC Success courses through Project Share rather than a more extensive content-oriented training. With the rollout of Project Share, program staff should be able to provide the content and depth needed to impact teachers' practices. Additional data collection and analyses planned for the next phase of the evaluation will help assess the extent to which the additional online PD provides teachers with the necessary content to impact their knowledge and instruction.

Figure 3.4. Participants' Opinions of the Impact of PD Academy on Their General Knowledge



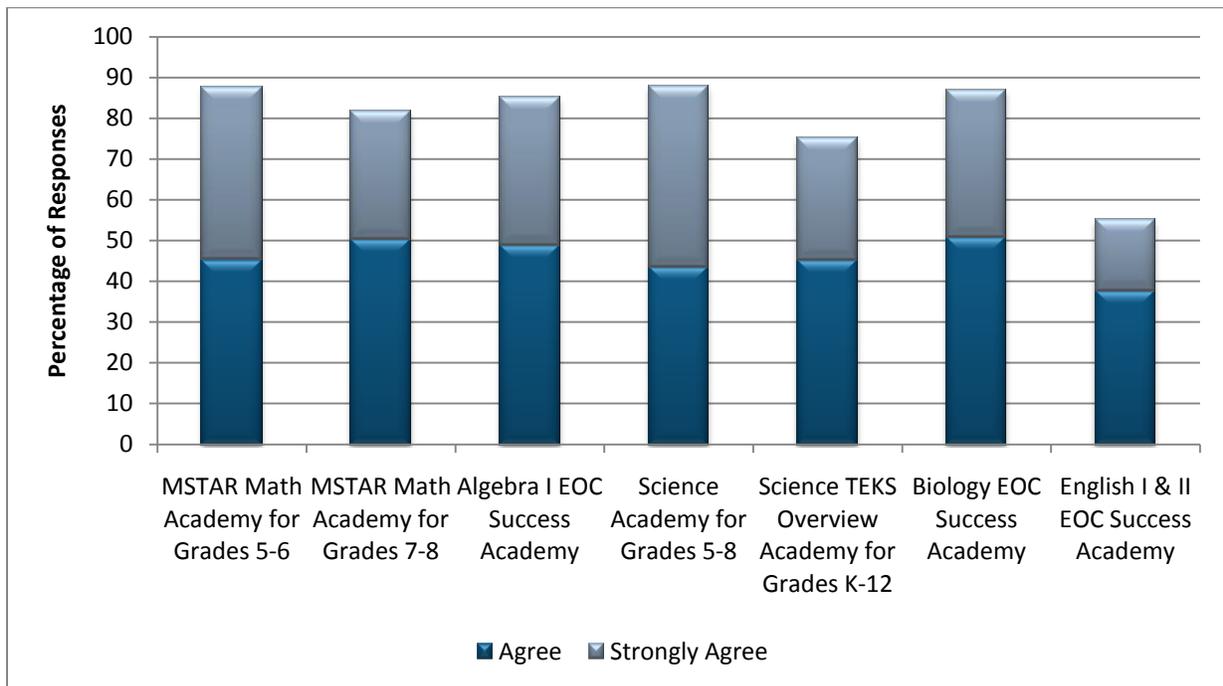
Source: PD Academy participant survey, 2010

Figure 3.5. Participants' Opinions of the Impact of PD Academy on Academy Specific Knowledge



Source: PD Academy participant survey, 2010

Figure 3.6. Participants' Opinions of the Impact of PD Academy on Classroom Knowledge



Source: PD Academy participant survey, 2010

## Summary

The evaluation results indicate that, over a short time period, the PD developers were successful in preparing PD programs in the core content areas of math, science and ELA that were well aligned with national standards PD, best practices for content instruction and TEKS and national standards. In addition, TEA and regional staff successfully recruited and trained large numbers of regional trainers creating the capacity to continue to deliver PD across the state. These trainers reported high levels of satisfaction with the training they received and reported that they were well-prepared to deliver the training to teachers. Observations of training delivery confirmed these perceptions with overall high ratings of quality and fidelity across all observations. Teacher survey responses also indicate the training was delivered well, covered key content, and impacted teachers to a moderate or great extent. Of concern are the lower levels of satisfaction and impact reported by participants in the English I and II EOC Success Academy. As staff plan new training for summer 2011 and supplement the current training through the roll-out of Project Share, the evaluation results also provide useful feedback that should help improve the quality of future PD. The most critical need is in the preparation of trainers to facilitate teachers' use of Project Share. The regional trainers do not have much experience in facilitating online PD and reported that they received lower levels of preparation in this area than in the delivery of face-to-face PD. From multiple sources, it was also clear that the training delivered to teachers did not provide much information about Project Share nor did it generate high interest in using Project Share. Clearly, there is a high need for additional marketing, training, and support if teachers are expected to rely on Project Share for continued PD. They will not likely receive this support unless the pool of regional trainers receives additional training themselves on how best to utilize Project Share.

A second set of recommendations stems from the high capacity for delivering PD that TEA has achieved, now having high numbers of regional trainers across the state. In addition to ensuring that these trainers can facilitate Project Share, TEA and ESC staff should develop new recruitment methods for teacher participation in both online and face-to-face training and utilize these trainers to reach even more teachers, particularly at the high school level.

As TEA continues to develop and implement PD courses through Project Share and plan additional face-to-face trainings, the evaluation results also suggest the content of the PD could be improved with additional focus on data-driven instruction, the provision and use of ongoing resources (e.g., Project Share), CCRS and more examples of student work, particularly in the area of ELPS. Finally, future training for both the regional trainers and teachers could benefit from a focus on the more challenging indicators of good PD and good instruction such as differentiating instruction, use of questioning strategies, and intellectual rigor.

# Chapter IV. Detailed Findings by Research Question

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As described in previous chapters, the Rider 42 PDRS has five objectives that will be addressed over the course of the project. This report presents findings related only to research questions associated with Research Objective 1: assessing the content of, delivery of, and participation in the face-to-face PD Academies. Section 1 of this chapter presents results related to the quality of the Academies. Section 2 presents results related to the quality and fidelity of the delivery of the Academies, and Section 3 presents results related to participation in the Academies.

In each section, results are triangulated across various sources of data (described previously in Chapter II), to provide a cohesive representation of findings related to each research question. In some cases, results are generalizable across all PD Academies while, in others, findings are specific to individual Academies.

## Section 1. Quality of the Face-to-Face PD Academies' Content

One of the first tasks in the evaluation was to develop an understanding of the content that TEA and the developers were planning to include in each face-to-face Rider 42 PD Academy. As detailed in Chapter II, the research team accomplished this task through reviews of the PD materials, interviews and surveys of the program planners and implementers, observations of TOTs, and comprehensive reviews of training materials by national experts in the three primary content areas – mathematics, science, and English language arts. The results of this inquiry process are summarized by the three relevant research questions.

**Research Question 1A: What types of content and activities were included as part of each level of training (i.e., training of state and regional trainers, as well as training of teachers)?**

### General Format of Academy Materials

The training materials for each face-to-face Academy were in various stages of development at the time of the state trainings. Based on feedback from ESC and TEA staff at the state trainings, materials were finalized for the regional TOTs. After the regional TOTs, the materials underwent minor edits before rolling them out for the teacher PD trainings. The Academy materials throughout all levels of training followed the same general outline and activities. Presenter guides were provided to the trainers as a bound hard-copy, but were also available electronically. These materials displayed a printed PowerPoint presentation and also included notes for the presenter to use while presenting. The presenter notes included a script of what the presenter should say in bold font, detailed instructions on what to do while presenting in italicized font (e.g., post a “parking lot”, use an icebreaker, etc.), as well as additional notes and tips.

Participant guides were also created for teachers to use during the PD Academies. The participant guides allowed teachers to follow along with the presentation and gave them a resource to take back to their classrooms. The participant guides were similar to the TOT and presenter guides in that they were provided as bound hard-copies and also available electronically. While the participant guides included a copy of the presenters' PowerPoint presentation, they did not include the detailed notes provided to the presenters. Instead, the participant guides usually had space in which the teachers could take notes. Participant guides provided a summary introduction including background information on the TEKS, CCRS, RtI, and ELPS as appropriate as well as copies of the activities to be completed during the PD Academy.

PowerPoint presentations were used in all PD Academies by presenters. Only the Science Academies for Grades 5-8 and Biology EOC Success Academy PowerPoint presentations included videos for the teachers to watch during the training. The videos were for motivational purposes or to demonstrate learning objectives or lab activities. Supplemental handouts were provided to teachers and included agendas, links from activities to learning objectives, and connections to TEKS, ELPS, and EOC Assessments.

### ***Content of Math Academy Materials***

The content varied across the three face-to-face math Academies (MSTAR Math for Grades 5-6, MSTAR Math for Grades 7-8 and Algebra I EOC Success Academy), but there were similarities in the methods used to accomplish the Academy goals. Overall, the math Academy materials included learner profiles that highlighted common student mistakes on sample problems and provided participants with the opportunity to discuss students' misconceptions about math concepts. All of the math Academies also provided activities to encourage participant discussions about instructional practices, including how to correct students' misconceptions. The math Academies also contained content designed to improve teachers' depth of understanding of particular mathematical concepts and provided an overview of the Project Share website.

Specific content in the MSTAR Academy for Grades 5-6 materials included:

- A focus on enhancing teachers' existing content knowledge.
- Information to help familiarize Grades 5-6 teachers with the math TEKS.
- Resources to help teachers improve classroom instructional strategies.
- Hands-on activities related to fractions/ratios provided participants with a broader perspective for teaching math, while demonstrating the connections between current Grades 5-6 content and future content.
- Instruction for teachers on how to administer the MSTAR Universal Screener to their students.

Specific content in the MSTAR Math Academy for Grades 7-8 materials included:

- A focus on providing new content to teachers.

- A strong focus on improving teacher participants' content knowledge in proportional thinking.
- Activities to help teachers improve their instructional strategies to teach proportions and percentages.
- Instruction for teachers on how to administer the MSTAR Universal Screener to their students.

The Algebra I EOC Success Academy incorporated algebra-related student activities and lesson plan summaries for teachers. Specific content in the Algebra I EOC Success Academy materials included:

- A focus on the topics of functions (linear), equations, and inequalities.
- Session preparation materials and background information (e.g., a supply/equipment list, standards and support frameworks, content objectives, and book titled *Texas Response to Curriculum Focal Points* for Kindergarten through Grade 8 Mathematics).
- Algebra I TEKS student data for grades 9-11 from 2004 through 2009, that included matrices showing the percentage of students achieving varying levels of success for each math objective.
- Student activities, materials to make a flip book, and TAKS cards with objective-focused problems for students.

### ***Science Academies***

The intent and content varied across the three face-to-face Science Academies. The Science Academies for Grades 5-8 and the Biology EOC Success Academy PD were offered as a three-day training session. Because the new 2010 Science TEKS were set to roll out in fall 2010, the Science TEKS Overview Academy for Grades K-12 was a one-day Academy to familiarize teacher participants with the new structure of the TEKS. Teachers attending Science Academies for Grades 5-8 and the Biology EOC Success Academy could also attend the overview Academy. In addition to the standard presenter guide, participant guide, and presentation slides, content in the Science Academy materials included:

#### Science Academies for Grades 5-8

- Six videos to motivate, provide information, or demonstrate an activity or lab.
- A list of materials teachers would need for each activity including a list of consumable products to purchase with example pictures of the products.

#### Science TEKS Overview Academy for Grades K-12

- Information on and rationale for state changes to the TEKS, the impact of the changes upon student achievement (cited Rigor/Relevance Framework) by grade-level, and an in-depth analysis of the changes between the 1998 and 2010 TEKS.
- Answer keys for all example student questions listed in the participant guides.

## Biology EOC Success Academy

- Thirteen videos to motivate, provide information, or demonstrate an activity or lab.
- A list of materials needed by teachers for activities, including consumable products to purchase.

The Science Academy materials included an emphasis on improving teacher participants' understanding of the new science TEKS and how this understanding could be integrated into teachers' classroom practice. Activities encouraged participant discussion and thinking about ELPS, CCRS, and RtI when developing and implementing science lessons. The Science Academies for Grades 5-8 and the Biology EOC Success Academy included sample lessons that participants went through during the training. Participants were able to review content and standards from both the teacher and student perspectives. Teachers could take these sample lessons and use them in their classrooms.

## *English Language Arts Academy*

The focus of the English I and II EOC Success Academy face-to-face Academy varied considerably compared to the other Academies. The English I and II EOC Success Academy face-to-face session was designed to provide an overview of the English I and II EOCs based on limited information available on these assessments, to explain the connections between the EOCs and tools (support frameworks and standards, including TEKS, CCRS, and ELPS) that are available to teachers to help students succeed, and to orient participants in upcoming PD courses that will be available through Project Share. Based on the evaluation team's review of these documents, the materials reflected the unique focus of the English I and II EOC Success Academy. Besides the standard presenter guide and participant guide, the developers provided specific materials to the regional trainers on how to turnaround the training for teachers, which included:

- Participant handouts with activity questions to be covered during the training.
- A guide with general Project Share/Epsilon information.
- Two sets of the PowerPoint presentation, participant notes, and presenter notes, one specifically for trainings with internet services available at the training site, and one specifically for trainings without internet services available.
- A presentation for regional trainers on "Planning for Turnaround".
- Supplementary materials that included a visual diagram of each days' agenda, CCRS plan of action (phase I and II), and English III performance expectations.
- A "Rules of Use" document for English I and II EOC Success Academy materials that trainers and participants had to agree to before accepting the materials to prevent wide distribution and use of materials.

## **Summary of Findings on Rider 42 PD Academy Content**

The content is similar across math, ELA, and science statewide Academies. But, a specific focus on emphasizing particular concepts or topics, deepening teachers' content knowledge, and enhancing skills

in using various instructional strategies make each Academy unique. Most Academies (some to a deeper extent than others) emphasize improving teachers' skills in adapting instruction by integrating the support frameworks of CCRS, ELPS, and RtI. The format of the materials is standard across all Academies in that a presenter guide, a participant guide, and a presentation were provided for trainers and participants.

### **Research Question 1B: To what extent does the content of each Academy reflect best practices for teacher professional development?**

Expert reviews were the sole source of data for examining the extent to which Academy content reflected best practices for teacher professional development. The experts used the NSDC Standards to assess how the various Academies aligned with best practices in terms of content, context and process standards for PD. The specific NSDC standards used for this review are provided in Appendix 17.

A synthesis of each expert panel's findings is provided below for each content area highlighting areas of strong, moderate and/or weak alignment with the national standards. Appendix 18 provides detailed summaries of the feedback provided by each of the expert review panels, as well as a description of alignment ratings.

#### ***Math Academies***

In their review of the content and activities of the three math Academies math experts indicated that, overall, the Math Academy materials were high-quality and would help teachers expand their understanding of math concepts and their ability to help teach specific concepts to students.

Regarding best practices in teacher PD, math experts felt that the materials for the three math Academies would engage teachers with each other and with the presenters and enhance teaching. The experts indicated a strong alignment of the materials across the three math Academies to the "quality teaching", "collaboration", and "learning" standards for staff development indicating that the PD would<sup>30</sup>: (a) deepen teachers' content knowledge and provide them with instructional strategies to assist students in meeting math standards; (b) provide educators with the knowledge and skills to collaborate; and (c) apply knowledge about human learning and change. In addition, the "data driven" standard for Algebra I EOC Success Academy was strongly reflective of best practices for teacher PD due to the sample assessment items that were shown with right and wrong answers.

There was moderate alignment between the math Academies materials and four of the standards for staff development—"equity," "learning communities," "research-based," and "design." This moderate alignment demonstrates that the experts identified both strengths and weaknesses in these materials across these standards. Specifically, the experts' review suggests that despite some weaknesses that exist, these Academies are likely to: (a) prepare educators to understand and appreciate all students, create safe, orderly and supportive learning environments, and hold high expectations for students' academic achievement; (b) organize teachers into learning communities; (c) prepare educators to apply

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<sup>30</sup> Paraphrased from NSDC Standards. NSDC standards used for this review are provided in Appendix 17.

research to decision making; and (d) use learning strategies appropriate to the intended goal of each Academy.

The experts' review of two standards, "data-driven" for the two MSTAR math Academies and "resources" across all three Academies, suggest a weak alignment with best practices. Based on the experts' comments, this is mostly due to the lack of information on the Universal Screener and Project Share, possibly due to the implementation timetable for Project Share and limited documentation related to the Universal Screener. Math experts did not cite the materials themselves as resources, and if they did, that may have raised the "resources" standard to be a moderate reflection of best practices in teacher PD. The experts also found that the math Academy materials for all three math Academies were a weak reflection of the "family involvement" standard. However, this standard was not a focus of any of the Academies. Further analysis of the experts' perceived strengths and weaknesses of the math Academies provides deeper insight into their general reflections on the math content and activities. The greatest concern of experts across the math Academies was their feeling that there were insufficient activities for participants to develop conceptual understanding and computational mastery. The math panel experts also unanimously expressed a need to strengthen the level of content instruction present in the math Academies. They indicated that teachers would benefit from exposure to curriculum/content that is beyond their present grade level as well as how their grade-level materials fit into the broader discipline of mathematics. In addition, errors in the materials regarding mathematical terminology were noted by experts across the math Academy materials, and this specific feedback will be provided in a separate document to TEA.

The development of the PD Academy materials may have been a challenging process because the Academies were limited to a specific number of days and decisions had to be made about what topics should be covered during this short amount of time. Even with this challenge, TEA and the developers created math PD that experts agreed was mostly aligned with the latest math research and would benefit from some revision. Based on the document review and the math expert panel review, the activities included in these materials are likely to help teachers improve their teaching in very specific content areas or with very specific instructional strategies. The math experts' review point to the need to extend learning beyond these specific content areas and strategies in order to solidify participant learning.

### ***Science Academies***

The science experts reviewed the content and activities of the three science Academies and concluded that they provide useful activities but that some of the instructions need more clarification in order to enhance teacher participant learning. Furthermore, the science experts suggested that the materials could be strengthened by incorporating opportunities for more participant discussion about their implementation. Providing participants with opportunities to "practice" integrating the activities into a classroom environment followed by group discussion could address this.

Overall, experts felt that the materials for the three science Academies were designed well and enhanced teacher development through strong alignment with most standards for staff development.

The experts indicated a strong alignment of the materials across the three science Academies to the “quality teaching,” “learning communities,” “design,” “learning,” and “collaboration” standards for staff development. This strong alignment suggests that the science Academies are likely to<sup>31</sup>: (a) provide teachers with instructional strategies to assist students in meeting new science standards, (b) organize teachers into learning communities, (c) use learning strategies appropriate to the intended goal of the Academies, (d) apply knowledge about human learning and change, and (e) provides educators with the knowledge and skills to collaborate. In addition, the “data driven” standard for Science Academies for Grades 5-8 and Biology EOC Success Academy was strongly reflective with best practices for teacher PD.

There was moderate alignment between the science Academies materials and three of the standards for staff development – “equity,” “data-driven” (for Science TEKS Overview Academy for Grades K-12), and “research-based”, with the experts noting both strengths and weaknesses along these dimensions. There was weak alignment with the “resources” standard due to the fact that little to no information on Project Share was provided in any of the science Academies materials. While materials for all three science Academies were found to be weakly aligned with “family involvement” standard, this was not a focus of any of the Academies.

TEA and developers were up against the same challenges when creating content for the three face-to-face science Academies as they were for the math Academies (i.e., the development and implementation timelines available to create the science Academies materials). Overall, the materials for the science Academies were of high quality, well organized and would facilitate collaboration among teachers. Their review also suggests that parts of these materials would benefit from the addition of more detail. Experts noted that the materials were well-organized and facilitated.

### *ELA Academy*

Upon their reflection on the content and activities of the English I and II EOC Success Academy PD, the experts determined that the PD is adequate in effectively strengthening teacher understanding of and relationship between TEKS, ELPS, and CCRS. Experts indicated that the materials are comparable to programs offered by other states that attempt to help teachers understand the purpose of ELA assessments, and how the assessments relate to state standards and student achievement.

Overall, ELA experts indicated that the materials for the English I and II EOC Success Academy were reflective of best practices for teacher PD across all but one standard (data-driven). The experts indicated a strong alignment of the English I and II EOC Success Academy materials to the “learning communities,” “design,” “learning,” and “collaboration” standards for staff development. Given the goals of the face-to-face English I and II EOC Success Academy, which were to orient teachers to Project Share and set up future learning opportunities, this alignment demonstrates that the materials accomplished these goals. There was moderate alignment found between the English I and II EOC Success Academy materials and five of the standards for staff development—“equity,” “quality teaching,” “family involvement,” “resources,” and “research-based”, indicating that the experts identified both strengths and weaknesses along these dimensions.

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<sup>31</sup> Paraphrased from NSDC Standards. NSDC standards used for this review are provided in Appendix 17.

ELA experts recommended that the materials could be enhanced by working to ensure that teachers understand specifically how to use their awareness of the state standards to strengthen their instruction. All experts indicated that greater specificity is required to ensure that teachers understand how to translate key ideas into quality classroom practice. For example, technical terminology is used in the training such as “depth of understanding of key concepts” but without practical examples of how this terminology relates directly to their work, it is likely to have only a minimal impact. One expert remarked that greater depth for the instruction piece is needed in addition to specific instructional practices for ELLs. Experts remarked that several of the PowerPoint slides were cluttered and would be strengthened by less text and more actionable examples.

Experts recommended that the developers include samples of student work that demonstrate key concepts communicated during training. These samples could portray positive examples of the concepts as well as poor examples of student work can promote participant learning. There is a prevailing assumption that suggests that a greater understanding of standards will lead to improvements in practice. This will only occur if the materials also specifically address instruction. One expert remarked that it might be advantageous for teachers to work backwards beginning with the EOC assessment and examples of students’ performance on the assessment to what types of practices will lead to good performance.

Based on the ELA expert panel review, the content of the English I and II EOC Success Academy face-to-face PD materials aligns with the goals of the Academy. It is evident that this one-day face-to-face session was meant to be a launching pad for the further implementation of online ELA courses through Project Share. Experts felt that the materials were clear and provided specific guidance and options for regional trainers to help teachers understand the English I and II EOC assessment, the connections between this assessment and available tools (ELPS, CCRS, and TEKS), and the technology teachers can use to learn more through Project Share. However, the experts also felt that the English I and II EOC Success Academy PD materials could be improved if they included examples of student work or a connection between a better understanding of the standards and ways in which teachers could specifically improve their classroom practice. Further analysis of the online materials as part of the ELA Academy, which is planned for the next phase of the evaluation, will greatly improve the understanding of the content of the English I and II EOC Success Academy PD and the overall potential impact of this Academy on teaching practice and student outcomes.

**Research Question 1C: To what extent does the content of each Academy reflect best practices for instruction in respective subject areas?**

In addition to the previous analysis of the alignment of the Rider 42 PD Academies with NSDC standards, the expert review panels were asked to examine the extent to which Academy content reflected best practices for instruction, including the alignment with national and state standards. While alignment to national standards was considered by the experts during their review, developers were not charged by TEA to address national standards during the development of the Academy materials. Instead, this analysis is provided as helpful background knowledge and can inform revisions and additions to existing Academy materials.

Appendix 18 provides a detailed summary of the feedback provided by the expert reviewers in these areas for each Academy. The narrative below provides a synthesis of the experts' findings, noting areas of strong, moderate and/or weak alignment with best practices for instruction and alignment to TEKS and national standards.

Overall, the expert panels indicated a strong or moderate alignment of the materials with best practices in instruction for each of the areas under review, including the alignment to national and state standards. Some of the common themes that were highlighted by experts include active engagement of participants (and ultimately students), modeling of hands-on activities, and creating feedback loops between presenters and participants to generate understanding and to correct misconceptions.

Math and science experts indicated that they noticed a close correlation of the contents to the state standards (the TEKS) in their respective subjects. Additionally, there were several activities that were determined to be beneficial for student learning. There was consensus among the experts, however, that if increased student achievement is the aim of the Academies, there must be a concentrated effort to increase the conceptual understanding of the teacher participants and provide numerous opportunities throughout the Academies to practice explaining various concepts that are covered in the Academies. ELA experts felt that while the materials overall were good, there is a need to help teachers learn how to directly link the new standards to quality instruction. Samples of student work with accompanying discussion were mentioned as a potential basis for discussion to get at this issue in the ELA Academy.

## **Section 2. Delivery of the Face-to-Face PD Academies**

With an understanding and assessment of the quality of the content of the PD Academies, the next step of the evaluation was designed to measure the quality and fidelity of the way in which training was delivered. This includes delivery of training to the regional trainers, as well as delivery of the content to teachers themselves. The research findings for this section are summarized by the five research questions under Objective 1 that address delivery of training.

### **Research Question 1E: What is the quality of the training provided to the regional trainers?**

Two sources of data were used to address the quality of the training provided to regional trainers. Observations of the regional TOTs were conducted to validate the implementation of the TOTs to regional trainers, and to refine the observations protocols that would be used by observers at the various teacher Academy sessions. Survey results from regional trainers themselves (i.e., questions covering training structure and delivery, coverage of key content, and perceived usefulness of Presenter's Guides) were used to assess the quality of the training provided to regional trainers.

### **TOT Observations**

The main purpose of the TOT observations occurring across the state (see Chapter II for details on which sessions were observed) was to assess the quality of the training and the clarity of the PD content communicated to regional trainers the content of the Academies since it was the first time the training materials were being implemented on a statewide basis. TOT observations also served to assist the

research team in the refinement of observation protocols that would later be used by observers at 29 Teacher PD Academies across the state, as well as the regional trainer survey. The TOT observations provide qualitative context for the regional trainer survey results.

### ***Observations of MSTAR Math Academy for Grades 5-6 and Grades 7-8***

One combined five-day regional trainer TOT session was held for both the MSTAR Math Grade 5-6 and Grade 7-8 Academies. The first day of training was the same for both the Grades 5-6 and Grades 7-8 Academies, the next two days covered the Grades 5-6 Academy only, and the last two days covered the Grades 7-8 Academy only. Thus, regional trainers attending this PD Academy TOT became trained, over the course of the five-day training, to deliver both the MSTAR Math Academy for Grades 5-6 and the MSTAR Math Academy for Grades 7-8. During these sessions regional trainers:

- Examined the Grades 5-6 and Grades 7-8 mathematics TEKS and learned strategies for preparing students for success in algebra.
- Explored hands-on, student-centered lessons designed to provide connections to and strengthen knowledge of the middle-school mathematics that is critical for success in algebra.
- Explored the support frameworks – CCRS, ELPS, and Rtl.
- Received a brief orientation about online resources and follow-up activities, as well as professional learning communities, through the Project Share online interactive platform for further development and growth.

The master trainers for the MSTAR Math Academy for Grades 5-6 TOT session observed were very polished in their delivery of materials, but there were times when the presentation seemed rushed. The switch from one set of master trainers for Days 1-3 (MSTAR Math Academy for Grades 5-6 TOT) to a different set of master trainers for Days 4-5 (MSTAR Math Academy for Grades 7-8 TOT) was difficult for participants due to the different training delivery styles (and the content) of the two sets of trainers and due to the lack of a smooth transition from one to the other. Regional trainers were not directed to take different views (from the perspective of a trainer, teacher or student) of the content, and so stayed primarily in teacher-participant mode. Presenters encouraged participation and circulated during activities to answer questions as necessary, and up to four additional trainers circulated during activities to help provide support for the large group.

### ***Algebra I EOC Success Academy***

The TOT session for Algebra I EOC Success Academy took place over three days, and was designed to enable trainers to deliver the material to teachers over a two-day session. During the TOT, participants:

- Examined the concepts in the TEKS.
- Learned strategies for preparing students for success on the Algebra I EOC Success assessment.
- Explored hands-on activities to dissect students' misconceptions about algebraic concepts.

- Developed an understanding of the connections to, and strengthened their knowledge of, CCRS, ELPS, and RtI.
- Listened to a very brief introduction to Project Share.

The master trainers observed were effective in their delivery of the training material. They modeled active learning techniques and encouraged participation. In addition, the master trainers were very familiar with the material and moved the activities at an appropriate pace. During the session observed there was little opportunity to move between different views (from the perspective of a trainer, teacher or student) of the material. Regional trainers primarily stayed in a teacher-participant mode. Regional trainers seemed comfortable interacting with each other and with the master trainers. The room for the training was conducive to learning, and participants had plenty of room to complete activities. The master trainers invited ‘parking lot’ and verbal questions, and both were answered thoroughly.

### *Science Academies for Grades 5-8*

The Science for Grades 5-8 TOT was a 3-day session, and was designed to enable regional trainers to deliver the material to teachers over a three-day session. Using printed materials and videos, the regional trainers:

- Participated in various activities to make connections to and strengthen their knowledge of CCRS, RtI, and ELPS.
- Walked through hands-on, student-centered lessons (most of which included lab activities) framed in the research-based 5E instructional model (engage, explore, explain, elaborate, evaluate).
- Analyzed the changes in the science TEKS, including an examination of TEKS in terms of the content, process skills, and types of investigations.
- Listened to a brief introduction to Project Share.

Overall, the master trainers demonstrated their expertise in science content and science TEKS, which allowed them to effectively work through the lessons (labs and other activities) with the regional trainers and answer any questions that came up. They also demonstrated their expert knowledge of the support frameworks (CCRS, ELPS, and RtI). The master trainers were passionate about science, energetic, supportive of change (in TEKS and in teaching reforms), encouraging, and motivational.

Regional trainers had the opportunity to examine concepts from various points of view (as a trainer, teacher participant, and student), and the master trainers did an excellent job infusing this thinking (i.e., positioning the regional trainers in these perspectives) throughout the training. Participants were asked to put various “hats” on (e.g., trainer, teacher, student) at various points in the training to better understand what each group may be thinking when going through an exercise and how they might be able to help these difference groups problem solve. The regional trainers were actively engaged during group activities and discussions, and especially during hands-on lab activities. The design of the TOT,

which called for different grouping arrangements and learning strategies (journaling, videos, reflection), helped bring out intellectual conversations about things like changes in the science TEKS and how to differentiate instruction for students in the context of the sample lessons. The master trainers were constantly circulating, played off of each other effectively, and made the TOT lively but not off task. In fact, they were very task oriented and this seemed to keep the regional trainers on task, too.

### ***Science TEKS Overview Academy for Grades K-12***

The TOT session for the Science TEKS Overview Academy for Grades K-12 took place over one day, and was designed to enable trainers to deliver the material to teachers over a one-day session. In this training, regional trainers:

- Examined the new 2010 science TEKS compared to the 1998 TEKS.
- Strengthened their knowledge of the CCRS and ELPS. CCRS and ELPS were integrated into the activities during this session so regional trainers had the opportunity to work with the frameworks and discuss how they were addressed in the Academy lessons.
- Explored models of vertical alignment that strengthened their knowledge of science concepts and processes.
- Had opportunities to garner professional support from other educators through shared resources and ongoing academic networking.

The master trainers for this session were skillful at presenting the Science TEKS Overview Academy for Grades K-12 material. They modeled effective classroom management skills and kept the class moving at a brisk pace that did not feel rushed. Participants seemed comfortable asking questions of the master trainers and with interacting with other regional trainers. Support for implementation was provided throughout the session. The master trainers often referred to the turnaround sessions, which allowed regional trainers to shift their perspective from the teacher-participant perspective to a trainer perspective.

### ***Biology EOC Success Academy***

The Biology EOC Success Academy TOT was structured the same way as the Science for Grades 5-8 TOT (i.e., as a 3-day session). The purpose was for regional trainers to develop a deeper understanding of concepts in the new biology 2010 TEKS and to learn strategies to prepare their students for success on the Biology EOC assessment. Using the same approach, regional trainers went through sample lessons based on the 5E instructional model, reviewed and analyzed changes in the Science TEKS, including looking at the content, process skills, and types of investigations. A short presentation was presented on Project Share with no instruction on how to use Project Share, possibly due to lack of familiarity with Project Share among presenters.

Overall, the master trainers observed demonstrated their expertise in biology content and science TEKS, which allowed them to effectively work through the lessons (labs and other activities) with the regional

trainers and answer any questions that arose. They also demonstrated their knowledge of the support frameworks (CCRS, ELPS, and Rtl).

Similar to some of the other TOTs, regional trainers in the Biology EOC Success Academy TOT sessions were encouraged to consider the training activities and ideas from various perspectives (as a trainer, teacher participant, and student), although most of the time they were in teacher-participant mode. As a result, very little time was spent on training the regional trainers how to be good trainers.

The master trainers encouraged participation of most regional trainers and provided ample opportunities for them to ask questions and respected the contribution of all regional trainers; however, in the whole group discussions, it was often the same regional trainers who were willing to share their answers or comments. The master trainers answered questions as they were posed by the regional trainers, and the developer representatives answered the parking lot questions either at the end of the day, beginning of the next day, or after breaks. The facility where the training was held (which was a science lab) was very conducive to the activities presented in the training.

### ***English I and II EOC Success Academy***

The English I and II EOC Success Academy TOT was a one and a half day session, and provided guidance for trainers to turn around the material in a one-day session for teachers. Participants received an overview of the English I and II EOC assessment and saw the integration of the TEKS for English language arts and reading, ELPS, and CCRS. Participants were also introduced to online resources, follow-up activities, and networking through professional learning communities. The ELPS and CCRS support frameworks were integrated in the activities during this session. Participants had the opportunity to work with the frameworks and discuss how they were included in lessons.

The Project Share component for the English I and II EOC Success Academy was more prominent for this TOT due to early plans to use the Academy as a launch pad for online PD in writing and reading instruction that would be made available through Project Share as early as fall 2010. Unlike the other Academies, which did not provide Project Share information, the entire afternoon of the first day of this training session was dedicated to Project Share. Participants brought their own computers (or used computers provided at the training facility) to work on their e-Portfolio and become familiar with the Epsilon platform. Less than 10% of the regional trainers had issues that were not resolved during the session. Participants seemed eager to work on the platform, but a little less comfortable with the idea of showing teachers how to use Project Share. "Connection Specialists" from TEA were present to assist with this part of the session. The master trainers also noted that a "non-connected" version of the Project Share part of the session was available. The master trainers did a very good job of pointing the regional trainers to Project Share for the most current information on the EOC assessment.

The master trainers for this session were polished and appeared very comfortable with the material. The regional trainers were attentive and engaged throughout the session, and interacted with each other in a friendly and helpful manner. The master trainers answered questions about the activities and training. They also provided a large chart paper and sticky-notes (parking lot) for participants to post questions

during the session. Although they did not answer the ‘parking lot’ questions, one master trainer stated that they would be creating a Frequently Asked Questions list that would be posted on Project Share for all participants to see answers to questions posed during the session. Regional trainers were able to shift their perspective from the teacher-participant perspective to a trainer-provider perspective. The entire morning of the second day was dedicated to reviewing the material from a trainer’s perspective and working through questions about logistics with other regional trainers and/or the master trainers.

### ***Summary of TOT Observations***

The TOT observations served as a valuable resource for the development of the Rider 42 PD Academy observation protocols. In addition, these observations of TOTs helped to provide context for the later assessment of the training provided to teachers across the state. Only minor issues with the delivery of the TOTs were identified by observers and the master trainers were able to adapt and recommend minor changes to the content of the Academies. It was evident that the quality of the master trainers was generally high across all Academies. It was also made clear at all regional TOTs that this was statewide PD that needed to be implemented at each of the ESCs across Texas without significant variations from the presenters’ guide.

### **Perspectives of Regional Trainers on Effectiveness of TOT Sessions**

To gain a better understanding of the TOTs from the perspective of regional trainers who ultimately facilitated the teacher PD Academies on behalf of their regional ESCs, an online survey was distributed to all attendees of the TOTs in September 2010. While most of the survey respondents attended the TOTs in April – June 2010, the later timing of the survey was purposeful to elicit responses from TOT participants after they had the opportunity to conduct the PD Academies with teachers in their regions. The results which follow are based on their survey responses.

### ***Training Structure and Delivery***

The survey asked respondents to rate 16 aspects of the training related to the structure and delivery of professional development, which were then combined to create a single scale score<sup>32</sup>. This included the organization, pacing, length, physical space, as well as the knowledge and responsiveness of the instructor. As summarized in Table 3.1, overall, the majority of respondents from all Academies were most likely to report that they either agreed (49%) or strongly agreed (41%) that the TOT sessions they attended were well delivered.

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<sup>32</sup> A complete description of the development of scale scores can be found in Appendix 16.

Table 4.1. Structure and Delivery of TOT Sessions Were of High Quality

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Strongly Disagree	3.4%	0.0%	2.8%	6.1%	2.5%	3.8%	1.4%	4.7%
Disagree	7.1%	2.8%	19.7%	1.7%	2.5%	8.8%	4.3%	10.0%
Agree	48.6%	51.4%	56.3%	37.4%	36.3%	43.8%	50.0%	60.7%
Strongly Agree	40.9%	45.8%	21.1%	54.8%	58.8%	43.8%	44.3%	24.7%

Source: Regional trainer survey, 2010.

Note: n=638. The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data.

Compared to participants of other TOTs, participants of the Algebra I EOC Success Academy TOT session and the Science Academies for Grades 5-8 TOTs were more positive about the quality of training structure and delivery (Table 4.1). More than half of these regional trainers indicated that they *strongly agreed* with the survey items related to this construct. Regional trainers attending the TOT for the MSTAR Math for Grades 7-8 Academy (23%) and the English I and II EOC Success Academy TOT session (15%) were more likely to disagree or strongly disagree that the structure and delivery of the TOT they attended were of high quality than attendees of other Academies.

Moreover, as shown in Table 4.2, while the vast majority of participants attending the seven TOT sessions *agreed* or *strongly agreed* that they felt prepared to train others after attending the TOT (63% to 92%) and thought it was a good use of their time (65% to 92%), there was substantial variation across Academies. A large majority of regional trainers attending the Algebra I TOT *strongly agreed* (42%) or *agreed* (39%) with the statement that they felt prepared to train others after attending the TOT session. Regional trainers attending the Science Academies for Grades 5-8 TOT session also responded favorably to this survey item in comparison to attendees of the other Academies (48% and 44%, respectively). And when asked whether *attending the TOT was a good use of my time*, nearly six out of 10 Algebra I and Science 5-8 TOT attendees *strongly agreed* (58% and 57%, respectively), and at least one third *agreed* with this statement from all Academies. Similar to the results for the structure and delivery of the TOTs, the MSTAR Math for Grades 7-8 TOT and English I and II EOC Success Academy TOT were rated lowest among the Academies by participants in these two areas. While these two TOT Academies had lower average ratings than other TOT Academies, still, a majority of responses among both groups were in agreement with statements about the effectiveness and utility of these trainings.

Table 4.2. Comparison of Selected Survey Items by Academy TOT Session

Academy	After attending this TOT session, I felt prepared to train others.		Attending this TOT was a good use of my time.	
	% Strongly Agree	% Agree	% Strongly Agree	% Agree
MSTAR Math Academy for Grades 5-6	32.9%	45.7%	49.3%	42.3%
MSTAR Math Academy for Grades 7-8	12.9%	50.0%	22.5%	46.5%
Algebra I EOC Success Academy	42.1%	38.6%	58.3%	33.0%
Science Academies for Grades 5-8	48.1%	44.3%	57.0%	32.9%
Science TEKS Overview Academy for Grades K-12	38.8%	43.8%	40.0%	40.0%
Biology EOC Success Academy	30.0%	47.1%	40.0%	45.7%
English I and II EOC Success Academy	22.0%	44.0%	22.3%	42.6%

Source: Regional trainer survey, 2010.

### ***Coverage of Key Content***

Another indicator of quality is coverage of key content during each Academy’s TOT session. This construct included questions about the extent to which training sessions conveyed TEA’s expectations for the new TEKS and EOC assessments, and presented practical ways for teachers to integrate relevant frameworks and models – including CCRS, ELPS and RtI – in their classroom instruction. Six items in the survey related to this construct and were combined into a single scale score. As summarized in Table 4.3, overall, 42% of respondents were most likely to report that TEA’s expectations and practical ways for teachers to integrate the frameworks in their teaching were covered to a *moderate extent* at the TOT session they attended. Another one-third of TOT participants responding to the survey indicated that they were covered to a *great extent*, while approximately 25% reported *minimal* or *no* coverage of these topics.

Table 4.3. Coverage of Key Content and Project Share in TOT Session

	Response	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Key Content	Not at all	4.9%	1.4%	4.3%	0.9%	2.5%	7.6%	0.0%	12.0%
Key Content	To a Minimal Extent	20.0%	11.6%	24.3%	7.8%	10.0%	26.6%	20.6%	32.7%
Key Content	To a Moderate Extent	41.8%	33.3%	37.1%	43.5%	42.5%	51.9%	47.1%	38.7%
Key Content	To a Great Extent	33.3%	53.6%	34.3%	47.8%	45.0%	13.9%	32.4%	16.7%
Project Share	Not at all	5.7%	7.1%	4.2%	1.8%	8.8%	10.1%	10.0%	2.7%
Project Share	To a Minimal Extent	33.8%	35.7%	47.9%	45.6%	33.8%	44.3%	32.9%	12.0%
Project Share	To a Moderate Extent	31.4%	34.3%	28.2%	30.7%	27.5%	25.3%	35.7%	35.3%
Project Share	To a Great Extent	25.7%	21.4%	15.5%	20.2%	26.3%	12.7%	18.6%	46.7%

Source: Regional trainer survey, 2010.

Note: Due to rounding, percentages may not total to 100. For Key Content data: n=631. The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data. For Project Share data: n=634.

When the data were disaggregated by TOT, participants of the English I and II EOC Success Academy TOT and the Science TEKS Overview Academy for Grades K-12 TOT indicated with far less frequency than attendees of the other Academies that TEA’s expectations and practical ways for teachers to integrate the frameworks in their teaching were covered to a *great extent*. As shown in Table 4.3, those who attended the English I and II EOC Success Academy TOT and the Science TEKS Overview Academy for Grades K-12 TOT most frequently reported that coverage was *moderate* (39% and 52%, respectively) or *minimal* (33% and 27%, respectively). In contrast, respondents for the other TOTs more frequently indicated that TEA’s expectations and practical ways for teachers to integrate the frameworks in their teaching were covered from a *moderate extent* (ranging from 33% for MSTAR Math Academy for Grades

5-6 TOT to 47% for Biology EOC Success Academy TOT) to a *great extent* (ranging from 32% for Biology EOC Success Academy TOT to 54% for the MSTAR Math Academy for Grades 5-6 TOT).

Since Project Share is expected to play a major role in furthering the professional development of teachers throughout the school year, information about the system was also considered to be key content for the Academies. Thus, respondents were also asked the extent to which the TOT session they attended included an overview of Project Share. Also shown in Table 4.3, the majority of respondents who attended the English I and II EOC Success Academy TOT indicated that the Project Share system was covered either to a *great* (47%) or a *moderate extent* (35%). In contrast, attendees of all other TOT sessions most frequently reported that the Project Share system was covered either to a *minimal* (ranging from 33% for the Biology EOC Success Academy TOT to 48% for the MSTAR Math Academy for Grades 7-8 TOT) or *moderate* extent (ranging from 25% for the Science TEKS Overview Academy for Grades K-12 TOT to 36% for the Biology EOC Success Academy TOT). This is likely due to design differences in the English I and II EOC Success Academy and other content areas. ELA face-to-face PD was purposefully designed to be a “launching pad” for teachers to access online courses and content through Project Share.

### *Usefulness of Training Components*

TOT attendees completed surveys after they had a chance to turn around and deliver trainings to teachers. Thus, they were able to reflect on the usefulness of training components after they trained teachers. Table 4.4 lists several components common across most if not all Academies. As it shows, respondents facilitating the MSTAR Math Academy for Grades 7-8 TOT found their presenter’s guide less useful than facilitators of other Academies, with only 39% indicating that they found it *very useful*. Respondents for the Algebra I EOC Success Academy TOT were most positive about the usefulness of the presenter’s guide as a whole, with 75% reporting that they found it *very useful*, followed by MSTAR Math Academy for Grades 5-6 at 66%. TOT attendees were generally in agreement across all Academies that the Orientation to Project Share was only *somewhat useful* or *not at all useful*. While 39% of English I and II EOC Success Academy trainers found it *very useful*, only 6% of MSTAR Math Academy for Grade 7-8 attendees thought similarly. Across Academies, Support Frameworks were considered *useful* to *very useful*. Over half of Science Academy for Grades 5-8 (53%) and Algebra I EOC Success Academy (51%) attendees indicated that they were *very useful*. Of those Academy TOTs that provided *Lessons and Activities* to regional trainers, the majority of respondents rated them as *useful* to *very useful*. Nearly three quarters of MSTAR Math Academy for Grades 5-6 and Algebra I EOC Success Academy attendees deemed them *very useful*, but only 40% of Biology EOC Success Academy respondents rated likewise. Among those TOTs that featured a TEKS component, a large majority of respondents (ranging from 84% for Algebra I EOC Success Academy to 96% for Biology EOC Success Academy) across Academies found this portion of their training to be either *useful* or *very useful*.

Table 4.4. Usefulness of Training Resources and Materials

	Response	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Presenter's Guide (as a whole)	Not at all	0.0%	2.4%	0.0%	0.0%	0.0%	0.0%	1.8%
Presenter's Guide (as a whole)	Somewhat	5.7%	12.2%	0.0%	15.5%	21.2%	6.4%	14.0%
Presenter's Guide (as a whole)	Useful	28.6%	46.3%	25.4%	29.3%	30.8%	42.6%	40.4%
Presenter's Guide (as a whole)	Very	65.7%	39.0%	74.6%	55.2%	48.1%	51.1%	43.9%
Project Share Orientation	Not at all	27.3%	25.7%	33.3%	21.6%	N/A	32.6%	12.5%
Project Share Orientation	Somewhat	36.4%	42.9%	31.8%	25.5%	N/A	25.6%	14.3%
Project Share Orientation	Useful	21.2%	25.7%	24.2%	35.3%	N/A	23.3%	33.9%
Project Share Orientation	Very	15.2%	5.7%	10.6%	17.6%	N/A	18.6%	39.3%
Support Frameworks	Not at all	0.0%	5.0%	2.9%	1.7%	0.0%	0.0%	5.5%
Support Frameworks	Somewhat	18.2%	25.0%	8.7%	8.6%	36.5%	8.5%	21.8%
Support Frameworks	Useful	39.4%	37.5%	37.7%	36.2%	28.8%	42.6%	52.7%
Support Frameworks	Very	42.4%	32.5%	50.7%	53.4%	34.6%	48.9%	20.0%
Lessons and Activities	Not at all	0.0%	4.9%	1.4%	0.0%	N/A	2.1%	N/A
Lessons and Activities	Somewhat	2.9%	17.1%	0.0%	12.1%	N/A	19.1%	N/A

	Response	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Lessons and Activities	Useful	22.9%	29.3%	25.0%	22.4%	N/A	38.3%	N/A
Lessons and Activities	Very	74.3%	48.8%	73.6%	65.5%	N/A	40.4%	N/A
TEKS Component	Not at all	N/A	N/A	1.4%	1.7%	0.0%	0.0%	1.8%
TEKS Component	Somewhat	N/A	N/A	14.5%	6.9%	15.4%	4.3%	12.3%
TEKS Component	Useful	N/A	N/A	46.4%	22.4%	36.5%	27.7%	29.8%
TEKS Component	Very	N/A	N/A	37.7%	69.0%	48.1%	68.1%	56.1%

Source: Regional trainer survey, 2010.

Note: Due to rounding, percentages may not total to 100. N/A indicates components not included in the Academy

While there were a number of training components common across Academies, several components also featured unique elements specific to the subject area. The following list presents findings on these unique elements by Academy.

- Both the MSTAR Math Academies had two additional components: (1) Algebra Readiness and, (2) Curriculum Focal Points. MSTAR Math Academy for Grade 5-6 attendees were slightly more likely than attendees of other Academies to find both components to be *useful* or *very useful*.
- The Science TEKS Overview Academy for Grades K-12 TOT also provided information on *Types of Investigations* as well as *Rigor and Relevance Analysis*. While 85% of respondents found the former to be *useful* or *very useful*, 73% reported likewise for the latter.
- The English I and II EOC Success Academy featured several unique components: EOC Assessment Overview, English for Speakers of Other Languages I and II Introduction, and Planning for Turnaround. Respondents gave mixed reviews when asked about the usefulness of these components. While 40% of regional trainers considered the EOC Assessment Overview to be *very useful*, approximately a quarter found the other two components to be similarly useful, and approximately 10% found them to be *not at all useful* (compared to 2% for EOC Assessment Overview).

### ***Summary of Findings on Quality of Regional Trainer Training: TOT Observations and Regional Trainer Survey***

Observations of the various TOTs provided the research team with a broad perspective on how the regional trainers were taught to turn around the statewide PD Academies. By all accounts, the master trainers presenting to the regional trainers at the TOTs were very knowledgeable about the subject matter and had exemplary presentation skills. At both the State Trainings and TOTs, there was high level of emphasis placed on turning around this PD with a high degree of fidelity at each of the ESCs across Texas. At each of the TOTs, the majority of the content was provided to regional trainers to enable them to conduct the training in an effective manner, with the exception of the Project Share portion of the training. However, the master trainers did emphasize the importance of Project Sharing going forward.

Participants expressed broad satisfaction with the quality of the TOT sessions they attended. Attendees of the Algebra I EOC Success Academy TOT and the Science Academies for Grades 5-8 trainings were most positive about the training received. Overall, the TOT sessions were seen by the majority of regional trainers as useful in preparing them to train teachers and thus a good use of their time. The TOT sessions were also found by most regional trainers to adequately convey both TEA's expectations as well as practical ways for teachers to integrate relevant frameworks and strategies in their teaching. With the exception of trainers who attended the English I and II EOC Success Academy TOT session, coverage of the Project Share system was somewhat less highly regarded. The majority of respondents indicated that the Project Share system was covered only to a moderate or minimum extent at the TOT they attended. Finally, regional trainers frequently indicated that they found the various general as well Academy-specific components of the presenter's guide useful, with the exception of the Orientation to Project Share, which, across Academies, was generally found to be only minimally useful.

## **Research Question 1F: What are the professional characteristics of the regional trainers?**

### **TOT Attendance**

A total of 1,313 individuals attended at least one Academy's TOT session to become trained as a regional trainer. Seventy-eight percent of attendees (1,024 individuals) were trained to facilitate only one Academy, while 17% became trained in two Academies, 4% became trained in three Academies, and 20 individuals (2%) became trained in four Academies.<sup>33</sup>

Table 4.5 presents the total number of individuals trained overall for each of the 20 regions across the state, and the number of individuals attending one, two, three or four Academies. ESC Region IV trained the largest number of regional trainers (281), followed by ESC Region X (184), followed by Regions I, XI, and XIX, which all had similar numbers of attendees (113, 116, 115, respectively). ESC Regions II, III, VIII, IX, XV, XVI, and XVIII trained 20 or fewer regional trainers.

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<sup>33</sup> These counts include training for ELPS Academies. If a participant received training in one or more ELPS Academy, it was counted as one Academy.

Table 4.5. Trainings-of-Trainer Participants by Region and Number of Academies Attended

ESC Region	Number of Participants	Number of TOTs Attended by Participants			
ESC Region	Number	One	Two	Three	Four
I	113	84	18	8	3
II	18	9	4	3	2
III	19	16	1	2	0
IV	281	231	43	7	0
V	34	33	0	1	0
VI	40	30	6	3	1
VII	28	23	3	1	1
VIII	19	14	2	1	2
IX	16	10	3	1	2
X	184	145	36	2	1
XI	116	76	31	5	4
XII	47	37	8	2	0
XIII	90	71	16	3	0
XIV	24	19	4	1	0
XV	20	13	5	1	1
XVI	19	16	1	1	1
XVII	34	30	3	0	1
XVIII	18	12	3	2	1
XIX	115	93	18	4	0
XX	78	62	14	2	0
<b>Total</b>	<b>1,313</b>	<b>1,024</b>	<b>219</b>	<b>50</b>	<b>20</b>

Source: Regional ESC attendance records

Note: 36 cases were missing region attended or name/email and are not included above.

### ***Background Characteristics and Experience***

Though it was not possible to match TOT attendees to any existing database for the purpose of reporting demographic characteristics, regional trainers responding to the regional trainer survey provided details on their level of education attained, years of experience as a teacher, hours of experience as a PD provider and as an online PD provider, as well as their place of employment.

Virtually all regional trainers held at least a Bachelor’s degree, with two-thirds holding a Master’s degree and 5% holding a Doctorate or other professional degree. The vast majority of individuals who became trained as regional trainers were employed by a district or school in the ESC region in which they attended training (68%), while 19% were employed by the ESC that offered the Academy. Table 4.6 shows responses for all categories of employment.

Table 4.6. Regional Trainers’ Primary Place of Employment

<b>Location</b>	<b>Percentage of Respondents</b>
ESC that offered the PD Academies	18.8%
Other ESC	1.9%
District or school in the region in which I provided training	68.2%
District or school not in the region in which I provided training	4.3%
College or University	1.4%
Other	5.3%

Source: Regional trainer survey, 2010.

Regional trainers were highly experienced in their field, with 93% indicating that they have over 6 years of experience as a K-12 teacher, while a full 53% indicated they had more than 15 years of experience. They were also highly experienced as trainers, with 56% reporting more than 180 hours of experience providing professional development (see Table 4.7). However, this group did not demonstrate an equal amount of experience as an online facilitator or educator, with 60% reporting that they had no experience at all. The majority of the other 40% had some experience (1 to 60 hours), but very few had more than 60 hours of experience with online facilitation.

Table 4.7. Regional Trainers' Experience Providing PD and as an Online Facilitator

Experience	Experience Providing Professional Development	Experience as an Online Facilitator/Educator
None	1.9%	59.9%
1 to 20 hours	7.5%	20.6%
21 to 60 hours	14.9%	10.2%
61 to 180 hours	19.6%	4.4%
More than 180 hours	56.1%	4.9%

Source: Regional trainer survey, 2010.

### *Providing PD for Teacher Academies*

Not all of those who became trained to deliver training to teachers necessarily did so. Table 4.8 presents the total number of individuals who attended each Academy's TOT, how many of those that became trained actually provided training to teachers, and the total number of PD sessions delivered to teachers for each Academy. As shown in the table below, between 28% (English I and II EOC Success Academy) and 56% (MSTAR Math Academies for Grade 5-8) of TOT participants went on to train teachers. At the time of the survey, a total of 56% of trained trainers had yet to deliver training to teachers.

Table 4.8. Number of TOT Participants by Rider 42 PD Academy

	Total # of TOT Attendees	Attended TOT and Conducted a PD Session	Percent Attended TOT and Conducted a PD Session	Number of PD Sessions Conducted
MSTAR Math Academies for Grades 5-8	254	142	56%	188
Algebra I EOC Success Academy	192	88	46%	103
Science Academies for Grades 5-8	231	118	51%	132
Science TEKS Overview Academy for Grades K-12	272	103	38%	200
Biology EOC Success Academy	168	72	43%	82
English I and II EOC Success Academy	232	65	28%	101
<b>Total</b>	<b>1,349</b>	<b>588</b>	<b>44%</b>	<b>806</b>

Source: Regional ESC attendance records.

Note: Data include all TOT attendees even if missing fields such as region and attendee name. For MSTAR Math for Grades 5-8, the TOT occurred for Grades 5-8 combined. However the Academy trainings were then split for Grades 5-6 and Grades 7-8.

### ***Summary of Findings on Professional Characteristics***

The number of regional trainers attending the TOTs appears to be more than sufficient to meet the teacher demand for these Rider 42 PD Academies across the state. In addition, there is adequate coverage of trainers across the state by content area. In fact, it is possible that more regional trainers were trained than necessary (over 1,300 trainers), as only 54% had conducted a Teacher PD session at the time of the survey in September 2010. Approximately two-thirds of the trainers are employed by schools or districts within an ESC region, and 19% were ESC employees.

Over two-thirds of the regional trainers hold a Master's or Doctorate degree and virtually all have a Bachelors degree. However, very few have experience in the online facilitation of courses or training. This may be an issue as more of the PD moves to an online format that requires substantial degrees of active facilitation. Additional training may be required for regional trainers to support the effective facilitation on online PD through Project Share. This is especially true in areas such as English I and II and math content areas which are planning more substantive online PD activities.

### **Research Question 1G: In what ways, and to what extent, was each Academy promoted to teachers across Texas?**

There were two primary ways of examining the extent to which Academies were promoted across the state: one was examining historical documents regarding the ways in which TEA announced and communicated the initiative, and the other was through questions to ESC administrators regarding the approaches they took, and the efforts they made, to advertise/promote Academies and/or recruit teachers. In addition to these two primary methods, regional trainers and teachers also answered survey questions that shed light on how this initiative compared to other PD initiatives in terms of promotion/advertisement, from their perspectives.

### **TEA Communication**

Press releases were used to promote PD Academy sessions, including one distributed in November 2009 describing TEA's collaboration with Epsilen LLC and The New York Times Company on Project Share. Additionally, a letter was posted on TEA's website in November 2009 addressed to all administrators describing and promoting Project Share as, "a new initiative to expand the development and delivery of high quality professional development in an interactive and engaging eLearning environment and provide access to online resources, online course content, academic networking, and professional learning communities." A second letter was posted on TEA's website in February 2010 describing how, "Texas Essential Knowledge and Skills (TEKS)-based professional development will be offered to grade K-12 teachers and administrators and will address various topics such as the new science TEKS, EOC exams, math and science Academies, and ELPS." It indicated that all Rider 42 PD Academies were designed to address content-specific TEKS as well as the CCRS and the ELPS, and that the PD would be offered at no cost to school districts and charter schools. These letters strived to bring additional attention and support from all levels across all school districts for the rejuvenated focus on teacher PD.

In addition, the presence of TEA staff at advisory meetings and state trainings with the various PD developers was instrumental in the development/refinement of PD content and in clarifying TEA expectations related to the prescriptive nature of the training and the manner in which these statewide Academies should be turned around to teachers across the state.

### *Statewide Promotion/Advertisement of Academies*

With just one exception, each of the seven PD academies under review was offered in all 20 ESCs across the state. Each of the 20 ESCs in Texas generally used the same promotion/advertising strategies across the state to recruit teacher participants. All posted announcements on their websites, advertised the incentives associated with attending the PD sessions, and communicated directly with district superintendents. Almost all (19 out of 20) also sent mass messages to teachers or principals and listed the sessions in existing ESC catalogues of PD opportunities. Further, 17 ESCs communicated directly with campus principals. Only a few ESCs chose to promote the Academies using other strategies, with three ESCs reporting that they posted flyers, two advertising on a social media network, and one ESC reporting that they advertised via traditional methods. Eighteen of the 20 ESCs indicated that these promotion efforts were about the same as the promotion efforts they execute for other PD they offer.

All but two ESCs reported that they promoted all Academies to the same extent. Among the two that reported varying their promotion efforts by Academy, MSTAR Math Academy for Grades 5-6 and Science TEKS Overview Academy for Grades K-12 were the most promoted, followed by Science Academies for Grades 5-8, and then Algebra I EOC Success Academy and Biology EOC Success Academy. These two ESCs reported that the reasons for prioritizing the promotion of some Academies over others were because they covered subjects most in need of improvement in their region, there was greater demand for these Academies, and because of the new Science TEKS.

In addition to reporting on how they promoted Academies, respondents were asked to provide their input on ways to improve promotion/advertisement efforts. The most common response was to start recruitment efforts earlier in the school year, followed by using social networks such as Facebook or Twitter to advertise. It was also common for ESCs to report that nothing more could have been done. Table 4.9 presents all responses, along with the frequency of each response.

Table 4.9. Suggestions for Improving Promotion/Advertising Efforts

In what ways could promotion efforts be improved?	Number of ESCs	Percent of responses
Start earlier in spring, improve timing of promotion efforts	5	29%
Could not have done more than was done, or nothing more was needed	4	24%
Used Facebook, Twitter, or other electronic/social networking media	4	24%
Distributed flyers, or TEA-provided statements describing importance of Academies	2	12%
Recruitment problems due to no-shows	1	6%
More promotion from the state level	1	6%

Source: ESC administrator survey, 2010.

### *Recruitment*

Of the 20 ESCs across the state, ten reported having recruitment goals for the Academies. These goals ranged from 25 to 350 for the majority of Academies, but PD attendance goals were as high as 500 and 800 teachers for Science Academies for Grades 5-8 and Science TEKS Overview Academy for Grades K-12, respectively. Table 4.10 presents the mean number of teachers targeted for each Academy, and the percentage of the 10 ESCs with targets that met those goals. As can clearly be seen, ESCs had the highest recruitment targets for the Science TEKS Overview Academy for Grades K-12 Academy. Approximately half of these ESCs were able to meet their recruitment goals for each of the Academies, and 8 of the 10 were able to meet their goal for the Science Academies for Grades 5-8. Only four of the ten ESCs met targets for Biology EOC Success Academy and English I and II EOC Success Academy.

Table 4.10. Teacher Recruitment Targets Among 10 ESCs Reporting Setting Recruitment Goals

Academy	Minimum Target	Maximum Target	Mean Target	Percent of 10 ESCs meeting targets
MSTAR Math Academy for Grades 5-6	25	336	133	60%
MSTAR Math Academy for Grades 7-8	25	336	127	50%
Algebra I EOC Success Academy	25	300	127	50%
Science Academies for Grades 5-8	25	504	171	80%
Science TEKS Overview Academy for Grades K-12	25	800	388	60%
Biology EOC Success Academy	25	200	103	40%
English I and II EOC Success Academy	25	300	142	40%

Source: ESC administrator survey, 2010.

The vast majority of ESCs (17 out of 20) reported that there were no criteria by which teachers were targeted for participation. Of those indicating there were some criteria, ESCs targeted teachers who had a particular certification type, level of content expertise, taught a specific grade level, were recommended by a person of authority, demonstrated a need for improvement/professional development, and/or taught the course for which the Academy was relevant.

### ***Regional Trainer Perspectives***

Although the regional trainer survey did not specifically ask respondents about the ways and extent to which the Rider 42 PD Academies were promoted to teachers, it did query trainers about how this PD initiative compared to other ESC-sponsored PD efforts for teachers on a number of factors, including financial resources provided, materials and personnel needed, as well as promotion and advertisement. As shown in Table 4.11, the majority of respondents indicated that it was either *more* or *about the same* across the eight items. Specifically, according to over 40% of regional trainers, this PD initiative required a greater time commitment from them (45%), had more TEA involvement (43%), and was perceived to be of greater importance at the ESC (41%). When asked specifically about promotion or advertisement of the Academies, nearly half (46%) of respondents indicated that it was about the same as other professional development efforts offered by the ESC, while approximately three out of 10 regional trainers reported that it received more promotion or advertisement attention by the ESC.

Table 4.11. Comparison of ESC Promotion and Support with Other PD Efforts for Teachers

	<b>N</b>	<b>Less</b>	<b>About the Same</b>	<b>More</b>	<b>Don't Know</b>
Importance at ESC	646	4.5%	35.4%	41.2%	18.9%
Financial resources provided by the ESC	646	5.0%	35.6%	33.9%	25.5%
Materials needed	646	5.3%	40.1%	35.6%	19.0%
ESC personnel needed	642	5.6%	45.0%	27.4%	22.0%
Promotion/advertisement by the ESC	643	4.8%	45.9%	28.5%	20.8%
Interest among teachers	644	6.5%	41.3%	36.2%	16.0%
Your time commitment	645	3.6%	36.9%	45.4%	14.1%
TEA involvement	640	4.7%	28.4%	43.4%	23.4%

Source: ESC administrator survey, 2010.

Note: Due to rounding, percentages may not total to 100.

### ***PD Participant Perspectives***

#### **Survey of Professional Development Participants Fall 2010**

The purpose of the fall Survey for Professional Development Participants was to gather feedback from participants (teachers) who attended the PD Academies. Teachers were asked to provide information

about how they heard about the PD Academy they attended, their reasons for attending the PD Academies, and their level of interest in the PD Academies.

### *Academy Promotion*

The survey asked respondents to identify the ways in which they heard about the PD Academy they attended. As shown in Table 4.12, approximately 30% of teachers indicated that they learned of the PD Academy at their school—either from their school principal (31%) or from a teacher or other school colleague (29%). In addition, about 20% of teachers reported that they heard about the PD Academy through an announcement on the ESC website (22%) and/or from a mass message sent to teachers (21%). Nearly 20% also reported that they learned about the Academy from a listing in an ESC catalogue of professional learning opportunities. The 11% of teachers who selected “Other” most often indicated that they became aware of the PD Academy from a curriculum coordinator or another administrator at their school or district, such as an assistant principal or a department chairperson.

Table 4.12. Promotion of PD Academies

	Percentage of Respondents
School principal	31.0%
Teacher/Other school colleague	28.5%
Announcement on regional education service center (ESC) website	22.3%
Mass message (email/mail) to teachers	21.3%
Listing in ESC catalogue of PD opportunities	18.9%
Other	11.0%
District superintendent	3.5%
Posters/flyers at school or other venues popular with teachers	2.8%
Announcement on a social media network (e.g., Facebook, Twitter, Ning)	0.2%
Advertisement via traditional media (e.g., television, radio, newspaper)	0.1%

Source: PD participant survey, 2010.

Note: n=6,022. Percent total is greater than 100 because respondents were able to select multiple responses.

When asked how this PD Academy compares to other professional development opportunities offered by the ESC in the past year in terms of promotion or advertisement, as shown in Table 4.13, the majority of teachers (59%) indicated that it was about the same. Approximately 23% of teachers could not say how it compared, while 14% perceived more promotion or advertisement associated with the PD Academies.

Table 4.13. Comparison of Promotion/Advertisement

	Percentage of Respondents
About the same	58.9%
Don't know	23.3%
More promotion/advertisement	14.3%
Less promotion/advertisement	3.6%

Source: PD participant survey, 2010.

Note: n=5,967. Due to rounding, percentages may not total to 100.

### *Reasons for Attendance*

When asked about their reason for attending the PD Academy, as shown in Table 4.14, a quarter (25%) of teachers selected “to improve my content/subject area knowledge” as their primary reason for attendance. Some respondents also indicated that encouragement from their school or district (15%) or attendance as a school/district requirement (14%) were compelling reasons for attending the PD Academy. In contrast, less than one percent of teachers reported that learning more about CCRS, RtI, or ELPS was an important reason for attending a PD Academy.

Table 4.14. Reasons for Attendance

Response	Percentage of Respondents Who Ranked this Response First
To improve my content/subject area knowledge.	25.0%
I was encouraged to attend by my school or district.	14.6%
I was required to attend by my school or district.	14.4%
To learn about the Texas Essential Knowledge and Skills (TEKS) standards.	11.7%
To receive a stipend for attending the training.	10.0%
To learn about new instructional strategies.	7.1%
To learn about state assessments for students.	6.3%
To obtain useful resources and materials.	4.8%
To earn continuing education credits.	4.4%
To learn about College and Career Readiness Standards (CCRS).	0.6%
To learn about Response to Intervention (RtI).	0.6%
To learn about English Language Proficiency Standards (ELPS).	0.5%

Source: PD participant survey, 2010.

Note: n=6,016

### *Interest in Academies*

In addition to their reasons for attendance, teachers were also asked about their interest in attending the PD Academies. As shown in Table 4.15, approximately half of survey respondents indicated that their level of interest in the PD Academy was *about the same* as their interest in other professional development opportunities offered by the ESC in the past year, while 43% reported being *more interested* in attending the PD Academies.

Table 4.15. Comparison of Interest in PD Academies

Percentage of Respondents	
About the same	53.6%
More Interested	42.8%
Less Interested	3.6%

Source: PD participant survey, 2010.

Note: n=5,973.

### *Summary of Findings on Academy Promotion*

Generally, participants stated that there did not seem to be any unique method of communicating Rider 42 PD Academies across the state. No innovative approaches were taken by TEA to announce or broadcast the implementation of the Academies. Findings from surveys regarding Academy promotion and recruitment efforts do not reflect any major change or difference in the way in which these Academies were promoted across the state. ESC administrators generally felt that these PD Academies were promoted very similarly to how other PD efforts were promoted, and they did not report using any new or innovative promotion strategies. Likewise, regional trainers mostly responded that promotion or advertisement efforts on the part of the ESCs did not differ substantially from other professional development efforts offered by the ESC. A large minority of regional trainers did feel that the Rider 42 PD required a greater time commitment from them, had more TEA involvement, and was perceived to be of greater importance at the ESC than other PD offerings.

A clear challenge in promoting these Academies was the short amount of time that ESCs had to announce the PD offerings and recruit teachers, as many ESCs commented that promotion efforts could be improved by starting earlier in the year. Teachers most commonly learned about the PD Academies through their school principal or another colleague at their campus, as opposed to through the ESC directly (though about one in five teachers did learn about the PD Academies through their regional ESC's website).

When teachers were asked about why they attended a PD Academy this past summer, the most common reason cited was to improve their content/subject area knowledge; however a fairly large percentage indicated that they were either encouraged or required to attend the summer PD sessions by their principal. This may have been as a result of participation in the Algebra Readiness Grant

Program which required teacher participation in the MSTAR Math Academies for teachers in Grades 5-6 and Grades 7-8, and the Algebra I EOC Success Academy.

**Research Question 1H: What is the quality of the training provided to teachers?**

***Regional Trainer Perspectives on Quality of PD Academies***

All respondents to the Regional Trainer Survey, regardless of the PD Academy they facilitated, were asked the extent to which they were able to deliver the Academies to teachers in a manner that adhered to the strategies and guidelines in the Presenter’s Guide and reflected high quality professional development. As shown in Table 4.16, respondents were generally positive about how they delivered the training to teachers. For example, approximately three quarters reported that they followed the materials and activities in the presenter’s guide (76%) and incorporated what they learned from their TOT session (73%) *to a great extent*. And, over half (55%) thought that they addressed participants’ questions and concerns *to a great extent*. Respondents for Algebra I EOC Success Academy and Science Academies for Grades 5-8 most frequently reported positive execution of teacher training on these indicators of quality, while the responses for the remaining Academies varied to a greater extent.

Table 4.16. Delivery of Teacher Training

To what extent were you able to do the following when you trained teachers?	N	Not at All	To a Minimum Extent	To a Moderate Extent	To a Great Extent
Follow the materials and activities in the Presenter's Guide.	358	0.6%	2.8%	20.9%	75.7%
Incorporate what I learned from the TOT session.	360	0.6%	2.2%	23.9%	73.3%
Address participants' questions and concerns.	361	0.8%	6.1%	37.7%	55.4%
Differentiate instruction based on participants' knowledge of the subject area.	359	4.5%	12.0%	38.2%	45.4%

Source: Regional trainer survey, 2010.

Note: Due to rounding, percentages may not total to 100.

**Challenges Faced.** When asked about the challenges they faced when training teachers, one-third of respondents indicated “Other”, but did not specify an explanation. Among those who did specify a challenge, the most common response was that there was “insufficient time to cover the material” followed by “lack of required materials,” as shown in Table 4.17. Regional trainers of the Algebra I EOC Success Academy TOT session, compared to the other Academies, indicated that “insufficient time to cover the material” was a much more common challenge for them, with 35% identifying this as a challenge.

Table 4.17. Challenges Faced When Training Teachers

Challenge	Percentage of Respondents
Other.	32.3%
Insufficient time to cover the material.	15.9%
Lack of required materials.	12.9%
Participants were not interested in the content of the training.	11.2%
Insufficient time to prepare prior to delivering training.	9.3%
Participants were already familiar with the instructional strategies presented.	7.9%
Inadequate training site.	7.4%
Participants were not ready for the instructional strategies presented.	6.0%
Technology issues, including problems with audio-visual set-up.	5.2%
Inadequate training provided to me as a trainer.	3.6%

Source: Regional trainer survey, 2010.

Note: n= 365. Percent total is greater than 100 because respondents were able to select multiple responses.

**Perceptions of Teacher Preparedness to Teach Students.** As another reflection on the quality of the training provided to teachers, regional trainers were also asked to share their opinions on the extent to which teachers who attended the training they delivered will be prepared to teach the concepts presented in the trainings and improve student outcomes. Their responses to the eight survey items addressing this construct were then categorized according to their most likely response to these items, as summarized in Table 4.18. Overall, the strong majority of respondents from all Academies were most likely to indicate that teachers who attended their sessions are prepared from a *moderate* (52%) to a *great extent* (41%) to provide effective instruction and improve student outcomes.

Table 4.18. Preparedness of Teachers

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Not at All	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.8%
To a Minimum Extent	7.5%	0.0%	9.5%	1.4%	3.4%	21.6%	0.0%	15.8%
To a Moderate Extent	51.5%	58.8%	50.0%	46.5%	48.3%	56.9%	54.3%	50.9%
To a Great Extent	40.7%	41.2%	40.5%	52.1%	48.3%	21.6%	45.7%	31.6%

Source: Regional trainer survey, 2010.

Note: n= 359. The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data.

Also shown in Table 4.18, when examined by Academy, regional trainers of Science TEKS Overview Academy for Grades K-12 expressed slightly less confidence in the preparedness of the teachers they trained—22% reported that teachers are only minimally prepared— in comparison to trainers of other Academies. The majority of respondents across Academies estimated that teachers who attended their sessions are prepared to a *moderate extent* (ranging from 47% for Algebra I EOC Success Academy to 59% for MSTAR Math Academy for Grades 5-6) or to a *great extent* (ranging from 22% for Science TEKS Overview Academy for Grades K-12 to 52% for Algebra I EOC Success Academy) to provide effective instruction and improve student outcomes. Trainers of the Biology EOC Success Academy, MSTAR Math Academy for Grades 5-6, and Algebra I EOC Success Academy were the most optimistic about the effectiveness of the teacher trainings they delivered.

### ***ESC Administrator Perspectives on Quality of PD Academies***

Across all 20 ESCs, 70% indicated that the quality of these PD Academies was “about the same” compared to other PD offered by the ESC. Ten percent thought the quality was “less” and 20% thought the quality was “more” than other ESC PD offerings.

**ESC and TEA Involvement.** Based on the hypothesis that more ESC or TEA involvement in the delivery of teacher PD sessions may result in higher quality PD delivered to teachers, ESC administrators were asked several questions about the extent to which they, and TEA, were involved in these Academies, and how that involvement compared to involvement in other PD offered historically.

All ESCs (100%) reported being “involved to a great extent” in providing or disseminating materials and providing administrative/logistical support, and 19 of the 20 were involved “to a great extent” in

facilitating communication among stakeholders and providing technical support (see Appendix 19 Table A19.1).

ESC respondents also wrote-in additional ways in which they were involved in the delivery of the PD Academies. The most common responses involved managing the processes involved in hiring, paying, monitoring, managing, and/or observing the trainers themselves, followed by actually delivering the training to teachers. Other common responses included being involved with paying stipends to teachers, handling teacher registration, and completing data requests/compilation of information for TEA. More detail on these responses is also provided in Appendix 19 (Table A19.2).

ESCs indicated through survey responses that this PD initiative was more demanding of their own resources and staff time than other PD efforts. Eighty percent of ESCs reported that this PD initiative had more reporting requirements, 70% reported that the cost to implement the PD was higher, and 65% indicated that more ESC staff were utilized. Respondents reported that the amount of materials needed for this PD was not substantially more than for other PD efforts, as 50% thought more was needed and another 50% thought it was about the same as what was needed for other PD efforts.

One-quarter to one-half of ESCs reported that TEA was not involved at all in promotion, teacher recruitment, or customization of promotion or recruitment materials (see Table 4.19). The highest degree of TEA’s involvement was reported in promotion/advertisement of Academies, with half of the ESCs reporting that TEA was involved to a moderate extent.

Table 4.19. TEA’s involvement in Academy Promotion/Advertisement

	Not Involved	Involved to a Minimum Extent	Involved to a Moderate Extent	Involved to a Great Extent
Promotion/Advertisement of PD Academies	25%	25%	50%	--
Teacher recruitment or selection for PD Academies	55%	30%	15%	--
Customization of materials for promotion or recruitment efforts for PD Academies (e.g., brochures, flyers, etc.)	50%	40%	5%	5%

Source: ESC administrator survey, 2010.

In addition to these activities, and general funding and creation of the TOTs themselves (i.e., contracting with vendors, creating the initiative), ESCs indicated that TEA was involved with rule clarification, stipend eligibility, provided a Frequently Asked Questions document, and was available to answer follow-up questions.

**Project Share Preparation and Delivery.** ESCs were asked specifically about the Project Share component of the PD Academies, regarding the extent to which ESC staff and trainers were prepared and equipped to provide that aspect of the training to teachers. It was clear from respondents’ answers to survey questions that preparation for, and delivery of, training on Project Share could have been

improved in various areas. First, ESCs stated that overall awareness, use, and knowledge of Project Share at the ESC could have been improved. Sixty-five percent of ESCs reported that understanding of Project Share at the ESC was low to moderate and 75% indicated that the use of Project Share by the ESC was low or moderate. None of the respondents indicated that use of social-networking sites for professional development is high among ESC staff (see Table 4.20).

Table 4.20. Preparation for Training on Project Share

	Low	Moderate	High
Understanding of Project Share among staff at the ESC	15%	50%	35%
Use of social-networking sites for professional development, project collaboration, and/or community building by the ESC	40%	60%	--
Prominence of the use of Project Share by the ESC (relative to other social-networking sites and tools)	35%	40%	25%

Source: ESC administrator survey, 2010.

Second, ESCs stated that while trainings provided an opportunity to introduce teachers to the system, allow them to login and experiment with its functionalities, set up profiles, etc.; it was rare for teachers to actually be able to use the system during the delivery of the PD, despite the design of the Academies. Most ESCs reported that the approach to training teachers on Project Share did not vary across the different Academies. Among the 14 ESCs responding this way, 10 indicated that they used printed screen shots of important components or functions of the system, and/or provided detailed instructions on the use of the system that teachers could take with them. Eight ESCs indicated that they had a single computer available for presenters to demonstrate the functionality of Project Share, and only two ESCs indicated that multiple computers were available for teachers to actually use Project Share themselves during training. One ESC even indicated that no materials at all were provided regarding Project Share.

Across all ESCs, only 6 of the 20 ESCs had computers available for teachers to use Project Share during the PD training. Among the six ESCs that reported different approaches of conveying Project Share by Academy, four of the six ESCs reported that teachers were able to use Project Share in the English I and II EOC Success Academy only.

Respondents frequently wrote-in “other” responses when asked about the resources available to teachers during training on Project Share, and while their responses did not provide additional answers regarding resources available, they did shed light on why ESCs believed Project Share proved to be a challenge in terms of training sessions. The most frequent comment was that trainers were not appropriately or sufficiently trained in the use of Project Share from the TOT sessions. Other comments included that teachers did not have usernames and passwords, an internet connection was not always available, most participants had never heard of Project Share, and that there was a lack of communication to trainers about Project Share (e.g., many staff lacked accounts).

The one exception to the issues surrounding Project Share was among the ESC responses specifically describing the English I and II EOC Success Academy. As mentioned above, while still not common across ESCs, computers for teachers to use the system were most frequently available in English I and II EOC Success Academy’s. Consistent with these reports, open-ended comments on Project Share training specific to the ELA Academy included the following: “English consultants had ESC create accounts for the participants prior to trainings. Hands-on project share training was conducted” and “Trainer was well informed at TOT session and was able to provide good support to participants with Project Share; the developers provided extensive training in this content area in comparison to other areas.”

### *Participant Perspectives on Quality of PD Academies*

#### **Training Delivery**

The participant survey asked respondents to rate various aspects of the training related to the delivery of professional development. This includes the organization, pacing, and length of the PD Academy, as well as opportunities for practicing the concepts and strategies presented, and the acquisition of new knowledge and skills as a result of attending. Teachers’ responses to these 12 survey items, which contributed to the overall construct of Quality of Training Delivery, were then categorized according to their most likely response to these 12 items. As summarized in Table 4.21, the majority of respondents from all Academies were most likely to report that they either *agreed* (56%) or *strongly agreed* (36%) that the Academy they attended was delivered well.

Table 4.21. Delivery of Training Was of High Quality

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Strongly Disagree	4.2%	3.3%	2.4%	4.7%	4.7%	5.3%	4.8%	2.9%
Disagree	3.5%	3.5%	2.4%	4.5%	2.0%	3.8%	2.5%	7.7%
Agree	56.3%	55.8%	58.2%	52.8%	52.1%	59.1%	54.5%	62.2%
Strongly Agree	36.1%	37.3%	37.1%	38.1%	41.2%	31.8%	38.3%	27.3%

Source: PD participant survey, 2010.

Note: n= 5,980. The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data. Due to rounding, percentages may not total to 100.

Also shown in Table 4.21, attendees of the Science Academies 5-8, compared to participants of other Academies, were slightly more positive about the quality of training delivery—approximately 41% *strongly agreed* that the training delivery was of high quality—followed by Biology EOC Success

Academy and Algebra I EOC Success Academy participants. About 8% of attendees across Academies (ranging from 5% for MSTAR Math Academy for Grades 5-8 and 11% for English I and II EOC Success Academy) either *disagreed* or *strongly disagreed* that the quality of training delivery was high. These findings are consistent with the results from the regional trainer survey.

An additional aspect of training delivery considered in the survey was the adequacy of the site where the Academy was held. As Table 4.22 illustrates, the vast majority of respondents reported that they either *agreed* (51%) or *strongly agreed* (39%) that the physical space of the training site was conducive to learning.

Table 4.22. Adequacy of Training Site

Response	Percentage of Respondents
Strongly Disagree	4.7%
Disagree	5.6%
Agree	50.7%
Strongly Agree	39.0%

Source: PD participant survey, 2010.

Note: n= 5,958. Due to rounding, percentages may not total to 100.

### Instructor Competence

An additional factor to consider when determining the quality of the training delivered to teachers is the perceived competence of the instructor facilitating the training. This construct included items about the knowledge of the presenter related to the content area; the ability of the instructor to effectively model instructional activities; and the instructor’s responsiveness to participants’ questions or concerns. The six items in the survey related to the construct of Instructor Competence and were combined into a single scale score. As summarized in Table 4.23, over 50% of respondents from all Academies were most likely to report that they *agreed* that the instructor’s competence was high at the Academy they attended. An additional 38% of survey respondents indicated that they *strongly agreed* that the instructor facilitating their training was of high caliber.

Table 4.23. Instructor Competence

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Strongly Disagree	4.1%	3.7%	2.1%	4.5%	4.8%	4.8%	4.5%	3.1%
Disagree	4.2%	3.9%	3.0%	4.3%	3.2%	4.1%	2.5%	9.5%
Agree	54.0%	54.7%	57.7%	48.9%	47.6%	58.2%	51.4%	60.5%
Strongly Agree	37.7%	37.7%	37.2%	42.3%	44.4%	32.9%	41.6%	26.9%

Source: PD participant survey, 2010.

Note: n= 5,949. The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data. Due to rounding, percentages may not total to 100.

Similar to findings related to training delivery, when the data were disaggregated by Academy, also shown in Table 4.23, respondents for English I and II EOC Success Academy less frequently reported strong agreement to items about instructors' competence (27%). In contrast, 44% of Science Academy 5-8 and 42% of Algebra I EOC Success Academy attendees *strongly agreed* that their instructors were of high quality.

### Coverage of Key Content

Also factoring into quality is coverage of key content during each Academy. This construct included the extent to which training sessions conveyed TEA's expectations for the new TEKS and EOC assessments, and presented practical ways for teachers to integrate relevant frameworks and models—including CCRS, ELPS and RtI—in their classroom instruction. Seven items in the survey related to this construct and were combined into a single scale score. As shown in Table 4.24, more than half (54%) of respondents from all Academies reported that TEA's expectations and practical ways for teachers to integrate frameworks were covered to a *moderate extent* at the Academy they attended. Nearly one out of three (28%) indicated that they were covered to a *great extent*, while about 19% reported *minimal* or *no* coverage of key content.

Table 4.24. Coverage of Key Content

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Not at all	1.7%	1.1%	0.6%	1.4%	1.3%	2.4%	2.0%	3.4%
Minimal Extent	16.8%	11.8%	16.7%	17.3%	12.6%	19.9%	12.0%	31.1%
Moderate Extent	53.6%	54.5%	57.2%	55.4%	52.1%	52.6%	57.9%	49.7%
Great Extent	27.9%	32.6%	25.4%	25.9%	34.0%	25.1%	28.1%	15.7%

Source: PD participant survey, 2010.

Note: n= 5,949. The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data. Due to rounding, percentages may not total to 100.

Also summarized in Table 4.24, across Academies, with the exception of the English I and II EOC Success Academy, respondents were most likely to report that key content was covered to either a *moderate* (ranging from 53% for Science TEKS Overview Academy for Grades K-12 to 58% for Biology EOC Success Academy) or a *great extent* (from 25% for Science TEKS K-12 Overview to 34% for Science Academy 5-8). In contrast, nearly one-third of respondents who attended the English I and II EOC Success Academies (31%) indicated that key content was covered only to a *minimal extent* and half reported *moderate* coverage.

### Perceived Increase or Improvement in Teacher Knowledge

All respondents to the survey, regardless of the PD Academy attended, were asked the extent to which the PD Academy increased or improved their knowledge related to subject area content; how to integrate CCRS, ELPS, and RtI into classroom instruction; and different strategies to improve student learning and outcomes. Their responses to these nine survey items, which together contributed to the overall construct of *Perceived Increase or Improvement in General Teacher Knowledge*, were then categorized according to their most likely response to these items. As summarized in Table 4.25, overall, the majority of respondents from all Academies reported that their general knowledge had increased either to a *moderate* (53%) or *great extent* (24%).

Table 4.25. Perceived Increase or Improvement in General Teacher Knowledge

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Not at all	3.4%	1.4%	2.0%	2.0%	2.8%	4.2%	2.1%	10.2%
Minimal Extent	19.5%	14.5%	21.1%	16.0%	15.2%	23.4%	14.2%	33.6%
Moderate Extent	53.2%	57.8%	56.1%	55.5%	51.8%	51.8%	56.6%	44.6%
Great Extent	23.9%	26.3%	20.8%	26.5%	30.2%	20.5%	27.1%	11.6%

Source: PD participant survey, 2010.

Note: n=5,817. The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data. Due to rounding, percentages may not total to 100.

When the data were examined by Academy, also shown in Table 4.25, with the exception of teachers who attended the English I and II EOC Success Academy, teachers' perceptions of gains in general knowledge were similar across the Academies. English I and II EOC Success Academy teachers, however, were more likely to report *moderate* (45%) to *minimal* (34%) increase or improvement in general knowledge as a result of attending the PD Academy.

In addition to increases in general teacher knowledge, attendees of the each Academy were also asked about knowledge gains related to the unique content of each Academy. Their responses to these survey items, which together contributed to the overall construct of *Perceived Increase or Improvement in Academy-Specific Teacher Knowledge*, were combined into a single scale score for each Academy with the exception of Science TEKS Overview Academy for Grades K-12<sup>34</sup> (Table 4.26). Responses were then categorized according to their typical response to these Academy-specific items. The paragraphs below report survey results by Academy.

<sup>34</sup> Because there were only two unique items for the Science TEKS Overview K-12 Academy, scaling was not possible.

Table 4.26. Perceived Increase or Improvement in Academy-Specific Teacher Knowledge

	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Biology EOC Success Academy	English I & II EOC Success Academy
Not at all	1.8%	1.9%	2.8%	1.5%	2.6%	7.6%
Minimal Extent	13.2%	12.9%	11.4%	11.4%	14.2%	30.3%
Moderate Extent	54.1%	52.9%	48.4%	45.5%	45.6%	43.8%
Great Extent	30.9%	32.4%	37.3%	41.6%	37.6%	18.3%

Source: PD participant survey, 2010.

Note: The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data. Due to rounding, percentages may not total to 100.

The majority of respondents for the MSTAR Math Academy for Grades 5-6 reported a perceived increase in knowledge to either a *moderate* (54%) or to a *great extent* (31%). This included a perceived improvement of knowledge in the areas of providing effective instruction on equivalent fractions, successfully moving students from additive to multiplicative thinking, and applying the Grade 5-6 Math TEKS in lesson planning and implementation.

Responses from teachers who attended a MSTAR Math Academy for Grades 7-8 were similar to those from the MSTAR Math Academy for Grades 5-6—more than 85% indicated that their knowledge increased by either a *moderate* (53%) or *great extent* (32%). Questions in this construct included teachers perceived increase in knowledge of effective instruction on proportionality, how to identify student misconceptions about proportionality, effective instruction on algebraic representations and the overall vertical alignment of the Math TEKS.

Respondents who attended the Algebra I EOC Success Academy were positive in their estimation of the level of knowledge gained on topics such as preparing students for success on the Algebra I EOC assessment; effective instruction on functions, functional relationships, and linear functions; and the overall vertical alignment of the Math TEKS. Approximately 48% indicated that they believed their knowledge in these areas increased by a *moderate extent*, while 37% reported *great* improvement in knowledge.

When teachers who attended the Science Academies for Grades 5-8 were asked the extent of increase in Academy-specific knowledge, the majority of teachers attending this PD session were most likely to report *moderate* (46%) or *great* (42%) gains. Unique content for this Academy included preparing students for success on the Science EOC assessments, as well as providing effective instruction on weatherization and erosion as well as tectonic plates and the layers of the Earth.

Attendees of the Biology EOC Success Academy reported that their knowledge most frequently increased by either a *moderate* (46%) or *great extent* (38%), which included their knowledge of how to prepare students for success on the Science EOC assessment and the Science TEKS as they relate to Biology.

Attendees of the English I and II EOC Success Academy most frequently reported *moderate* (44%) or *minimal* (30%) gains in knowledge. Teachers attending this Academy were asked to rate perceived increases in knowledge related to the overall purpose and importance of the English EOC assessments and preparing students for success in reading on the English EOC assessments.

An additional key component of the MSTAR Math Academies was the information provided to attendees on the use of the Universal Screener. As shown in Table 4.27, results were similar across the two Academies—the majority reporting a *moderate to minimal* increase in knowledge.

Table 4.27. MSTAR Math Academy for Grades 5-6 Universal Screener Knowledge

	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8
Not at all	7.7%	10.0%
Minimal Extent	28.4%	33.0%
Moderate Extent	46.2%	42.5%
Great Extent	17.7%	14.4%

Source: PD participant survey, 2010.

Note: n=914. Due to rounding, percentages may not total to 100.

Finally, although their responses were not scaled, the majority of Science TEKS Overview Academy for Grades K-12 attendees reported *moderate to great* gains in knowledge of the overall vertical alignment of Science TEKS (84%) as well as how they relate to specific grade levels (90%).

#### Perceived Increase in Knowledge Related to Classroom Instruction

The survey also asked respondents to rate their perceived increase in knowledge related to classroom instruction, which encompasses the use of effective questioning and discussion strategies, hands-on activities, scaffolding, and visual representations. Responses to these nine survey items, which together contributed to the overall construct of *Knowledge Related to Classroom Instruction*, were then categorized according to their most likely response to these nine items. As summarized in Table 4.28, the majority of respondents from all Academies were most likely to report that their knowledge related to classroom instruction increased by either a *moderate* (45%) or *great extent* (36%) as a result of attending the PD Academy.

Table 4.28. Perceived Increase in Classroom Instruction Knowledge

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Not at all	4.2%	1.8%	1.9%	1.2%	2.2%	6.4%	1.8%	14.2%
Minimal Extent	15.0%	10.4%	16.2%	13.6%	9.8%	18.1%	11.1%	30.7%
Moderate Extent	45.3%	45.3%	50.3%	48.8%	43.5%	45.1%	50.8%	37.6%
Great Extent	35.5%	42.5%	31.5%	36.4%	44.5%	30.3%	36.3%	17.5%

Source: PD participant survey, 2010.

Note: n=5,638. The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data. Due to rounding, percentages may not total to 100.

Also shown in Table 4.28, with the exception of attendees of the English I and II EOC Success Academy, perceptions of increased classroom instruction knowledge tended to be similar across the Academies—the majority reported *moderate* (between 45% and 51%) to *great* (30% to 45%) gains in knowledge. Teachers who attended the English I and II EOC Success Academy, however, were more likely to indicate *moderate* (38%) to *minimal* (31%) increases in classroom instruction knowledge from attending the PD Academy.

### PD Component Related to Project Share

Project Share is expected to play a significant role in furthering the professional development of teachers throughout the school year. Thus, the quality of Project Share training provided to teachers was addressed in the fall PD Participant survey. Various aspects of Project Share training were considered, such as the length, resources used, and teachers’ interest in using the system. When reviewing findings related to Project Share, it is important to be mindful of the fact that this online PD platform is in its infancy and much of the online content was still in development at the time of the survey.

### Length of Project Share Training

When teachers were asked how long the Project Share portion of their PD Academy was, across Academies, about half reported that 30 minutes or less were dedicated to Project Share, and almost one-quarter indicated that Project Share was not covered at all at the PD Academy they attended.

As shown in Table 4.29, the amount of time spent covering the Project Share system varied by Academy. Over 40% of respondents who attended the Science TEKS Overview Academy for Grades K-12 reported that Project Share was not covered at the session they attended, while almost one-quarter (24%) of English I and II EOC Success Academy respondents indicated training that lasted 50 minutes or more. In general, Project Share was covered from about 10 to 30 minutes across the Academies.

Table 4.29. Project Share Coverage by Academy

	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Project Share was not covered in the PD Academy	11.5%	10.3%	22.6%	24.5%	41.9%	22.4%	18.6%
1-10 minutes	16.2%	20.2%	25.8%	17.9%	17.1%	24.0%	12.6%
11-20 minutes	19.8%	21.2%	16.6%	16.2%	10.4%	15.5%	12.0%
21-30 minutes	19.7%	19.5%	14.0%	14.8%	9.1%	14.7%	14.8%
31-40 minutes	13.7%	11.4%	8.2%	9.7%	7.5%	10.6%	12.8%
41-50 minutes	5.7%	4.6%	2.4%	3.8%	3.3%	4.4%	5.3%
51-60 minutes	6.1%	4.6%	3.2%	5.4%	3.0%	2.1%	10.8%
More than an hour	7.4%	8.2%	7.2%	7.8%	7.7%	6.4%	13.1%

Source: PD participant survey, 2010.

Note: n=5,783. Due to rounding, percentages may not total to 100.

### Resources Used

Teachers were also asked to report on the resources used during the presentation of Project Share at the PD Academy they attended. As shown in Table 4.30, respondents most frequently indicated that the instructor used a computer with a projector to demonstrate Project Share’s functionality at the training they attended (44%). About a quarter of teachers also indicated that printed screen shots of important components or functions of Project Share (26%) and/or printed instructions that teachers could take with them (25%) were provided. Only 8% of survey respondents reported that the training they attended provided computers that they could use to log in and use the Project Share system. Eight percent also indicated that no equipment or materials were used during training on Project Share. Varied responses fell into the “Other” category. Several participants indicated that Project Share was “mentioned” but not described in detail or demonstrated. A few shared that they were given a Web

address and a contact name to assist with creating an account. Others admitted that they did not recall how Project Share was presented, and some respondents had no recollection of Project Share at all.

Table 4.30. Resources Utilized During the Project Share Training

Response	Percentage of Respondents
Computer used by instructor with projector to demonstrate Project Share's functionality.	43.9%
Printed screen shots of important components or functions of Project Share.	25.7%
Printed instructions of the use of Project Share that we could take with us.	25.2%
Printed instructions for using important components or functions of Project Share.	22.6%
Computers with which we could log in and use the system.	8.1%
No equipment or materials were used.	8.0%
Other	4.2%

Source: PD participant survey, 2010.

Note: n=6,022. Percent total is greater than 100 because respondents were able to select multiple responses.

### Coverage of Project Share Uses

As another reflection on the quality of the training of the Project Share system provided to teachers, survey respondents were asked to report the extent to which facilitators covered various aspects or uses of Project Share, such as using Project Share to share experiences and insights; modeling discussion behavior when on the system; and the use of Project Share to collaborate and/or build collective capacity. Their responses to the six survey items addressing this construct were categorized according to their most likely response to these items. As summarized in Table 4.31, the majority of respondents from all Academies were most likely to indicate that facilitators covered the Project Share system's uses to a *moderate* (47%) or *minimal extent* (27%) at the PD Academy they attended.

Table 4.31. Coverage of Project Share Uses

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Not at all	7.6%	5.9%	6.8%	11.7%	7.9%	8.5%	10.2%	4.4%
Minimal Extent	26.9%	27.2%	29.3%	32.8%	26.0%	26.0%	31.1%	19.7%
Moderate Extent	46.6%	50.7%	47.0%	39.1%	43.9%	46.5%	43.5%	53.8%
Great Extent	18.8%	16.1%	17.0%	16.4%	22.3%	19.0%	15.2%	22.0%

Source: PD participant survey, 2010.

Note: n=4,203. The percentage of respondents column does not indicate the percentage of responses for any single item. It represents the percentage of respondents who are most likely to select the particular response option as derived from the Rasch psychometric analysis of the survey data. Due to rounding, percentages may not total to 100.

When examined by Academy, many respondents across Academies reported *moderate* coverage of Project Share uses (ranging from 39% for Algebra I EOC Success Academy to 54% for English I and II EOC Success Academy). While 22% of Science Academy for Grades 5-8 and English I and II EOC Success Academy respondents reported *great* coverage, between 45% (Algebra I EOC Success Academy) and 24% (English I and II EOC Success Academy) reported *minimal* to *no* coverage of Project Share uses.

### Preparedness to Use Project Share

Teachers responding to the survey were also asked to share the extent to which they felt prepared to use Project Share after attending their PD Academy. As illustrated by Table 4.32, the majority of respondents from all Academies indicated that they were either *somewhat prepared* (54%) or *not at all prepared* (25%) to use Project Share. Less than 3% reported that they were *very prepared*.

Table 4.32. Preparedness to Use Project Share

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Not at all prepared	24.6%	21.0%	26.2%	31.0%	27.3%	24.2%	29.8%	13.8%
Somewhat Prepared	54.1%	63.8%	57.1%	50.0%	50.4%	46.8%	52.5%	58.0%
Prepared	18.8%	13.7%	15.4%	16.4%	19.5%	24.6%	15.9%	24.5%
Very Prepared	2.6%	1.5%	1.4%	2.6%	2.8%	4.3%	1.7%	3.6%

Source: PD participant survey, 2010.

Note: n=4,377. Due to rounding, percentages may not total to 100.

Also shown in Table 4.32, participants of the Science TEKS Overview Academy for Grades K-12 and the English I and II EOC Success Academy reported that they felt *prepared* (25%) or *very prepared* (4%) slightly more frequently than attendees of the other Academies. In contrast, teachers who attended the Algebra I EOC Success Academy were the most likely to report that they were *not at all prepared* (31%) to use Project Share.

### Interest in Using Project Share

As a final measure to determine the quality of the training provided to teachers on Project Share, the survey asked respondents to rate their interest in using the system after attending the Academy. The majority of teachers (55%) from all Academies, as shown in Table 4.33, expressed that they were *somewhat interested* in using Project Share, while an additional 23% indicated that they were *interested*. Less than 7% of teachers responding to the survey expressed high interest in using Project Share.

Table 4.33. Interest in Using Project Share

	All Academies	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	English I & II EOC Success Academy
Not at all Interested	16.0%	14.6%	16.6%	12.7%	14.3%	16.1%	18.5%	22.7%
Somewhat Interested	54.7%	58.0%	54.2%	55.8%	53.0%	55.0%	51.9%	54.0%
Interested	22.7%	21.4%	22.8%	20.5%	25.5%	24.0%	21.2%	19.3%
Very Interested	6.6%	6.1%	6.3%	10.9%	7.1%	5.0%	8.4%	4.1%

Source: PD participant survey, 2010.

Note: n=4,375. Due to rounding, percentages may not total to 100.

Also shown in Table 4.33, attendees of the Science Academy for Grades 5-8 expressed the most interest in Project Share, being either *interested* (7%) or *very interested* (26%), followed by Algebra I EOC Success Academy respondents (31% *interested* or *very interested*). The group least interested in using Project Share was English I and II EOC Success Academy respondents—nearly a quarter (23%) were *not at all interested* in using the system.

### ***Assessment of Quality from Observations of PD sessions***

Supplementing these survey results were relatively objective assessments of training quality based on observations of the teacher PD sessions by members of the evaluation team. As described in Chapter II (section 3), the observers used a standard observation protocol for each Academy. Using a scale of 1 to 4, observers also provided synthesis ratings on each domain. The synthesis rating was a separate rating for each domain and not a grand mean. The mean synthesis ratings for each of the three observed domains indicate that the quality of the training was high.

- 1) **Presenter Delivery** – The average overall rating (grand mean of the synthesis ratings across all observed academies) of the quality of presenter delivery across all observed Academies was 3.16 on a scale of “1” to “4.”, indicating a moderate to high degree of quality on presenter delivery across all sessions.
- 2) **Interactions between Presenters and Participants** – The average overall rating of quality of interactions between presenters and participants was 3.48, indicating high levels of positive interaction.
- 3) **Training Climate** – The average overall rating of the quality of the climate of the trainings was 3.46, reflecting positive scores across all observed Academies.

It should be noted that one of the primary limitations to the findings is that results are based on a sample size of 29 observations.<sup>35</sup> The sessions were randomly selected and can be generalized to all sessions held during summer 2010, but should be done so with caution due to the variation of content and format across Academies. Notable findings from the analysis of the qualitative data collected during the observations of the 29 PD Academies are included in Appendix 20 to provide context for the quantitative findings. Results included in Appendix 20 include information about session pacing, Project Share, and interactions between presenters and participants.

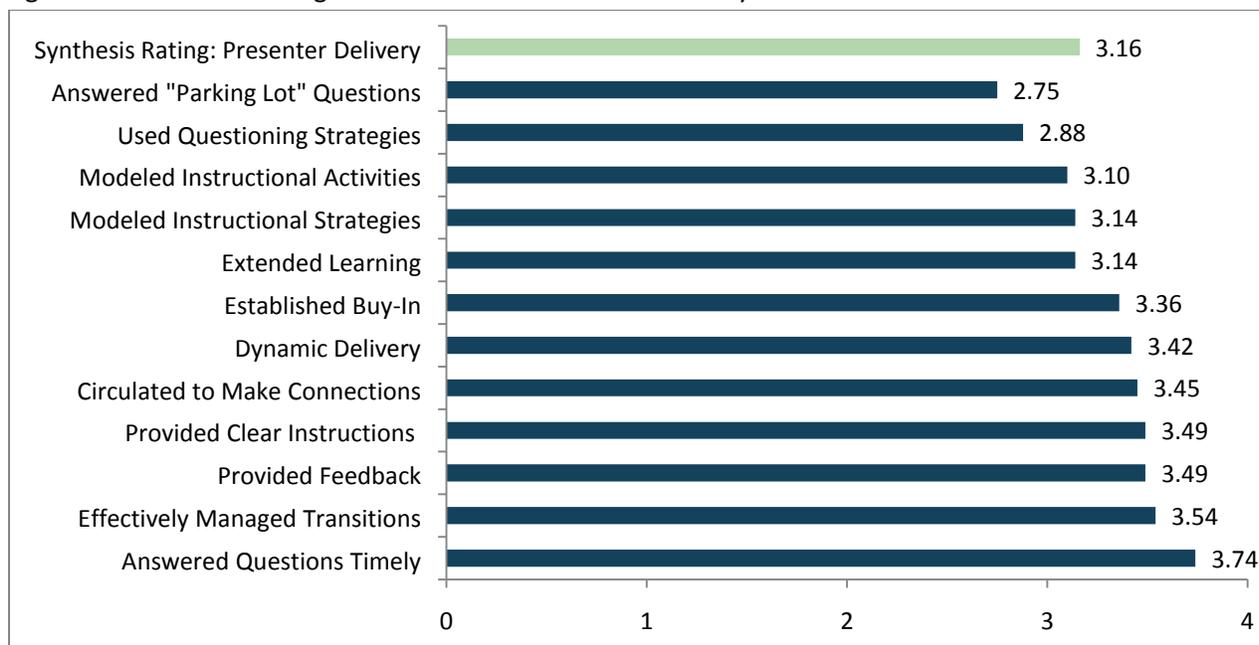
### Domain 1: Presenter Delivery

Across the observed sessions, observers' ratings of presenter delivery provided the strongest evidence among the indicators of presenters answering participants' questions in a timely manner (3.74) and effectively managing transitions between activities (3.54) (see Figure 4.1). In addition, the observers saw stronger evidence compared to other indicators of presenters providing feedback to participants (3.49) and clear instructions on how to complete activities (3.49). Observers also indicated that presenters did a good job of circulating around the room to make connections with participants (3.45), delivering training content in a dynamic way (3.42), and establishing participant buy-in for the training (3.36). These are all basic indicators of quality delivery of teacher PD, particularly because the trainers should be setting a good example for teachers, so the evidence from the observations indicates high quality delivery of the training by presenters.

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<sup>35</sup> A total of 806 PD Academies were held across the 20 ESCs through August 5, 2010.

Figure 4.1. Observer Ratings of Indicators of Presenter Delivery



Source: Teacher PD session observations, 2010

Note: For each day of training observed (i.e., one to three days depending upon the PD Academy), individual items under each domain were rated on a four-point Likert scale, where “1” equals “no evidence,” “2” equals “little evidence,” “3” equals “some evidence,” and “4” equals “strong evidence.” The mean of the ratings for each day observed was calculated to create a mean rating for each indicator by PD Academy observed. For those Academies that were observed for one day only, the mean rating was equal to the single observed day’s rating.

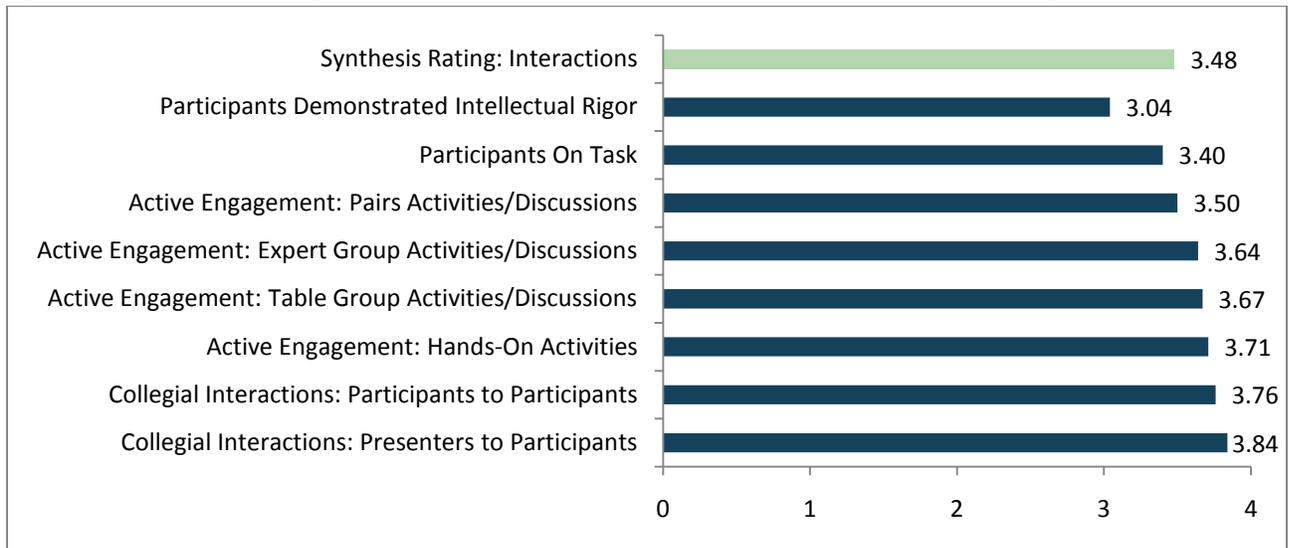
There was only “some evidence” of what could be considered to be the more difficult indicators related to training delivery, including extending learning (3.14), modeling effective instructional strategies (3.14) and activities (3.10), and using questioning strategies (2.88).

There was the least amount of evidence of presenters answering participants’ questions posted in a “parking lot” during the training. This indicator was added because this was a feature included as part of the Academies so that presenters could stay on task and use the “parking lot” (e.g., a flip chart or dry erase boards) to have participants post questions that are important but might not be directly related to the topic that is being discussed.

### Domain 2: Interactions between Presenters and Participants

Most of the eight indicators of the quality of the interactions between presenters and participants showed that there was strong evidence of positive interaction in the PD sessions (see Figure 4.2). The observers noted high levels of collegial relationships between presenters and participants (3.84) and among participants (3.76). Participants were actively engaged with each other during hands-on activities (3.71), during table groups activities/discussions (3.67), expert group activities/discussions (3.64) and pairs activities/discussions (3.50). There was also strong evidence that participants were observed as being on task throughout the training (3.40).

Figure 4.2. Observer Ratings of Indicators of Interactions between Presenters and Participants



Source: Teacher PD session observations, 2010

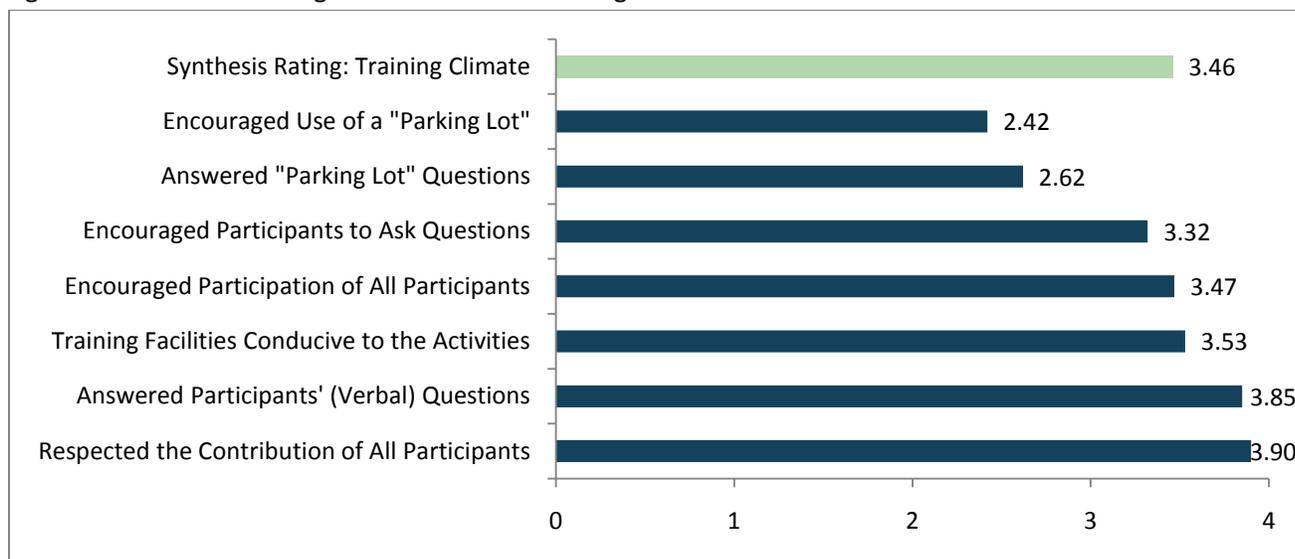
Note: For each day of training observed (i.e., one to three days depending upon the PD Academy), individual items under each domain were rated on a four-point Likert scale, where “1” equals “no evidence,” “2” equals “little evidence,” “3” equals “some evidence,” and “4” equals “strong evidence.” The mean of the ratings for each day observed was calculated to create a mean rating for each indicator by PD Academy observed. For those Academies that were observed for one day only, the mean rating was equal to the single observed day’s rating.

Across all sessions, observers reported only some evidence that participants showed intellectual rigor in their responses (3.04). As noted in the findings section on the presenter delivery, this indicator is a training characteristic that can be considered more difficult, but is very important to facilitation.

### Domain 3: Training Climate

Among the seven training climate indicators (see Figure 4.3) observers noted the strongest evidence of presenters respecting the contribution of all participants (3.90) and answering participants’ questions (3.85). In addition to providing high marks on facilities (3.53), observers also reported few problems with the physical space and materials that, despite a few minor delays, did not detract from the overall PD session.

Figure 4.3. Observer Ratings of Indicators of Training Climate



Source: Teacher PD session observations, 2010

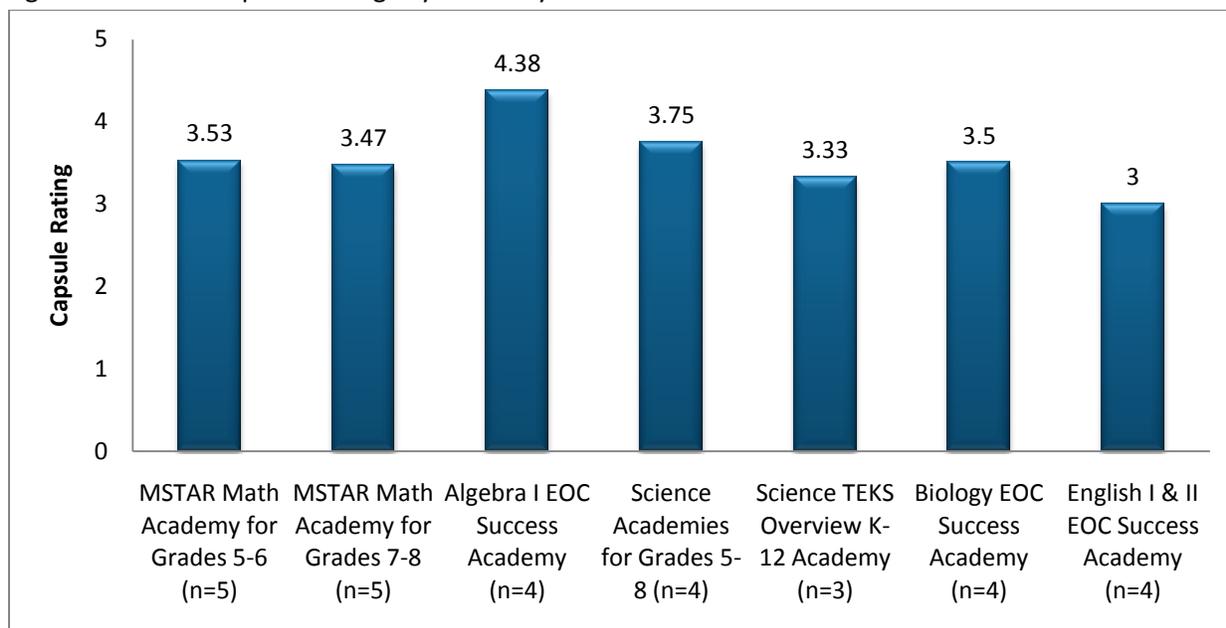
Note: For each day of training observed (i.e., one to three days depending upon the PD Academy), individual items under each domain were rated on a four-point Likert scale, where “1” equals “no evidence,” “2” equals “little evidence,” “3” equals “some evidence,” and “4” equals “strong evidence.” The mean of the ratings for each day observed was calculated to create a mean rating for each indicator by PD Academy observed. For those Academies that were observed for one day only, the mean rating was equal to the single observed day’s rating.

Observers noted that there was only little to some evidence that the “parking lot” technique was being used to facilitate the training and control the climate of the training. Only 18 of the sessions actually used the “parking lot” and in those cases, there was little to some evidence that presenters answered participants’ questions posed on the “parking lot” (2.62). Furthermore, there was little to some evidence across most of the observed Academies that presenters encouraged participants to place questions on the “parking lot” (2.42).

### ***Overall Capsule Ratings***

In a final summation of each professional development session, observers provided a capsule rating of each session. In making the capsule rating, the observer considered all available information about the session (e.g., context, purpose, judgment of the relative importance of all other ratings). Observers were to select the capsule rating that best characterized the session, keeping in mind that the capsule rating was not intended to be an average of all the previous ratings. Instead, the capsule rating was to encapsulate the observer’s overall assessment of the quality and likely impact of the session. These ratings ranged from “1” (ineffective professional development) to “5” (exemplary professional development). The average capsule rating across all Academies was 3.57, and the range of the mean single Academy capsule ratings was from 3.00 to 4.38. The Algebra I EOC Success Academy had the highest rating (4.38), followed by the Science Academies 5-8 (3.75). English I and II EOC Success Academy had the lowest capsule rating (3.00). Figure 4.4 lists the mean capsule ratings for each Academy.

Figure 4.4. Mean Capsule Ratings by Academy



Source: Teacher PD session observations, 2010

### *Summary of Findings on Quality of Training Provided to Teachers*

Overall, the regional trainers exhibited strong evidence of high quality professional development related to delivery, climate, and interactions with participants. Across the 29 observed PD sessions, indicators that were rated highest include the responsiveness of presenters, collegial interactions, and a respectful training climate. The PD sessions that were observed showed evidence of effective behaviors in delivery that were reflective of best practices for teacher PD. Furthermore, the interactions of the presenters and participants in the PD sessions contributed positively toward accomplishing the objectives of the trainings. Lastly, the climate of the PD sessions contributed positively toward accomplishing the objectives of the trainings.

Most regional trainers indicated that they effectively delivered the training to teachers, with the majority reporting that they were able to follow the materials and activities in the Presenter’s Guide and incorporate what they learned from their TOT session. The majority of regional trainers, particularly trainers of the Biology EOC Success Academy, the MSTAR Math Academy for Grades 5-6, and the Algebra I EOC Success Academy, were moderately to greatly confident that teachers they trained are well prepared to effectively teach the concepts presented in the Academies and improve student outcomes.

Similar to the regional trainer survey results, most of the teachers attending the PD Academies were very satisfied with the quality of training delivery and with the perceived competence of the instructors facilitating the PD Academies. Overall, teachers tended to indicate that key content was covered to moderate or great extent. The English I and II EOC Success Academy were rated lower by teachers in terms of delivery of training and the extent to which key content was covered than the other PD

Academies. A substantially larger proportion of attendees, while still a minority, indicated that key content was *not covered at all* or only to a *minimal extent*. Teachers were asked to rate the extent to which the PD Academies impacted their general knowledge and their knowledge related to classroom instruction. For all but one of the PD Academies (i.e., English I and II EOC Success Academy), the vast majority of teachers indicated that it increased their knowledge to either a *moderate* or *great extent*. English teachers were more likely to rate the impact of the PD on their knowledge levels as either *minimal* or *moderate*. It is also of note that Math teachers were less positive about the impact of the training on their knowledge of the Universal Screener, with the majority indicating that the PD increased their knowledge to a *minimal* or *moderate* extent.

Based on the observations and survey results, there were some concerns about the use of the “parking lot” as a training session management tool. The parking lot can be emphasized as a tool in future TOTs. In addition, program developers and implementers can learn from regional trainers what other effective strategies they use for session management and incorporate those strategies into future TOTs.

Another issue that was raised was the lack of information provided to participants about Project Share. This finding was shared with TEA and developers early on and they were able to provide more information during sessions that took place later in the summer. Project Share was being further developed over the summer, and as this happened, detailed instructions about its use were developed and could be shared statewide. Since these observations were completed, Project Share has been widely promoted to teachers across Texas. Teacher survey results also revealed a general lack of concerted effort by PD Academy trainers put into highlighting and showcasing Project Share as a platform for ongoing PD and information sharing opportunities for teachers. With the exception of the English I and II EOC Success Academy, Project Share was typically either not covered as part of the PD Academy or it was given minimal to moderate exposure (less than 20 minutes). A relatively low proportion of teachers (approximately one in five) indicated that they were *prepared* or *very prepared* to use Project Share after the training they received. The training has seemed to pique some interest in teachers, with over three quarters either *somewhat interested* or *interested* in Project Share as a potential PD platform, and another 7% of teachers *very interested* in Project Share. Thus, it appears there is some interest among teachers in using the Project Share system, but additional training may be required.

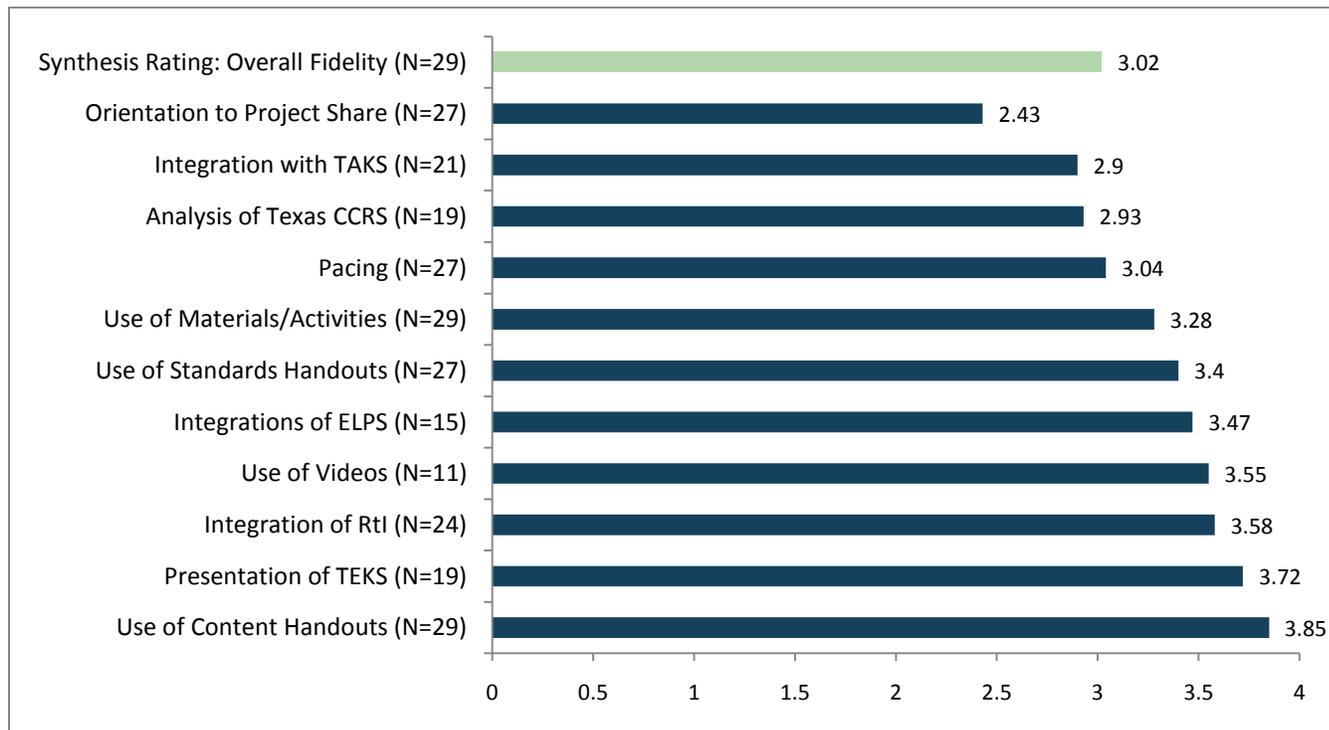
Lastly, the pacing for some Academies, particularly the Algebra I EOC Success Academy, was difficult for regional trainers and participants. The Algebra I EOC Success Academy may have been more effectively presented in a two and half or three day format as opposed to the two days that were allotted for the Academy.

### **Research Question 1I: To what extent is the PD training implemented with fidelity to teachers across the regional education service centers?**

Findings regarding the fidelity with which PD training was implemented across the state are based on the research team’s observations of the PD Academies delivered to teachers compared to how regional trainers were instructed to cover the PD sessions, as informed by observations of regional training sessions.

Using the protocol described in Chapter II, observers provided ratings (using the same “level of evidence rating” described earlier) on specific indicators of the fidelity of implementation in addition to an overall rating on this domain. Figure 4.5 lists the synthesis rating and each indicator ordered from the lowest to the highest mean ratings.

Figure 4.5. Observer Ratings of Indicators of Fidelity



Source: Teacher PD session observations, 2010

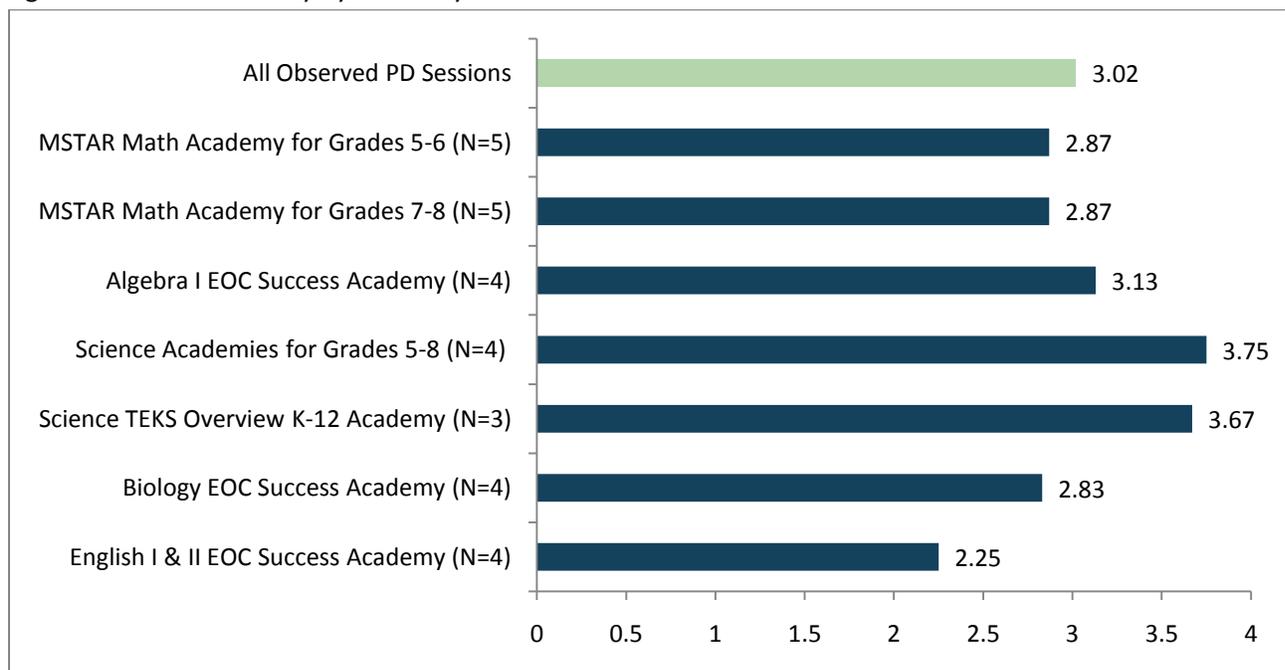
Note: For each day of training observed (i.e., one to three days depending upon the PD Academy), individual items under each domain were rated on a four-point Likert scale, where “1” equals “no evidence,” “2” equals “little evidence,” “3” equals “some evidence,” and “4” equals “strong evidence.” The mean of the ratings for each day observed was calculated to create a mean rating for each indicator by PD Academy observed. For those Academies that were observed for one day only, the mean rating was equal to the single observed day’s rating.

Observers noted the strongest evidence of fidelity in terms of the presenters’ use of the content handouts (3.85) and standards handouts (3.40) throughout, as well as the videos when applicable (3.55). There was a slightly lower rating of the evidence that presenters followed the materials/activities in the presenter guide as planned (3.28), but this was still relatively strong and is expected to be slightly lower due to some variation in the sessions. This variation was often influenced by the needs of the participants, presenters, or facilities. There was also strong evidence of the integration of TEKS (3.72), Rtl (3.58), and ELPS (3.47) into the PD Academies. There was less evidence (2.93) that the CCRS standards were analyzed and implemented with fidelity. There could be more emphasis on the analysis of CCRS in future TOTs so that the teachers are able to delve deeper into these standards to improve students’ college and career readiness. The lowest rated indicator of fidelity was the orientation to Project Share (2.43). As discussed earlier, this issue has already been addressed by TEA.

The research team also examined whether these overall fidelity scores varied by location type or by role of the presenter. The pace of the PD sessions as specified in the Presenter Guide was implemented with higher fidelity at sessions held at ESCs (3.35) when compared to sessions held at non-ESC facilities (2.83). Prior to implementation, TEA and the PD developers expressed concern that, if regional trainers implemented Academies at non-ESC facilities, they may lose some control over the fidelity of PD implementation. However, based on the observation, the regional trainers implemented the Academies with fidelity across all location types. In addition, little variation in fidelity of implementation based on the role of the presenter (i.e., whether the regional trainer was an ESC staff member or school/district staff member).

**Synthesis Rating.** Observers provided an overall rating of the fidelity of the delivery of each Academy’s materials, ranging from a “1” (The professional development session was implemented with major changes) to “4” (The session was implemented with no major changes). The mean rating across all 29 Academies was 3.02, indicating a relatively high degree of fidelity. Since the definition of fidelity varied across the Academies, Figure 4.6 presents overall mean scores for each Academy. The Science Academies 5-8 received the highest average rating on fidelity (3.75), followed by Science TEKS K-12 Overview (3.67) and Algebra I EOC Success Academy (3.13). English I and II EOC Success Academy had the lowest overall fidelity of implementation rating (2.25).

Figure 4.6. Overall Fidelity by Academy



Source: Teacher PD session observations, 2010

Note: For each day of training observed (i.e., one to three days depending upon the PD Academy), individual items under each domain were rated on a four-point Likert scale, where “1” equals “no evidence,” “2” equals “little evidence,” “3” equals “some evidence,” and “4” equals “strong evidence.” The mean of the ratings for each day observed was calculated to create a mean rating for each indicator by PD Academy observed. For those Academies that were observed for one day only, the mean rating was equal to the single observed day’s rating.

No broad conclusions can really be made about the fidelity of the implementation across various Academies except that there was noticeable variation across content areas. This variation could be attributed to many factors, including the unique purpose and focus of each PD Academy.

### ***Summary of Findings on Fidelity of Delivery***

Rider 42 PD Academies were implemented with a high level of fidelity to the training materials and expectations outlined in the TOT sessions across all observed Academies. Of the three state support frameworks introduced at the Academies, RtI and ELPS appear to have been implemented with greater fidelity than the third support framework, CCRS. With the exception of pacing for the PD sessions, there was little variation in the implementation fidelity of the Academies based on the analysis comparing PD sessions held in different locations or presented by regional trainers with different roles. The PD Academy presenters paid careful attention to ensuring that the materials in the presenter's guide were covered during the course of the training. There is some noticeable variation in the evidence of fidelity overall across the various Academies.

## **Section 3. Participation in the Face-to-Face PD Academies**

### **Research Question 1J: What are the professional characteristics of the teachers who participated in face-to-face training?**

Descriptions of the characteristics of the PD participants are based on data provided from ESC attendance logs, merged with TEA's data files, and finally merged into the ERC data warehouse, as explained in Chapter II. It is important to note that there are sources of error in these numbers that are not possible to remedy including:

- Individuals for whom the ESC reported attendance, when the individual did not actually attend.
- Some duplicate participant records existed that could not be identified due to mistyped email addresses.
- The inability to match some of the PD attendance data with ERC data due to incorrect or missing ESC data.
- The inability to match some of the PD attendance data with ERC data because the available ERC data are from the 2009-10 school year and the PD attendance data included teachers who would be new to the state in 2010-11 and would not have been included in the 2009-10 data. A match of 70% was achieved.

Given these potential sources of error, readers should be cautioned that the reported raw numbers are likely to be off by a reasonable amount, however, this error should not interfere with the proportions or percentages across Academies and regions. It is also important to note that the comparisons noted in this section are for descriptive purposes only; no statistical tests were performed to determine if any observed differences are statistically significant.

From May 15<sup>th</sup> to August 6<sup>th</sup>, 2010, a total of 19,010 participants attended 806 PD Academies across Texas. These PD participants attended one of the seven content-specific Academies under review through this evaluation. It is important to note that a large number of teachers also participated in the ELPS Academies and the Texas Adolescent Literacy Academies ( which is not part of this evaluation) during summer 2010. The total number of teachers trained during summer 2010 is estimated by TEA at approximately 42,000. PD participation totals noted in Table 4.34 do not reflect unique individuals, but rather reflect the total number of attendees across all Academies, even though some individuals attended multiple Academies (a duplicated count). Table 4.34 shows the number of participants across the state who attended each of the Academies offered. The Science TEKS Overview Academy for Grades K-12 attracted the highest number of participants (5,014 – 26%), likely due to the larger grade-level range of targeted teachers (i.e., K-12 teachers) than the other Academies (e.g., high school Algebra teachers for Algebra I EOC Success Academies). Of the multiple-day Academies, the three-day MSTAR Math Academies (2,816 – 15%, for Grades 5-6 and 2,019 – 11% for Grades 7-8) and the Science Academies for Grades 5-8 (4,175 -22%) had largest numbers of attendees. The EOC Academies were least well attended. The relatively low attendance for the EOC Academies may be related to the fact that EOC exams will not be mandatory until spring 2012, so attendance in summer 2010 may not have been overly pressing for Algebra I, Biology and English I and II teachers.

Table 4.34. Number of Rider 42 PD Academy Sessions and Teacher Attendees

Academy	Number of Sessions	Number of Attendees	Percent of Total Attendees
MSTAR Math Academy for Grades 5-6	101	2,816	15%
MSTAR Math Academy for Grades 7-8	87	2,019	11%
Algebra I EOC Success Academy	103	1,776	9%
Science Academies for Grades 5-8	132	4,175	22%
Science TEKS Overview Academy for Grades K-12	200	5,014	26%
Biology EOC Success Academy	82	1,289	7%
English I and II EOC Success Academy	101	1,921	10%
<b>Total</b>	<b>806</b>	<b>19,010</b>	<b>100%</b>

Source: Regional ESC attendance records, 2010

Note: Individuals may have attended more than one Academy.

Although the study focuses on the 19,010 attendees at the seven content specific Academies in Table 4.35, it is interesting to note that 14,568 teachers attended an ELPS Academy also offered by the ESCs during the May 15, 2010 to August 6, 2010 time frame. These were content focused (Math, English, Language Arts, Science and Social Studies) one-day trainings designed to provide training in ELPS for teachers of all grade levels. ELPS attendance was examined to determine the rate of teachers that attended both a subject specific Academy and a corresponding ELPS Academy (for example, attended

one of the Math Academies and the ELPS focused on mathematics). Additionally, the rate of those attending both a subject training in science and the Science TEKS Overview Academy for Grades K-12 is reported. As the research team moves forward with future analysis and reporting, the team will examine if there is a relationship between attending both a subject-specific Academy (e.g., Science Academy for Grades 5-8, MSTAR Math Academy for Grades 5-6, Algebra I EOC Success Academy) and either ELPS (in that same subject area) or Science TEKS (combined with either the Biology EOC Success Academy or the Science Academy for Grades 5-8), and study outcomes (i.e., teacher instructional practices and student performance results). A variable indicating attendance at the ELPS Academy will be included in the teacher instructional practice and student achievement models for each of the academies. Likewise, a variable for attendance of the Science TEKS Overview Academy for Grades K-12 will be included in the teacher instructional practices and student achievement models for the Science Academy for Grades 5-8 and the Biology EOC Success Academy.

At this time we provide the following descriptive statistics and note that from 3.7% (English) to 9.5% (Mathematics) of teachers attended both the subject specific Academy and the corresponding ELPS. Additionally, 6.5% of Biology and 12.8% of Science Academy teachers also attended the Science TEKS Overview Academy for Grades K-12.

Table 4.35. Percent of Academy Participants that also Attended the ELPS Academy and the Science TEKS Overview Academy for Grades K-12

Academy	Percent of PD Academy Participants Also Attending ELPS	Percent of PD Academy Participants Also Attending Science TEKS Overview Academy for Grades K-12
MSTAR Math Academies for Grades 5-8 and Algebra I EOC Success Academy	9.5%	n/a
Science Academies for Grades 5-8	8.1%	12.8%
Biology EOC Success Academy	5.7%	6.5%
English I and II EOC Success Academy	3.7%	n/a

Source: Regional ESC attendance records, 2010

Table 4.36 presents comparisons of demographic characteristics of PD participants with characteristics of all 2009-10 school year Texas teachers in the same content area to examine the extent to which PD attendees were representative of teachers across the state. A higher proportion of PD participants were female than the proportion of female teachers in Texas in general, a difference more noticeable in the Algebra and Science Academies. In regards to race/ethnicity, the PD attendees were similar to the population of teachers in Texas with two exceptions: (1) a possible overrepresentation of White teachers in the EOC Academies, and (2) attendees having a slightly lower level of teaching experience than all teachers (9.7 years versus 10.3 years).

Table 4.37 shows the percentages of all teachers in a given subject area (e.g., math, science) that attended an Academy relevant to that subject. The data are presented statewide as well as by region (e.g., comparing the number of Biology EOC Success Academy attendees to the total number of teachers in the state who taught Biology). It is important to note that the 2009-10 teacher data is used as a proxy for the denominators in these analyses. Though not perfect proportions, these comparisons provide an estimate of the percent of teachers who started the 2010-11 school year having had the new training. MSTAR Math Academies for Grades 5-6 and Grades 7-8 are combined for these comparisons because it was not possible to reliably separate 2009-10 middle school math teachers into mutually exclusive grade level categories.

Teacher attendance rates at the summer PD Academies varied widely by ESC region and across the various Academies. On average, middle school teachers attended Academies at a higher rate for MSTAR (38.1%) and Science (39.5%) than their high school counterparts for Algebra (25%), Biology (24%) and English (15%). Data on the subject areas by region reveal the following; Regions VII (45%), XI (46%), and XVII (33%) had the highest rates of attendance for Algebra 1 EOC, Regions VII (35%), VIII (61%), and XVI (37%) the highest rates for Biology EOC Success Academy, Regions XI (33%), XII (34%), and XIV (32%) the highest for English EOC, Regions III (70%), VIII (85%), and IX (75%) for MSTAR Math, and Regions IX (70%), X (54.6%) and XVII for Science for Grades 5-8 (59%). As noted above, these figures are based on the 70% of participants for whom 2009-10 school-level data were available.

One goal of the Rider 42 Academies was to reach out to teachers at campuses where students are struggling to meet accountability standards and where students are unlikely to exhibit postsecondary readiness. To determine if this goal was met, data were examined to compare the extent to which teachers on these campuses participated in relation to rates of participation at other, less high-need campuses. To do so, campuses that had PD participants (based on where the participant taught in 2009-10) were compared to campuses that had no PD participants (again, based on participants' associated schools from 2009-10). In general, PD participants' schools were similar to schools without PD participants in average TAKS passing rates, percent economically disadvantaged student populations, percent LEP students, and percent regular education students, though these numbers varied a bit by Academy (see Table 4.38). With more training to be offered in the 2010-11 school year, a more deliberate recruitment effort may be necessary to ensure that teachers from at-risk campuses have an opportunity to participate in the PD.

Table 4.36. Demographic Characteristics of Rider 42 PD Academy Attendees Compared to all Texas Teachers

Academy	Percent Female	Percent Female	Percent White	Percent White	Percent Hispanic	Percent Hispanic	Percent African American	Percent African American	Average Years Experience	Average Years Experience
	State	PD	State	PD	State	PD	State	PD	State	PD
MSTAR Math Academies for Grades 5-8	77.0%	85.5%	67.1%	67.2%	18.8%	18.9%	11.5%	11.7%	9.5%	9.4%
Algebra I EOC Success Academy	60.6%	74.5%	67.9%	73.1%	19.8%	18.2%	8.5%	6.6%	10.2%	10.3%
Science Academies for Grades 5-8	70.8%	83.2%	70.3%	68.5%	17.0%	18.9%	10.5%	10.9%	9.6%	9.7%
Science TEKS Overview Academy for Grades K-12	*	*	*	*	*	*	*	*	*	*
Biology EOC Success Academy	62.0%	73.7%	70.9%	73.5%	17.3%	15.2%	9.3%	8.8%	10.5%	9.7%
English I and II EOC Success Academy	79.1%	86.5%	74.6%	80.6%	15.8%	12.3%	8.4%	6.6%	11.7%	11.2%
Total	72.2%	83.0%	70.4%	70.2%	17.6%	17.8%	9.8%	10.2%	10.3%	9.7%

Source: Regional educational service center attendance records and 2009-10 PEIMS teacher, district, campus and course data from UTD-ERC data warehouse.

Note: State comparison groups are calculated by subject taught and represent the population of teachers in that subject.

\* There is no appropriate statewide comparison group for teachers of science where the grade span is K-12.

Table 4.37. Rider 42 PD Academy Attendance by Region (Number of Attendees and Percent of 2009-10 Teachers Who Taught Each Content Area)

	MSTAR Math Academies for Grades 5-8	MSTAR Math Academies for Grades 5-8	Algebra I EOC Success Academy	Algebra I EOC Success Academy	Science Academies for Grades 5-8	Science Academies for Grades 5-8	Science TEKS Overview Academy for Grades K-12	Science TEKS Overview Academy for Grades K-12	Biology EOC Success Academy	Biology EOC Success Academy	English I & II EOC Success Academy	English I & II EOC Success Academy
Region	# of attendees	% of attendees	# of attendees	% of attendees	# of attendees	% of attendees	# of attendees	% of attendees	# of attendees	% of attendees	# of attendees	% of attendees
I	331	32.3%	171	24.9%	267	32.6%	578	^	59	13.7%	93	8.9%
II	97	33.0%	14	7.9%	101	38.5%	143	^	38	29.2%	80	26.8%
III	100	70.4%	30	29.1%	36	30.8%	38	^	15	18.8%	32	17.0%
IV	360	12.6%	158	12.0%	731	31.0%	861	^	151	14.3%	212	8.0%
V	130	57.3%	43	31.2%	65	38.7%	96	^	*	*	21	7.2%
VI	110	21.6%	42	15.8%	114	27.1%	0	^	30	14.6%	19	3.9%
VII	364	67.0%	133	45.1%	225	52.6%	537	^	82	34.6%	71	13.1%
VIII	156	84.8%	22	22.7%	78	48.1%	176	^	50	61.0%	54	27.4%
IX	85	75.2%	18	18.2%	76	69.7%	123	^	23	33.8%	35	22.4%
X	918	53.2%	317	32.3%	813	54.6%	427	^	228	30.0%	320	17.0%
XI	583	44.3%	302	46.4%	491	43.1%	452	^	161	31.1%	438	32.6%
XII	242	59.2%	72	27.7%	184	49.5%	363	^	54	28.7%	154	34.1%
XIII	515	52.7%	119	19.9%	191	24.5%	269	^	67	15.5%	92	9.5%
XIV	91	58.7%	13	13.0%	32	26.9%	24	^	16	18.0%	56	31.8%
XV	48	34.8%	23	24.2%	22	18.5%	158	^	27	32.9%	16	8.1%
XVI	92	31.5%	26	16.0%	87	36.7%	70	^	47	36.7%	29	9.8%
XVII	113	44.7%	49	32.5%	131	59.3%	0	^	35	27.6%	25	9.4%
XVIII	0	0.0%	16	12.0%	35	22.9%	0	^	*	*	27	10.5%
XIX	86	18.9%	56	16.6%	177	52.4%	183	^	56	22.9%	45	8.2%
XX	414	46.2%	152	27.9%	319	42.0%	516	^	136	33.3%	102	10.6%
Total	4,835	38.1%	1,776	24.7%	4,175	39.5%	5,014	^	1,289	23.5%	1,921	14.5%

Source: Regional Educational Service Center attendance records and 2009-10 PEIMS teacher, district, campus and course data from UTD-ERC data warehouse.

Note: # represents the number of teachers that participated in the specified Academy; % represents the percent of teachers as calculated by dividing the number of teacher by the total number of teachers in that subject for each region. 2009-10 PEIMS files were used as a proxy to determine current subject taught.

^ Data on K-12 Science “TEKS teachers” is not available as TEA does not collect this specific information.

\* Cells with counts smaller than 10 are masked.

Table 4.38. Campus Characteristics of Rider 42 PD Academy Attendees Compared to Characteristics of Campuses without a PD Attendee

	Percent Passing 2010 TAKS (Targeted Content Area)	Percent Passing 2010 TAKS (Targeted Content Area)	2009-10 Percent Economically Disadvantaged	2009-10 Percent Economically Disadvantaged	2009-10 Percent Limited English Proficient	2009-10 Percent Limited English Proficient	2009-10 Percent Regular Education	2009-10 Percent Regular Education
	No PD	PD	No PD	PD	No PD	PD	No PD	PD
MSTAR Math Academies for Grades 5-8	83.4%	82.6%	56.5%	57.0%	7.8%	8.5%	88.8%	88.8%
Algebra I EOC Success Academy	79.4%	78.2%	53.7%	49.0%	6.7%	6.2%	88.4%	88.6%
Science Academies for Grades 5-8	74.0%	74.9%	57.0%	55.5%	7.7%	8.4%	88.9%	88.7%
Science TEKS Overview Academy for Grades K-12	*	*	*	*	*	*	*	*
Biology EOC Success Academy	76.2%	76.0%	51.7%	50.0%	5.0%	5.7%	88.1%	88.5%
English I and II EOC Success Academy	89.3%	91.1%	53.0%	46.5%	5.4%	4.8%	88.0%	88.0%
Total	80.7%	79.5%	54.3%	52.6%	6.5%	7.2%	88.5%	88.6%

Source: Regional Educational Service Center attendance records and 2009-10 PEIMS teacher, district, campus and course data from UTD-ERC data warehouse.

Note: Comparison groups are calculated by all campuses that did not send any subject teachers to the specified PD Academy. \*Data are not collected at the state level for ELPS and K-12 Science TEKS teaching.

### *Summary of Findings on Professional Characteristics of Participants*

Over 19,000 participants attended at least one of the seven primary Rider 42 PD Academies (excluding ELPS and TALA) offered by TEA during summer of 2010. Participation rates varied substantially across regions ranging from less than 10% in some regions to greater than 50% in many others. With the exception of English I and II EOC Success Academy, the participants represented approximately one-quarter or more of the number of 2009-10 teachers. Participation in middle school Academies was particularly high with approximately 39% of 2009-10 middle school science teachers attending the Science Academies and approximately 38% of 2009-10 middle school mathematics teachers attending an MSTAR Math Academy. This focus on middle school bodes well for Texas in 'building a base' of learning that students can take with them to higher grades. Additionally, a number of teachers attended both their subject Academy and either the corresponding ELPS Academy or the TEKS Overview, possibly enhancing or reinforcing the impact of the content specific PD. This possibility will be examined in the future analyses of teacher and student outcomes.

Generally, attendees resembled their teacher populations (e.g., Grade 5-8 science teachers) with only slight demographic differences between the two groups. With the exception of the MSTAR Math Academies, the two groups (participants versus all 2009-10 Texas teachers) were also similar in terms of the at-risk characteristics of their campuses suggesting that the participants were from a representative sample of campuses across the state. If TEA seeks to target teachers from campuses with larger proportions of students in at-risk situations, these data suggest that more work may need to be done to ensure higher participation rates from teachers working at these campuses.

# Chapter V. Continuing Evaluation Activities

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This Interim Report presents findings related to Research Objective 1, answering research questions addressing the content of, delivery of, and participation in the PD Academies implemented during the summer of 2010. However, this is just the first step in the execution of the overall evaluation of the Rider 42 PD Academies for Texas teachers. Over the coming months, research activities will continue to address the first research objective regarding the teacher Academies more comprehensively, and new activities have commenced that address the remaining research objectives. Further activities addressing Research Objective 1 will include the collection and analysis of fall and spring PD participant (teacher) survey data, and the continued collection and analysis of Rider 42 PD Academy participant data for the 2010-11 school year. Planned evaluation activities associated with each of the Research Objectives that will take place over the November 2010-August 2011 period are detailed below. In addition to the content-specific Academies under review as part of this study, the research team will assess the impact of participating in *both* an ELPS Academy and a related content-specific Academy on teacher instructional practices and student achievement results.

## **Research Objective 1: Assess the content of, delivery of, and participation in face-to-face PD Academies**

While Research Objective 1 has been comprehensively addressed in this first Interim Report, there are a number of data collection activities planned to further address this aspect of the Rider 42 PDRS.

These data collection approaches include, but are not limited to:

- Collection and analysis of PD participant data for teachers attending Rider 42 PD Academies after August 5, 2010 – the PD participant data collection cut-off date for reporting in this Interim Report. These PD Academies are being offered to teachers by ESCs in a variety of formats during the 2010-11 school year (e.g., successive Saturday sessions for 3-day Academies).
- Collection and analysis of spring 2011 teacher survey data related to the extent to which Rider 42 PD has impacted instructional practices, use of Project Share and how it has impacted collaboration with other teachers, and the types of supports (if any) received from the district or campus since attending the Rider 42 PD Academies.
- Collection and analysis of spring 2011 district administrator survey data to evaluate the extent to which the district office encouraged teacher participation in the summer 2010 face-to-face PD Academies and how they have helped support teachers after returning from the training.
- Collection and analysis of spring 2011 campus administrator survey data to determine how campus leaders supported and encouraged teachers to participate in the Rider 42 PD Academies in summer 2010 and how they helped to support the work of teachers in implementing strategies learned through the state-sponsored training.

In addition, the evaluation team will be collecting data related to the following 2011 PD Academies funded through Rider 42, and planned for summer 2011 delivery:

- Geometry EOC Success Academy
- Algebra II EOC (College Readiness) Academy
- English III EOC (College Readiness) Academy
- Chemistry EOC Success Academy
- Physics EOC Success Academy

As required by the contract between the TEA and UTD-ERC, the same data collection approaches that were utilized for the 2010 PD Academies will be employed for the 2011 Academies to ensure that the appropriate data are available for the continuation of the Rider 42 PDRS should the 82<sup>nd</sup> Legislature appropriate funds for future PD implementation and evaluation activities into the next biennium.

Should evaluation activities continue beyond August 31, 2011, the following data collection activities related to Research Question 1 will continue during the 2011-12 school year:

- Survey of PD developers
- Survey of ESC administrators
- Survey of regional trainers
- Survey of PD Academy participants (i.e., teachers)

## **Research Objective 2: Assess the content of, delivery of, and participation in online PD through Project Share**

While Project Share is still in its infancy in Texas, with teachers beginning to log onto the system in fall 2010, and the first online PD module being made available to teachers in October 2010, the evaluation team has begun to explore the types of system usage data that may be available from Epsilon (an e-learning platform). Research Objective 2 involves the assessment of the content of, delivery of, and participation in, online PD through Rider 42. This objective also explores the manner in which teachers collaborate through online courses and online professional learning communities created by joining teacher groups on Project Share.

In order to effectively accomplish Research Objective 2, the research team will employ a wide array of research activities including the following:

### **Conduct Document Review and Analysis**

The research team will request and review pertinent documents that will enable a thorough understanding of various elements of the development and implementation of online components for each Academy. The focus of this review and analysis will be on the quality of the online content and on the online experience of teachers accessing PD through Project Share.

The evaluation team will review and analyze documents and information to assess how the developers collaborated with TEA, designed online materials and courses, and how online content curriculum is delivered to teachers. Findings from the review and analysis of online PD content will be synthesized into an internal report that can later be incorporated into formal deliverables.

### **Reviews of Training Materials by Expert Panel**

Three of the expert panel members conducting reviews of face-to-face PD content for Objective 1 will form the expert panel for review of the online training materials and assessment of the quality of the online PD experience from a content and technical perspective. This review will focus on the content of the training materials and appropriateness of the materials for online training (for each of the primary content areas represented by each Academy). This process will ensure continuity in the content review across content areas.

As in Objective 1, panel members will be given copies of all online training materials for both facilitators and participants, and will be given full access to the Project Share system. The panel will be responsible for evaluating the training content in terms of best practices for instruction. They will also evaluate the content in terms of national content area standards and national standards for the online delivery of PD for adult learners. Due to the staggered nature of the online PD module development and roll-out, the Project Share system and materials will be evaluated at two different times during the evaluation period: January 2011 and May 2011. This approach to the review of the online content and delivery reflects an understanding that the system may look substantially different in late spring 2011 than when teachers first started accessing online courses in fall 2010. The timing of feedback can be staggered to accommodate ongoing delivery of online training. A content analysis of the data gathered from the panel experts will be conducted and synthesized into an internal report that can later be incorporated into formal deliverables.

### **Collect and Analyze Regional Trainer Survey Data**

To evaluate the quality and effectiveness of the online training and facilitation of each PD Academy, a survey was developed and administered to regional trainers (who attended TOTs and could be serving as facilitators for online training) in September 2010 related to Project Share. Survey items assessed the degree to which regional trainers felt prepared to facilitate the online training modules for teachers based on TOT training received, their experience with conducting face-to-face and online training, the types of activities and content covered with teachers during online PD sessions, and other areas related to the facilitation of the online courses with teachers.

### **Collect and Analyze PD Participant Survey Data**

A fall 2010 survey of teachers participating in the face-to-face PD Academies was administered in October 2010, and a spring 2011 survey is planned for the same population of teachers. Both teacher surveys capture a wide array of data related to teachers' experiences with face-to-face PD, and their experiences with the online Project Share system. Key areas that will be addressed in the spring 2011 survey relevant to Research Objective 2 include:

- Satisfaction with training and comfort level with accessing online content available through Project Share
- Ability to access and navigate the Project Share system
- Relevance and usefulness of online content and how it maps on to PD needs
- Which online content is perceived as most impactful to improve instructional practices
- Satisfaction with the nature and quality of the online facilitation of Project Share courses
- District and campus support for teachers participating in face-to-face and online PD
- Ways in which the online PD has established virtual professional learning communities
- Ways in which online PD content has helped to create professional learning communities at their campuses

### **Collect and Analyze District Administrator Survey Data**

To evaluate the degree to which district administrators supported and encouraged teacher participation in the face-to-face and online training through Project Share, a survey will be developed for district administrators. Survey items will assess, among other items, the degree to which the district administrators were knowledgeable about the PD Academies and the Project Share system, the extent to which the district communicated with campus administrators to encourage teachers to attend the face-to-face PD Academies and engage in online PD through the Project Share system, and determine the ways in which this information was communicated to campuses and how the information was received by campus administrators. This survey will be administered in February 2011.

### **Collect and Analyze Campus Administrator Survey Data**

A survey will also be developed for campus administrators to determine the degree to which campus administrators supported and encouraged teachers to attend face-to-face training and participate in online training through Project Share and helped to create professional learning communities on campus around this training. Survey items will assess, among other topics, the degree to which the campus administrators were knowledgeable about the PD Academies and the Project Share system, the extent to which campus administrators encouraged teachers to attend the face-to-face PD Academies and engage in online PD through the Project Share system, the degree to which campus administrators help to facilitate professional learning communities on campus around this PD and incorporate the Academy training (both face-to-face and online) into campus-based PD efforts in faculty meetings and other venues. This survey will be administered to campus leaders in February/March 2011.

### **Collect Project Share Teacher Participant Database (Online Training through Project Share) Usage Data**

Each school district is responsible for providing email addresses for their teachers so Epsilen can establish IDs for them to access the PD and other features available through Project Share. While the degree to which online content is available will vary for each of the PD Academies, a common set of usage metrics will be tracked by the system (e.g., number of log-ins, time online, content areas

accessed, courses completed). The evaluation team will work closely with TEA and Epsilon staff to ensure that necessary usage data are available through the system and report on system usage.

### **Research Objective 3: Determine the impact of PD received on teacher knowledge, changes in instructional practices, and changes in collaborative behavior**

Research Objective 3 represents a critical step in determining the effectiveness of the various PD Academies by assessing the impact of the PD Academies on teacher knowledge, changes in instructional practices, and changes in collaborative behavior. To accomplish this research objective, a wide variety of research activities will take place, including comparison of the experiences of teachers who attended the Rider 42 PD Academies with the experiences of teachers who did not attend the state-developed PD.

The following research activities will be used to address the research questions posed by this study:

#### **Collect and Analyze Program Participation Data**

In order to estimate the effect of participating in the professional development Academies, the study team must first determine which teachers attended the Academies and were active users of online PD available through the Project Share system. As described above, two major sources of information will be used to measure participation. First, the study team has worked with local ESCs to develop a program participation database, and will continue to collect data from the ESCs on teachers participating in Rider 42-sponsored PD after August 5, 2010 (i.e., the cut-off date for reporting for this Interim Report). Second, data will be collected from the Project Share system on teacher usage. These data will be used to determine how much teachers used the online resources as well as their patterns of use. From these two sources of data, all participating teachers will be classified into one of the following participation groups:

- Face-to-face only
- Online only
- Face-to-face and online

In addition, examination of these data will enable the evaluation team to characterize online users according to one of four groups for analysis: nonusers, minimal users, moderate users, and power users.

#### **Collect and Analyze Teacher Survey Data**

As described above, all teachers attending Rider 42 PD Academies were asked to complete a survey in fall 2010, and will be asked to do so again in spring 2011 after they have had the opportunity to implement instructional strategies taught in the PD Academies and participate in online PD and collaborative activities through Project Share. These surveys measure important components related to Objective 3, including constructs related to teacher efficacy in teaching the subject matter and instructional strategies used in the classroom.

## Collect and Analyze Classroom Observation Data

In addition to teachers' self perceptions about the ways in which attending PD or using Project Share has influenced their behaviors, measures of teacher behavior in the classroom will also be assessed through direct classroom observations. Using a quasi-experimental design, samples of teachers who attended the Rider 42 PD Academies and comparable teachers who did not attend PD will be observed in their classrooms. The Classroom Assessment Scoring System for Secondary (CLASS-S) Observation Tool will be utilized to assess classroom and instructional quality across four primary domains.<sup>36</sup> Each domain is comprised of different dimensions of measurement. Domains and dimensions are listed in Table 5.1.

Table 5.1. CLASS-S Domains and Dimensions

Domain	Dimensions
Emotional Support	<ul style="list-style-type: none"><li>▪ Positive Climate</li><li>▪ Negative Climate</li><li>▪ Teacher Sensitivity</li><li>▪ Regard for Adolescent Perspectives</li></ul>
Instructional Support	<ul style="list-style-type: none"><li>▪ Content Understanding</li><li>▪ Analysis and Problem Solving</li><li>▪ Quality of Feedback</li></ul>
Classroom Organization	<ul style="list-style-type: none"><li>▪ Behavior Management</li><li>▪ Productivity</li><li>▪ Instructional Learning Formats</li></ul>
Student Outcomes	<ul style="list-style-type: none"><li>▪ Student Engagement</li></ul>

All observers will be trained and certified as reliable in the use of the CLASS-S protocol prior to conducting classroom observation. Observer training took place in October 2010. Propensity score matching methodology was used to determine comparable observation samples. Observations were conducted once during the fall of 2010 and will be conducted again during the spring of 2011. The same teachers' classrooms will be observed at both time points.

Classroom observations were conducted among the following samples:

1. Approximately 220 Grade 6-8 math teachers (110 teachers who have attended one of the two MSTAR Math Academies, and 110 teachers who did not attend). Approximately half of each group will be teachers at campuses with AR Cycle 1 Grants, while the other half will come from non-AR campuses.
2. Approximately 80 Grade 6-8 science teachers (40 teachers who have attended the Science Academy for Grades 5-8, and 40 teachers who did not attend).

<sup>36</sup> For further information regarding the CLASS-S observation tool, refer to the *CLASS-Secondary Manual* or to the following website: <http://www.teachstone.org/about-the-class/>.

3. A total of 25 PD Academy attendees and 25 control group teachers for each of the following EOC PD Academies: Algebra I EOC Success Academy, Biology EOC Success Academy, and English I and II EOC Success Academy.

### **Recruit Teachers for Learning Math for Teaching Assessment**

A final measure of change in teacher knowledge, practices, and behavior will come from a comparison of scores on the Learning Math for Teaching (LMT) assessment between teachers who have attended PD and those who have not. The LMT, developed by researchers at the University of Michigan, measures the mathematical knowledge needed for teaching. Assessment items measure both content and pedagogical knowledge in mathematics. All teachers participating in the AR Cycle 1 grant are required to take the LMT assessment before and after participating in the Academy. As a part of the evaluation, comparison teachers from non-AR campus within districts with campuses funded through the AR Cycle I Grant Program were recruited to take the LMT in the fall of 2010 and again in the spring of 2011. Comparison teachers will receive continuing professional education credits as an incentive for completing the assessments.

### **Research Objective 4: Determine the impact of PD received on student achievement outcomes**

Ultimately, the most important outcome from the Rider 42 PD is the impact of the training on student achievement results through the application of effective instructional strategies. Statistical analyses will be employed to determine the extent to which teacher participation in training (both online and face-to-face) impacted student achievement, and if it did, the extent to which changes in student achievement are attributable to changes in teacher knowledge, instructional strategies, and behaviors.

### **Conduct Dosage and Usage Study**

Separately for each Academy, the research study will examine whether the type and amount of professional development teachers receive is related to teacher instructional practice and student outcomes. This study will compare teachers who participated in the face-to-face PD Academies (and related online Rider 42-related PD) to other teachers who did not participate in the PD Academies. For the purpose of these comparisons, participating teachers will be categorized according to both their type of participation (face-to-face, online, or both) and their amount of participation. These analyses will examine whether certain patterns of participation are more likely to lead to a change in classroom instruction and student outcomes. Whether teachers who spend more time online using the Project Share system are more likely to change instructional practices and affect student achievement will be examined.

Because of the nested nature of the data, a hierarchical modeling approach will be employed to examine the relationship between type or amount of professional development and changes in instructional practices (teacher survey pre and post and teacher observation results), and student achievement (e.g., TAKS Scale Scores, “met standard” and “met commended” results) controlling for student, teacher, and school characteristics.

From these analyses, we will be able to determine whether there is a relationship between type and usage of professional development and classroom instruction and student achievement. However, we will not be able to determine whether participating in a certain type or amount of professional development *caused* a change in instruction or achievement. To assess the causal effect of participating in the professional development, we turn to the Propensity Score Matching Study for the middle school Math and Science teachers, and Algebra I, Biology, and English I and II teachers.

### **Conduct Propensity Score Matching Study (Science Grades 5-8, Math Grades 5-6, Math Grades 7-8, Algebra I, Biology, and English I and II)**

A multi-level propensity score matching approach will be employed to match participating teachers to similar non-participating teachers in the analytic sample for each of the following Academies/subject areas: MSTAR Math for Grades 5-6, MSTAR Math for Grades 7-8, Science for Grades 5-8, Algebra I EOC Success Academy, Biology EOC Success Academy, and English I and II EOC Success Academy.

Propensity scores allow for modeling the probability that a given teacher participates in a particular PD Academy based on available observable characteristics. By modeling selection into the program, this approach will allow the evaluation to create a comparison group that would have a similar propensity to select into the program based on observables. Although demographic variables alone are often not sufficient predictors of selection propensity, the ERC data on both teachers and the schools where they teach should allow us to adequately model teacher participation.

**Statistical Modeling of Student Outcomes.** The Rider 42 PD Academy logic model developed by the evaluation team suggests that participation in the content-specific face-to-face training during summer 2010, combined with a number of moderating factors (e.g., participation in follow-up online PD through Project Share, district and campus supports, participation in professional learning communities), will result in positive changes in instructional practices (as measured by CLASS-S observation data related to classroom instruction) and collaborative behaviors. Then, the model suggests that if changes in teacher instructional practices are observed, changes in student achievement results should also be realized. In order to assess the impact of the PD on student achievement results, data which connect the teacher to specific students they taught during the period of interest (i.e., student-teacher links) are required.

Outcomes of students in classrooms of participating teachers will be compared with the outcomes of students whose teachers did not participate (the comparison group). Student outcomes will be based primarily on performance of the TAKS for the 2010-11 school year. Districts will submit data to TEA linking teachers to their respective students so that these comparisons can be made. The comparison groups will be created through a propensity score stratification and marginal mean weighting approach (Hong & Hong, 2009). The number of strata used will be determined by the spread and overlap of the data. The propensity score logit will also be included in the outcome model to control for within strata differences. Student outcomes will be modeled using three-level hierarchical linear models to account for the nested nature of the data (students within teachers within schools).

A similar approach will also be employed to examine the relationship between type and usage of professional development and classroom instruction. The only difference is that these models will only include two levels because the outcome of interest is at the teacher or classroom level.

**Research Objective 5: Determine the impact of district and campus supports (e.g., instructional coaching, support of campus leadership team, integration of Academy concepts into campus faculty meetings and local PD, extended learning time and other Algebra Readiness Cycle 1 grant program features) on teacher knowledge, changes in instructional practices, changes in collaborative behavior, and ultimately student achievement outcomes.**

The final research objective for this study of the Rider 42 PD Academies involves a series of data collection and analysis activities designed to determine how (if at all) district and campus supports, including supports provided through the Algebra Readiness Cycle 1 Grant Program (e.g., instructional coaching, extended learning time for students) and other support mechanisms, have an impact on teacher and student outcomes. To accomplish this research objective, the following data sources will be utilized, each of which has been described previously:

- PD Participant databases
- Project Share usage databases
- District administrator survey
- Campus administrator survey
- Fall 2010 and spring 2011 teacher surveys
- Classroom observations (using CLASS-S Observation Tool)
- LMT fall 2010 and spring 2011 assessments (for middle school math teachers)
- ERC databases

A variety of factors could influence the extent to which the professional development impacts teacher practices and, ultimately, student achievement. Thus, using data sources previously described, statistical analyses will be used to examine the extent to which various factors, such as the presence or absence of particular campus or district supports, increase or decrease the effectiveness of participating in professional development. The modeling approach will vary across research designs, but the basic approach will interact possible moderating factors with program participation. It should be noted that these analyses will be exploratory in nature and will not determine whether these relationships are causal. Despite this limitation, these analyses will provide important insights into the contexts within which PD is most likely to positively affect instructional practice and student outcomes. This study will provide valuable insights into the complex relationships between comprehensive, statewide training for

teachers, complementary online PD, campus support structures for teachers, and behavioral (e.g., teacher instructional practices and collaborative behaviors) and student performance outcomes. The final evaluation report for the 2010-11 school year will be completed by August 31, 2011.

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# Appendices

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Appendix 1 – List of Academy Developers and Implementers Interviewed .....	154
Appendix 2 – Developer Survey .....	156
Appendix 3 – Professional Development Curriculum Materials Reviewed .....	160
Appendix 4 – Expert Panel Review Protocols .....	162
Appendix 5 – Expert Panel Biographies .....	218
Appendix 6 – Regional TOT Sessions Observed .....	224
Appendix 7 – Professional Development Selection Process .....	226
Appendix 8 – Academy Sessions Observed.....	230
Appendix 9 – Sample Observation Protocol .....	233
Appendix 10 – Sample Observation Notes Template .....	241
Appendix 11 – ESC Administrator Survey .....	258
Appendix 12 – Regional Trainer Survey .....	290
Appendix 13 – Regional Trainer Response Rate by Region .....	353
Appendix 14 – Participant Survey .....	355
Appendix 15 – Participant Response Rate by Region .....	390
Appendix 16 – Analytic Approaches .....	392
Appendix 17 – NSDC Standards .....	396
Appendix 18 – Expert Panel Summaries .....	398
Appendix 19 – ESC Survey Responses.....	414
Appendix 20 – Additional Data from PD Observations.....	416

## **Appendix 1 – List of Academy Developers and Implementers Interviewed**

Academy/Program	Developers/Implementers/TEA
All Academies	<ul style="list-style-type: none"> <li>▪ Epsilen/Project Share</li> <li>▪ TEA</li> </ul>
MSTAR Math Academy for Grades 5-6 and 7-8 / Algebra Readiness Cycle 1 Grant Program	<ul style="list-style-type: none"> <li>▪ UT System–IPSI</li> <li>▪ Texas A&amp;M</li> <li>▪ ESC Region IV</li> <li>▪ Stephen F. Austin University</li> <li>▪ TEA</li> </ul>
Algebra I EOC Success Academy	<ul style="list-style-type: none"> <li>▪ ESC Region IV</li> <li>▪ TEA</li> </ul>
Science Academies for Grades 5-8	<ul style="list-style-type: none"> <li>▪ ESC Region IV</li> <li>▪ TEA</li> </ul>
Science TEKS Overview Academy for Grades K-12	<ul style="list-style-type: none"> <li>▪ ESC Region IV</li> <li>▪ TEA</li> </ul>
Biology EOC Success Academy	<ul style="list-style-type: none"> <li>▪ ESC Region IV</li> <li>▪ TEA</li> </ul>
English I & II EOC Success Academy	<ul style="list-style-type: none"> <li>▪ UT System</li> <li>▪ VGCRLA at UT</li> <li>▪ TEA</li> </ul>
ELPS (Math, ELA, Science, Social Studies)	<ul style="list-style-type: none"> <li>▪ ESC Region XX</li> <li>▪ Private Consultant</li> <li>▪ TEA</li> </ul>

## **Appendix 2 – Developer Survey**

page 1

**1. Respond to the following questions specifically about the following academy:**

\_\_\_\_\_

\_\_\_\_\_

**Prescriptive versus Flexible**

**3. For each of the following aspects of training, indicate those for which trainers are required to implement elements in a certain way, and indicate those for which trainers are given flexibility over how they choose to implement various elements when delivering training to teachers:**

	<b>Elements are prescriptive</b>	<b>Elements are flexible</b>
(a) Structure of the master schedule and time management	<input type="checkbox"/>	<input type="checkbox"/>
(b) Content of the lessons	<input type="checkbox"/>	<input type="checkbox"/>
(c) Hands-on activities	<input type="checkbox"/>	<input type="checkbox"/>
(d) Relevant TEKS (and revisions in TEKS, if applicable) and/or End of Course (EOC) exams	<input type="checkbox"/>	<input type="checkbox"/>
(e) Support frameworks (ELPS, RtI, and CCRS)	<input type="checkbox"/>	<input type="checkbox"/>
(f) Culture of the training	<input type="checkbox"/>	<input type="checkbox"/>
(g) Instructional practices	<input type="checkbox"/>	<input type="checkbox"/>

**4. Describe the aspects of the teacher training that trainers are required to implement in a certain way when providing the teacher PD workshops:**

\_\_\_\_\_

\_\_\_\_\_

**5. Describe the aspects of the teacher training that are flexible when trainers are implementing the teacher PD workshops:**

\_\_\_\_\_

\_\_\_\_\_

If you had the opportunity to observe a trained teacher's classroom, describe what you would look for, in terms of *the content of what the teacher is teaching*, to confirm that the teacher had successfully integrated the training they received into their instruction in terms of:

**6. The content of the lessons**

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**7. Lesson activities and student engagement**

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**8. Instructional practices**

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**9. Implementation of support frameworks (ELPS, RtI, and CCRS)**

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**10. Are there any other things you would look for as evidence that a teacher had successfully integrated the training they received, as it relates to the content being taught?**

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If you had the opportunity to observe a trained teacher's classroom, describe what you would look for, in terms of *how the teacher is teaching (i.e. instructional strategies)*, to confirm that the teacher had successfully integrated the training they received into their instruction in terms of the following aspects:

**11. The content of the lessons**

\_\_\_\_\_

\_\_\_\_\_

**12. Lesson activities and student engagement**

\_\_\_\_\_

\_\_\_\_\_

**13. Instructional practices**

\_\_\_\_\_

\_\_\_\_\_

**14. Implementation of support frameworks (ELPS, RtI, and CCRS)**

\_\_\_\_\_

\_\_\_\_\_

**15. Are there any other things you would look for as evidence that a teacher had successfully integrated the training they received, as it relates to how the teacher is teaching?**

\_\_\_\_\_

\_\_\_\_\_

## **Appendix 3 – Professional Development Curriculum Materials Reviewed**

PD Academies	State TOT Materials	Regional TOT Materials (Presenter Guide)	Teacher PD Materials (Participant Guide)	PowerPoint Presentation	Other Materials
<b><i>Mathematics</i></b>					
MSTAR Math Academy for Grades 5-6	*	✓	✓	✓	✓
MSTAR Math Academy for Grades 7-8	*	✓	✓	✓	✓
Algebra I EOC Success Academy	*	✓	✓	✓	✓
<b><i>English Language Arts</i></b>					
English I & II EOC Success Academy	✓	✓	✓	✓	✓
<b><i>Science</i></b>					
Science Academies for Grades 5-8	✓	✓	✓	✓	✓
Science TEKS Overview Academy for Grades K-12	✓	✓	✓	✓	✓
Biology EOC Success Academy	✓	✓	✓	✓	✓

## **Appendix 4 – Expert Panel Review Protocols**

## **ELA EXPERT REVIEW PANEL BACKGROUND**

### **Relevant Legislation and Goals**

Texas Senate Bill 1031 (2007) called for the development of “end-of-course (EOC) assessment instruments for secondary-level courses in Algebra I, Algebra II, Geometry, Biology, Chemistry, Physics, English I, English II, English III, World Geography, World History and United States History.” The purpose of the EOC assessments is to measure students’ academic performance in core high school courses and to become part of the graduation requirements beginning with the freshman class of 2011–12. The EOC assessments for lower-level courses must include questions to determine readiness for advanced coursework. The assessments for higher-level courses will include a series of special purpose questions to measure college readiness and the need for developmental coursework in higher education. In addition, a student’s score on each EOC assessment will be worth 15% of the student’s final grade for that course.<sup>37</sup>

Rider 42 of Article III of the General Appropriations Act of the 81st Texas Legislature (2009) called for increasing the reading, math, and college and career readiness for students throughout the state of Texas. Under this appropriation, funding was set aside to support the implementation of scientifically validated and research-based instructional strategies. Campuses on which students were struggling to meet the grades 3, 5, and 8 Texas Assessment of Knowledge and Skills’ (TAKS) reading and/or mathematics standards are being targeted.

Based on this legislation, the Texas Education Agency (TEA) developed the professional development (PD) academies that are the focus of this expert review. These PD academies incorporate several sets of standards, frameworks, and tools with which you should be familiar.

### **Goals and Description of Rider 42 Professional Development Academies**

The Texas Education Agency (TEA) created PD academies in Spring 2010 to provide teachers with in-depth training in mathematics, English language arts (ELA), and science. The goals of the PD include helping teachers to:

- Facilitate the appropriate use of data to drive instructional planning,
- Align instruction to the Texas Essential Knowledge and Skills (TEKS),
- Accelerate instruction or provide interventions for struggling students
- Transition into an online environment for future professional development opportunities, and
- Incorporate research-based strategies to improve the academic language skills of English language learners.

The participant guides, presenter notes, PowerPoint presentations, videos, handouts, and other materials for these PD academies are the subject of the review by three Expert Panels:

### **Math PD Academies for Math Expert Panel Review**

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<sup>37</sup> Source: Texas Education Agency, [http://www.tea.state.tx.us/index3.aspx?id=3302&menu\\_id=793](http://www.tea.state.tx.us/index3.aspx?id=3302&menu_id=793).

- Algebra I EOC Success
- MSTAR Math Academy for Grades 5-6
- MSTAR Math Academy for Grades 7-8

#### **ELA PD Academies for ELA Expert Panel Review**

- English I & II EOC Success

#### **Science PD Academies for Science Expert Panel Review**

- Biology EOC Success
- Science Academies for Grades 5-8
- Science TEKS Overview K-12

PD academies for Algebra II EOC Success, Geometry EOC Success, English III EOC Success, Chemistry EOC Success, and Physics EOC Success will be developed in Spring 2011 and implemented in Summer 2011. Materials for these PD academies will be the subject of a separate expert review in Spring/Summer 2011.

#### **Standards, Frameworks, and Tools**

ELA Expert Panel members should be familiar with these standards, frameworks, and tools. Please note that while comparisons to national standards have been listed as helpful background knowledge and can inform revisions and additions to existing professional development materials, content development partners were not charged to address national standards during the development of state products.

#### ***Texas College and Career Readiness Standards (CCRS)***

The 79<sup>th</sup> Texas Legislature passed House Bill 1, the “Advancement of College Readiness in Curriculum,” Section 28.008 of the Texas Education Code, to increase the number of students who are college and career ready when they graduate from high school. The Texas College and Career Readiness Standards (CCRS) that resulted from that legislation were developed and assessed by vertical teams composed of secondary and postsecondary faculty across the content areas of English/language arts, mathematics, science, and social studies. Vertical teams used a multi-level framework that focuses on subject matter and the way it is organized and presented in the classroom.

Incorporated into the Texas Essential Knowledge and Skills (TEKS) in 2008, the CCRS emphasize secondary-level content knowledge that stimulates students to engage in deeper levels of thinking. The framework of the CCRS recognizes that at a postsecondary level, students must (1) have core foundational knowledge of a discipline and be able to use that knowledge with facility and fluency; and (2) be able to understand the vertical structure of a discipline and how knowledge expands from the initial study of a topic.<sup>38</sup>

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<sup>38</sup> Source: Biology EOC Success documentation.

To learn more and to familiarize yourself with these standards, visit:

<http://www.thecb.state.tx.us/index.cfm?objectid=EAE69736-B39D-F3FF-EA777519F1F0348B>

### ***English Language Proficiency Standards (ELPS)***

The English Language Proficiency Standards (ELPS) developed by TEA outline English language proficiency level descriptors and student expectations for English language learners (ELLs). School districts are required to implement this section as an integral part of each subject in the required curriculum. The ELPS are published along with the Texas Essential Knowledge and Skills (TEKS) for each subject in the required curriculum (ELA/reading, math, science, social studies).<sup>39</sup>

To learn more and to familiarize yourself with these standards, visit:

<http://ritter.tea.state.tx.us/curriculum/biling/elps.html>

### ***Response to Intervention (RtI)***

Response to Intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RtI, schools identify students at risk for poor learning outcomes and monitor individual student progress. In addition, schools provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness. RtI also helps schools identify students with learning disabilities or other disabilities.<sup>40</sup> The Texas Education Agency, in collaboration with the Response to Intervention Coordinating Council (RtICC), is in the planning phase of collecting RtI anecdotes from the field.<sup>41</sup>

To learn more about RtI and to familiarize yourself with what TEA is doing with RtI, visit:

<http://www.rti4success.org/>

<http://www.tea.state.tx.us/index2.aspx?id=5817>

### ***Texas Essential Knowledge and Skills (TEKS) for English Language Arts and Reading***

The TEKS are the State of Texas' curriculum standards for students in kindergarten through Grade 12. Educators use these standards as guidelines in forming their curriculum goals and lesson plans.

To learn more and to familiarize yourself with these standards, visit:

<http://ritter.tea.state.tx.us/rules/tac/chapter110/index.html>

### ***National Council of Teachers of English (NCTE) and the International Reading Association (IRA) Standards for the English Language Arts***

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<sup>39</sup> Source: Texas Education Agency, <http://ritter.tea.state.tx.us/curriculum/biling/elps.html>.

<sup>40</sup> Source: National Center on Response to Intervention, <http://www.rti4success.org/>.

<sup>41</sup> Source: Texas Education Agency, <http://www.tea.state.tx.us/index2.aspx?id=5817>.

“Published jointly by NCTE and the IRA, the Standards for the English Language Arts are designed to complement other national, state, and local standards and contribute to ongoing discussion about English language arts classroom activities and curricula.”<sup>42</sup>

To learn more and to familiarize yourself with these standards, visit: <http://www.ncte.org/standards>

### ***Project Share (Epsilen)***

Project Share is a partnership between TEA, Epsilen (an e-learning platform), and The New York Times Knowledge Network. This initiative will provide for online content delivery through teaching, collaborating and networking.<sup>43</sup> Project Share will be utilized to deliver ongoing PD modules and to facilitate online professional learning communities for PD participants. An overview and introduction to this platform is provided in the English I and II EOC Success academy.

To learn more or to view a demo, visit:

[www.projectsharetexas.org](http://www.projectsharetexas.org)

### ***National Staff Development Council (NSDC) Standards for Staff Development***

“NSDC views high quality staff development programs as essential to creating schools in which all students and staff members are learners who continually improve their performance.”<sup>44</sup> The expert review protocols are based on the framework of these standards so that experts will be able to judge the extent to which the PD training materials are reflective of best practices for teacher PD.

To learn more and to familiarize yourself with these standards, visit:

<http://www.nsd.org/standards/index.cfm>

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<sup>42</sup> Source: National Council of Teachers of English, <http://www.ncte.org/standards>.

<sup>43</sup> Source: Texas Education Agency, <http://tea.epsilen.com/Public/Home.aspx>.

<sup>44</sup> Source: National Staff Development Council (NSDC), <http://www.nsd.org/standards/index.cfm>.

## **ELA EXPERT REVIEW PANEL INSTRUCTIONS**

Expert panel members should review and evaluate the materials located on the USB flash drive that was provided for the English I and II EOC Success academy in terms of the following:

- Content of the PD academy
- Best practices for ELA instruction
- State Texas Essential Knowledge and Skills (TEKS) ELAR standards
- National ELA/reading standards
- Best practices for teacher professional development

### **Use of Materials**

Agreement to serve as a panelist requires that materials may not be used or shared in any way outside of the review process.

### **Protocol**

A protocol has been developed and provided separately to guide your review. An overview of the academy accompanies the protocol to provide an understanding of the context of the program implementation and schedule of activities. Please review and evaluate all training materials for the English I and II EOC Success academy which are located on the USB flash drive you received. As an expert reviewer, please provide any feedback that is relevant in your review of the materials as you respond to the open-ended questions on the protocol.

### **Reports**

All three expert review panel members will prepare individual written reports of findings. In your reports, provide specific reasons or evidence supporting your expert opinions. Please feel free to cite relevant research or other similar programs with which you are familiar. In doing so, be sure to provide the appropriate citations at the end of your document in a list of references in APA format. When you are finished with your report, send an electronic version of the report to Tony Marchesi at ICF via email at [AMarchesi@icfi.com](mailto:AMarchesi@icfi.com).

### **Conference Call with ICF and Other ELA Expert Review Panel Members**

All three ELA expert review panel members will participate in a conference call to discuss the synthesis of findings with ICF and each other based on individual reports from each panel member. ICF will moderate the conference call and panel members will have the opportunity to review the reports that were submitted by the other ELA expert review panel members. The purpose of this call will be to synthesize findings from the expert review of all materials for the academy.

### **Use of Findings**

The evaluation team will incorporate findings from the expert reviews in reports and presentations to

TEA and the Texas Legislature to inform program improvement.

## **ENGLISH I & II EOC SUCCESS ACADEMY OVERVIEW**

Participants will receive an overview of the English I and II End-of-Course (EOC) assessment and see the integration of the Texas Essential Knowledge and Skills (TEKS) for English Language Arts and Reading, English Language Proficiency Standards (ELPS), and the College and Career Readiness Standards (CCRS). Sessions will also provide participants with online resources and follow-up activities through an online interactive platform (Project Share/Epsilen), as well as allow educators to build online professional learning communities for further development and growth.<sup>45</sup>

The English I and II EOC Success academy was developed in early 2010 and 233 trainers attended regional training of trainers (TOTs) in May 2010 to be trained to implement the academy statewide. The English I and II EOC Success academy is presented to teachers in one day, and teachers have been participating in this training since June 2010. Face-to-face training will be followed by on-line follow-up training (using Project Share/Epsilen) that will begin in fall 2010. The English I and II EOC Success academy includes the following components:

### **Day One**

- **Introduction and Opening Activities**

Objective: To get participants centered, set session norms, state the purpose of the academy (i.e., state why they are here), motivate participants to embrace change, and provide an overview of the academy.

- **English EOC Assessment**

Objective: To provide an overview of the EOC assessments' structure and their relationship to the 2008 English Language Arts and Reading Texas Essential Knowledge and Skills (ELAR TEKS) and the English for Speakers of Other Languages (ESOL) I and II TEKS.

- **State Standards (Support Frameworks)**

Objective: To provide an opportunity for teachers to investigate how the state standards align and correlate with the English EOC Assessments.

- **Epsilen (Project Share) Introduction**

Objective: To allow participants to become familiar with the purpose and features of Epsilen (Project Share) and learn to navigate the Epsilen environment. In addition, participants will begin to develop a professional e-portfolio.<sup>46</sup>

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<sup>45</sup> Source: Texas Education Agency (May 2010). *Curriculum Update* (Newsletter), Issue I, Volume 1.

<sup>46</sup> Source: Evaluators' analysis of English I and II EOC Success Academy materials and documentation.

## **ENGLISH I & II EOC SUCCESS EXPERT REVIEW PROTOCOL**

*Review the English I and II EOC Success academy materials and respond to each question by following the instructions provided separately. Think about the materials from the presenter/ trainer perspective, as well as from the teacher participant perspective.*

### **Description of PD Academy Content [RQ1A]**

*We are interested in your perspective of the content and activities of the PD academy.*

1. Describe the content and activities of the English I and II EOC Success academy based on your review and understanding of the goals of the academy. How does this PD academy compare/contrast to other teacher PD with similar objectives?
2. What do you think are the strengths of the PD academy training materials?
3. What do you think are the weaknesses of the PD academy training materials?
4. What changes to existing materials and/or inclusion of new material would you recommend?

### **Best Practices for English Language Arts Instruction [RQ1C]**

*As an English language arts and reading expert, we are interested in your opinion of the alignment of the PD academy materials with best practices for English language arts instruction.*

5. Does the content of the English I and II EOC Success academy reflect best practices for instruction in English? Why or why not? Please be explicit in your description of the “best practices” citing specific references to support your claims.
6. What, if anything, do you perceive as lacking from the content?
7. In your expert opinion, what do you perceive as strengths of the English I and II EOC Success academy?

### **State English Language Arts and Reading (ELAR) Standards:**

#### **Texas Essential Knowledge and Skills (TEKS) [RQ1D]**

*Based on your understanding of the ELAR Texas Essential Knowledge and Skills (TEKS), we are interested in your opinion about the alignment of the academy materials to relevant ELAR TEKS.*

8. Does the content of the PD academy align with the relevant state standards (ELAR TEKS) for students taking the English I and II and ESOL I and II courses who are expected to take the English I and II EOC assessments? Why or why not?
9. What appropriate state standards (ELAR TEKS), if any, are not addressed in the PD academy materials?

**National ELA and Reading Standards: [NCTE/IRA Principles & Standards for English](#)**

*Based on your understanding of the NCTE/IRA standards for the English Language Arts, we are interested in your opinion about the alignment of the PD academy materials to the NCTE/IRA standards.*

10. What appropriate national standards for English does the academy address?
11. What appropriate national standards for English, if any, are not addressed in the academy?

**Best Practices for Teacher PD: NSDC Standards for Staff Development [RQ1B]**

*We are interested in your perspectives of the extent to which you think this PD academy is reflective of best practices for teacher professional development based on the content, context, and process standards established by the National Staff Development Council (NSDC). Be sure to cite specific reasons and evidence to support your opinions.*

***NSDC Content Standards for Staff Development***

12. To what extent do you think the materials can help educators create a learning environment that is organized and demonstrates an appreciation for all students, including English language learners (ELL) and students with disabilities?
13. To what extent do you think that the training materials help increase participants' understanding of how the English I and II EOCs are structured?
14. To what extent do you think that the training materials encourage quality teaching by providing tangible instructional strategies for participants to support students' academic achievement? In your response, comment on the instructional strategies that are incorporated in the training materials.
15. To what extent do you think that the training materials encourage the proper use of classroom assessments (e.g., formative assessments, diagnostic assessments)?
16. To what extent do you think that the training materials equip educators with the skills to engage families and other stakeholders in the learning process (e.g., consensus building, cultural competence)?

***NSDC Context Standards for Staff Development***

17. To what extent do the instructional strategies described in the academy materials correspond with best practices for working with adult learners? What evidence did you find to support your observation?
18. What evidence, if any, did you find of participants being organized into professional learning communities?
19. What evidence, if any, did you find of participants having opportunities to participate in follow-up activities in order to extend their learning beyond the face-to-face academy?

***NSDC Process Standards for Staff Development***

20. To what extent do you think that the PD academy helps participants use data and research to inform decision-making and collaboration in their classrooms/schools/ professional learning communities?
21. To what extent do you think that the PD academy effectively incorporates technology in the delivery of professional development? Are there other ways in which technology could be incorporated into this PD academy?
22. Is the amount of time allotted for this academy (1 day) sufficient? What is your opinion, based solely on reviewing the materials, about the amount of time allocated to each activity throughout the academy? Explain.

## **MATH EXPERT REVIEW PANEL BACKGROUND**

### **Relevant Legislation and Goals**

Texas Senate Bill 1031 (2007) called for the development of “end-of-course (EOC) assessment instruments for secondary-level courses in Algebra I, Algebra II, Geometry, Biology, Chemistry, Physics, English I, English II, English III, World Geography, World History and United States History.” The purpose of the EOC assessments is to measure students’ academic performance in core high school courses and to become part of the graduation requirements beginning with the freshman class of 2011–12. The EOC assessments for lower-level courses must include questions to determine readiness for advanced coursework. The assessments for higher-level courses will include a series of special purpose questions to measure college readiness and the need for developmental coursework in higher education. In addition, a student’s score on each EOC assessment will be worth 15% of the student’s final grade for that course.<sup>47</sup>

Rider 42 of Article III of the General Appropriations Act of the 81st Texas Legislature (2009) called for increasing the reading, math, and college and career readiness for students throughout the state of Texas. Under this appropriation, funding was set aside to support the implementation of scientifically validated and research-based instructional strategies. Campuses on which students were struggling to meet the grades 3, 5, and 8 Texas Assessment of Knowledge and Skills’ (TAKS) reading and/or mathematics standards are being targeted.

Based on this legislation, the Texas Education Agency (TEA) developed the professional development (PD) academies that are the focus of this expert review. These PD academies incorporate several sets of standards, frameworks, and tools with which you should be familiar.

### **Goals and Description of Rider 42 Professional Development Academies**

The Texas Education Agency (TEA) created PD academies in Spring 2010 to provide teachers with in-depth training in mathematics, English language arts (ELA), and science. The goals of the PD include helping teachers to:

- Facilitate the appropriate use of data to drive instructional planning,
- Align instruction to the Texas Essential Knowledge and Skills (TEKS),
- Accelerate instruction or provide interventions for struggling students
- Transition into an online environment for future professional development opportunities, and
- Incorporate research-based strategies to improve the academic language skills of English language learners.

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<sup>47</sup> Source: Texas Education Agency, [http://www.tea.state.tx.us/index3.aspx?id=3302&menu\\_id=793](http://www.tea.state.tx.us/index3.aspx?id=3302&menu_id=793).

The participant guides, presenter notes, PowerPoint presentations, videos, handouts, and other materials for these PD academies are the subject of the review by three Expert Panels:

#### **Math PD Academies for Math Expert Panel Review**

- Algebra I EOC Success
- MSTAR Math Academy for Grades 5-6
- MSTAR Math Academy for Grades 7-8

#### **ELA PD Academies for ELA Expert Panel Review**

- English I & II EOC Success

#### **Science PD Academies for Science Expert Panel Review**

- Biology EOC Success
- Science Academies for Grades 5-8
- Science TEKS Overview K-12

PD academies for Algebra II EOC Success, Geometry EOC Success, English III EOC Success, Chemistry EOC Success, and Physics EOC Success will be developed in Spring 2011 and implemented in Summer 2011. Materials for these PD academies will be the subject of a separate review in Spring/Summer 2011.

#### **Standards, Frameworks, and Tools**

Math Expert Panel members should be familiar with these standards, frameworks, and tools. Please note that while comparisons to national standards have been listed as helpful background knowledge and can inform revisions and additions to existing professional development materials, content developers were not charged to address national standards during the development of state products.

#### ***Texas College and Career Readiness Standards (CCRS)***

The 79<sup>th</sup> Texas Legislature passed House Bill 1, the “Advancement of College Readiness in Curriculum,” Section 28.008 of the Texas Education Code, to increase the number of students who are college and career ready when they graduate from high school. The Texas College and Career Readiness Standards (CCRS) that resulted from that legislation were developed and assessed by vertical teams composed of secondary and postsecondary faculty across the content areas of English/language arts, mathematics, science, and social studies. Vertical teams used a multi-level framework that focuses on subject matter and the way it is organized and presented in the classroom.

Incorporated into the Texas Essential Knowledge and Skills (TEKS) in 2008, the CCRS emphasize secondary-level content knowledge that stimulates students to engage in deeper levels of thinking. The framework of the CCRS recognizes that at a postsecondary level, students must (1) have core foundational knowledge of a discipline and be able to use that knowledge with facility and fluency; and

(2) be able to understand the vertical structure of a discipline and how knowledge expands from the initial study of a topic.<sup>48</sup>

To learn more and to familiarize yourself with these standards, visit:

<http://www.theccb.state.tx.us/index.cfm?objectid=EAE69736-B39D-F3FF-EA777519F1F0348B>

### ***English Language Proficiency Standards (ELPS)***

The English Language Proficiency Standards (ELPS) developed by TEA outline English language proficiency level descriptors and student expectations for English language learners (ELLs). School districts are required to implement this section as an integral part of each subject in the required curriculum. The ELPS are published along with the Texas Essential Knowledge and Skills (TEKS) for each subject in the required curriculum (ELA/reading, math, science, social studies).<sup>49</sup>

To learn more and to familiarize yourself with these standards, visit:

<http://ritter.tea.state.tx.us/curriculum/biling/elps.html>

### ***Response to Intervention (RtI)***

Response to Intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RtI, schools identify students at risk for poor learning outcomes and monitor individual student progress. In addition, schools provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness. RtI also helps schools identify students with learning disabilities or other disabilities.<sup>50</sup> The Texas Education Agency, in collaboration with the Response to Intervention Coordinating Council (RtICC), is in the planning phase of collecting RtI anecdotes from the field.<sup>51</sup>

To learn more about RtI and to familiarize yourself with what TEA is doing with RtI, visit:

<http://www.rti4success.org/> and <http://www.tea.state.tx.us/index2.aspx?id=5817>

### ***Texas Essential Knowledge and Skills (TEKS) for Math***

The TEKS are the State of Texas' curriculum standards for students in kindergarten through Grade 12. Educators use these standards as guidelines in forming their curriculum goals and lesson plans.

To learn more and to familiarize yourself with these standards, visit:

<http://ritter.tea.state.tx.us/rules/tac/chapter111/index.html>

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<sup>48</sup> Source: Biology EOC Success documentation.

<sup>49</sup> Source: Texas Education Agency, <http://ritter.tea.state.tx.us/curriculum/biling/elps.html>.

<sup>50</sup> Source: National Center on Response to Intervention, <http://www.rti4success.org/>.

<sup>51</sup> Source: Texas Education Agency, <http://www.tea.state.tx.us/index2.aspx?id=5817>.

### ***National Council of Teachers of Mathematics (NCTM) Principles and Standards for School Mathematics***

The NCTM is a public voice of mathematics education supporting teachers to ensure equitable mathematics learning of the highest quality for all students. Math experts on the national level suggest that these standards guide instruction on what students should know at each grade level or after completing each type of math course.<sup>52</sup>

To learn more and to familiarize yourself with these standards, visit:

<http://standards.nctm.org/document/index.htm>

### ***Project Share (Epsilen)***

Project Share is a partnership between TEA, Epsilen (an e-learning platform), and The New York Times Knowledge Network. This initiative will provide for online content delivery through teaching, collaborating and networking.<sup>53</sup> Project Share will be utilized to deliver ongoing PD modules and to facilitate online professional learning communities for PD participants. An overview of this platform is provided in the math PD academies. To learn more or to view a demo, visit:

[www.projectsharetexas.org](http://www.projectsharetexas.org)

### ***Texas Response to Curriculum Focal Points (TxRCFP) grades K-8***

Based on the Texas Essential Knowledge and Skills (TEKS), the TxRCFP document identifies critical areas for mathematics instruction at each grade level. This document is mentioned in the MSTAR Math Academy PDs and is a key component of the Algebra Readiness Initiative. To learn more, visit:

[http://txar.org/docs/txcfps\\_final\\_2\\_1\\_10.pdf](http://txar.org/docs/txcfps_final_2_1_10.pdf)

### ***MSTAR Universal Screener grades 5-8, or Math Supplemental Diagnostic Screening Instrument***

A screening tool for students in grades 5-8 which will allow teachers to target and assess specific Curriculum Focal Points. Information about this screener is integrated in the MSTAR Math Academy for Grades 5-6 and Grades 7-8 and is part of the Algebra Readiness Initiative. To learn more, visit:

[http://www.utsystem.edu/ipsi/docs/alg\\_readiness\\_toolkit/AlgebraReadinessInitiativeno.pdf](http://www.utsystem.edu/ipsi/docs/alg_readiness_toolkit/AlgebraReadinessInitiativeno.pdf)

### ***National Mathematics Advisory Panel (NMAP)***

The National Mathematics Advisory Panel provided recommendations for educational outcomes that increase the likelihood of student readiness for high school algebra.<sup>54</sup> These recommendations are referenced in the MSTAR Math Academy for Grades 5-6 and Grades 7-8 and are part of the Algebra Readiness Initiative. To learn more, visit:

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<sup>52</sup> Source: National Council of Teachers of Mathematics, <http://standards.nctm.org/document/index.htm>.

<sup>53</sup> Source: Texas Education Agency, <http://tea.epsilen.com/Public/Home.aspx>.

<sup>54</sup> Source: MSTAR Math Academy documentation.

<http://www2.ed.gov/about/bdscomm/list/mathpanel/report/final-report.pdf>

***National Staff Development Council (NSDC) Standards for Staff Development***

“NSDC views high quality staff development programs as essential to creating schools in which all students and staff members are learners who continually improve their performance.”<sup>55</sup> The expert review protocols are based on the framework of these standards so that experts will be able to judge the extent to which the PD training materials are reflective of best practices for teacher PD. To learn more and to familiarize yourself with these standards, visit:

<http://www.nsd.org/standards/index.cfm>

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<sup>55</sup> Source: National Staff Development Council (NSDC), <http://www.nsd.org/standards/index.cfm>.

## **MATH EXPERT REVIEW PANEL INSTRUCTIONS**

Expert panel members should review and evaluate the materials located on the USB flash drive that was provided for the three math PD academies in terms of the following:

- Content of the PD academies
- Best practices for math instruction
- State Texas Essential Knowledge and Skills (TEKS) math standards
- National math standards
- Best practices for teacher professional development

### **Use of Materials**

Agreement to serve as a panelist requires that materials may not be used or shared in any way outside of the review process.

### **Protocols**

Three protocols, one for each math PD academy provided separately, have been developed to guide your reviews. An overview of each academy accompanies each protocol to provide an understanding of the context of the program implementation and schedule of activities. Please review and evaluate all training materials for three math PD academies including Algebra I EOC Success, MSTAR Math Academy for Grades 5-6, and MSTAR Math Academy for Grades 7-8, which are located on the USB flash drive you received. As an expert reviewer, please provide any feedback that is relevant in your review of the materials as you respond to the open-ended questions on each protocol.

### **Reports**

All three expert review panel members will prepare individual written reports of findings for each academy. In your reports, provide specific reasons or evidence supporting your expert opinions. Please feel free to cite relevant research or other similar programs with which you are familiar. In doing so, be sure to provide the appropriate citations at the end of your document in a list of references in APA format. When you are finished with your report, send an electronic version of the report to Tony Marchesi at ICF via email at [AMarchesi@icfi.com](mailto:AMarchesi@icfi.com).

### **Conference Call with ICF and Other Math Expert Panel Members**

All three math expert review panel members will participate in a conference call to discuss the synthesis of findings with ICF and each other based on individual reports from each panel member. ICF will moderate the conference call and panel members will have the opportunity to review the reports that were submitted by the other math expert review panel members. The purpose of this call will be to synthesize findings from the expert review of all materials for each of the three academies.

## **Use of Findings**

The evaluation team will incorporate findings from the expert reviews in reports and presentations to TEA and the Texas Legislature to inform program improvement.

## **MSTAR MATH ACADEMY FOR GRADES 5-6 OVERVIEW**

Participants will examine the “big ideas” in the Grades 5-6 mathematics TEKS and learn strategies to prepare students for success in algebra. Participants will explore hands-on, student-centered lessons designed to provide connections to and strengthen participants' knowledge of the middle-school mathematics that is critical for success in algebra, the College and Career Readiness Standards (CCRS), English Language Proficiency Standards (ELPS), and Response to Intervention (RtI). Sessions will provide Texas teachers and administrators with online resources and follow-up activities through an online interactive platform as well as allow educators to build online professional learning communities for further development and growth.<sup>56</sup>

The Middle-School Students in Texas: Algebra Ready (MSTAR) Academy for teachers in Grades 5-6 and campus leaders has a goal to improve overall mathematics instruction and student achievement in order to meet end-of-course Algebra I standards in ninth grade/high school and to ensure postsecondary readiness.<sup>57</sup>

The MSTAR Math Academy for Grades 5-6 was developed in early 2010 and 262 trainers attended regional training of trainers (TOTs) in May 2010 to be trained to implement the academy statewide. The MSTAR Math Academy for Grades 5-6 consists of three days of face-to-face training, and teachers have been participating in this training since June 2010. Face-to-face training will be followed by on-line follow-up training (using Project Share) that will begin in fall 2010. The MSTAR Math Academy for Grades 5-6 includes the following components as organized by the suggested schedule established by the developer.

### **Day One**

- **Introduction to MSTAR**

Objective: Participants will become familiar with the combined face-to-face and on-line professional development (PD) design to be implemented from summer 2010 through summer 2011.

- **What is Algebra Readiness?**

Objective: Participants will (a) discuss what it means for a student to be ready for algebra, (b) investigate the Texas Response to the Curriculum Focal Points (TxRCFP), and (c) become familiar with some recommendations for improving student success in algebra (e.g., the NMAP recommendations).

- **Supporting All Students**

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<sup>56</sup> Source: Texas Education Agency (May 2010). *Curriculum Update* (Newsletter), Issue I, Volume 1.

<sup>57</sup> Source: Professional development academy materials.

Objective: Participants will become familiar with the legal requirements for and desirable components of an effective RtI plan, the relevant components in the ELPS, and the research-based recommendations for assisting struggling students in the IES Practice Guide.

- **MSTAR Universal Screener Overview**

Objective: Participants will understand (a) the relationship of the MSTAR Universal Screener to the TXRCFP and algebra readiness, (b) the purpose of the MSTAR Universal Screener, and (c) the knowledge representations used in the MSTAR Universal Screener.

- **Learning Community: Project Share**

Objective: Participants will experience the use of various components of Project Share (e.g., blogs, wikis, and lessons).

## Day Two

- **Comparing Fractions**

Objective: Participants will identify the big ideas within the math curriculum and practice applying ELPS- and RtI-based instructional strategies to promote student success at comparing fractions.

- **Equivalent Fractions**

Objective: Participants will practice applying ELPS- and RtI-based instructional strategies to promote student success at working with equivalent fractions.

- **Fraction/Decimal Relationships**

Objective: Participants will practice applying ELPS- and RtI-based instructional strategies to promote student success at working with fraction/decimal relationships.

- **Add & Subtract Fractions**

Objective: Participants will practice applying ELPS- and RtI-based instructional strategies to promote student success at addition and subtractions of fractions.

## Day Three

- **Progression of Rate and Ratio**

Objective: Participants will practice applying ELPS- and RtI-based instructional strategies to promote student success at understanding and working with ratios.

- **Building Understanding of Ratio**

Objective: Participants will practice applying ELPS- and Rtl-based instructional strategies to promote student success at understanding and working with ratios. Participants will explore the concept of rate as a special kind of ratio.<sup>58</sup>

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<sup>58</sup> *Source:* Evaluators' analysis of MSTAR Math Academy for Grades 5-6 materials and documentation.

## **MSTAR MATH ACADEMY FOR GRADES 5-6 EXPERT REVIEW PROTOCOL**

*Review the MSTAR Math Academy for Grades 5-6 materials and respond to each question by following the instructions provided separately. Think about the materials from the presenter/trainer perspective, as well as from the teacher participant perspective.*

### **Description of PD Academy Content [RQ1A]**

*We are interested in your perspective of the content and activities of the PD academy.*

1. Describe the content and activities of the Math Academy for Grades 5-6 based on your review and understanding of the goals of the academy. How does this PD academy compare/contrast to other teacher PD with similar objectives?
2. What do you think are the strengths of the PD academy training materials?
3. What do you think are the weaknesses of the PD academy training materials?
4. What changes to existing materials and/or inclusion of new material would you recommend?

### **Best Practices for Math Instruction [RQ1C]**

*As a math education expert, we are interested in your professional opinion of the alignment of the PD academy materials with best practices for math instruction.*

5. Does the content of the Math Academy for Grades 5-6 reflect best practices for instruction in math? Why or why not? Please be explicit in your description of the “best practices” citing specific references to support your claims.
6. What, if anything, do you perceive as lacking from the content?
7. Are the learner profiles included in the academy appropriate for teachers who work with students in Grades 5 and 6? Why or why not?
8. In your expert opinion, what do you perceive as strengths of the MSTAR Math Academy for Grades 5-6?

### **State Math Standards: Texas Essential Knowledge and Skills (TEKS) [RQ1D]**

*Based on your understanding of the Texas Essential Knowledge and Skills (TEKS) for math (in grades 5-6 and beyond), we are interested in your opinion about the alignment of the PD academy materials to the relevant TEKS.*

9. Does the content of the PD academy align with the relevant state math standards (TEKS) for students taking the math courses in grades 5 and 6? Why or why not?
10. What appropriate state math standards (TEKS), if any, are not addressed in the PD academy materials?

### **National Math Standards: [NCTM Principles and Standards for School Mathematics](#) [RQ1D]**

*Based on your understanding of the NCTM math standards (in grades 5-6 and beyond), we are interested in your opinion about the alignment of the PD academy materials to the NCTM Principles and Standards for School Mathematics.*

11. What appropriate national math standards does the academy address? Were these standards adequately addressed?
12. What appropriate national math standards, if any, are not addressed by the academy?

**Best Practices for Teacher PD: NSDC Standards for Staff Development [RQ1B]**

*We are interested in your perspectives of the extent to which you think this PD academy is reflective of best practices for teacher professional development based on the content, context, and process standards established by the National Staff Development Council (NSDC). Be sure to cite specific reasons and evidence to support your opinions.*

***NSDC Content Standards for Staff Development***

13. To what extent do you think the materials can help educators create a learning environment that is organized and demonstrates an appreciation for all students, including English language learners (ELL) and students with disabilities?
14. To what extent do you think that the training materials help increase participants' content knowledge to support students' academic achievement? In your response, comment on the subject matter that is incorporated in the training materials.
15. To what extent do you think that the training materials encourage quality teaching by providing tangible instructional strategies for participants to support students' academic achievement? In your response, comment on the instructional strategies that are incorporated in the training materials.
16. To what extent do you think that the training materials encourage the proper use of classroom assessments (e.g., formative assessments, diagnostic assessments)?
17. To what extent do you think that the training materials equip educators with the skills to engage families and other stakeholders in the learning process (e.g., consensus building, cultural competence)?

***NSDC Context Standards for Staff Development***

18. To what extent do the instructional strategies described in the academy materials correspond with best practices for working with adult learners? What evidence did you find to support your observation?
19. What evidence, if any, did you find of participants being organized into professional learning communities?
20. What evidence, if any, did you find of participants having opportunities to participate in follow-up activities in order to extend their learning beyond the face-to-face academy?

***NSDC Process Standards for Staff Development***

21. To what extent do you think that the PD academy helps participants use data and research to inform decision-making and collaboration in their classrooms/schools/ professional learning communities?

22. To what extent do you think that the PD academy effectively incorporates technology in the delivery of professional development? Are there other ways in which technology could be incorporated into this PD academy?
23. Is the amount of time allotted for this academy (3 days) sufficient? What is your opinion, based solely on reviewing the materials, about the amount of time allocated to each activity throughout the academy? Explain.

## **MSTAR MATH ACADEMY FOR GRADES 7-8 OVERVIEW**

Participants will examine the “big ideas” in the Grades 7-8 mathematics TEKS and learn strategies to prepare students for success in algebra. Participants will explore hands-on, student-centered lessons designed to provide connections to and strengthen participants' knowledge of the middle-school mathematics that is critical for success in algebra, the College and Career Readiness Standards (CCRS), English Language Proficiency Standards (ELPS), and Response to Intervention (RtI). Sessions will provide Texas teachers and administrators with online resources and follow-up activities through an online interactive platform as well as allow educators to build online professional learning communities for further development and growth.<sup>59</sup>

The MSTAR Math Academy for Grades 7-8 was developed in early 2010 and 262 trainers attended regional training of trainers (TOTs) in May 2010 to be trained to implement the academy statewide. The MSTAR Math Academy for Grades 7-8 consists of three days of face-to-face training, and teachers have been participating in this training since June 2010. Face-to-face training will be followed by on-line follow-up training (using Project Share) that will begin in fall 2010. The MSTAR Math Academy for Grades 7-8 includes the following components as organized by the suggested schedule established by the developer.

The Middle-School Students in Texas: Algebra Ready (MSTAR) Academy for teachers in Grades 7-8 and campus leaders has a goal to improve overall mathematics instruction and student achievement in order to meet end-of-course Algebra I standards in ninth grade/high school and to ensure postsecondary readiness.

### **Day One**

- **Introduction to MSTAR**

Objective: Participants will become familiar with the combined face-to-face and on-line professional development (PD) design to be implemented from summer 2010 through summer 2011.

- **What is Algebra Readiness?**

Objective: Participants will (a) discuss what it means for a student to be ready for algebra, (b) investigate the Texas Response to the Curriculum Focal Points (TxRCFP), and (c) become familiar with some recommendations for improving student success in algebra (e.g., the NMAP recommendations).

- **Supporting All Students**

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<sup>59</sup> Source: Texas Education Agency (May 2010). *Curriculum Update* (Newsletter), Issue I, Volume 1.

Objective: Participants will become familiar with the legal requirements for and desirable components of an effective RtI plan, the relevant components in the ELPS, and the research-based recommendations for assisting struggling students in the IES Practice Guide.

- **MSTAR Universal Screener Overview**

Objective: Participants will understand (a) the relationship of the MSTAR Universal Screener to the TXRCFP and algebra readiness, (b) the purpose of the MSTAR Universal Screener, and (c) the knowledge representations used in the MSTAR Universal Screener.

- **Learning Community: Project Share**

Objective: Participants will experience the use of various components of Project Share (e.g., blogs, wikis, and lessons).

## Day Two

- **Why Proportionality?**

Objective: Participants will discuss how and when proportional reasoning is taught, articulate the concepts of ratio, rate, and proportionality (focal point and content), and trace the proportionality focal point through grades 7 and 8.

- **Proportional Thinking**

Objective: Participants will recognize proportional situations vs. situations that are not proportional, discuss algebraic thinking and tie in student errors, identify the structure of word problems, and review research connections (RtI and ELPS).

- **Percent, Proportionality and Probability**

Objective: Participants will practice debugging faulty thinking regarding percent and proportionality and make connections using hands-on activities focused on geometric probability, geometry and measurement, and connecting ratio and proportion to geometric probability.

## Day Three

- **Geometry Connections to Proportionality**

Objective: Participants will gain experience connecting geometry to proportionality.

- **Percentages, Percent Change, and Proportionality: Multiple Representations.**

Objective: Participants will explore multiple representations of percentages, percent change, and proportionality.

- **Percentages, Percent Change, and Proportionality: Multiple Perspectives**

Objective: Participants will explore multiple perspectives of percentages, percent change, and proportionality.

- **Embedded Proportionality**

Objective: Participants will explore proportionality by solving problems, review conclusions from the research, and pose final questions regarding proportionality.<sup>60</sup>

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<sup>60</sup> Source: Evaluators' analysis of MSTAR Math Academy for Grades 7-8 materials and documentation.

## **MSTAR MATH ACADEMY FOR GRADES 7-8 EXPERT REVIEW PROTOCOL**

*Review the MSTAR Math Academy for Grades 7-8 materials and respond to each question by following the instructions provided separately. Think about the materials from the presenter/trainer perspective, as well as from the teacher participant perspective.*

### **Description of PD Academy Content [RQ1A]**

*We are interested in your perspective of the content and activities of the PD academy.*

1. Describe the content and activities of the Math Academy for Grades 7-8 based on your review and understanding of the goals of the academy. How does this PD academy compare/contrast to other teacher PD with similar objectives?
2. What do you think are the strengths of the PD academy training materials?
3. What do you think are the weaknesses of the PD academy training materials?
4. What changes to existing materials and/or inclusion of new material would you recommend?

### **Best Practices for Math Instruction [RQ1C]**

*As a math education expert, we are interested in your professional opinion of the alignment of the PD academy materials with best practices for math instruction.*

5. Does the content of the Math Academy for Grades 7-8 reflect best practices for instruction in math? Why or why not? Please be explicit in your description of the “best practices” citing specific references to support your claims.
6. What, if anything, do you perceive as lacking from the content?
7. Are the learner profiles included in the academy appropriate for teachers who work with students in Grades 7 and 8? Why or why not?
8. In your expert opinion, what do you perceive as strengths of the MSTAR Math Academy for Grades 7-8?

### **State Math Standards: Texas Essential Knowledge and Skills (TEKS) [RQ1D]**

*Based on your understanding of the Texas Essential Knowledge and Skills (TEKS) for math (in grades 7-8 and beyond), we are interested in your opinion about the alignment of the PD academy materials to the relevant TEKS.*

9. Does the content of the PD academy align with the relevant state math standards (TEKS) for students taking the math courses in grades 7 and 8? Why or why not?
10. What appropriate state math standards (TEKS), if any, are not addressed in the PD academy materials?

**National Math Standards: [NCTM Principles and Standards for School Mathematics](#) [RQ1D]**

*Based on your understanding of the NCTM math standards (in grades 7-8 and beyond), we are interested in your opinion about the alignment of the PD academy materials to the NCTM Principles and Standards for School Mathematics.*

11. What appropriate national math standards does the academy address? Were these standards adequately addressed?
12. What appropriate national math standards, if any, are not addressed by the academy?

**Best Practices for Teacher PD: NSDC Standards for Staff Development [RQ1B]**

*We are interested in your perspectives of the extent to which you think this PD academy is reflective of best practices for teacher professional development based on the content, context, and process standards established by the National Staff Development Council (NSDC). Be sure to cite specific reasons and evidence to support your opinions.*

***NSDC Content Standards for Staff Development***

13. To what extent do you think the materials can help educators create a learning environment that is organized and demonstrates an appreciation for all students, including English language learners (ELL) and students with disabilities?
14. To what extent do you think that the training materials help increase participants' content knowledge to support students' academic achievement? In your response, comment on the subject matter that is incorporated in the training materials.
15. To what extent do you think that the training materials encourage quality teaching by providing tangible instructional strategies for participants to support students' academic achievement? In your response, comment on the instructional strategies that are incorporated in the training materials.
16. To what extent do you think that the training materials encourage the proper use of classroom assessments (e.g., formative assessments, diagnostic assessments)?
17. To what extent do you think that the training materials equip educators with the skills to engage families and other stakeholders in the learning process (e.g., consensus building, cultural competence)?

***NSDC Context Standards for Staff Development***

18. To what extent do the instructional strategies described in the academy materials correspond with best practices for working with adult learners? What evidence did you find to support your observation?
19. What evidence, if any, did you find of participants being organized into professional learning communities?
20. What evidence, if any, did you find of participants having opportunities to participate in follow-up activities in order to extend their learning beyond the summer academy?

***NSDC Process Standards for Staff Development***

21. To what extent do you think that the PD academy helps participants use data and research to inform decision-making and collaboration in their classrooms/schools/ professional learning communities?
22. To what extent do you think that the PD academy effectively incorporates technology in the delivery of professional development? Are there other ways in which technology could be incorporated into this PD academy?
23. Is the amount of time allotted for this academy (3 days) sufficient? What is your opinion, based solely on reviewing the materials, about the amount of time allocated to each activity throughout the academy? Explain.

## ALGEBRA I EOC SUCCESS ACADEMY OVERVIEW

### ACADEMY OVERVIEW

Participants will examine the concepts in the Algebra I Texas Essential Knowledge and Skills (TEKS) and learn strategies to prepare students for success on the Algebra I End-of-Course (EOC) assessment (to view the blueprint for this assessment that shows the five objectives of the assessment, visit <http://ritter.tea.state.tx.us/student.assessment/eoc/AlgebraBlueprint.pdf>).

Participants will explore hands-on, student-centered lessons. (NOTE: the developer created two lessons for each EOC objective, but only presented one during the PD academy, while others may be put on Project Share). These sessions provide connections to and strengthen participants' knowledge of College and Career Readiness Standards (CCRS), English Language Proficiency Standards (ELPS), and Response to Intervention (RtI). Participants (Texas teachers and administrators) will also be provided with online resources and follow-up activities through an online interactive platform as well as have opportunities to build online professional learning communities.<sup>61</sup>

The Algebra I EOC Success academy was developed in early 2010 and 192 trainers attended regional training of trainers (TOTs) in May 2010 to be trained to implement the academy statewide. The Algebra I EOC Success academy consists of two days of face-to-face training, and teachers have been participating in this training since June 2010. Face-to-face training will be followed by on-line follow-up training (using Project Share) that will begin in fall 2010. The Algebra I EOC Success academy includes the following components as organized by the suggested schedule established by the developer.

#### Day One

- **Introduction**

Objective: To get participants centered, set session norms, state the purpose of the academy (i.e., state why they are here), motivate participants to embrace change, introduce participants to support frameworks (RtI, ELPS, and CCRS), and provide an overview of day one of the academy.

#### REPRESENTATIONS AND SUPPORT

- **EOC Objective 1 Lesson 1: Describe functional relationships in a variety of ways**

Objective: Investigate students' understandings and misunderstandings of Objective 1. Build conceptual understanding and address misunderstandings and obstacles for student understanding. Build awareness of differentiation and enrichment strategies within Tier 1 instruction (RtI).

- **EOC Objective 3 Lesson 2: Demonstrate an understanding of linear functions**

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<sup>61</sup> Source: Texas Education Agency (May 2010). *Curriculum Update* (Newsletter), Issue I, Volume 1.

Objective: Investigate students' understandings and misunderstandings of Objective 3. Build conceptual understanding and address misunderstandings and obstacles for student understanding. Build awareness of differentiation and enrichment strategies within Tier 1 instruction (RtI).

## Day Two

### VOCABULARY

- **EOC Objective 2 Lesson 1: Demonstrate an understanding of the properties and attributes of functions**

Objective: Investigate students' understandings and misunderstandings of Objective 2. Build conceptual understanding and address misunderstandings and obstacles for student understanding. Build awareness of differentiation and enrichment strategies within Tier 1 instruction (RtI).

- **EOC Objective 3 Lesson 1: Demonstrate an understanding of linear functions**

Objective: Investigate students' understandings and misunderstandings of Objective 3. Build conceptual understanding and address misunderstandings and obstacles for student understanding. Build awareness of differentiation and enrichment strategies within Tier 1 instruction (RtI).

### COLLEGE AND CAREER READINESS STANDARDS

- **EOC Objective 4 Lesson 2: Formulate and use linear equations and inequalities**

Objective: Investigate students' understandings and misunderstandings of Objective 4. Build conceptual understanding and address misunderstandings and obstacles for student understanding. Build awareness of differentiation and enrichment strategies within Tier 1 instruction (RtI).

- **EOC Objective 5 Lesson 2: Demonstrate an understanding of quadratic and other nonlinear functions**

Objective: Investigate students' understandings and misunderstandings of Objective 5. Build conceptual understanding and address misunderstandings and obstacles for student understanding. Build awareness of differentiation and enrichment strategies within Tier 1 instruction (RtI).

### ONLINE

- **Texas Tour (Review of Project Share)**

Objective: To introduce participants to Project Share and the Epsilon environment by showing them the “Texas Tour.”<sup>62</sup>

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<sup>62</sup> *Source:* Evaluators’ analysis of Algebra I EOC Success materials and documentation.

## **ALGEBRA I EOC SUCCESS EXPERT REVIEW PROTOCOL**

*Review the Algebra I EOC Success academy materials and respond to the following questions by following the instructions provided separately. Think about the materials from the presenter/trainer perspective, as well as from the teacher participant perspective.*

### **Description of PD Academy Content [RQ1A]**

*We are interested in your perspective of the content and activities of the PD academy.*

1. Describe the content and activities of the Algebra I EOC Success academy based on your review and understanding of the goals of the academy. How does this PD academy compare/contrast to other teacher PD with similar objectives?
2. What do you think are the strengths of the PD academy training materials?
3. What do you think are the weaknesses of the PD academy training materials?
4. What changes to existing materials and/or inclusion of new material would you recommend?

### **Best Practices for Math Instruction [RQ1C]**

*As a math education expert, we are interested in your professional opinion of the alignment of the PD academy materials with best practices for math instruction.*

5. Does the content of the Algebra I EOC Success academy reflect best practices for instruction in math? Why or why not? Please be explicit in your description of the “best practices” citing specific references to support your claims.
6. What, if anything, do you perceive as lacking from the content?
7. Are the lessons (i.e., math problems) included in the academy appropriate for students taking algebra I who will be expected to take the EOC assessment? Why or why not?
8. In your expert opinion, what do you perceive as strengths of the Algebra I EOC Success academy?

### **State Math Standards: Texas Essential Knowledge and Skills (TEKS) [RQ1D]**

*Based on your understanding of the Texas Essential Knowledge and Skills (TEKS) for math, we are interested in your opinion about the alignment of the PD academy materials to the relevant TEKS.*

9. Does the content of the PD academy align with the relevant state math standards (TEKS) for students taking the algebra I course? Why or why not?
10. What appropriate state math standards (TEKS), if any, are not addressed in the PD academy materials?

**National Math Standards: [NCTM Principles and Standards for School Mathematics](#) [RQ1D]**

*Based on your understanding of the NCTM math standards, we are interested in your opinion about the alignment of the PD academy materials to the NCTM Principles and Standards for School Mathematics.*

11. What appropriate national math standards does the academy address? Were these standards adequately addressed?
12. What appropriate national math standards, if any, are not addressed by the content of the academy?

**Best Practices for Teacher PD: NSDC Standards for Staff Development [RQ1B]**

*We are interested in your perspectives of the extent to which you think this PD academy is reflective of best practices for teacher professional development based on the content, context, and process standards established by the National Staff Development Council (NSDC). Be sure to cite specific reasons and evidence to support your opinions.*

***NSDC Content Standards for Staff Development***

13. To what extent do you think the materials can help educators create a learning environment that is organized and demonstrates an appreciation for all students, including English language learners (ELL) and students with disabilities?
14. To what extent do you think that the training materials help increase participants' content knowledge to support students' academic achievement? In your response, comment on the subject matter that is incorporated in the training materials.
15. To what extent do you think that the training materials help increase participants' understanding of how the English I and II EOCs are structured?
16. To what extent do you think that the training materials encourage quality teaching by providing tangible instructional strategies for participants to support students' academic achievement? In your response, comment on the instructional strategies that are incorporated in the training materials.
17. To what extent do you think that the training materials encourage the proper use of classroom assessments (e.g., formative assessments, diagnostic assessments)?
18. To what extent do you think that the training materials equip educators with the skills to engage families and other stakeholders in the learning process (e.g., consensus building, cultural competence)?

***NSDC Context Standards for Staff Development***

19. To what extent do the instructional strategies described in the academy materials correspond with best practices for working with adult learners? What evidence did you find to support your observation?
20. What evidence, if any, did you find of participants being organized into professional learning communities?

21. What evidence, if any, did you find of participants having opportunities to participate in follow-up activities in order to extend their learning beyond the summer academy?

***NSDC Process Standards for Staff Development***

22. To what extent do you think that the PD academy helps participants use data and research to inform decision-making and collaboration in their classrooms/schools/professional learning communities?
23. To what extent do you think that the PD academy effectively incorporates technology in the delivery of professional development? Are there other ways in which technology could be incorporated into this PD academy?
24. Is the amount of time allotted for this academy (2 days) sufficient? What is your opinion, based solely on reviewing the materials, about the amount of time allocated to each activity throughout the academy? Explain.

## **SCIENCE EXPERT REVIEW PANEL BACKGROUND**

### **Relevant Legislation and Goals**

Texas Senate Bill 1031 (2007) called for the development of “end-of-course (EOC) assessment instruments for secondary-level courses in Algebra I, Algebra II, Geometry, Biology, Chemistry, Physics, English I, English II, English III, World Geography, World History and United States History.” The purpose of the EOC assessments is to measure students’ academic performance in core high school courses and to become part of the graduation requirements beginning with the freshman class of 2011–12. The EOC assessments for lower-level courses must include questions to determine readiness for advanced coursework. The assessments for higher-level courses will include a series of special purpose questions to measure college readiness and the need for developmental coursework in higher education. In addition, a student’s score on each EOC assessment will be worth 15% of the student’s final grade for that course.<sup>63</sup>

Rider 42 of Article III of the General Appropriations Act of the 81st Texas Legislature (2009) called for increasing the reading, math, and college and career readiness for students throughout the state of Texas. Under this appropriation, funding was set aside to support the implementation of scientifically validated and research-based instructional strategies. Campuses on which students were struggling to meet the grades 3, 5, and 8 Texas Assessment of Knowledge and Skills’ (TAKS) reading and/or mathematics standards are being targeted.

Based on this legislation, the Texas Education Agency (TEA) developed the professional development (PD) academies that are the focus of this expert review. These PD academies incorporate several sets of standards, frameworks, and tools with which you should be familiar.

### **Goals and Description of Rider 42 Professional Development Academies**

The Texas Education Agency (TEA) created PD academies in Spring 2010 to provide teachers with in-depth training in mathematics, English language arts (ELA), and science. The goals of the PD include helping teachers to:

- Facilitate the appropriate use of data to drive instructional planning,
- Align instruction to the Texas Essential Knowledge and Skills (TEKS),
- Accelerate instruction or provide interventions for struggling students
- Transition into an online environment for future professional development opportunities, and
- Incorporate research-based strategies to improve the academic language skills of English language learners.

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<sup>63</sup> Source: Texas Education Agency, [http://www.tea.state.tx.us/index3.aspx?id=3302&menu\\_id=793](http://www.tea.state.tx.us/index3.aspx?id=3302&menu_id=793).

The participant guides, presenter notes, PowerPoint presentations, videos, handouts, and other materials for these PD academies are the subject of the review by three Expert Panels:

#### **Math PD Academies for Math Expert Panel Review**

- Algebra I EOC Success
- MSTAR Math Academy for Grades 5-6
- MSTAR Math Academy for Grades 7-8

#### **ELA PD Academies for ELA Expert Panel Review**

- English I & II EOC Success

#### **Science PD Academies for Science Expert Panel Review**

- Biology EOC Success
- Science Academies for Grades 5-8
- Science TEKS Overview K-12

PD academies for Algebra II EOC Success, Geometry EOC Success, English III EOC Success, Chemistry EOC Success, and Physics EOC Success will be developed in Spring 2011 and implemented in Summer 2011. Materials for these PD academies will be the subject of a separate expert review in Spring/Summer 2011.

#### **Standards, Frameworks, and Tools**

Science Expert Panel members should be familiar with these standards, frameworks, and tools. Please note that while comparisons to national standards have been listed as helpful background knowledge and can inform revisions and additions to existing professional development materials, content development partners were not charged to address national standards during the development of state products.

#### ***Texas College and Career Readiness Standards (CCRS)***

The 79<sup>th</sup> Texas Legislature passed House Bill 1, the “Advancement of College Readiness in Curriculum,” Section 28.008 of the Texas Education Code, to increase the number of students who are college and career ready when they graduate from high school. The Texas College and Career Readiness Standards (CCRS) that resulted from that legislation were developed and assessed by vertical teams composed of secondary and postsecondary faculty across the content areas of English/language arts, mathematics, science, and social studies. Vertical teams used a multi-level framework that focuses on subject matter and the way it is organized and presented in the classroom.

Incorporated into the Texas Essential Knowledge and Skills (TEKS) in 2008, the CCRS emphasize secondary-level content knowledge that stimulates students to engage in deeper levels of thinking. The framework of the CCRS recognizes that at a postsecondary level, students must (1) have core

foundational knowledge of a discipline and be able to use that knowledge with facility and fluency; and (2) be able to understand the vertical structure of a discipline and how knowledge expands from the initial study of a topic.<sup>64</sup> To learn more and to familiarize yourself with these standards, visit:

<http://www.theccb.state.tx.us/index.cfm?objectid=EAE69736-B39D-F3FF-EA777519F1F0348B>

### ***English Language Proficiency Standards (ELPS)***

The English Language Proficiency Standards (ELPS) developed by TEA outline English language proficiency level descriptors and student expectations for English language learners (ELLs). School districts are required to implement this section as an integral part of each subject in the required curriculum. The ELPS are published along with the Texas Essential Knowledge and Skills (TEKS) for each subject in the required curriculum (ELA/reading, math, science, social studies).<sup>65</sup> To learn more and to familiarize yourself with these standards, visit: <http://ritter.tea.state.tx.us/curriculum/biling/elps.html>

### ***Response to Intervention (RtI)***

Response to Intervention integrates assessment and intervention within a multi-level prevention system to maximize student achievement and to reduce behavior problems. With RtI, schools identify students at risk for poor learning outcomes and monitor individual student progress. In addition, schools provide evidence-based interventions and adjust the intensity and nature of those interventions depending on a student's responsiveness. RtI also helps schools identify students with learning disabilities or other disabilities.<sup>66</sup> The Texas Education Agency, in collaboration with the Response to Intervention Coordinating Council (RtICC), is in the planning phase of collecting RtI anecdotes from the field.<sup>67</sup>

To learn more about RtI and to familiarize yourself with what TEA is doing with RtI, visit:

<http://www.rti4success.org/> or <http://www.tea.state.tx.us/index2.aspx?id=5817>

### ***Texas Essential Knowledge and Skills (TEKS) for Science***

The TEKS are the State of Texas' curriculum standards for students in kindergarten through Grade 12. Educators use these standards as guidelines in forming their curriculum goals and lesson plans. **BE SURE TO NOTICE THE DIFFERENCE BETWEEN THE 1998 TEKS AND THE 2010 TEKS. THE 2010 TEKS SAY "Beginning with School Year 2010-2011" NEXT TO THEM.**

To learn more and to familiarize yourself with these standards, visit:

<http://ritter.tea.state.tx.us/rules/tac/chapter112/index.html>

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<sup>64</sup> Source: Biology EOC Success documentation.

<sup>65</sup> Source: Texas Education Agency, <http://ritter.tea.state.tx.us/curriculum/biling/elps.html>.

<sup>66</sup> Source: National Center on Response to Intervention, <http://www.rti4success.org/>.

<sup>67</sup> Source: Texas Education Agency, <http://www.tea.state.tx.us/index2.aspx?id=5817>.

### ***National Science Education Standards (NSES)***

The National Science Education Standards were produced by the National Research Council in 1995 and published in 1996. The standards were the result of four years of work by twenty-two scientific and science education societies and over 18,000 individual contributors. The National Science Teachers Association is now part of an ongoing effort to implement the standards in classrooms throughout the country.<sup>68</sup> To learn more and to familiarize yourself with these standards, visit:

<http://www.nsta.org/publications/nses.aspx>

### ***American Association for the Advancement of Science (AAAS) Benchmarks for Science Literacy***

Specifies how students should progress toward science literacy, recommending what they should know and be able to do by the time they reach certain grade levels.<sup>69</sup>

To learn more, visit:

<http://www.project2061.org/publications/bsl/online/index.php?home=true>

### ***Biological Sciences Curriculum Study (BSCS) 5E Instructional Model***

The BSCS 5E model describes a teaching sequence that can be used for entire programs, specific units, and individual lessons. That model consists of the following phases: engagement, exploration, explanation, elaboration, and evaluation. The BSCS 5E Instructional Model plays a significant role in the curriculum development process as well as the enactment of curricular materials in science classrooms. The 5E Instructional model is utilized in the Science Academies for Grades 5-8 and the Biology EOC Success academy.<sup>70</sup>

To learn more, visit:

<http://www.bsccs.org/pdf/bsccs5eexecsummary.pdf>

### ***Project Share (Epsilen)***

Project Share is a partnership between TEA, Epsilen (an e-learning platform), and The New York Times Knowledge Network. This initiative will provide for online content delivery through teaching, collaborating and networking.<sup>71</sup> Project Share will be utilized to deliver ongoing PD modules and to facilitate online professional learning communities for PD participants. An overview and introduction to this platform is provided in science PD academies.

To learn more or to view a demo, visit:

[www.projectsharetexas.org](http://www.projectsharetexas.org)

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<sup>68</sup> Source: National Science Teachers Association; <http://www.nsta.org/publications/nses.aspx>.

<sup>69</sup> Source: <http://www.project2061.org/publications/bsl/online/index.php?home=true>.

<sup>70</sup> Source: BSCS 5E Executive Summary, <http://www.bsccs.org/pdf/bsccs5eexecsummary.pdf>.

<sup>71</sup> Source: Texas Education Agency, <http://tea.epsilen.com/Public/Home.aspx>.

***National Staff Development Council (NSDC) Standards for Staff Development***

“NSDC views high quality staff development programs as essential to creating schools in which all students and staff members are learners who continually improve their performance.”<sup>72</sup> The expert review protocols are based on the framework of these standards so that experts will be able to judge the extent to which the PD training materials are reflective of best practices for teacher PD.

To learn more and to familiarize yourself with these standards, visit:

<http://www.nsd.org/standards/index.cfm>

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<sup>72</sup> Source: National Staff Development Council (NSDC), <http://www.nsd.org/standards/index.cfm>.

## **SCIENCE EXPERT PANEL REVIEW INSTRUCTIONS**

Expert panel members should review and evaluate the materials located on the USB flash drive that was provided for the three science PD academies in terms of the following:

- Content of the PD academies
- Best practices for science instruction
- State Texas Essential Knowledge and Skills (TEKS) science standards
- National science standards
- Best practices for teacher professional development

### **Use of Materials**

Agreement to serve as a panelist requires that materials may not be used or shared in any way outside of the review process.

### **Protocols**

Three protocols, one for each science PD academy provided separately, have been developed to guide your reviews. An overview of each academy accompanies each protocol to provide an understanding of the context of the program implementation and schedule of activities. Please review and evaluate all training materials for three math PD academies including Science Academies for Grades 5-8, Biology EOC Success, and Science TEKS Overview K-12, which are located on the USB flash drive you received. As an expert reviewer, please provide any feedback that is relevant in your review of the materials as you respond to the open-ended questions on each protocol.

### **Reports**

All three expert review panel members will prepare individual written reports of findings for each academy. In your reports, provide specific reasons or evidence supporting your expert opinions. Please feel free to cite relevant research or other similar programs with which you are familiar. In doing so, be sure to provide the appropriate citations at the end of your document in a list of references in APA format. When you are finished with your report, send an electronic version of the report to Tony Marchesi at ICF via email at [AMarchesi@icfi.com](mailto:AMarchesi@icfi.com).

### **Conference Call with ICF and Other Science Expert Panel Members**

All three science expert review panel members will participate in a conference call to discuss the synthesis of findings with ICF and each other based on individual reports from each panel member. ICF will moderate the conference call and panel members will have the opportunity to review the reports that were submitted by the other science expert review panel members. The purpose of this call will be to synthesize findings from the expert review of all materials for each of the three academies.

## Use of Findings

The evaluation team will incorporate findings from the expert reviews in reports and presentations to TEA and the Texas Legislature to inform program improvement.

## SCIENCE ACADEMIES FOR GRADES 5-8 OVERVIEW

Participants will experience a total immersion into the new science 2010 TEKS for grades 5-8 during this professional development. Participants will explore hands-on, student-centered lessons framed in the research-based 5E instructional model. These sessions provide connections to and strengthen participants' knowledge of College and Career Readiness Standards (CCRS), English Language Proficiency Standards (ELPS), and Response to Intervention (RtI).<sup>73</sup>

The Science Academies for Grades 5-8 was developed in early 2010 and 237 trainers attended regional training of trainers (TOTs) in May 2010 to be trained to implement the academy statewide. The Science Academies for Grades 5-8 consists of three days of face-to-face training, and teachers have been participating in this training since June 2010. Face-to-face training will be followed by on-line follow-up training (using Project Share) that will begin in fall 2010. The Science Academies for Grades 5-8 includes the following components as organized by the suggested schedule established by the developer.

### Day One

- **Introduction**  
Objective: To get participants centered, set session norms, state the purpose of the academy (i.e., state why they are here), motivate participants to embrace change, introduce participants to support frameworks, and provide an overview of day one of the academy.
- **Analyzing the Changes of the New TEKS**  
Objective: To introduce participants to new science 2010 TEKS for Grades 5-8 and analyze the differences between 1998 Science TEKS and 2010 Science TEKS.
- **Investigating CCRS, ELPS, and RtI**  
Objective: To introduce participants to ELPS, CCRS, and RtI standards and support frameworks and look deeper into the contents of these standards and support frameworks.
- **GRADE 5 LESSON: Constant Changes**  
Objective: To present a sample Grade 5 lesson on Earth's changing surface using the 5E model while helping participants understand how ELPS can be incorporated into a science lesson.

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<sup>73</sup> Source: Texas Education Agency (May 2010). *Curriculum Update* (Newsletter), Issue I, Volume 1.

## Day Two

- **GRADE 6 LESSON: Moving and Shaking**

Objective: To present a sample Grade 6 lesson on plate tectonics and earthquakes/volcanoes using the 5E Model to show how RtI frameworks can help support instruction and student learning in the science classroom.

- **GRADE 7 LESSON: Texas, Our Texas**

Objective: To engage participants more deeply into the Standards and Support Frameworks (CCRS, ELPS, and RtI).

## Day Three

- **GRADE 8 LESSON: An Elevated View**

Objective: To present a sample Grade 8 lesson on interpreting topographic maps using the 5E Model and explore how the lesson components relate to CCRS in the science classroom.

- **Building the Foundations for EOC HS Exams**

Objective: To present an opportunity for participants to see how what students learn in grades K-8 build the foundation for success in HS EOC assessments.

- **Concluding Activities**

Objective: To present an opportunity for participants to set a goal for the following school year, record obstacles to that goal, record actions to overcome the obstacle and to reflect on what they learned in the academy.<sup>74</sup>

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<sup>74</sup> Source: Evaluators' analysis of Science Academies for Grades 5-8 materials and documentation.

## **SCIENCE ACADEMIES FOR GRADES 5-8 EXPERT REVIEW PROTOCOL**

*Review the Science Academies for Grades 5-8 materials and respond to each question by following the instructions provided separately. Think about the materials from the presenter/ trainer perspective, as well as from the teacher participant perspective.*

### **Description of PD Academy Content [RQ1A]**

*We are interested in your perspective of the content and activities of the PD academy.*

1. Describe the content and activities of the Science Academies for Grades 5-8 based on your review and understanding of the goals of the academy. How does this PD academy compare/contrast to other teacher PD with similar objectives?
2. What do you think are the strengths of the PD academy training materials?
3. What do you think are the weaknesses of the PD academy training materials?
4. What changes to existing materials and/or inclusion of new material would you recommend?

### **Best Practices for Science Instruction [RQ1C]**

*As a science education expert, we are interested in your professional opinion of the alignment of the PD academy materials with best practices for science instruction.*

5. Does the content of the Science Academies for Grades 5-8 reflect best practices for instruction in science? Why or why not? Please be explicit in your description of the “best practices” citing specific references to support your claims.
6. What, if anything, do you perceive as lacking from the content?
7. Are the lessons included in the academy appropriate for students in Grades 5-8? Why or why not?
8. In your expert opinion, what do you perceive as strengths of the Science Academies for Grades 5-8?

### **State Science Standards: Texas Essential Knowledge and Skills (TEKS) [RQ1D]**

*Based on your understanding of the Texas Essential Knowledge and Skills (TEKS) for science (in grades 5-8 and beyond), we are interested in your opinion about the alignment of the PD academy materials to the relevant TEKS.*

9. Does the content of the PD academy align with the relevant state science standards (TEKS) for students taking the science courses in grades 5 through 8? Why or why not?
10. What appropriate state science standards (TEKS), if any, are not addressed in the PD academy materials?

### **National Science Standards: National Science Education Standards [RQ1D]**

*Based on your understanding of the National Science Educational standards (in grades 5-8 and beyond), we are interested in your opinion about the alignment of the PD academy materials to the National Science Education Standards.*

11. What appropriate national science standards does the academy address? Were these standards adequately addressed?
12. What appropriate national science standards, if any, are not addressed by the academy?

### **Best Practices for Teacher PD: NSDC Standards for Staff Development [RQ1B]**

*We are interested in your perspectives of the extent to which you think this PD academy is reflective of best practices for teacher professional development based on the content, context, and process standards established by the National Staff Development Council (NSDC).*

#### ***NSDC Content Standards for Staff Development***

13. To what extent do you think the materials can help educators create a learning environment that is organized and demonstrates an appreciation for all students, including English language learners (ELL) and students with disabilities?
14. To what extent do you think that the training materials help increase participants' content knowledge to support students' academic achievement?
15. To what extent do you think that the training materials encourage quality teaching by providing tangible instructional strategies for participants to support students' academic achievement? In your response, comment on the instructional strategies that are incorporated in the training materials.
16. To what extent do you think that the training materials encourage the proper use of classroom assessments (e.g., formative assessments, diagnostic assessments)?
17. To what extent do you think that the training materials equip educators with the skills to engage families and other stakeholders in the learning process (e.g., consensus building, cultural competence)?

#### ***NSDC Context Standards for Staff Development***

18. To what extent do the instructional strategies described in the academy materials correspond with best practices for working with adult learners? What evidence did you find to support your observation?
19. What evidence, if any, did you find of participants being organized into professional learning communities?
20. What evidence, if any, did you find of participants having opportunities to participate in follow-up activities in order to extend their learning beyond the face-to-face academy?

***NSDC Process Standards for Staff Development***

21. To what extent do you think that the PD academy helps participants use data and research to inform decision-making and collaboration in their classrooms/schools/professional learning communities?
22. To what extent do you think that the PD academy effectively incorporates technology in the delivery of professional development? Are there other ways in which technology could be incorporated into this PD academy?
23. Is the amount of time allotted for this academy (3 days) sufficient? What is your opinion, based solely on reviewing the materials, about the amount of time allocated to each activity throughout the academy? Explain.

## **BIOLOGY EOC SUCCESS ACADEMY OVERVIEW**

Participants will examine the concepts in the new Biology 2010 TEKS and learn strategies to prepare students for success on the End of Course (EOC) assessment during this professional development (PD) session. Participants will explore hands-on, student-centered lessons framed in the research-based 5E instructional model. These sessions provide connections to and strengthen participants' knowledge of College and Career Readiness Standards (CCRS), English Language Proficiency Standards (ELPS), and Response to Intervention (RtI).<sup>75</sup>

The Biology EOC Success academy was developed in early 2010 and 172 trainers attended regional training of trainers (TOTs) in May 2010 to be trained to implement the academy statewide. The Biology EOC Success academy consists of three days of face-to-face training, and teachers have been participating in this training since June 2010. Face-to-face training will be followed by on-line follow-up training (using Project Share) that will begin in fall 2010. The Biology EOC Success academy includes the following components as organized by the suggested schedule established by the developer.

### **Day One**

- **Introduction**

Objective: To get participants centered, set session norms, state the purpose of the academy (i.e., state why they are here), motivate participants to embrace change, introduce participants to support frameworks, and provide an overview of day one of the academy.

- **Biology End of Course**

Objective: To introduce participants to State of Texas Assessment of Academic Readiness (STAAR), End of Course Exams (EOCs) in Science (Biology being one of three), End of Course rollout, Biology TEKS to be tested, the current Biology EOC Blueprint, and results of the pilot test of Biology EOCs.

- **TEKS Introduction Comparison**

Objective: To engage participants in the analysis of TEKS by looking at specific changes from the 1998 TEKS and the 2010 TEKS introductory statements and concept statements.

- **TEKS Process Skills Comparison**

Objective: To engage participants in the analysis of TEKS by looking at specific changes from the 1998 TEKS and the 2010 TEKS process skills and types of investigations; discuss implications for classroom instruction and students.

- **Lesson: The Role of Enzymes**

Objective: To present a sample lesson on the role of enzymes using the 5E Model.

- **Design an Investigation**

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<sup>75</sup> Source: Texas Education Agency (May 2010). *Curriculum Update* (Newsletter), Issue I, Volume 1.

Objective: To provide participants with an opportunity to analyze the new TEKS and choose objectives that could include one type of investigation.

### Day Two

- **Standards and Support Frameworks (CCRS/ELPS/RtI)**

Objective: To introduce participants to the Standards and Support Frameworks (College and Career Readiness Standards – CCRS, English Language Proficiency Standards – ELPS, and Response to Intervention – RtI)

- **Lesson: Energy and Matter in Ecosystems**

Objective: To present a sample lesson on energy and matter in ecosystems using the 5E model.

- **Lesson Debrief**

Objective: To explore how the previous lesson components relate to CCRS, ELPS, and RtI.

### Day Three

- **Lesson: Evidence for Evolution**

Objective: To present a sample lesson on evidence for evolution using the 5E model.

- **Lesson Debrief**

Objective: To explore how the previous lesson components relate to CCRS, ELPS, and RtI.

- **Lesson: Energy and Matter in Cells**

Objective: To present a sample lesson on energy and matter in cells using the 5E model.

- **Lesson Debrief**

Objective: To explore how the previous lesson components relate to CCRS, ELPS, and RtI.

- **Setting Goals**

Objective: To present an opportunity for participants to set a goal for the following school year, record obstacles to that goal, record actions to overcome the obstacle and to reflect on what they learned in the academy.<sup>76</sup>

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<sup>76</sup> Source: Evaluators' analysis of Biology EOC Success materials and documentation.

## **BIOLOGY EOC SUCCESS ACADEMY EXPERT REVIEW PROTOCOL**

*Review the Biology EOC Success academy materials and respond to each question by following the instructions provided separately. Think about the materials from the presenter/trainer perspective, as well as from the teacher participant perspective.*

### **Description of PD Academy Content [RQ1A]**

*We are interested in your perspective of the content and activities of the PD academy.*

1. Describe the content and activities of the Biology EOC Success academy based on your review and understanding of the goals of the academy. How does this PD academy compare/contrast to other teacher PD with similar objectives?
2. What do you think are the strengths of the PD academy training materials?
3. What do you think are the weaknesses of the PD academy training materials?
4. What changes to existing materials and/or inclusion of new material would you recommend?

### **Best Practices for Science Instruction [RQ1C]**

*As a science education expert, we are interested in your professional opinion of the alignment of the PD academy materials with best practices for science instruction.*

5. Does the content of the Biology EOC Success academy reflect best practices for instruction in science? Why or why not? Please be explicit in your description of the “best practices” citing specific references to support your claims.
6. What, if anything, do you perceive as lacking from the content?
7. Are the lessons included in the academy appropriate for the students who will be taking a biology course and expected to take the Biology EOC assessment? Why or why not?
8. In your expert opinion, what do you perceive as strengths of the Biology EOC Success academy?

### **State Science Standards: Texas Essential Knowledge and Skills (TEKS) [RQ1D]**

*Based on your understanding of the Texas Essential Knowledge and Skills (TEKS) for science, we are interested in your opinion about the alignment of the PD academy materials to the relevant TEKS.*

9. Does the content of the PD academy align with the relevant state science standards (TEKS) for students who will be expected to take the Biology EOC assessment? Why or why not?
10. What appropriate state science standards (TEKS), if any, are not addressed in the PD academy materials?

### **National Science Standards: National Science Education Standards [RQ1D]**

*Based on your understanding of the National Science Educational standards, we are interested in your opinion about the alignment of the PD academy materials to the National Science Education Standards.*

11. What appropriate national science standards does the academy address? Were these standards adequately addressed?
12. What appropriate national science standards, if any, are not addressed by the academy?

**Best Practices for Teacher PD: NSDC Standards for Staff Development [RQ1B]**

*We are interested in your perspectives of the extent to which you think this PD academy is reflective of best practices for teacher professional development based on the content, context, and process standards established by the National Staff Development Council (NSDC).*

***NSDC Content Standards for Staff Development***

13. To what extent do you think the materials can help educators create a learning environment that is organized and demonstrates an appreciation for all students, including English language learners (ELL) and students with disabilities?
14. To what extent do you think that the training materials help increase participants' content knowledge to support students' academic achievement? In your response, comment on the subject matter that is incorporated in the training materials.
15. To what extent do you think that the training materials help increase participants' understanding of how the Biology EOC assessment is structured?
16. To what extent do you think that the training materials encourage quality teaching by providing tangible instructional strategies for participants to support students' academic achievement? In your response, comment on the instructional strategies that are incorporated in the training materials.
17. To what extent do you think that the training materials encourage the proper use of classroom assessments (e.g., formative assessments, diagnostic assessments)?
18. To what extent do you think that the training materials equip educators with the skills to engage families and other stakeholders in the learning process (e.g., consensus building, cultural competence)?

***NSDC Context Standards for Staff Development***

19. To what extent do the instructional strategies described in the academy materials correspond with best practices for working with adult learners? What evidence did you find to support your observation?
20. What evidence, if any, did you find of participants being organized into professional learning communities?
21. What evidence, if any, did you find of participants having opportunities to participate in follow-up activities in order to extend their learning beyond the face-to-face academy?

***NSDC Process Standards for Staff Development***

22. To what extent do you think that the PD academy helps participants use data and research to inform decision-making and collaboration in their classrooms/schools/ professional learning communities?
23. To what extent do you think that the PD academy effectively incorporates technology in the delivery of professional development? Are there other ways in which technology could be incorporated into this PD academy?
24. Is the amount of time allotted for this academy (3 days) sufficient? What is your opinion, based solely on reviewing the materials, about the amount of time allocated to each activity throughout the academy? Explain.

## SCIENCE TEKS OVERVIEW K-12 ACADEMY OVERVIEW

Participants will examine the new science Texas Essential Knowledge and Skills (TEKS) while strengthening their knowledge of the College and Career Readiness Standards (CCRS), Response to Intervention (RtI), and the English Language Proficiency Standards (ELPS). Participants will explore models of vertical alignment that strengthen their knowledge of science concepts and processes. This training will also provide an opportunity for participants to garner professional support from other educators through shared resources and ongoing academic networking.<sup>77</sup>

The Science TEKS Overview K-12 academy was developed in early 2010 and 282 trainers attended regional training of trainers (TOTs) in May 2010 to be trained to implement the academy statewide. The Science TEKS Overview K-12 academy consists of one day of face-to-face training, and teachers have been participating in this training since June 2010. The Science TEKS Overview K-12 academy includes the following components as organized by the suggested schedule established by the developer.

### Day One

- **Introduction**

Objective: To get participants centered, set session norms, state the purpose of the academy (i.e., state why they are here), and motivate participants to embrace change.

- **Course Introduction Analyses**

Objective: To provide an overview of the academy.

- **Types of Investigations**

Objective: To allow participants to define types of scientific investigations (descriptive, comparative, and experimental), to describe key words used to differentiate each type of study, practice identifying types of investigations, and identify the types of investigations included in the 2010 TEKS.

- **Integration of Tools and Equipment**

Objective: To provide an opportunity for teachers to investigate the grade levels at which tools and equipment are first introduced in the science classroom.

- **Support Frameworks**

Objective: To deepen participants' understanding of Support Frameworks (CCRS, ELPS, and RtI) for student success by providing opportunities to review information on the frameworks, discuss the frameworks, and to understand how the frameworks support student success using student profiles.

- **Rigor/Relevance Analysis**

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<sup>77</sup> Source: Texas Education Agency (May 2010). *Curriculum Update* (Newsletter), Issue I, Volume 1.

Objective: To use the Rigor/Relevance Framework to analyze the concept student expectations of the Science TEKS.

- **Assessments**

Objective: To provide information about the new state assessments.

- **Wrap-up Graphic Organizer**

Objective: To provide an opportunity for participants to synthesize course information by creating a wrap-up graphic organizer.<sup>78</sup>

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<sup>78</sup> Source: Science TEKS Overview K-12 academy documentation.

## **SCIENCE TEKS OVERVIEW K-12 ACADEMY EXPERT REVIEW PROTOCOL**

*Review the Science TEKS Overview K-12 academy materials and respond to each question by following the instructions provided separately. Think about the materials from the presenter/ trainer perspective, as well as from the teacher participant perspective.*

### **Description of PD Academy Content [RQ1A]**

*We are interested in your perspective of the content and activities of the PD academy.*

1. Describe the content and activities of the Science TEKS Overview K-12 academy based on your review and understanding of the goals of the academy. How does this PD academy compare/contrast to other teacher PD with similar objectives?
2. What do you think are the strengths of the PD academy training materials?
3. What do you think are the weaknesses of the PD academy training materials?
4. What changes to existing materials and/or inclusion of new material would you recommend?

### **Best Practices for Science Instruction [RQ1C]**

*As a science education expert, we are interested in your professional opinion of the alignment of the PD academy materials with best practices for science instruction.*

5. Does the content of the Science TEKS Overview K-12 reflect best practices for instruction in science? Why or why not? Please be explicit in your description of the “best practices” citing specific references to support your claims.
6. What, if anything, do you perceive as lacking from the content?
7. In your expert opinion, what do you perceive as strengths of the Science TEKS Overview K-12 academy?

### **State Science Standards: Texas Essential Knowledge and Skills (TEKS) [RQ1D]**

*Based on your understanding of the Texas Essential Knowledge and Skills (TEKS) for science, we are interested in your opinion about the alignment of the PD academy materials to the relevant TEKS.*

8. Does the content of the PD academy align with the relevant state science standards (TEKS) for students in grade K-12 science classes? Why or why not?
9. What appropriate state science standards (TEKS), if any, are not addressed in the PD academy materials?

### **National Science Standards: National Science Education Standards [RQ1D]**

*Based on your understanding of the National Science Education Standards, we are interested in your opinion about the alignment of the PD academy materials to the National Science Education Standards.*

10. What appropriate national science standards does the academy address? Were these standards adequately addressed?
11. What appropriate national science standards, if any, are not addressed by the academy?

**Best Practices for Teacher PD: NSDC Standards for Staff Development [RQ1B]**

*We are interested in your perspectives of the extent to which you think this PD academy is reflective of best practices for teacher professional development based on the content, context, and process standards established by the National Staff Development Council (NSDC). Be sure to cite specific reasons and evidence to support your opinions.*

***NSDC Content Standards for Staff Development***

12. To what extent do you think the materials can help educators create a learning environment that is organized and demonstrates an appreciation for all students, including English language learners (ELL) and students with disabilities?
13. To what extent do you think the PD academy helps participants analyze and understand the differences between the 1998 science TEKS and the 2010 science TEKS?
14. To what extent do you think that the training materials encourage quality teaching by providing tangible instructional strategies for participants to support students' academic achievement? In your response, comment on the instructional strategies that are incorporated in the training materials.
15. To what extent do you think that the training materials encourage the proper use of classroom assessments?
16. To what extent do you think that the training materials equip educators with the skills to engage families and other stakeholders in the learning process (e.g., consensus building, cultural competence)?

***NSDC Context Standards for Staff Development***

17. To what extent do the instructional strategies described in the academy materials correspond with best practices for working with adult learners? What evidence did you find to support your observation?
18. What evidence, if any, did you find of participants being organized into professional learning communities?
19. What evidence, if any, did you find of participants having opportunities to participate in follow-up activities in order to extend their learning beyond the face-to-face academy?

***NSDC Process Standards for Staff Development***

20. To what extent do you think that the PD academy helps participants use data and research to inform decision-making and collaboration in their classrooms/schools/ professional learning communities?

21. To what extent do you think that the PD academy effectively incorporates technology in the delivery of professional development? Are there other ways in which technology could be incorporated into this PD academy?
22. Is the amount of time allotted for this academy (1 day) sufficient? What is your opinion, based solely on reviewing the materials, about the amount of time allocated to each activity throughout the academy? Explain.

## **Appendix 5 - Expert Panel Biographies**

**Sylvia Linan-Thompson, Ph.D.**

*Associate Professor*

Department of Special Education, College of Education,  
Learning Disabilities/Behavior Disorders,

The University of Texas at Austin

*Associate Director*

CREATE

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Sylvia Linan-Thompson, Ph.D., is Associate Professor, Fellow in the Mollie V. Davis Professorship in Learning Disabilities, Department of Special Education, College of Education at The University of Texas at Austin. She is associate director of CREATE, examining the effect of instructional practices that enhance vocabulary and comprehension for middle school English language learners in content areas. Dr. Linan-Thompson is currently co-principal investigator of studies examining the oral language and literacy development in English and Spanish of Spanish speaking children, the efficacy of a 3-tiered model of reading intervention in general education classrooms and in bilingual classrooms. She has developed and examined reading interventions for struggling readers who are monolingual English speakers, English language learners, and bilingual students acquiring Spanish literacy. She has authored articles, chapters and a book on these topics and has developed instructional guides.

**Karen K. Wixson**

*Professor of Education*

School of Education

University of Michigan

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Karen K. Wixson is Professor of Education and was Dean of the School of Education from 1998-2005. Prior to receiving her doctorate in reading education at Syracuse University, she worked both as a remedial reading and a learning disabilities teacher. She has published widely in the areas of literacy curriculum, instruction, and assessment, and is co-author of a popular text on the assessment and instruction of reading and writing problems. She has been a long-time consultant to the National Assessment of Educational Progress (NAEP) reading tests and currently serves on the Planning Committee for the development of the 2007 NAEP Reading Framework. She recently served as Co-

Director and Principal Investigator for the U.S. Department of Education's Center for the Improvement of Early Reading Achievement (CIERA).

She has published widely in the areas of literacy curriculum, instruction, and assessment, and is co-author of a popular text on the assessment and instruction of reading and writing problems. She has been a long-time consultant to the National Assessment of Educational Progress reading tests, and recently served as Co-Director and Principal Investigator for the U.S. Department of Education's Center for the Improvement of Early Reading Achievement. She received her PhD from Syracuse University.

### **Patricia Pflaumer**

*English Language Arts Teacher*

Abington High School in Abington, MA

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Patricia Pflaumer leads an effort called Students Write to Be Heard, or SW2BH. The goal she sets for her students is for them to have written work published during the school year, whether in a literary magazine, school newspaper, or writing conference or contest. Through Students Write to Be Heard, her students learn about the query and editing process. They develop writing skills as well as confidence and pride in their talents, especially when they are recognized outside of class.

Patricia Pflaumer's Education, Licenses and Grants include a B.A. from Boston College in English, cum laude, 1994; and M.A. in Philosophy, 1999. Her professional licensure and grant awards include: English Language Arts 5-9 and 9-12; certification as a Qualified MELA-O Administrator (QMA); recipient of the College Board's Bob Costas Grant for the Teaching of Writing, 2010; and recipient of the Massachusetts Initiative for New Teachers' (MINT) Grant, 2001.

### **Anita Deck**

*Director*

West Virginia Parental Information and Resource Center

Phone: 304.252.0385 (Home), E-Mail: [asdeck00@yahoo.com](mailto:asdeck00@yahoo.com), Mailing Address: PO Box 356, Crab Orchard, WV 25827.

Anita Deck is the director of the West Virginia Parental Information and Resource Center (WV PIRC) that helps schools and school districts implement parent involvement activities that lead to improved student achievement and stronger partnerships between families and educators. She directs the design and delivery of technical assistance to meet Title I and No Child Left Behind parent involvement requirements at the state and/or county level.

Having taught in the public school system for 13 years, she plans, develops, and implements workshops and institutes for educators in areas such as inquiry-based learning, standards-based learning, reading in

the content area, and data-based decision making. She has contributed to culturally responsive corporate projects by developing content specific and integrated curriculum units. Anita Deck also prepares training materials in the areas of science, technology, engineering, and/or mathematics (STEM) for service delivery and client use as well as assisting in the evaluation of those services.

Anita Deck holds Bachelor's degrees in Biology and Education, the latter with specializations in General Science, Chemistry, Physics, and Biology, from Concord College. She also holds a Master's degree in Science Education from West Virginia University. Currently, Anita Deck is pursuing a doctorate in Integrative STEM Education from Virginia Tech.

### **Dr. Johnny Evans**

*Professor of Physics and Chemistry*

Lee University

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Dr. Evans joined the Department of Natural Sciences and Mathematics faculty in January of 2000. A 1993 graduate of Georgia College, now Georgia College and State University, Evans continued his education at the University of Florida, earning a Ph.D. in Physical Chemistry.

From 1998-2000, he was a post-doctoral associate at the University of Florida, developing instrumentation first for Oak Ridge National Laboratories and then for Savannah River Laboratories. He now serves as associate professor of Chemistry and Physics teaching physics, general chemistry, and upper division chemistry courses.

Dr. Evans actively pursues several research areas, including development of science education curriculum and innovative instructional tools, and development of unique sensors and detectors for various industries. Since coming to Lee he has been involved in writing/managing grants for research programs and professional development projects which have secured over \$1 million in external research funds.

### **Sara Christopherson**

*Science Writer, Editor, and Consultant*

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Sara Christopherson is a freelance science writer and editor, working primarily with middle school and high school science textbooks. She also writes for other science- and science education-related publications including trade books, museum interpretation/signage, and research publications.

Sara Christopherson provides consultant services as a reviewer and coordinator for state alignment studies nationwide, working with Norman Webb and his Webb Alignment process. She balances her writing and consulting work with teaching: conducting educational programming for the UW-Madison Arboretum and Madison's Olbrich Garden, teaching for UW-Madison's PEOPLE program, and lecturing for Introductory Botany in the UW-Madison Botany Department.

A graduate of Oberlin College in 2000, Sara Christopherson continued her education at the University of Wisconsin-Madison, earning her M.S. in Science Education.

### **Steven R. Lay**

*Professor of Mathematics*

Lee University

Phone: 423.614.8296, E-mail: [slay@leeuniversity.edu](mailto:slay@leeuniversity.edu), Mailing Address: 3222 Cascade Hills Dr. NW, Cleveland, TN 37312.

Steven Lay joined the Department of Natural Sciences and Mathematics at Lee University in the fall of 1998. An experienced college instructor, Lay came to Lee from the mission field of Japan, where he had been ministering since 1990.

Prior to his mission work, Steven Lay was a professor for nineteen years at Aurora University in Illinois, where he received the Excellence in Teaching Award in 1985. His M.A. and Ph.D. degrees in Mathematics were earned at the University of California at Los Angeles, and his B.A., also in Mathematics, was earned at Aurora where he returned to teach in 1971.

Steven Lay's areas of specialty are analysis and geometry. He teaches math classes at all levels, from developmental to upper division courses for majors. He has written four books, including three math texts: Principles of Algebra, Convex Sets and their Applications, and Analysis with an Introduction to Proof. The 4th edition of his analysis book became available in the spring of 2005. His newest book, Japanese: Language and Culture, is used as a text in a one-semester introduction to Japanese course that he teaches each spring

Steven Lay's work with Dr. Johnny Evans to train local math teachers with his INAT (Improving Numeracy and Algebraic Thinking) program was awarded a major grant in 2007 by the Tennessee Department of Education to fund training to seven school systems in the teaching of mathematics at the middle-school level.

## **Murray H. Siegel**

*Faculty Associate*

University of Arizona

Phone: 480.727.5006, E-Mail: [Murray.Siegel@asu.edu](mailto:Murray.Siegel@asu.edu), Mailing Address: 20159 N Geyser Dr., Maricopa, AZ 85138.

Murray H. Siegel is an instructor in the Applied Sciences and Mathematics Department at the Polytechnic Campus of Arizona State University. His Great Courses include various remedial classes (one of which is closely related to Algebra II) and a two-course sequence for future elementary school teachers, the subject matter of which can be found in Basic Math.

He received a B.S. in Physics from New York University College of Engineering. Dr. Siegel completed his graduate studies in mathematics education at Georgia State University, where he received his M.Ed., Ed.S., and Ph.D.

Dr. Siegel is known nationally as a mathematics leader in our public schools and much of his professional life has been devoted to adult education. His community workshops, college courses, college workshops, and videos have one purpose: to help students overcome mathematical anxiety and to provide his audiences with a picture of mathematics as a subject with logical underpinnings and great utility. In addition, he tries to focus on the connectivity of the various branches of mathematics as well as the beauty that exists throughout the subject.

## **Audrey Malagon**

*Assistant Professor*

Mercer University

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Dr. Audrey Malagon is an Assistant Professor of Mathematics at Mercer University in Macon, Ga. Her research area includes Lie algebras, quadratic forms, and Galois cohomology. She received her Ph.D. in Mathematics from Emory University in 2009 and has taught college mathematics at Mercer, Emory, and Agnes Scott College. Her commitment to mathematics education has been recognized with several teaching awards including: Project NExT Fellow by the Mathematical Association of America (2009-2010) and US Junior Oberwolfach Fellow, funded by National Science Foundation (2009).

Dr. Malagon is passionate about helping students increase their confidence and skills in the area of mathematics. In addition to teaching at the college level, Dr. Malagon owns a tutoring company that works with elementary, middle, and high school students and teaches mathematics for gifted high school students in the Summer Honors Program in Nebraska. She is a member of the Mathematical Association for America, the American Mathematical Society, and the Association for Women in Mathematics.

## **Appendix 6 – Regional TOT Sessions Observed**

Academy	Location	# Days	Dates
ELPS – Science (K-12)	San Antonio	2	4/22/10 to 4/23/10
Biology EOC Success	Houston	3	5/5/10 to 5/7/10
MSTAR Math Academy for Grades 5-6	Austin	2.5	5/10/10 to 5/14/10
MSTAR Math Academy for Grades 7-8	Austin	2.5	5/10/10 to 5/14/10
Science Academies for Grades 5-8	Houston	3	5/12/10 to 5/14/10
Science TEKS Overview K-12	Dallas	1	5/18/10
English I and II EOC Success	Austin	2	5/19/10 to 5/20/10
Algebra I EOC Success	Austin	3	6/01/10 to 6/03/10

# **Appendix 7 – Professional Development Selection Process**

### ***PD Session Selection Process***

A total of 760 professional development sessions were scheduled by the 20 ESCs at the time the research team needed to select trainings to observe. The following section describes the sampling approach taken to determining which sessions would be observed.

**Unit of Analysis.** The unit of analysis for this sampling plan was the PD sessions that were implemented across each of the seven Academies. The duration of these sessions varied for each content area. Table A7.1 displays the duration, in days, of each Academy.

Table A7.1. Duration of PD Sessions by Academy

<b>Academy</b>	<b>Duration of the Training (# of Days)</b>
MSTAR Math Academy for Grades 5-6	3
MSTAR Math Academy for Grades 7-8	3
Algebra I EOC Success	2
Science Academies for Grades 5-8	3
Science TEKS Overview K-12	1
Biology EOC Success	3
English I & II EOC Success	1

**Target Population.** When selecting the PD sessions to observe, PD sessions that were facilitated by trainers who attended the Regional TOT sessions were included. It is possible that some sessions may have been conducted by a trainer who did not attend the TOT but were trained subsequently by a TOT-trained instructor at their ESC. This group of trainers included in the observation sample also included master trainers, who are the presenters who led the Regional TOT sessions in spring 2010. These PD sessions are also known informally as “sanctioned trainings” because these Academies were implemented across the state in a uniform fashion according to the guidelines established by TEA and the developers. The key factors in determining whether a PD session was sanctioned were that: a) the duration (number of days) of the PD session was equal to the number of days intended by the developer and TEA, and b) the PD session was presented by trainers who attended one of the Regional TOTs.

**Sampling Frame.** To develop the sampling frame, the evaluation team began by extracting information from the 20 ESC’s catalogs and online registration systems about which teacher PD sessions were scheduled. At the time of sampling (May 14, 2010), the 20 ESCs had scheduled 760 teacher PD sessions across the seven Academies. These PD sessions were scheduled to take place between May 14, 2010 and January 19, 2011. These 760 PD sessions comprise the population to which findings can be generalized, as appropriate, however, not all 760 session were eligible for selection into the observation sample. For logistical reasons (e.g., scheduling, evaluation timeline, logic model proposed, etc.) only PD sessions held between June 21, 2010 and August 6, 2010 were eligible for selection into the observation

sample. Of the 760 PD sessions scheduled, 497 (65%) were eligible for selection due to the date range criteria. Table A7.2 lists the number of PD sessions by Academy in the final sampling frame.

Table A7.2. Number of PD Sessions by Academy in the Final Sampling Frame for Selection

Academy	N	%
MSTAR Math Academy for Grades 5-6	56	11%
MSTAR Math Academy for Grades 7-8	55	11%
Algebra I EOC Success	66	13%
Science Academies 5-8	61	12%
Science TEKS Overview K-12	129	26%
Biology EOC Success	58	12%
English I & II EOC Success	72	15%
<b>Total</b>	<b>497</b>	<b>100%</b>

**Selection Process.** To obtain a representative sample across the state, the research team selected 29 PD sessions for observation by the research team. As can be seen in Table A7.3, similar numbers of training sessions would be observed for each Academy (between 3 and 5). A stronger focus was placed on the middle-school math Academies, as the supplemental Algebra Readiness grant program is a focus of additional evaluation activities as part of the larger scope of this evaluation.

Table A7.3. Actual Number of PD Sessions Observed Across Academies

Academy	N	%
MSTAR Math Academy for Grades 5-6	5	17%
MSTAR Math Academy for Grades 7-8	5	17%
Algebra I EOC Success	4	14%
Science Academies 5-8	4	14%
Science TEKS Overview K-12	3	10%
Biology EOC Success	4	14%
English I & II EOC Success	4	14%
<b>Total</b>	<b>29</b>	<b>100%</b>

To choose 29 training sessions from the sampling frame of 497 PD sessions, the research team first categorized the ESC regions as large (serving more than 200,000 students), medium (serving between 100,000 and 199,999 students), or small (serving fewer than 100,000 students). The 497 PD sessions were then arrayed by region size. Sixty-three percent of the PD sessions were being held in large

regions, 21% were being held in medium regions, and 16% were being held in small regions. This proportion guided the selection of the 29 PD sessions for observations. However, in addition to proportions, the research team also stratified the sample such that at least one of each of the seven Academies was observed from each of the three groups of PD sessions based on region size.

To maintain these proportions, it was determined that 16 PD sessions would be from large regions, 7 PD sessions would be from medium regions, and 7 PD sessions would be from small regions (Table A7.4).

Table A7.4. PD Sessions for Observations by Region Size by Academy

Region Size	MSTAR Math Academy for Grades 5-6	MSTAR Math Academy for Grades 7-8	Algebra I EOC Success	Science Academies for Grades 5-8	Science TEKS Overview K-12	Biology EOC Success	English I & II EOC Success	Total
Large Regions	3	3	2	2	2	2	2	16
Medium Regions	1	1	1	1	1	1	1	7
Small Regions	1	1	1	1	0	1	1	6
<b>Total</b>	<b>5</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>29</b>

To randomly select sessions to observe in each cell of the above matrix (Table A7.4), the 497 individual PD sessions were listed in a case summary report, grouped by Academy and region size, and assigned a number from 1 to x (where x equals the highest number of PD sessions in that group). Using the Research Randomizer (<http://www.randomizer.org/form.htm>), random numbers were generated to select the PD sessions in each group by entering in the range and number of PD sessions to select from each group (Academy X region size). One exception to the random selection process was made for the selection of the Science TEKS Overview K-12 Academy so that these four, one-day PD sessions could be observed the day before or after another Academy.

PD Academy sessions observed covered the majority of the ESCs across the state (15 of the 20 ESCs). Observations took place during a seven-week period between June 21, 2010 and August 6, 2010.

## **Appendix 8 – Academy Sessions Observed**

Academy	Duration of Training (# of Days)	Number of Academies Observed	Total Number of Training Days Observed
MSTAR Math Academy for Grades 5-6	3	5	15
MSTAR Math Academy for Grades 7-8	3	5	15
Algebra I EOC Success	2	4	8
Science Academies for Grades 5-8	3	4	12
Science TEKS Overview K-12	1	3	3
Biology EOC Success	3	4	12
English I & II EOC Success	1	4	4
<b>TOTAL</b>		<b>29</b>	<b>69</b>

Region Size	ESC	ESC Location	Academy	Start Date	End Date	Week #	#_Days
1 Large	11	Fort Worth	1 English I & II EOC Success	21-Jun-2010	21-Jun-2010	1 Wk 1 (06/21-06/25)	1
2 Medium	07	Kilgore	1 English I & II EOC Success	23-Jul-2010	23-Jul-2010	5 Wk 5 (07/19-07/23)	1
3 Small	18	Midland	1 English I & II EOC Success	03-Aug-2010	03-Aug-2010	7 Wk 7 (08/02-08/06)	1
1 Large	10	Richardson	1 English I & II EOC Success	04-Aug-2010	04-Aug-2010	7 Wk 7 (08/02-08/06)	1
1 Large	11	Fort Worth	2 Algebra I EOC Success	30-Jun-2010	01-Jul-2010	2 Wk 2 (06/28-07/02)	2
1 Large	10	Richardson	2 Algebra I EOC Success	12-Jul-2010	13-Jul-2010	4 Wk 4 (07/12-07/16)	2
2 Medium	19	El Paso	2 Algebra I EOC Success	04-Aug-2010	05-Aug-2010	7 Wk 7 (08/02-08/06)	2
3 Small	03	Victoria	2 Algebra I EOC Success	03-Aug-2010	04-Aug-2010	7 Wk 7 (08/02-08/06)	2
1 Large	10	Richardson	3 Math Academy for Grades5-6	07-Jul-2010	09-Jul-2010	3 Wk 3 (07/05-07/09)	3
2 Medium	07	Kilgore	3 Math Academy for Grades5-6	20-Jul-2010	22-Jul-2010	5 Wk 5 (07/19-07/23)	3
1 Large	13	Austin	3 Math Academy for Grades5-6	20-Jul-2010	22-Jul-2010	5 Wk 5 (07/19-07/23)	3
1 Large	04	Houston	3 Math Academy for Grades5-6	27-Jul-2010	29-Jul-2010	6 Wk 6 (07/26-07/30)	3
3 Small	08	Mt. Pleasant	3 Math Academy for Grades5-6	02-Aug-2010	04-Aug-2010	7 Wk 7 (08/02-08/06)	3
1 Large	01	Edinburg	4 Math Academy for Grades 7-8	12-Jul-2010	14-Jul-2010	4 Wk 4 (07/12-07/16)	3
1 Large	13	Austin	4 Math Academy for Grades 7-8	20-Jul-2010	22-Jul-2010	5 Wk 5 (07/19-07/23)	3
1 Large	04	Houston	4 Math Academy for Grades 7-8	20-Jul-2010	22-Jul-2010	5 Wk 5 (07/19-07/23)	3
2 Medium	07	Kilgore	4 Math Academy for Grades 7-8	28-Jul-2010	30-Jul-2010	6 Wk 6 (07/26-07/30)	3
3 Small	03	Victoria	4 Math Academy for Grades 7-8	03-Aug-2010	05-Aug-2010	7 Wk 7 (08/02-08/06)	3
1 Large	20	San Antonio	5 Biology EOC Success	28-Jun-2010	30-Jun-2010	2 Wk 2 (06/28-07/02)	3
1 Large	11	Fort Worth	5 Biology EOC Success	26-Jul-2010	28-Jul-2010	6 Wk 6 (07/26-07/30)	3
2 Medium	12	Waco	5 Biology EOC Success	29-Jun-2010	01-Jul-2010	2 Wk 2 (06/28-07/02)	3
3 Small	17	Lubbock	5 Biology EOC Success	12-Jul-2010	14-Jul-2010	4 Wk 4 (07/12-07/16)	3
1 Large	04	Houston	6 Science Academies for Grades 5-8	22-Jun-2010	24-Jun-2010	1 Wk 1 (06/21-06/25)	3
1 Large	10	Richardson	6 Science Academies for Grades 5-8	21-Jun-2010	23-Jun-2010	1 Wk 1 (06/21-06/25)	3
3 Small	14	Abilene	6 Science Academies for Grades 5-8	20-Jul-2010	22-Jul-2010	5 Wk 5 (07/19-07/23)	3
2 Medium	02	Corpus Christi	6 Science Academies for Grades 5-8	21-Jul-2010	23-Jul-2010	5 Wk 5 (07/19-07/23)	3
1 Large	04	Houston	7 Science TEKS Overview K-12	21-Jun-2010	21-Jun-2010	1 Wk 1 (06/21-06/25)	1
2 Medium	19	El Paso	7 Science TEKS Overview K-12	03-Aug-2010	03-Aug-2010	7 Wk 7 (08/02-08/06)	1
1 Large	13	Austin	7 Science TEKS Overview K-12	02-Aug-2010	02-Aug-2010	7 Wk 7 (08/02-08/06)	1

## **Appendix 9 – Sample Observation Protocol**

**Science Academies for Grades 5-8 (Science 5-8)**  
**Texas Rider 42 Professional Development Research Study**  
**Teacher Training Observation Protocol**

Date of Observation: \_\_\_\_\_ Region: \_\_\_\_\_

Observer: \_\_\_\_\_ Location: \_\_\_\_\_

Start Time: \_\_\_\_\_ Finish Time: \_\_\_\_\_

Presenter Name \_\_\_\_\_

Day 1       Day 2       Day 3

**Training Contextual Information**

**How many participants were registered today? \_\_\_\_\_**

**How many participants were present today? \_\_\_\_\_**

**Please describe the way in which the room was organized, including a description of seating, tables for supplies, and AV equipment.**

**Think about the supplies and equipment provided today. Did the participants appear to have all the items they needed to participate? Were there any difficulties with the audio-video setup?**

**Training Fidelity**

<b>On average</b> , to what extent was there evidence of the following?	No Evidence	Little Evidence	Some Evidence	Strong Evidence	N/A
Presenter(s) conveyed changes to the Texas Essential Knowledge and Skills (TEKS) science requirements	<input type="radio"/>				
Presenter(s) analyzed current Texas College and Career Readiness Standards (CCRS) Science Standards	<input type="radio"/>				
Presenter(s) related current science standards and content to the Texas Assessment of Knowledge and Skills (TAKS) Science subject testing	<input type="radio"/>				
Presenter(s) integrated an English Language Proficiency Standards (ELPS) focus into the Grade 5 lesson (Weathering)	<input type="radio"/>				
Presenter(s) integrated a Response to Intervention (Rtl) focus into the Grade 6 & 7 lessons (Movin' and Shakin' and Texas, our Texas)	<input type="radio"/>				
Presenter(s) integrated a College and Career Readiness Standards (CCRS) focus into the Grade 8 lesson (An Elevated View)	<input type="radio"/>				
Presenter(s) conducted an orientation to the Project Share (Epsilon) Website	<input type="radio"/>				
Presenter(s) used the standards handouts throughout	<input type="radio"/>				
Presenter(s) used the content handouts throughout	<input type="radio"/>				
Presenter(s) used videos where appropriate	<input type="radio"/>				
Presenter(s) managed the pace of the training as specified in the Presenter Guide	<input type="radio"/>				
Presenter(s) followed the materials/activities in the Presenter Guide as planned	<input type="radio"/>				

**Other general observations of the implementation of science standards and content during this training session:**

**How would you rate the overall fidelity of implementation of the science standards and content in this training session?**

1	2	3	4
The PD session today was implemented with major changes (five or more noticeable deviations across most blocks)			The PD session today was implemented with no major changes (no noticeable deviations across most blocks)

**Please provide supporting evidence for this overall rating:**

**Training Delivery**

<b>On average</b> , to what extent was there evidence of the following?	No Evidence	Little Evidence	Some Evidence	Strong Evidence	N/A
Presenter(s) established participant buy-in for the training	<input type="radio"/>				
Presenter(s) provided clear instructions for how participants should complete activities	<input type="radio"/>				
Presenter(s) circulated around the room to make connections with participants	<input type="radio"/>				
Presenter(s) effectively managed transitions between activities	<input type="radio"/>				
Presenter(s) answered participants' questions at the time they were asked	<input type="radio"/>				
Presenter(s) answered participants' questions posted in a "parking lot"	<input type="radio"/>				
Presenter(s) modeled effective instructional activities (i.e., lessons that can be taught to students)	<input type="radio"/>				
Presenter(s) reinforced effective instructional strategies by modeling them	<input type="radio"/>				
Presenter(s) used questioning strategies to measure participant comprehension of the material	<input type="radio"/>				
Presenter(s) extended learning based on participants' knowledge of the content covered in the training	<input type="radio"/>				
Presenter(s) provided feedback to participants	<input type="radio"/>				
Presenter(s) were dynamic in their delivery of the training content	<input type="radio"/>				

**Other general observations of the delivery of the training session:**

**Overall, how would you rate the delivery of the training session?**

1	2	3	4
The delivery of the activities in the PD session today was not reflective of best practices in teacher professional development			The delivery of the activities in the PD session today was highly reflective of best practices in teacher professional development

**Please provide supporting evidence for this overall rating:**

**Interactions of Participants and Presenters**

On average, to what extent was there evidence of the following?	No Evidence	Little Evidence	Some Evidence	Strong Evidence	N/A
Presenter(s) were collegial in their interactions with participants	<input type="radio"/>				
Participants were actively engaged with each other during <i>table group</i> activities/discussions	<input type="radio"/>				
Participants were actively engaged with each other during <i>expert group</i> activities/discussions	<input type="radio"/>				
Participants were actively engaged with each other during <i>pairs</i> activities/discussions	<input type="radio"/>				
Participants were actively engaged with each other during hands-on activities	<input type="radio"/>				
Participants were on task throughout the training	<input type="radio"/>				
Participants showed intellectual rigor in their responses	<input type="radio"/>				
Participants were collegial in their interactions with each other	<input type="radio"/>				

**Other general observations of the interactions of presenters and participants during the training session:**

**Overall, how would you rate the interactions of presenters and participants during the training session?**

1	2	3	4
<p>The interactions of the presenters and participants in the PD session today distracted from accomplishing the objectives of the training</p>			<p>The interactions of the presenters and participants in the PD session today contributed positively toward accomplishing the objectives of the training</p>

**Please provide supporting evidence for this overall rating:**

**Training Climate**

On average, to what extent was there evidence of the following?	No Evidence	Little Evidence	Some Evidence	Strong Evidence	N/A
Presenter(s) encouraged participation of all participants	○	○	○	○	○
Presenter(s) encouraged participants to ask questions	○	○	○	○	○
Presenter(s) answered participants' (verbal) questions	○	○	○	○	○
Presenter(s) encouraged participants to place questions on a parking lot	○	○	○	○	○
Presenter(s) answered participants' parking lot questions	○	○	○	○	○
Presenter(s) respected the contribution of all participants	○	○	○	○	○
The facilities where the training were held were conducive to the activities presented in the training	○	○	○	○	○

**Other general observations of the climate of the training session:**

**Overall, how would you rate the training climate during the session?**

1	2	3	4
The climate of the PD session today distracted from accomplishing the objectives of the training	←————→		The climate of the PD session today contributed positively toward accomplishing the objectives of the training

**Please provide supporting evidence for this overall rating:**

## Capsule Description of the Quality of the Professional Development Session

In this final rating of the session, consider all available information about the session, its context and purpose, and your own judgment of the relative importance of the ratings you have made. Select the capsule description that best characterizes the session you observed. Keep in mind that this rating is not intended to be an average of all the previous ratings, but should encapsulate your overall assessment of the quality and likely impact of the session. Please provide a brief rationale for your final capsule description of the session in the space provided.

### Level 1: Ineffective Professional Development

There is little or no evidence of participant thinking or engagement with important ideas of science education. Session is *highly unlikely* to enhance the capacity of participants to provide high quality science education or to be effective leaders of science education in the district(s). Professional development appears to be (select one or both below):

#### Passive “Learning”

Session is pedantic and uninspiring. Participants are passive recipients of information; material is presented in a way that is inaccessible to or inappropriate for many of the participants.

#### Off-task Activity

Participants are involved in hands-on activities or other individual or group work, but it appears to be off-task. Session lacks a clear sense of purpose and/or a clear link to the conceptual development of participants.

### Level 2: Elements of Effective Professional Development

Session contains some elements of effective practice in professional development, but there are *serious problems* in the design, content, and/or implementation given the purposes of the session. For example, the content is presented in a way that would reinforce misconceptions or the pace is clearly too rapid for meaningful participant engagement. Overall, the session is *very limited* in its likelihood to enhance the capacity of most participants to provide high quality science education or to be effective leaders of science education in the district(s).

### Level 3: Beginning Stages of Effective Professional Development

Professional development is purposeful and at times effective, but there are *weaknesses*, ranging from substantial to fairly minor, in the design, content, or implementation of the session. For example, participants' expertise is not well-utilized; or participants are not given sufficient opportunity to reflect on what they are learning. Overall, the session is *somewhat limited* in its likelihood to enhance the capacity of participants to provide high quality science education or to be effective leaders of science education in the district(s).

□ **Level 4: Accomplished, Effective Professional Development**

Facilitation is skillful and participants are engaged in purposeful work (e.g., investigations, discussions, presentations, reading) designed to deepen their understanding of important science concepts; enhance their pedagogical skills and knowledge; increase their ability to use the designated instructional materials; or to enhance their leadership skills. The facilitator(s) implement the professional development session well and participants' contributions are valued, but adaptation of content or format in response to participants' needs and interests may be somewhat limited. The session is *quite likely* to enhance the capacity of most participants to provide high quality science education or to be effective leaders of science education in the district(s).

□ **Level 5: Exemplary Professional Development**

Facilitation is skillful, and participants are highly engaged in purposeful work (e.g., investigations, discussions, presentations, reading) designed to deepen their understanding of important science concepts; enhance their pedagogical skills and knowledge; increase their ability to use the designated instructional materials; or to enhance their leadership skills. The session is artfully implemented, with flexibility and responsiveness to participant needs/interests. The session is *highly likely* to enhance the capacity of participants to provide high quality science education or to be effective leaders of science education in the district(s).

# **Appendix 10 – Sample Observation Notes Template**

**Science Academies for Grades 5-8 (Science 5-8)  
Teacher Professional Development Observer Notes Template**

**Description:** Participants will experience a total immersion into the new science 2010 TEKS for grades 5-8 during this professional development. Participants will explore hands-on, student-centered lessons framed in the research-based 5E instructional model. These sessions provide connections to and strengthen participants' knowledge of College and Career Readiness Standards (CCRS), English Language Proficiency Standards (ELPS), and Response to Intervention (RtI). Each Science 5-8 Session is divided into three days, and the master schedule is broken into 10 blocks across these three days:

**Day 1 of 3**

1. Introduction
2. Analyzing the Changes of the New TEKS
3. Investigating CCRS, ELPS, and RtI
4. GRADE 5 LESSON: Constant Changes

**Day 2 of 3**

5. GRADE 6 LESSON: Moving and Shaking Pt1
6. GRADE 6 LESSON: Moving and Shaking Pt2
7. GRADE 7 LESSON: Texas, Our Texas

**Day 3 of 3**

8. GRADE 8 LESSON: An Elevated View
9. Building the Foundations for EOC HS Exams
10. Concluding Activities / Other

**Observation Objectives:** The goal of the observation is to observe the presenter(s) and participants at a Science Academies for Grades 5-8 PD Session and to record observations, perceptions, and “memory aids” across the 10 blocks in the three-day schedule.

**Directions:** Each block has a separate page to record your notes during the observation (although when you start typing into the template it may span across more than one page), and the activities that you will observe within each block are listed on the corresponding page in the notes template. Follow along with the presenter guide and use this notes template to record your observations of each activity throughout the PD session. In the first column, develop a bulleted list of things you observe or hear during each activity. These should be limited to factual statements of what you see or hear. In the second column, record your perceptions of things that you observe or hear throughout each activity. You are also encouraged to record any other notes that they may think are useful in describing the implementation of the Science Academies for Grades 5-8.

At the end of each block, observers should record “memory aids” for each of the following six constructs based on your observations and perceptions:

<p><b>GROUPING (mark the total % for each adding up to 100%)</b></p> <ul style="list-style-type: none"><li>• Individuals – participants worked independently</li><li>• Pairs – participants worked in pairs (or threes)</li><li>• Groups (Table / Expert) – participants worked in their table groups or “expert” groups (e.g., breakout groups)</li></ul>
--

<ul style="list-style-type: none"> <li>• Whole Group – participants listened to a lecture or had a whole group discussion facilitated by a presenter or a participant</li> </ul>
<p><b>CULTURE (mark all that apply)</b></p> <ul style="list-style-type: none"> <li>• Effective delivery – presenters achieved the objective of the activities presented</li> <li>• Unengaged participants – a noticeable sample of participants were distracted</li> <li>• Collegial interactions – presenters and participants were respectful in their interactions</li> <li>• Positive climate – presenters created a positive learning climate</li> </ul>
<p><b>TIME MANAGEMENT (mark one)</b></p> <ul style="list-style-type: none"> <li>• Poor – presenter(s) did not manage time adequately to get through all activities</li> <li>• Fair – presenter(s) ran short of time to get through at least one full activity</li> <li>• Good – presenter(s) managed time adequately to get through most activities completely</li> <li>• Excellent – presenter(s) managed time effectively to get through all activities completely</li> </ul>
<p><b>SUPPORT FRAMEWORKS (mark one for each type)</b></p> <ul style="list-style-type: none"> <li>• No evidence – presenter(s) did not mention any of the three support frameworks (CCRS, ELPS, RtI)</li> <li>• Little evidence – presenter(s) mentioned any of the three support frameworks but did not connect them to participant learning</li> <li>• Some evidence – presenter(s) mentioned any of the three support frameworks and made some connection of them to participant learning</li> <li>• Strong evidence – presenter(s) connected any of the three support frameworks to participant learning</li> <li>• N/A – not applicable during this block</li> </ul>
<p><b>TEKS STANDARDS (mark one)</b></p> <ul style="list-style-type: none"> <li>• No evidence – presenter(s) did not mention TEKS standards</li> <li>• Little evidence – presenter(s) mentioned TEKS standards but did not connect them to participant learning</li> <li>• Some evidence – presenter(s) mentioned TEKS standards and made some connection of them to participant learning</li> <li>• Strong evidence – presenter(s) connected TEKS standards to participant learning</li> <li>• N/A – not applicable during this block</li> </ul>
<p><b>FIDELITY (mark one)</b></p> <ul style="list-style-type: none"> <li>• Major changes – presenter(s) noticeably deviated from the materials/activities during the block 3 or more times</li> <li>• Minor changes – presenter(s) noticeably deviated from the materials/activities during the block 1 or 2 times</li> <li>• As planned – presenter(s) did not noticeably deviate from the materials/activities during the block</li> </ul>

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	1 of 3	: am/pm	: am/pm	Introduction	1 of 10
<b>Overall Objective:</b> To get participants centered, set session norms, state the purpose of the academy (i.e., state why they are here), motivate participants to embrace change, introduce participants to support frameworks, and provide an overview of day one of the academy.					
Record Things You Observe/Hear		Record Your Perceptions of Observations		Record Your Block Summary Stats	
1-A: Session Norms				<b>GROUPING (mark % for each)</b>	
•		•		____%	Individuals
•		•		____%	Pairs
•		•		____%	Groups (Table / Expert)
•		•		____%	Whole Group
1-B: VIDEO: "Changes"				<b>GROUPING (mark % for each)</b>	
•		•		<input type="checkbox"/>	Effective delivery
•		•		<input type="checkbox"/>	Unengaged participants
•		•		<input type="checkbox"/>	Collegial interactions
•		•		<input type="checkbox"/>	Positive climate
1-C: Factors that Influence Student Learning				<b>TIME MANAGEMENT (mark one)</b>	
•		•		<input type="checkbox"/>	Poor
•		•		<input type="checkbox"/>	Fair
•		•		<input type="checkbox"/>	Good
•		•		<input type="checkbox"/>	Excellent
1-D: Purpose				<b>SUPPORT FRAMEWORKS (mark each)</b>	
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	No evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	Little evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	Some evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	Strong evidence
					N/A
1-E: "Change" and "Opportunity"				<b>TEKS STANDARDS (mark one)</b>	
•		•		<input type="checkbox"/>	No evidence
•		•		<input type="checkbox"/>	Little evidence
•		•		<input type="checkbox"/>	Some evidence

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	1 of 3	: am/pm	: am/pm	Introduction	1 of 10
•		•		<input type="checkbox"/>	Strong evidence
1-F: <BLANK>				<b>FIDELITY (mark one)</b>	
•		•		<input type="checkbox"/>	Major changes (3+ deviations)
•		•		<input type="checkbox"/>	Minor changes (1-2 deviations)
•		•		<input type="checkbox"/>	As planned (0 deviations)
•		•			

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	1 of 3	: am/pm	: am/pm	Analyzing the Changes of the New TEKS	2 of 10
<b>Overall Objective:</b> To introduce participants to new science TEKS for Grades 5-8 and analyze the differences between 1998 TEKS and 2010 TEKS.					
<b>Record Things You Observe/Hear</b>		<b>Record Your Perceptions of Observations</b>		<b>Record Your Overall Ratings</b>	
2-A: New Structure of the 2010 TEKS				<b>GROUPING (mark % for each)</b>	
•		•		___%	Individuals
•		•		___%	Pairs
•		•		___%	Groups (Table / Expert)
•		•		___%	Whole Group
2-B: Analyze the Changes (Part I): Jigsaw				<b>GROUPING (mark % for each)</b>	
•		•		<input type="checkbox"/>	Effective delivery
•		•		<input type="checkbox"/>	Unengaged participants
•		•		<input type="checkbox"/>	Collegial interactions
•		•		<input type="checkbox"/>	Positive climate
2-C: Debrief by Strand				<b>TIME MANAGEMENT (mark one)</b>	
•		•		<input type="checkbox"/>	Poor
•		•		<input type="checkbox"/>	Fair
•		•		<input type="checkbox"/>	Good
•		•		<input type="checkbox"/>	Excellent
2-D: Analyze the Changes (Part II): Strands by Grade Levels				<b>SUPPORT FRAMEWORKS (mark each)</b>	

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	1 of 3	: am/pm	: am/pm	Analyzing the Changes of the New TEKS	2 of 10
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	No evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Little evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Some evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Strong evidence
					N/A
2-E: Debrief by Strand				<b>TEKS STANDARDS (mark one)</b>	
•		•		<input type="checkbox"/>	No evidence
•		•		<input type="checkbox"/>	Little evidence
•		•		<input type="checkbox"/>	Some evidence
•		•		<input type="checkbox"/>	Strong evidence
2-F: Types of Investigations				<b>FIDELITY (mark one)</b>	
•		•		<input type="checkbox"/>	Major changes (3+ deviations)
•		•		<input type="checkbox"/>	Minor changes (1-2 deviations)
•		•		<input type="checkbox"/>	As planned (0 deviations)
•		•			

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	1 of 3	: am/pm	: am/pm	Investigating CCRS, ELPS, and RtI	3 of 10
<b>Overall Objective:</b> To introduce participants to ELPS, CCRS, and RtI standards and support frameworks and look deeper into the contents of these standards and support frameworks.					
Record Things You Observe/Hear		Record Your Perceptions of Observations		Record Your Overall Ratings	
3-A: VIDEO: "Failure" and "Success"				<b>GROUPING (mark % for each)</b>	
•		•		____%	Individuals
•		•		____%	Pairs
•		•		____%	Groups (Table / Expert)
•		•		____%	Whole Group
3-B: Expert Groups: ELPS, CCRS, RtI				<b>GROUPING (mark % for each)</b>	
•		•		<input type="checkbox"/>	Effective delivery
•		•		<input type="checkbox"/>	Unengaged participants
•		•		<input type="checkbox"/>	Collegial interactions
•		•		<input type="checkbox"/>	Positive climate
3-B: Non-Linguistic Representations				<b>TIME MANAGEMENT (mark one)</b>	
•		•		<input type="checkbox"/>	Poor
•		•		<input type="checkbox"/>	Fair
•		•		<input type="checkbox"/>	Good
•		•		<input type="checkbox"/>	Excellent
3-B2: Triangle Slide				<b>SUPPORT FRAMEWORKS (mark each)</b>	
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	No evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Little evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Some evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Strong evidence
3-C: STARR and End of Course Exams Overview				<b>TEKS STANDARDS (mark one)</b>	
•		•		<input type="checkbox"/>	No evidence
•		•		<input type="checkbox"/>	Little evidence
•		•		<input type="checkbox"/>	Some evidence

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	1 of 3	: am/pm	: am/pm	Investigating CCRS, ELPS, and Rtl	3 of 10
•		•		<input type="checkbox"/>	Strong evidence
3-D: Focus on Earth Science				<b>FIDELITY (mark one)</b>	
•		•		<input type="checkbox"/>	Major changes (3+ deviations)
•		•		<input type="checkbox"/>	Minor changes (1-2 deviations)
•		•		<input type="checkbox"/>	As planned (0 deviations)
•		•			

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	1 of 3	: am/pm	: am/pm	GRADE 5 LESSON: Constant Changes	4 of 10

**Overall Objective:** To present a sample Grade 5 lesson on Earth’s changing surface using the 5E Model while helping participants understand how ELPS can be incorporated into a science lesson.

Record Things You Observe/Hear	Record Your Perceptions of Observations	Record Your Overall Ratings
<b>4-A: Engage: Play-Doh Activity</b>		<b>GROUPING (mark % for each)</b>
•	•	____% Individuals
•	•	____% Pairs
•	•	____% Groups (Table / Expert)
•	•	____% Whole Group
<b>4-B: Explore I/Explain I: 3 Stations on Water, Wind, Ice (RM1-3)</b>		<b>GROUPING (mark % for each)</b>
•	•	<input type="checkbox"/> Effective delivery
•	•	<input type="checkbox"/> Unengaged participants
•	•	<input type="checkbox"/> Collegial interactions
•	•	<input type="checkbox"/> Positive climate
<b>4-C: Explore II/Explain II: 4 Stations on Wind, Water, Ice (RM4-7) (+ formative assessment JOURNAL)</b>		<b>TIME MANAGEMENT (mark one)</b>
•	•	<input type="checkbox"/> Poor
•	•	<input type="checkbox"/> Fair
•	•	<input type="checkbox"/> Good
•	•	<input type="checkbox"/> Excellent
<b>4-D: Elaborate I: Landforms (RM8)</b>		<b>SUPPORT FRAMEWORKS (mark each)</b>

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	1 of 3	: am/pm	: am/pm	GRADE 5 LESSON: Constant Changes	4 of 10
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	No evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Little evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Some evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Strong evidence
4-E: <b>Elaborate II:</b> Landforms and Weathering (RM9-10) (+ formative assessment RM11)				<b>TEKS STANDARDS (mark one)</b>	
•		•		<input type="checkbox"/>	No evidence
•		•		<input type="checkbox"/>	Little evidence
•		•		<input type="checkbox"/>	Some evidence
•		•		<input type="checkbox"/>	Strong evidence
4-F: <b>Evaluate:</b> Short Assessment (RM12)				<b>FIDELITY (mark one)</b>	
•		•		<input type="checkbox"/>	Major changes (3+ deviations)
•		•		<input type="checkbox"/>	Minor changes (1-2 deviations)
•		•		<input type="checkbox"/>	As planned (0 deviations)
•		•			

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	2 of 3	: am/pm	: am/pm	GRADE 6 LESSON: Moving and Shaking Pt1	5 of 10
<b>Overall Objective:</b> To present a sample Grade 6 lesson on plate tectonics and earthquakes/volcanoes using the 5E Model to show how RtI frameworks can help support instruction and student learning in the science classroom.					
<b>Record Things You Observe/Hear</b>		<b>Record Your Perceptions of Observations</b>		<b>Record Your Overall Ratings</b>	
5-A: Introduction to Lesson and RtI in the Science Classrooms				<b>GROUPING (mark % for each)</b>	
•		•		____%	Individuals
•		•		____%	Pairs
•		•		____%	Groups (Table / Expert)
•		•		____%	Whole Group
5-B: <b>Engage:</b> Draw Pictures				<b>GROUPING (mark % for each)</b>	
•		•		<input type="checkbox"/>	Effective delivery

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	2 of 3	: am/pm	: am/pm	GRADE 6 LESSON: Moving and Shaking Pt1	5 of 10
•		•		<input type="checkbox"/>	Unengaged participants
•		•		<input type="checkbox"/>	Collegial interactions
•		•		<input type="checkbox"/>	Positive climate
5-C: <b>Explore Part I:</b> Paper Models of Earth's Layers (RM1-4)				<b>TIME MANAGEMENT (mark one)</b>	
•		•		<input type="checkbox"/>	Poor
•		•		<input type="checkbox"/>	Fair
•		•		<input type="checkbox"/>	Good
•		•		<input type="checkbox"/>	Excellent
5-D: <b>Explain Part I:</b> Observation of Paper Models and Hard Boiled Egg				<b>SUPPORT FRAMEWORKS (mark each)</b>	
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	No evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	Little evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	Some evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	Strong evidence
5-E: <b>Explore Part II:</b> Aluminum Pan Activity (RM5-7) (+ formative assessment JOURNAL)				<b>TEKS STANDARDS (mark one)</b>	
•		•		<input type="checkbox"/>	No evidence
•		•		<input type="checkbox"/>	Little evidence
•		•		<input type="checkbox"/>	Some evidence
•		•		<input type="checkbox"/>	Strong evidence
•		•		<b>FIDELITY (mark one)</b>	
•		•		<input type="checkbox"/>	Major changes (3+ deviations)
•		•		<input type="checkbox"/>	Minor changes (1-2 deviations)
•		•		<input type="checkbox"/>	As planned (0 deviations)
•		•			

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	2 of 3	: am/pm	: am/pm	GRADE 6 LESSON: Moving and Shaking Pt2	6 of 10
<b>Overall Objective:</b> Continue to present a sample Grade 6 lesson on plate tectonics and earthquakes/volcanoes using the 5E Model to show how RtI frameworks can					

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	2 of 3	: am/pm	: am/pm	GRADE 6 LESSON: Moving and Shaking Pt2	6 of 10
help support instruction and student learning in the science classroom.					
Record Things You Observe/Hear		Record Your Perceptions of Observations		Record Your Overall Ratings	
6-A: <b>Explain III:</b> 5 Expert Group Stations (RM8-13)				<b>GROUPING (mark % for each)</b>	
•		•		___%	Individuals
•		•		___%	Pairs
•		•		___%	Groups (Table / Expert)
•		•		___%	Whole Group
6-B: <b>Elaborate:</b> Moving Continents (RM16)				<b>GROUPING (mark % for each)</b>	
•		•		<input type="checkbox"/>	Effective delivery
•		•		<input type="checkbox"/>	Unengaged participants
•		•		<input type="checkbox"/>	Collegial interactions
•		•		<input type="checkbox"/>	Positive climate
6-C: <b>Evaluate:</b> Short Assessment (RM17)				<b>TIME MANAGEMENT (mark one)</b>	
•		•		<input type="checkbox"/>	Poor
•		•		<input type="checkbox"/>	Fair
•		•		<input type="checkbox"/>	Good
•		•		<input type="checkbox"/>	Excellent
6-D: <BLANK>				<b>SUPPORT FRAMEWORKS (mark each)</b>	
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/>	No evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/>	Little evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/>	Some evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/>	Strong evidence
					N/A
6-E: <BLANK>				<b>TEKS STANDARDS (mark one)</b>	
•		•		<input type="checkbox"/>	No evidence
•		•		<input type="checkbox"/>	Little evidence
•		•		<input type="checkbox"/>	Some evidence
•		•		<input type="checkbox"/>	Strong evidence
6-F: <BLANK>				<b>FIDELITY (mark one)</b>	

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	2 of 3	: am/pm	: am/pm	GRADE 6 LESSON: Moving and Shaking Pt2	6 of 10
•		•		<input type="checkbox"/>	Major changes (3+ deviations)
•		•		<input type="checkbox"/>	Minor changes (1-2 deviations)
•		•		<input type="checkbox"/>	As planned (0 deviations)
•		•			

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	2 of 3	: am/pm	: am/pm	GRADE 7 LESSON: Texas, Our Texas	7 of 10

**Overall Objective:** To engage participants more deeply into the Standards and Support Frameworks (CCRS, ELPS, RtI).

Record Things You Observe/Hear	Record Your Perceptions of Observations	Record Your Overall Ratings
<b>7-A: Engage:</b> Political Map of Texas		<b>GROUPING (mark % for each)</b>
•	•	____% Individuals
•	•	____% Pairs
•	•	____% Groups (Table / Expert)
•	•	____% Whole Group
<b>7-B: Explore:</b> Activities 1-4: Texas Map of Ecoregions and Recording Data (RM1-6)		<b>GROUPING (mark % for each)</b>
•	•	<input type="checkbox"/> Effective delivery
•	•	<input type="checkbox"/> Unengaged participants
•	•	<input type="checkbox"/> Collegial interactions
•	•	<input type="checkbox"/> Positive climate
<b>7-C: Explore:</b> Activities 5-6: Photographs and Wind Speeds (RM7)		<b>TIME MANAGEMENT (mark one)</b>
•	•	<input type="checkbox"/> Poor
•	•	<input type="checkbox"/> Fair
•	•	<input type="checkbox"/> Good
•	•	<input type="checkbox"/> Excellent
<b>7-D: Explain:</b> Venn Diagrams		<b>SUPPORT FRAMEWORKS (mark each)</b>
•	•	ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/> No evidence

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	2 of 3	: am/pm	: am/pm	GRADE 7 LESSON: Texas, Our Texas	7 of 10
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Little evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Some evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	Strong evidence
				ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RtI <input type="checkbox"/>	N/A
7-E: <b>Elaborate:</b> 4 Lab Stations (RM8-13) (+ fifth station VIDEO of Heated/Cooled Marble) (+ form assess RM14)				<b>TEKS STANDARDS (mark one)</b>	
•		•		<input type="checkbox"/>	No evidence
•		•		<input type="checkbox"/>	Little evidence
•		•		<input type="checkbox"/>	Some evidence
•		•		<input type="checkbox"/>	Strong evidence
7-F: <b>Evaluate:</b> Short Assessment (RM15)				<b>FIDELITY (mark one)</b>	
•		•		<input type="checkbox"/>	Major changes (3+ deviations)
•		•		<input type="checkbox"/>	Minor changes (1-2 deviations)
•		•		<input type="checkbox"/>	As planned (0 deviations)
•		•			

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	3 of 3	: am/pm	: am/pm	GRADE 8 LESSON: An Elevated View	8 of 10
<b>Overall Objective:</b> To present a sample Grade 8 lesson on interpreting topographic maps using the 5E Model and explore how the lesson components relate to CCRS in the science classroom.					
Record Things You Observe/Hear		Record Your Perceptions of Observations		Record Your Overall Ratings	
8-A: Introduction to Grade 8 Lesson				<b>GROUPING (mark % for each)</b>	
•		•		____%	Individuals
•		•		____%	Pairs
•		•		____%	Groups (Table / Expert)
•		•		____%	Whole Group
8-B: <b>Engage:</b> Saran Wrap on Knuckles				<b>GROUPING (mark % for each)</b>	
•		•		<input type="checkbox"/>	Effective delivery
•		•		<input type="checkbox"/>	Unengaged participants
•		•		<input type="checkbox"/>	Collegial interactions
•		•		<input type="checkbox"/>	Positive climate
8-C: <b>Explore:</b> Skewers (RM1-4)				<b>TIME MANAGEMENT (mark one)</b>	
•		•		<input type="checkbox"/>	Poor
•		•		<input type="checkbox"/>	Fair
•		•		<input type="checkbox"/>	Good
•		•		<input type="checkbox"/>	Excellent
8-D: <b>Explain:</b> Observation of Models Build in Engage/Explore (Scaffolding Qs + Formative Assessment RM5)				<b>SUPPORT FRAMEWORKS (mark each)</b>	
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	No evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	Little evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	Some evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> RTI <input type="checkbox"/>	Strong evidence
8-E: <b>Elaborate:</b> Maps and Satellite Images (RM6 + Scaffolding Qs RM7 + Formative Assessment in Journal)				<b>TEKS STANDARDS (mark one)</b>	
•		•		<input type="checkbox"/>	No evidence
•		•		<input type="checkbox"/>	Little evidence
•		•		<input type="checkbox"/>	Some evidence

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	3 of 3	: am/pm	: am/pm	GRADE 8 LESSON: An Elevated View	8 of 10
•		•		<input type="checkbox"/>	Strong evidence
8-F: <b>Evaluate:</b> Short Assessment (RM8)				<b>FIDELITY (mark one)</b>	
•		•		<input type="checkbox"/>	Major changes (3+ deviations)
8-G: Lesson Debrief				<input type="checkbox"/>	Minor changes (1-2 deviations)
•		•		<input type="checkbox"/>	As planned (0 deviations)
•		•			

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	3 of 3	: am/pm	: am/pm	Building the Foundations for EOC HS Exams	9 of 10

Overall Objective: To					
Record Things You Observe/Hear		Record Your Perceptions of Observations		Record Your Overall Ratings	
9-A: Connecting 4 Lessons to Science TEKS				<b>GROUPING (mark % for each)</b>	
•		•		___%	Individuals
•		•		___%	Pairs
9-B: VIDEO: Putting the Puzzle Together				___%	Groups (Table / Expert)
•		•		___%	Whole Group
•		•			
9-C: Group Discussion				<input type="checkbox"/>	Effective delivery
•		•		<input type="checkbox"/>	Unengaged participants
•		•		<input type="checkbox"/>	Collegial interactions
•		•		<input type="checkbox"/>	Positive climate
9-D: <BLANK>				<b>TIME MANAGEMENT (mark one)</b>	
•		•		<input type="checkbox"/>	Poor
•		•		<input type="checkbox"/>	Fair
•		•		<input type="checkbox"/>	Good
•		•		<input type="checkbox"/>	Excellent
9-E: <BLANK>				<b>SUPPORT FRAMEWORKS (mark each)</b>	

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	3 of 3	: am/pm	: am/pm	Building the Foundations for EOC HS Exams	9 of 10
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/>	No evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/>	Little evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/>	Some evidence
•		•		ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/>	Strong evidence
9-F: <BLANK>				<b>TEKS STANDARDS (mark one)</b>	
•		•		<input type="checkbox"/>	No evidence
•		•		<input type="checkbox"/>	Little evidence
•		•		<input type="checkbox"/>	Some evidence
•		•		<input type="checkbox"/>	Strong evidence
9-G: <BLANK>				<b>FIDELITY (mark one)</b>	
•		•		<input type="checkbox"/>	Major changes (3+ deviations)
9-H: <BLANK>					
•		•		<input type="checkbox"/>	Minor changes (1-2 deviations)
•		•		<input type="checkbox"/>	As planned (0 deviations)

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	3 of 3	: am/pm	: am/pm	Concluding Activities / Other	10 of 10
<b>Overall Objective:</b> To wrap up the session and tie everything together.					
<b>Record Things You Observe/Hear</b>		<b>Record Your Perceptions of Observations</b>		<b>Record Your Overall Ratings</b>	
10-A: GOAL Setting				<b>GROUPING (mark % for each)</b>	
•		•		____%	Individuals
•		•		____%	Pairs
10-B: <BLANK>				____%	Groups (Table / Expert)
•		•		____%	Whole Group
•		•		<b>CULTURE (mark all that apply)</b>	

Academy Title	Day Number	Start Time	End Time	Master Schedule Block Title	Block Number
Science Academies 5-8	3 of 3	: am/pm	: am/pm	Concluding Activities / Other	10 of 10
10-C: <BLANK>				<input type="checkbox"/> Effective delivery <input type="checkbox"/> Unengaged participants <input type="checkbox"/> Collegial interactions <input type="checkbox"/> Positive climate	
•		•			
•		•			
•		•			
•		•			
10-D: <BLANK>				<b>TIME MANAGEMENT (mark one)</b> <input type="checkbox"/> Poor <input type="checkbox"/> Fair <input type="checkbox"/> Good <input type="checkbox"/> Excellent	
•		•			
•		•			
•		•			
•		•			
10-E: <BLANK>				<b>SUPPORT FRAMEWORKS (mark each)</b> ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/> No evidence ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/> Little evidence ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/> Some evidence ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/> Strong evidence ELPS <input type="checkbox"/> CCRS <input type="checkbox"/> Rti <input type="checkbox"/> N/A	
•		•			
•		•			
•		•			
•		•			
•		•			
10-F: <BLANK>				<b>TEKS STANDARDS (mark one)</b> <input type="checkbox"/> No evidence <input type="checkbox"/> Little evidence <input type="checkbox"/> Some evidence <input type="checkbox"/> Strong evidence	
•		•			
•		•			
•		•			
•		•			
10-G: <BLANK>				<b>FIDELITY (mark one)</b> <input type="checkbox"/> Major changes (3+ deviations) <input type="checkbox"/> Minor changes (1-2 deviations) <input type="checkbox"/> As planned (0 deviations)	
•		•			
10-H: <BLANK>					
•		•			
•		•			

## **Appendix 11 – ESC Administrator Survey**

The development of the ESC survey first involved the creation of a crosswalk, and then identifying and aligning relevant topical areas with appropriate research questions (see Table A11.1). The research team then developed individual survey items to address each topic. The survey instrument was reviewed and revised by the research team according to best practices and then reviewed and approved by TEA.

Table A11.1. Objectives, Research Questions, and Topics Addressed by the Survey of ESC Administrators

Research Question	Topic
<i>Objective 1: Assess the content of, delivery of, and participation in face-to-face PD Academies</i>	
1G. In what ways and to what extent was each Academy promoted to teachers across Texas?	<ul style="list-style-type: none"> <li>▪ Academy promotion</li> <li>▪ Participant recruitment</li> </ul>
1H. What is the quality of the training provided to teachers?	<ul style="list-style-type: none"> <li>▪ Perceived quality</li> <li>▪ ESC involvement and support for Academy implementation</li> </ul>
<i>Objective 2: Assess the content of, delivery of, and participation in online PD Academies through Project Share</i>	
2D. What is the quality of the training provided to teachers regarding the use of the Project Share system?	<ul style="list-style-type: none"> <li>▪ ESC understanding of Project Share</li> <li>▪ ESC resources dedicated to Project Share training</li> </ul>
2E. What is the quality of the online facilitation provided to teachers through the Project Share system, and did the quality/extent of facilitation vary geographically across the state?	<ul style="list-style-type: none"> <li>▪ ESC support of online facilitators</li> <li>▪ Expected activities of online facilitators</li> <li>▪ Perceived trainer expertise in online facilitation</li> </ul>

# Summer 2010 Statewide Professional Development Academies ESC Staff Survey

page 1

This survey is part of the legislatively mandated evaluation of the Texas Education Agency (TEA) Rider 42 Professional Development Initiative. The intent of the study is to improve future TEA professional development (PD) efforts for teachers by obtaining feedback about the implementation of the following 2010 PD Academies:

- Algebra I End Of Course Success
- Biology End Of Course Success
- English I and II End Of Course Success
- Math Academy for Grades 5-6
- Math Academy for Grades 7-8
- Science TEKS Overview K-12
- Science Academies for Grades 5-8

Topics covered in the survey include:

- How the ESC promoted PD academies to teachers
- How teachers were recruited or selected to participate
- The types of support given and received
- The overall quality of the implemented academies

Your participation in the survey is voluntary. Responses will remain confidential and data will be destroyed upon completion of the project. Results will be reported only in such a manner that preserves respondent anonymity. Multiple people at your ESC may contribute to the answers provided in this survey (i.e., whoever is most familiar with a particular series of questions may provide answers), however, only one completed survey is being requested of your ESC. Please be assured that this is an evaluation of the teacher professional development program created by TEA, NOT an evaluation of the ESC.

If you have questions about the survey, please contact Amie Rapaport at [arapaport@gibsonconsult.com](mailto:arapaport@gibsonconsult.com) or 877-328-0884 x106. If you have questions about the evaluation study or about data confidentiality, please contact Joseph Shields at [jshields@gibsonconsult.com](mailto:jshields@gibsonconsult.com) or 877-328-0884 x101. Thank you!

## Academy Promotion

### 1. Which PD academies did your ESC offer to teachers in the region this summer (2010)? (select all that apply)

- Algebra I EOC Success
- Biology EOC Success
- English I and II EOC Success
- Math Academy for Grades 5-6
- Math Academy for Grades 7-8
- Science TEKS Overview K-12
- Science Academies for Grades 5-8

**The remainder of this survey asks about "the PD academies", or "the various academies". In all instances, we are referring only to the PD academies listed above; those statewide academies created out of Rider 42 by TEA, and implemented beginning in the summer of 2010.**

### 2. How did your ESC promote or advertise the PD academies to teachers in the region? (select all that apply)

- Announced on the ESC website
- Sent mass messages (email/mail) to teachers or principals
- Advertised on social media networks (e.g., Facebook, Twitter, Ning)
- Advertised via traditional media (e.g., TV, radio, newspaper)
- Put up posters/flyers in school or other venues popular with teachers
- Advertised incentives for teachers to participate (e.g., stipend)
- Communicated directly with district superintendents about the PD opportunities
- Communicated directly with campus principals about the PD opportunities
- Listed the PD academies in an existing ESC catalogue of PD opportunities
- Developed a catalogue specifically for these statewide PD academies
- The ESC did not promote/advertise the academy/academies.
- Other (please specify) \_\_\_\_\_

**3. Were there any differences in the ways in which these PD academies were promoted or advertised to teachers? (Select one option)**

Yes

Go to Page No. 3

No, promotion/advertisement was the same for all PD academies offered.

Go to Page No. 4

If Did Not  
Answer Then  
Go to Page No. 3

**4. Indicate three academies that were promoted or advertised the most by your ESC. [ Please rank exactly 3 option(s). ]**

Algebra I EOC Success	<input type="text"/>
Biology EOC Success	<input type="text"/>
English I and II EOC Success	<input type="text"/>
Math Academy for Grades 5-6	<input type="text"/>
Math Academy for Grades 7-8	<input type="text"/>
Science TEKS Overview K-12	<input type="text"/>
Science Academies for Grades 5-8	<input type="text"/>

**5. Why were these PD academies promoted to a greater extent by the ESC? (select all that apply)**

- These were the first PD academies to be offered by the ESC.
- These PD academies covered subjects most in need of improvement in the region.
- There was more funding available for promotion for these academies.
- There was a greater demand for these PD academies.
- These academies were more encouraged by TEA
- Other (please specify) \_\_\_\_\_

**6. In what ways could promotion efforts for the PD academies have been improved?**

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***Academy Participants***

**7. Did the ESC have a target number of participants for one or more PD academy offered? (Select one option)**

- Yes
- No

Go to Page No. 5

Go to Page No. 6

If Did Not  
Answer Then  
Go to Page No. 5

**How many teachers were targeted for each type of PD academy overall (across all sessions) and were targets met?**

<b>8. N/A - Academy not offered or no target set</b>	
	<b>N/A</b>
(a) Algebra I EOC Success (Select one option)	<input type="radio"/>
(b) Biology EOC Success (Select one option)	<input type="radio"/>
(c) English I and II EOC Success (Select one option)	<input type="radio"/>
(d) Math Academy for Grades 5-6 (Select one option)	<input type="radio"/>
(e) Math Academy for Grades 7-8 (Select one option)	<input type="radio"/>
(f) Science TEKS Overview K-12 (Select one option)	<input type="radio"/>
(g) Science Academies for Grades 5-8 (Select one option)	<input type="radio"/>

<b>9. Target Number (across all sessions)</b>	
(a) Algebra I EOC Success	_____ _____
(b) Biology EOC Success	_____ _____
(c) English I and II EOC Success	_____ _____
(d) Math Academy for Grades 5-6	_____ _____
(e) Math Academy for Grades 7-8	_____ _____
(f) Science TEKS Overview K-12	_____ _____
(g) Science Academies for Grades 5-8	_____ _____

<b>10. Goal Met?</b>		
	<b>Goal Not Met</b>	<b>Goal Met or Exceeded</b>
(a) Algebra I EOC Success (Select one option)	<input type="radio"/>	<input type="radio"/>
(b) Biology EOC Success (Select one option)	<input type="radio"/>	<input type="radio"/>
(c) English I and II EOC Success (Select one option)	<input type="radio"/>	<input type="radio"/>
(d) Math Academy for Grades 5-6 (Select one option)	<input type="radio"/>	<input type="radio"/>
(e) Math Academy for Grades 7-8 (Select one option)	<input type="radio"/>	<input type="radio"/>
(f) Science TEKS Overview K-12 (Select one option)	<input type="radio"/>	<input type="radio"/>
(g) Science Academies for Grades 5-8 (Select one option)	<input type="radio"/>	<input type="radio"/>

**11. Were specific types of teachers targeted for participation in the PD academies (e.g., based on tenure at the school, level of content expertise, principal-recommended)? (Select one option)**

- Yes
- No

Go to Page No. 7

Go to Page No. 10

If Did Not  
Answer Then  
Go to Page No. 7

**12. Were the criteria for teacher recruitment different for each PD academy?**  
(Select one option)

- Yes
- No

Go to Page No. 8

Go to Page No. 9

If Did Not  
Answer Then  
Go to Page No. 8

**13. ALGEBRA I EOC SUCCESS: What were the criteria for the recruitment of teachers for this academy? (select all that apply)**

- Tenure at school
- Tenure in the district
- Level of content expertise
- Grade level
- Certification type
- Need for improvement/professional development
- Recommendation from person of authority (e.g., principal or department head)
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**14. BIOLOGY EOC SUCCESS: What were the criteria for the recruitment of teachers for this academy? (select all that apply)**

- Tenure at school
- Tenure in the district
- Level of content expertise
- Grade level
- Certification type
- Need for improvement/professional development
- Recommendation from person of authority (e.g., principal or department head)
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**15. ENGLISH I and II EOC SUCCESS: What were the criteria for the recruitment of teachers for this academy? (select all that apply)**

- Tenure at school
- Tenure in the district
- Level of content expertise
- Grade level
- Certification type
- Need for improvement/professional development
- Recommendation from person of authority (e.g., principal or department head)
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**16. MATH ACADEMY FOR GRADES 5-6: What were the criteria for the recruitment of teachers for this academy? (select all that apply)**

- Tenure at school
- Tenure in the district
- Level of content expertise
- Grade level
- Certification type
- Need for improvement/professional development
- Recommendation from person of authority (e.g., principal or department head)
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**17. MATH ACADEMY FOR GRADES 7-8: What were the criteria for the recruitment of teachers for this academy? (select all that apply)**

- Tenure at school
- Tenure in the district
- Level of content expertise
- Grade level
- Certification type
- Need for improvement/professional development
- Recommendation from person of authority (e.g., principal or department head)
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**18. SCIENCE TEKS OVERVIEW K-12: What were the criteria for the recruitment of teachers for this academy? (select all that apply)**

- Tenure at school
- Tenure in the district
- Level of content expertise
- Grade level
- Certification type
- Need for improvement/professional development
- Recommendation from person of authority (e.g., principal or department head)
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**19. SCIENCE ACADEMIES FOR GRADES 5-8: What were the criteria for the recruitment of teachers for this academy? (select all that apply)**

- Tenure at school
- Tenure in the district
- Level of content expertise
- Grade level
- Certification type
- Need for improvement/professional development
- Recommendation from person of authority (e.g., principal or department head)
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

Continue to next question  
If Did Not Answer Then Go to Page No. 10

**20. What were the main criteria for teacher selection? (select all that apply)**

- Tenure at school
- Tenure in the district
- Level of content expertise
- Grade level
- Certification type
- Need for improvement/professional development
- Recommendation from person of authority (e.g., principal or department head)
- Other (please specify) \_\_\_\_\_

**TEA Involvement****21. What was the extent of TEA involvement in the following activities?**

	<b>Not involved</b>	<b>Involved to a minimum extent</b>	<b>Involved to a moderate extent</b>	<b>Involved to a great extent</b>
(a) Promotion/advertisement of PD academies (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Teacher recruitment or selection for PD academies (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Customization of materials for promotion or recruitment efforts for PD academies (e.g., brochures, flyers, etc.) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**22. Was TEA involved with the PD academies in any other way not listed above? If so, please describe:**


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## ESC Involvement

23. To what extent was the ESC involved across the PD academies in the following:				
	Not at all	To a minimum extent	To a moderate extent	To a great extent
(a) Facilitated communication among stakeholders (e.g., trainers, schools, TEA) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Provided or disseminated materials (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Provided administrative/logistical support (e.g., scheduling training space, copying presentation materials, setting up training room) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Provided technical support (e.g., setting up projectors and presentation materials, troubleshooting equipment issues) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

24. Was the ESC involved in delivery of the PD academies in any other ways? If so, please explain:

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25. Was there a difference in level of ESC involvement among the PD academies offered? (Select one option)

- Yes  
 No

Go to Page No. 11

Go to Page No. 12

If Did Not Answer  
Then

Go to Page No. 11

**26. Indicate three academies for which the ESC was the most involved: [ Please rank exactly 3 option(s). ]**

Algebra I EOC Success	<input type="text"/>
Biology EOC Success	<input type="text"/>
English I and II EOC Success	<input type="text"/>
Math Academy for Grades 5-6	<input type="text"/>
Math Academy for Grades 7-8	<input type="text"/>
Science TEKS Overview K-12	<input type="text"/>
Science Academies for Grades 5-8	<input type="text"/>

**27. Why was the ESC more involved in these PD academies? (select all that apply)**

- These were the first PD academies to be offered by the ESC.
- These PD academies were more intensive or longer.
- These PD academies covered subjects most in need of improvement in the region.
- The ESC anticipated high teacher turnout for these PD academies.
- There was more funding available for ESC involvement in these PD academies.
- Regional trainer(s) requested additional assistance.
- These academies were more encouraged by TEA.
- The ESC was involved in developing the PD content
- Other (please specify) \_\_\_\_\_

**Project Share Training for Teachers**

**28. Please rate the following:**

	Low	Moderate	High	Not sure
(a) Understanding of Project Share among staff at the ESC (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Use of social-networking sites for professional development, project collaboration, and/or community building by the ESC (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Prominence of the use of Project Share by the ESC (relative to other social-networking sites and tools) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**29. Was the delivery method for training teachers on Project Share generally the same across the PD academies offered by the ESC? (Select one option)**

- Yes
- No

Go to Page No. 13

Go to Page No. 14

If Did Not Answer  
Then

Go to Page No. 13

**30. In general, what resources were available to train teachers on Project Share during PD training sessions? (select all that apply)**

- Multiple computers with which teachers themselves could try out the system
- A single computer for presenters to demonstrate the functionality of the system
- Printed screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were provided.
- Other (please specify) \_\_\_\_\_

Continue to next question  
If Did Not Answer Then Go to Page No. 15

**31. ALGEBRA I EOC SUCCESS: In general, what resources were available to teachers during training on Project Share for this academy? (select all that apply)**

- Computers with which teachers could try out the system
- Screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**32. BIOLOGY EOC SUCCESS: In general, what resources were available to teachers during training on Project Share for this academy? (select all that apply)**

- Computers with which teachers could try out the system
- Screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**33. ENGLISH I and II EOC SUCCESS: In general, what resources were available to teachers during training on Project Share for this academy? (select all that apply)**

- Computers with which teachers could try out the system
- Screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**34. MATH ACADEMY FOR GRADES 5-6: In general, what resources were available to teachers during training on Project Share for this academy? (select all that apply)**

- Computers with which teachers could try out the system
- Screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**35. MATH ACADEMY FOR GRADES 7-8: In general, what resources were available to teachers during training on Project Share for this academy? (select all that apply)**

- Computers with which teachers could try out the system
- Screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**36. SCIENCE TEKS OVERVIEW K-12: In general, what resources were available to teachers during training on Project Share for this academy? (select all that apply)**

- Computers with which teachers could try out the system
- Screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**37. SCIENCE ACADEMIES FOR GRADES 5-8: In general, what resources were available to teachers during training on Project Share for this academy? (select all that apply)**

- Computers with which teachers could try out the system
- Screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**38. In what ways could the training of teachers on Project Share have been improved?**

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**Online Facilitation**

<b>39. On average, what is the level of expertise in online facilitation among PD academy trainers?</b>					
	<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Not Sure</b>	<b>N/A - did not offer this academy</b>
(a) Algebra I EOC Success (Select one option)	<input type="radio"/>				
(b) Biology EOC Success (Select one option)	<input type="radio"/>				
(c) English I and II EOC Success (Select one option)	<input type="radio"/>				
(d) Math Academy for Grades 5-6 (Select one option)	<input type="radio"/>				
(e) Math Academy for Grades 7-8 (Select one option)	<input type="radio"/>				
(f) Science TEKS Overview K-12 (Select one option)	<input type="radio"/>				
(g) Science Academies for Grades 5-8 (Select one option)	<input type="radio"/>				

**40. What type(s) of activities do you expect online facilitators across the PD academies to engage in? (select all that apply)**

- Managerial (e.g., enforce guidelines, remind teachers of deadlines, monitor attendance, open and close course materials)
- Social (e.g., organize collaborative projects, encourage discussion and reflection among participants, monitor discussions and intervene when necessary, maintain continuous presence in discussions)
- Pedagogical (e.g., provide additional information to support course content, detect and correct misconceptions, focus discussions on specific issues or topics, provide regular feedback on progress to teachers)
- Technical (e.g., assist teachers with technical difficulties)
- Other (please specify) \_\_\_\_\_

page 16

**41. ALGEBRA I EOC SUCCESS: How will the ESC support online facilitation/facilitators for this academy? (select all that apply)**

- Provide technical support
- Provide content support
- Provide equipment
- Provide administrative support
- Provide or fund training/professional development on online facilitation for trainers
- No online facilitation will be provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**42. BIOLOGY EOC SUCCESS: How will the ESC support online facilitation/facilitators for this academy? (select all that apply)**

- Provide technical support
- Provide content support
- Provide equipment
- Provide administrative support
- Provide or fund training/professional development on online facilitation for trainers
- No online facilitation will be provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**43. ENGLISH I and II EOC SUCCESS: How will the ESC support online facilitation/facilitators for this academy? (select all that apply)**

- Provide technical support
- Provide content support
- Provide equipment
- Provide administrative support
- Provide or fund training/professional development on online facilitation for trainers
- No online facilitation will be provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**44. MATH ACADEMIES FOR GRADES 5-6: How will the ESC support online facilitation/facilitators for this academy? (select all that apply)**

- Provide technical support
- Provide content support
- Provide equipment
- Provide administrative support
- Provide or fund training/professional development on online facilitation for trainers
- No online facilitation will be provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**45. MATH ACADEMY FOR GRADES 7-8: How will the ESC support online facilitation/facilitators for this academy? (select all that apply)**

- Provide technical support
- Provide content support
- Provide equipment
- Provide administrative support
- Provide or fund training/professional development on online facilitation for trainers
- No online facilitation will be provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**46. SCIENCE TEKS OVERVIEW K-12: How will the ESC support online facilitation/facilitators for this academy? (select all that apply)**

- Provide technical support
- Provide content support
- Provide equipment
- Provide administrative support
- Provide or fund training/professional development on online facilitation for trainers
- No online facilitation will be provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**47. SCIENCE ACADEMIES FOR GRADES 5-8: How will the ESC support online facilitation/facilitators for this academy? (select all that apply)**

- Provide technical support
- Provide content support
- Provide equipment
- Provide administrative support
- Provide or fund training/professional development on online facilitation for trainers
- No online facilitation will be provided.
- N/A - Our ESC did not offer this academy.
- Other (please specify) \_\_\_\_\_

**48. What challenges do you anticipate trainers encountering when providing effective online facilitation to teachers?**

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**Perceptions of PD Initiative**

**49. How does this teacher PD initiative compare with the typical teacher PD effort offered by the ESC?**

	<b>Less</b>	<b>About the same</b>	<b>More</b>
(a) Cost to implement (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Materials needed for training purposes (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) ESC personnel needed (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Promotion/advertisement by the ESC (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) TEA reporting requirements (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Interest among districts/schools/teachers in the region (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) TEA involvement (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Overall quality (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**50. Is it widely known at the ESC that the PD academies offered are part of a large-scale statewide professional development initiative? (Select one option)**

- Yes
- No

## ***About the ESC***

**51. How would you describe your ESC region? (select all that apply)**

- Rural
- Suburban
- Urban

**52. How many schools does your ESC serve?**

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**53. How many people does your ESC employ?**

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**54. On average, how many professional development events does your ESC provide for teachers per calendar year?**

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# **Appendix 12 – Regional Trainer Survey**

Using a process similar to that used in creating the ESC survey, the research team developed individual survey items to address each of the research questions and topics listed in Table 12.1. Again, this survey instrument went through several rounds of review and revision by the evaluation team prior to being reviewed and approved by TEA. The complete survey instrument can be found in Appendix 12.

Table 12.1. Objectives, Research Questions and Topics Addressed by the Survey of Regional Administrators

Research Question	Topic
<i>Objective 1: Assess the content, delivery, and participation in face-to-face PD Academies</i>	
1E. What is the quality of the training provided to the regional trainers?	<ul style="list-style-type: none"> <li>▪ Structure and delivery</li> <li>▪ Coverage of key content</li> <li>▪ Usefulness of Presenter’s Guide</li> </ul>
1G. In what ways and to what extent was each Academy promoted to teachers across Texas?	<ul style="list-style-type: none"> <li>▪ Perceptions of Academy promotion and support</li> </ul>
1H. What is the quality of the training provided to teachers?	<ul style="list-style-type: none"> <li>▪ Perception of training delivery</li> <li>▪ Challenges faced when training teachers</li> <li>▪ Perceptions of teacher preparedness to teach students</li> </ul>
<i>Objective 2: Assess the content, delivery, and participation in online PD Academies through Project Share</i>	
2D. What is the quality of the training provided to teachers regarding the use of the Project Share system?	<ul style="list-style-type: none"> <li>▪ Coverage of Project Share at TOT</li> <li>▪ Perceptions of teacher preparedness to use Project Share</li> <li>▪ ESC support for teacher training on Project Share</li> <li>▪ Scope of teacher training on Project Share</li> </ul>
2E. What is the quality of the online facilitation provided to teachers through the Project Share system, and did the quality/extent of facilitation vary geographically across the state?	<ul style="list-style-type: none"> <li>▪ Plans for facilitation of online professional development</li> </ul>

**Summer 2010 Statewide Professional Development  
Academies  
Regional Trainer Survey**

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page 1

**As a regional trainer who participated in one or more regional training-of-trainers (TOT) sessions and who may have facilitated teacher trainings in your ESC, you are a valued source for our research. We would like your feedback about the quality of the TOT session (s) in which you took part, your preparedness to train teachers, and your experience actually delivering training to teachers if you did so. The information collected from regional trainers is part of an external evaluation of the Texas Education Agency (TEA) Rider 42 Professional Development Initiative. The intent of the study is to improve future TEA professional development (PD) efforts for teachers.**

**Your participation in this survey is voluntary. Responses will remain confidential and results will be reported in an aggregate manner to preserve respondent anonymity. Please be assured that this is an evaluation of the teacher professional development program created by the TEA *not* an evaluation of you as a trainer.**

**If you have questions about the survey, please contact Amie Rapaport at [arapaport@gibsonconsult.com](mailto:arapaport@gibsonconsult.com) or 877.328.0884 x106. If you have questions about the evaluation study, please contact Joseph Shields at [jshields@gibsonconsult.com](mailto:jshields@gibsonconsult.com) or 877.328.0884 x101. Thank you!**

**1. For which PD academy did you attend a regional TOT session? (Select all that apply.)**

- Algebra I EOC Success
- Biology EOC Success
- English I and II EOC Success
- Math Academy for Grades 5-6
- Math Academy for Grades 7-8
- Science TEKS Overview K-12
- Science Academies for Grades 5-8

**You must select one of the above to continue this survey. If you did not attend any of the TOT sessions listed above, when you click on the "Next" button, the survey will end.**

**Branching Instructions**

Follow the branching rules in the sequence given below. Jump to the page as specified in the branching rule if all the conditions specified in the rule are satisfied.

**Rule 1**

IF ANSWER TO (Q1 is (Algebra I EOC Success OR Biology EOC Success OR English I and II EOC Success OR Math Academy for Grades 5-6 OR Math Academy for Grades 7-8 OR Science TEKS Overview K-12 OR Science Academies for Grades 5-8) ) THEN GO TO Page3

**Rule 2**

IF ANSWER TO (Q1 is NOT (Algebra I EOC Success AND Biology EOC Success AND English I and II EOC Success AND Math Academy for Grades 5-6 AND Math Academy for Grades 7-8 AND Science TEKS Overview K-12 AND Science Academies for Grades 5-8) ) THEN STOP YOU HAVE FINISHED THIS SURVEY.

For the following questions, please answer only about the one PD academy that we have selected for you. If our records indicate that you attended only one academy's TOT, that is the academy about which we are asking you to complete this survey about. If our records indicate that you attended TOTs for multiple academies, then we have randomly selected one academy for you (see below question ). If you attended the Math Academy, we have selected EITHER the 5-6 or the 7-8 portion for you to answer about.

You may wish to answer these questions about a different academy than the one listed below. At the end of this survey, you will be asked if you would like to repeat the survey for one of the other academies that you may have attended. If you select "No", the survey will end and you will be asked to submit your data. If you select "Yes", relevant portions of the survey will be repeated for you so that you can complete them about another academy.

**2. Please complete all questions on this survey about the following PD academy:**  
(Select one option)

- Algebra I EOC Success
- Biology EOC Success
- English I and II EOC Success
- Math Academy for Grades 5-6
- Math Academy for Grades 7-8
- Science TEKS Overview K-12
- Science Academies for Grades 5-8

**3. Which statement best describes you? (Select one option)**

- |   |   |
|---|---|
| <input type="radio"/> I facilitated this PD academy's TOT session                               | Go to Page No. 7                              |
| <input type="radio"/> I attended this PD academy's TOT session as a prospective teacher-trainer | Go to Page No. 4                              |
| <input type="radio"/> I did not facilitate or attend this PD academy's TOT session              | Go to Page No. 25                             |
|   | If Did Not<br>Answer Then<br>Go to Page No. 4 |

**TOT Session****4. Indicate your level of agreement with each of the following statements:**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
(a) This TOT session was well-organized. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) This TOT session was appropriately paced. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) This TOT session was of an appropriate length. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) The physical space of the training site was conducive to learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) The equipment available was adequate and in good repair. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) The instructor presented information in a clear and comprehensible manner. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) The instructor was knowledgeable about the content covered in the training. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) The instructor was responsive to participants' questions or concerns. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) This TOT session provided ample opportunity for participants to voice questions or concerns. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) This TOT session provided ample opportunity for participants to share their knowledge and experience. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) This TOT session provided ample opportunity for participants to practice the concepts or strategies taught. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(l) The overall goal of this TOT session was clearly articulated. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(m) The overall goal or purpose of this TOT session was met. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(n) Materials (e.g., manuals, handouts) were clear. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(o) After attending this TOT session, I felt prepared to train others. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(p) Attending this TOT session was a good use of my time. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<b>5. To what extent did this PD academy's TOT session cover the following:</b>					
	<b>Not at All</b>	<b>To a Minimal Extent</b>	<b>To a Moderate Extent</b>	<b>To a Great Extent</b>	<b>Not Applicable</b>
(a) TEA's expectations for what teachers need to know about the new Texas Essential Knowledge and Skills (TEKS) standards (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) TEA's expectations for what teachers need to know about the new EOC Assessments (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Practical ways for teachers to integrate current Texas College and Career Readiness Standards (CCRS) into planning and implementing lessons for students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Practical ways for teachers to integrate English Language Proficiency Standards (ELPS) into planning and implementing lessons for students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Practical ways for teachers to use Response to Intervention (RTI) to guide their instruction to meet the needs of all students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Practical ways for teachers to incorporate the Texas Response to Curriculum Focal Points (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) An overview of the Project Share system (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## ***Training of Others***

**6. After attending this academy's TOT session, did you deliver a similar training to staff members at the ESC, your school, or your district in order for those staff members to be able to train or co-train teachers? (Select one option)**

Yes

Go to Page No. 6

No

Go to Page No. 7

If Did Not  
Answer Then  
Go to Page No. 6

**7. How many of these training sessions have you conducted?**

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**8. Estimate the total number of people you have trained, across all sessions you have conducted: (Select one option)**

- 1-5
- 6-10
- 11-15
- 16-20
- More than 20

**9. After this academy's TOT session, did you train teachers? (Select one option)**

Yes

Go to Page No. 8

No

Go to Page No. 22

If Did Not  
Answer Then  
Go to Page No. 8

**10. How many teacher training sessions did you facilitate for this PD academy?**

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**11. What proportion of these sessions were held on-site at an ESC? (Select one option)**

- None of the sessions
- Fewer than half of the sessions
- Approximately half of the sessions
- More than half of the sessions
- All sessions

**12. Estimate the total number of teachers you have trained to date for this PD academy: (Select one option)**

- 1-10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

## ***Preparation and Support to Train Teachers***

**Continue to answer questions about the [[check your answer to question number 2 ]] academy.**

### **13. How did you prepare to train teachers after attending the TOT? (Select all that apply.)**

- No further preparation was necessary after attending this TOT.
- I practiced on my own.
- I practiced with a co-trainer.
- I reviewed training materials.
- I practiced using my Project Share account.
- I consulted with the TOT trainer.
- I consulted with someone from the ESC.
- Other (please specify) \_\_\_\_\_

**14. Before conducting the teacher training, from whom and what kinds of support did you receive? (Select all that apply.)**

	<b>Financial Support</b>	<b>Administrative or Logistical Support</b>	<b>Technical Support</b>	<b>Guidance or Advice</b>
(a) ESC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) School district (where I trained teachers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Area schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) TEA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Project Share	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Other regional trainers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Content area teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) University faculty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**15. Did you receive support from anyone else, or did you receive any other types of support? Please describe:**

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## ***Delivery of Teacher Training***

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### **Algebra I EOC Success**

If Q16(a) is not Answered, then Go to Page No. 16

**16. In training teachers, how useful were the following components in the Presenter's Guide:**

	<b>Not at All Useful</b>	<b>Somewhat Useful</b>	<b>Useful</b>	<b>Very Useful</b>
(a) TEKS Overview (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P16	P16	P16	P16
(b) Activities/Lesson Plan Summaries (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Online Orientation (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## ***Delivery of Teacher Training***

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### **Biology EOC Success**

If Q17(a) is not Answered, then Go to Page No. 16

#### **17. In training teachers, how useful were the following components in the Presenter's Guide:**

	<b>Not at All Useful</b>	<b>Somewhat Useful</b>	<b>Useful</b>	<b>Very Useful</b>
(a) TEKS Overview/TEKS Comparisons (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P16	P16	P16	P16
(b) Lessons and Activities (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Online Orientation (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Delivery of Teacher Training

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### English I and II EOC Success

If Q18(a) is not Answered, then Go to Page No. 16

#### 18. In training teachers, how useful were the following components in the Presenter's Guide:

	Not at All Useful	Somewhat Useful	Useful	Very Useful
(a) TEKS Overview/TEKS Vertical Alignment (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P16	P16	P16	P16
(b) EOC Assessment Overview (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) ESOL I and II Introduction (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Orientation to Epsilon (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Planning for Turnaround (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## ***Delivery of Teacher Training***

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### **Math Academy for Grades 5-6 or Grades 7-8**

If Q19(a) is not Answered, then Go to Page No. 16

#### **19. In training teachers, how useful were the following components in the Presenter's Guide:**

	<b>Not at All Useful</b>	<b>Somewhat Useful</b>	<b>Useful</b>	<b>Very Useful</b>
(a) Algebra Readiness (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P16	P16	P16	P16
(b) Curriculum Focal Points (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Activities/Lessons (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Online Orientation (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Delivery of Teacher Training

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### Science TEKS Overview K-12

If Q20(a) is not Answered, then Go to Page No. 16

#### 20. In training teachers, how useful were the following components in the Presenter's Guide:

	Not at All Useful	Somewhat Useful	Useful	Very Useful
(a) TEKS Introduction Analyses (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P16	P16	P16	P16
(b) Types of Investigations (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Rigor and Relevance Analysis (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## ***Delivery of Teacher Training***

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### **Science Academies for Grades 5-8**

**21. In training teachers, how useful were the following components in the Presenter's Guide:**

	<b>Not at All Useful</b>	<b>Somewhat Useful</b>	<b>Useful</b>	<b>Very Useful</b>
(a) TEKS Overview/TEKS Comparisons (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Lessons and Activities (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Online Orientation (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**22. To what extent were you able to do the following when you trained teachers?**

	<b>Not at All</b>	<b>To a Minimal Extent</b>	<b>To a Moderate Extent</b>	<b>To a Great Extent</b>
(a) Incorporate what I learned from the TOT session (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Follow the materials and activities in the Presenter's Guide (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Differentiate instruction based on participants' knowledge of the subject area (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Address participants' questions and concerns (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**23. What challenges did you face when you trained teachers? (Select all that apply.)**

- Insufficient time to prepare prior to delivering training
- Insufficient time to cover the material
- Lack of required materials (e.g., Participant Guides, activity materials, TEKS handouts)
- Inadequate training site (e.g., the room being too small for teachers to participate in activities, no projection screen or computers to provide orientation of Project Share)
- Technology issues, including problems with audio-visual set-up
- Participants were not interested in the content of the training
- Participants were not ready for the instructional strategies presented
- Participants were already familiar with the instructional strategies presented
- Inadequate training provided to me as a trainer
- Other (please specify) \_\_\_\_\_

## *Perceptions of Teacher Preparedness to Teach Students*

Continue to answer questions about the [[check your answer to question number 2 ]] academy.

**24. To what extent do you think the teachers who attended the training that you delivered will be prepared to do the following:**

	<b>Not at All</b>	<b>To a Minimal Extent</b>	<b>To a Moderate Extent</b>	<b>To a Great Extent</b>
(a) Present activities as outlined in the training materials (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Teach concepts to students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Teach concepts to English language learners (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Teach concepts to students who receive Tiers 2 or 3 interventions, or who otherwise receive some type of intervention (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Implement research-based strategies in instruction (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Improve student outcomes (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Link instruction to the Texas Essential Knowledge and Skills (TEKS) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Explain state assessments for students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Differentiate instruction for various learning styles (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) Utilize the Project Share site (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## ***Project Share Training for Teachers***

**For this section, think about your overall experience conducting teacher training for this academy, and answer the following questions based on that experience.**

**25. After the TOT session, how prepared were you to train teachers on the use of Project Share? (Select one option)**

- Not at all prepared
- Somewhat prepared
- Prepared
- Very prepared

**26. After the TOT session, to what extent was ESC support provided to you related to training teachers on Project Share?**

	<b>No Support Provided</b>	<b>Minimal Support Provided</b>	<b>Moderate Support Provided</b>	<b>Extensive Support Provided</b>
(a) Technology support (e.g., setting up projectors and presentation materials, trouble shooting equipment issues) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Administrative/logistical support (e.g., scheduling training space, copying presentation materials, setting up training room) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Additional training/answered my questions about Project Share (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**27. When you trained teachers, approximately how many minutes did you spend covering Project Share? (Select one option)**

- |   |  |
|---|--|
| <input type="radio"/> I did not spend any time covering Project Share | Go to Page No. 20                              |
| <input type="radio"/> 1-10 minutes                                    | Go to Page No. 19                              |
| <input type="radio"/> 11-20 minutes                                   | Go to Page No. 19                              |
| <input type="radio"/> 21-30 minutes                                   | Go to Page No. 19                              |
| <input type="radio"/> 31-40 minutes                                   | Go to Page No. 19                              |
| <input type="radio"/> 41-50 minutes                                   | Go to Page No. 19                              |
| <input type="radio"/> 51-60 minutes                                   | Go to Page No. 19                              |
| <input type="radio"/> More than an hour                               | Go to Page No. 19                              |
|   | If Did Not Answer<br>Then<br>Go to Page No. 19 |

**28. What did you utilize to train teachers on the use of Project Share? (Select all the apply.)**

- Computers with which teachers could try out the system
- Screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were used
- Other (please specify) \_\_\_\_\_

**29. To what extent did you do the following when you trained teachers on Project Share?**

	<b>Not at All</b>	<b>To a Minimal Extent</b>	<b>To a Moderate Extent</b>	<b>To a Great Extent</b>
(a) Encourage participants to share their experiences and insights when using Project Share (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Model discussion behavior and response tone when using Project Share (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Emphasize the use of Project Share to build learning communities (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Stress collaboration in Project Share to build collective capacity (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Offer ongoing assistance on Project Share to participants (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**30. To what extent do you agree that the equipment provided at the training site (s) was conducive to training teachers on Project Share? (Select one option)**

- Strongly disagree
- Disagree
- Agree
- Strongly agree

**31. What challenges did you face in training teachers on Project Share? (Select all that apply.)**

- I did not face any challenges in training teachers on Project Share.
- There were technical difficulties/lack of access to technical support.
- I do not know enough about Project Share/I was not adequately trained on how to train teachers on the Project Share site.
- I am unclear about my role as an online facilitator/educator.
- I did not have needed equipment and/or enough hardware (e.g., computers, projector).
  
- Participants were not enthusiastic about working with online and/or forming online learning communities.
- Participants use other online social-networking sites or tools and were not interested in Project Share.
- Other (please specify) \_\_\_\_\_

## ***Facilitation of Online Professional Development***

**Continue to answer questions about the [[check your answer to question number 2 ]] academy.**

**32. Will you be facilitating online professional development for this PD academy through Project Share? (Select one option)**

- |   |  |
|---|--|
| <input type="radio"/> Yes                 | Go to Page No. 21                              |
| <input type="radio"/> No                  | Go to Page No. 22                              |
| <input type="radio"/> Don't know/not sure | Go to Page No. 22                              |
|   | If Did Not Answer<br>Then<br>Go to Page No. 21 |

**33. What type(s) of activities do you expect to engage in as an online facilitator/educator? (Select all that apply.)**

- Managerial (e.g., enforce guidelines, remind teachers of deadlines, monitor attendance, open and close course materials)
- Social (e.g., organize collaborative projects, encourage discussion and reflection among participants, monitor discussions and intervene when necessary, maintain continuous presence in discussions)
- Pedagogical (e.g., provide additional information to support course content, detect and correct misconceptions, focus discussions on specific issues or topics, provide regular feedback on progress to teachers)
- Technical (e.g., assist teachers with technical difficulties)
- Other (please specify) \_\_\_\_\_

**34. How confident are you in your ability to facilitate online professional development to teachers? (Select one option)**

- Not at all confident
- Somewhat confident
- Confident
- Very confident

**35. Approximately how much time do you anticipate devoting to your role as an online facilitator/educator (per PD academy if facilitating more than one)? (Select one option)**

- 1-3 hours per week
- 4-6 hours per week
- 7-10 hours per week
- More than 10 hours per week

**36. What types of support or assistance do you anticipate needing as an online facilitator/educator? (Select all that apply.)**

- Access to technical support
- Additional training on online facilitation
- Additional equipment (e.g., computer, software, etc.)
- Additional time/time away from other job responsibilities to prepare and deliver online content.
- Other (please specify) \_\_\_\_\_

## **Perceptions of PD Initiative**

**For the remaining questions, you no longer need to answer with respect to just the one PD academy about which you have been responding thus far. The rest of the survey asks more general questions about you and your experiences with this PD initiative.**

### **37. How does this PD initiative compare with other PD efforts for teachers offered by the ESC?**

	<b>Less</b>	<b>About the Same</b>	<b>More</b>	<b>Don't Know</b>
(a) Importance at ESC (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Financial resources provided by the ESC (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Materials needed (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) ESC personnel needed (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Promotion/advertisement by the ESC (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Interest among teachers (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Your time commitment (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) TEA involvement (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### **38. Are you aware that the training session(s) that you delivered and/or attended is (are) part of a statewide professional development initiative? (Select one option)**

- Yes  
 No

### **39. How much do you know about the Texas Education Agency (TEA) Rider 42 Professional Development Initiative? (Select one option)**

- Not much  
 A little  
 Some  
 A lot

## ***Background and Experience***

**40. What is the highest level of education you have attained? (Select one option)**

- High school degree
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctorate/professional degree

**41. How many years of experience do you have as a K-12 teacher? (Select one option)**

- None
- Less than one year
- 1 to 3 years
- 4 to 5 years
- 6 to 10 years
- 11 to 15 years
- More than 15 years

**42. How many hours of experience do you have providing professional development? (Select one option)**

- None
- 1-20 hours
- 21-60 hours
- 61-180 hours
- More than 180 hours

**44. Where is your primary place of employment? (Select one option)**

- ESC that offered the PD academies
- Other ESC
- District or school in the region in which I provided training
- District or school not in the region in which I provided training
- College or university
- Texas Education Agency
- Other (please specify) \_\_\_\_\_

**45. Do you wish to answer this survey again about a different PD academy for which you were a trainer? (Select one option)**

- Yes Go to Page No. 25
  - No Go to Page No. 24
- If Did Not Answer  
Then  
Go to Page No. 24

**46. Is there anything else you would like to tell us about your experiences as a regional trainer for this PD initiative?**

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Stop, you have finished the survey

If Did Not Answer Then Stop, you have finished the survey

**47. About which PD academy would you like to answer questions? (Select one option)**

- Algebra I EOC Success
- Biology EOC Success
- English I and II EOC Success
- Math Academy for Grades 5-6
- Math Academy for Grades 7-8
- Science TEKS Overview K-12
- Science Academies for Grades 5-8

**48. Which statement best describes you? (Select one option)**

- |   |  |
|---|--|
| <input type="radio"/> I facilitated this PD academy's TOT session                               | Go to Page No. 29                              |
| <input type="radio"/> I attended this PD academy's TOT session as a prospective teacher-trainer | Go to Page No. 26                              |
|   | If Did Not Answer<br>Then<br>Go to Page No. 26 |

**TOT Session**

<b>49. Indicate your level of agreement with each of the following statements:</b>				
	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
(a) This TOT session was well-organized. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) This TOT session was appropriately paced. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) This TOT session was of an appropriate length. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) The physical space of the training site was conducive to learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) The equipment available was adequate and in good repair. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) The instructor presented information in a clear and comprehensible manner. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) The instructor was knowledgeable about the content covered in the training. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) The instructor was responsive to participants' questions or concerns. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) This TOT session provided ample opportunity for participants to voice questions or concerns. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) This TOT session provided ample opportunity for participants to share their knowledge and experience. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) This TOT session provided ample opportunity for participants to practice the concepts or strategies taught. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(l) The overall goal of this TOT session was clearly articulated. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(m) The overall goal or purpose of this TOT session was met. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(n) Materials (e.g., manuals, handouts) were clear. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(o) After attending this TOT session, I felt prepared to train others. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(p) Attending this TOT session was a good use of my time. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<b>50. To what extent did this PD academy's TOT session cover the following:</b>					
	<b>Not at All</b>	<b>To a Minimal Extent</b>	<b>To a Moderate Extent</b>	<b>To a Great Extent</b>	<b>Not Applicable</b>
(a) TEA's expectations for what teachers need to know about the new Texas Essential Knowledge and Skills (TEKS) standards (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) TEA's expectations for what teachers need to know about the new EOC Assessments (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Practical ways for teachers to integrate current Texas College and Career Readiness Standards (CCRS) into planning and implementing lessons for students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Practical ways for teachers to integrate English Language Proficiency Standards (ELPS) into planning and implementing lessons for students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Practical ways for teachers to use Response to Intervention (RtI) to guide their instruction to meet the needs of all students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Practical ways for teachers to incorporate the Texas Response to Curriculum Focal Points (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) An overview of the Project Share system (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## ***Training of Others***

**51. After attending this academy's TOT session, did you deliver a similar training to staff members at the ESC, your school, or your district in order for those staff members to be able to train or co-train teachers? (Select one option)**

Yes

Go to Page No. 28

No

Go to Page No. 29

If Did Not Answer  
Then

Go to Page No. 28

**52. How many of these training sessions have you conducted?**

---

---

**53. Estimate the total number of people you have trained, across all sessions you have conducted: (Select one option)**

- 1-5
- 6-10
- 11-15
- 16-20
- More than 20

**54. After this academy's TOT session, did you train teachers? (Select one option)**

Yes

Go to Page No. 30

No

Go to Page No. 44

If Did Not Answer  
Then

Go to Page No. 30

**55. How many teacher training sessions did you facilitate for this PD academy?**

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**56. What proportion of these sessions were held on-site at an ESC? (Select one option)**

- None of the sessions
- Fewer than half of the sessions
- Approximately half of the sessions
- More than half of the sessions
- All sessions

**57. Estimate the total number of teachers you have trained to date for this PD academy: (Select one option)**

- 1-10
- 11-20
- 21-30
- 31-40
- 41-50
- More than 50

## Preparation and Support to Train Teachers

Continue to answer questions about the [[check your answer to question number 47 ]] academy.

### 58. How did you prepare to train teachers after attending the TOT? (Select all that apply.)

- No further preparation was necessary after attending this TOT.
- I practiced on my own.
- I practiced with a co-trainer.
- I reviewed training materials.
- I practiced using my Project Share account.
- I consulted with the TOT trainer.
- I consulted with someone from the ESC.
- Other (please specify) \_\_\_\_\_

### 59. Before conducting the teacher training, from whom and what kinds of support did you receive? (Select all that apply.)

	Financial Support	Administrative or Logistical Support	Technical Support	Guidance or Advice
(a) ESC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) School district (where I trained teachers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Area schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) TEA	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Project Share	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Other regional trainers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Content area teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) University faculty	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**60. Did you receive support from anyone else, or did you receive any other types of support? Please describe:**

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**Branching Instructions**

Follow the branching rules in the sequence given below. Jump to the page as specified in the branching rule if all the conditions specified in the rule are satisfied.

**Rule 1**

IF ANSWER TO (Q47 is (Algebra I EOC Success) ) THEN GO TO Page32

**Rule 2**

IF ANSWER TO (Q47 is (Biology EOC Success) ) THEN GO TO Page33

**Rule 3**

IF ANSWER TO (Q47 is (English I and II EOC Success) ) THEN GO TO Page34

**Rule 4**

IF ANSWER TO (Q47 is (Math Academy for Grades 5-6 OR Math Academy for Grades 7-8) ) THEN GO TO Page35

**Rule 5**

IF ANSWER TO (Q47 is (Science TEKS Overview K-12) ) THEN GO TO Page36

**Rule 6**

IF ANSWER TO (Q47 is (Science Academies for Grades 5-8) ) THEN GO TO Page37

## Delivery of Teacher Training

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### Algebra I EOC Success

If Q61(b) is not Answered, then Go to Page No. 38

**61. In training teachers, how useful were the following components in the Presenter's Guide:**

	Not at All Useful	Somewhat Useful	Useful	Very Useful
(a) TEKS Overview (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Activities/Lesson Plan Summaries (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P38	P38	P38	P38
(c) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Online Orientation (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## ***Delivery of Teacher Training***

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### **Biology EOC Success**

If Q62(b) is not Answered, then Go to Page No. 38

#### **62. In training teachers, how useful were the following components in the Presenter's Guide:**

	<b>Not at All Useful</b>	<b>Somewhat Useful</b>	<b>Useful</b>	<b>Very Useful</b>
(a) TEKS Overview/TEKS Comparisons (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Lessons and Activities (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P38	P38	P38	P38
(c) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Online Orientation (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Delivery of Teacher Training

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### English I and II EOC Success

If Q63(b) is not Answered, then Go to Page No. 38

#### 63. In training teachers, how useful were the following components in the Presenter's Guide:

	Not at All Useful	Somewhat Useful	Useful	Very Useful
(a) TEKS Overview/TEKS Vertical Alignment (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) EOC Assessment Overview (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P38	P38	P38	P38
(c) ESOL I and II Introduction (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Orientation to Epsilon (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Planning for Turnaround (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## ***Delivery of Teacher Training***

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### **Math Academy for Grades 5-6 or Grades 7-8**

If Q64(c) is not Answered, then Go to Page No. 38

**64. In training teachers, how useful were the following components in the Presenter's Guide:**

	<b>Not at All Useful</b>	<b>Somewhat Useful</b>	<b>Useful</b>	<b>Very Useful</b>
(a) Algebra Readiness (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Curriculum Focal Points (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Activities/Lessons (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P38	P38	P38	P38
(d) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Online Orientation (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## ***Delivery of Teacher Training***

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### **Science TEKS Overview K-12**

If Q65(e) is not Answered, then Go to Page No. 38

**65. In training teachers, how useful were the following components in the Presenter's Guide:**

	<b>Not at All Useful</b>	<b>Somewhat Useful</b>	<b>Useful</b>	<b>Very Useful</b>
(a) TEKS Introduction Analyses (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Types of Investigations (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Rigor and Relevance Analysis (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P38	P38	P38	P38

## ***Delivery of Teacher Training***

**For this section, think about your overall experience conducting teacher training for this PD academy, and answer the following questions based on that experience.**

### **Science Academies for Grades 5-8**

**66. In training teachers, how useful were the following components in the Presenter's Guide:**

	<b>Not at All Useful</b>	<b>Somewhat Useful</b>	<b>Useful</b>	<b>Very Useful</b>
(a) TEKS Overview/TEKS Comparisons (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Lessons and Activities (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Support Frameworks (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Online Orientation (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Presenter's Guide (as a whole) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**67. When you trained teachers, to what extent were you able to do the following?**

	<b>Not at All</b>	<b>To a Minimal Extent</b>	<b>To a Moderate Extent</b>	<b>To a Great Extent</b>
(a) Incorporate what I learned from the TOT session (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Follow the materials and activities in the Presenter's Guide (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Differentiate instruction based on participants' knowledge of the subject area (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Address participants' questions and concerns (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**68. What challenges did you face when you trained teachers? (Select all that apply.)**

- Insufficient time to prepare prior to delivering training
- Insufficient time to cover the material
- Lack of required materials (e.g., Participant Guides, activity materials, TEKS handouts)
- Inadequate training site (e.g., the room being too small for teachers to participate in activities, no projection screen or computers to provide orientation of Project Share)
- Technology issues, including problems with audio-visual set-up
- Participants were not interested in the content of the training
- Participants were not ready for the instructional strategies presented
- Participants were already familiar with the instructional strategies presented
- Inadequate training provided to me as a trainer
- Other (please specify) \_\_\_\_\_

## Perceptions of Teacher Preparedness to Teach Students

Continue to answer questions about the [[check your answer to question number 47 ]] academy.

**69. To what extent do you think the teachers who attended the training that you delivered will be prepared to do the following:**

	<b>Not at All</b>	<b>To a Minimal Extent</b>	<b>To a Moderate Extent</b>	<b>To a Great Extent</b>
(a) Present activities as outlined in the training materials (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Teach concepts to students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Teach concepts to English language learners (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Teach concepts to students who receive Tiers 2 or 3 interventions, or who otherwise receive some type of intervention (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Implement research-based strategies in instruction (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Improve student outcomes (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Link instruction to the Texas Essential Knowledge and Skills (TEKS) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Explain state assessments for students (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Differentiate instruction for various learning styles (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) Utilize the Project Share site (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## **Project Share Training for Teachers**

**For this section, think about your overall experience conducting teacher training for this academy, and answer the following questions based on that experience.**

**70. After the TOT session, how prepared were you to train teachers on the use of Project Share? (Select one option)**

- Not at all prepared
- Somewhat prepared
- Prepared
- Very prepared

**71. After the TOT session, to what extent was ESC support provided to you related to training teachers on Project Share?**

	<b>No Support Provided</b>	<b>Minimal Support Provided</b>	<b>Moderate Support Provided</b>	<b>Extensive Support Provided</b>
(a) Technology support (e.g., setting up projectors and presentation materials, trouble shooting equipment issues) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Administrative/logistical support (e.g., scheduling training space, copying presentation materials, setting up training room) (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Additional training/answered my questions about Project Share (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**72. Approximately how many minutes did you spend covering Project Share when you trained teachers? (Select one option)**

- |   |  |
|---|--|
| <input type="radio"/> I did not spend any time covering Project Share | Go to Page No. 42                              |
| <input type="radio"/> 1-10 minutes                                    | Go to Page No. 41                              |
| <input type="radio"/> 11-20 minutes                                   | Go to Page No. 41                              |
| <input type="radio"/> 21-30 minutes                                   | Go to Page No. 41                              |
| <input type="radio"/> 31-40 minutes                                   | Go to Page No. 41                              |
| <input type="radio"/> 41-50 minutes                                   | Go to Page No. 41                              |
| <input type="radio"/> 51-60 minutes                                   | Go to Page No. 41                              |
| <input type="radio"/> More than an hour                               | Go to Page No. 41                              |
|   | If Did Not Answer<br>Then<br>Go to Page No. 41 |

**73. What did you utilize to train teachers on the use of Project Share? (Select all that apply.)**

- Computers with which teachers could try out the system
- Screen shots of important components or functions of Project Share
- Detailed instructions on the use of Project Share for teachers to take with them
- No equipment or materials were used
- Other (please specify) \_\_\_\_\_

**74. To what extent did you do the following when you trained teachers on Project Share?**

	<b>Not at All</b>	<b>To a Minimal Extent</b>	<b>To a Moderate Extent</b>	<b>To a Great Extent</b>
(a) Encourage participants to share their experiences and insights when using Project Share (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Model discussion behavior and response tone when using Project Share (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Emphasize the use of Project Share to build learning communities (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Stress collaboration in Project Share to build collective capacity (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Offer ongoing assistance on Project Share to participants (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**75. To what extent do you agree that the equipment provided at the training site (s) was conducive to training teachers on Project Share? (Select one option)**

- Strongly disagree
- Disagree
- Agree
- Strongly agree

**76. What challenges did you face in training teachers on Project Share? (Select all that apply.)**

- I did not face any challenges in training teachers on Project Share.
  - There were technical difficulties/lack of access to technical support.
  - I do not know enough about Project Share/I was not adequately trained on how to train teachers on the Project Share site.
  - I am unclear about my role as an online facilitator/educator.
  - I did not have needed equipment and/or enough hardware (e.g., computers, projector).
- 
- Participants were not enthusiastic about working with online and/or forming online learning communities.
  - Participants use other online social-networking sites or tools and were not interested in Project Share.
  - Other (please specify) \_\_\_\_\_

## ***Facilitation of Online Professional Development***

**Continue to answer questions about the [[check your answer to question number 47 ]] academy.**

**77. Will you be facilitating online professional development for this PD academy through Project Share? (Select one option)**

- |   |  |
|---|--|
| <input type="radio"/> Yes                 | Go to Page No. 43                              |
| <input type="radio"/> No                  | Go to Page No. 46                              |
| <input type="radio"/> Don't know/not sure | Go to Page No. 46                              |
|   | If Did Not Answer<br>Then<br>Go to Page No. 43 |

**78. What type(s) of activities do you expect to engage in as an online facilitator/educator? (Select all that apply.)**

- Managerial (e.g., enforce guidelines, remind teachers of deadlines, monitor attendance, open and close course materials)
- Social (e.g., organize collaborative projects, encourage discussion and reflection among participants, monitor discussions and intervene when necessary, maintain continuous presence in discussions)
- Pedagogical (e.g., provide additional information to support course content, detect and correct misconceptions, focus discussions on specific issues or topics, provide regular feedback on progress to teachers)
- Technical (e.g., assist teachers with technical difficulties)
- Other (please specify) \_\_\_\_\_

**79. How confident are you in your ability to facilitate online professional development to teachers? (Select one option)**

- Not at all confident
- Somewhat confident
- Confident
- Very confident

**80. Approximately how much time do you anticipate devoting to your role as an online facilitator/educator (per PD academy if facilitating more than one)? (Select one option)**

- 1-3 hours per week
- 4-6 hours per week
- 7-10 hours per week
- More than 10 hours per week

**81. What types of support or assistance do you anticipate needing as an online facilitator/educator? (Select all that apply.)**

- Access to technical support
- Additional training on online facilitation
- Additional equipment (e.g., computer, software, etc.)
- Additional time/time away from other job responsibilities to prepare and deliver online content.
- Other (please specify) \_\_\_\_\_

## Perceptions of PD Initiative

For the remaining questions, you no longer need to answer with respect to just the one PD academy you have been responding about thus far. The rest of this survey asks more general questions about you and your experiences with this PD initiative.

### 82. How does this PD initiative compare with other PD efforts for teachers offered by the ESC?

	Less	About the Same	More	Don't Know
(a) Importance at ESC (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Financial resources provided by the ESC (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Materials needed (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) ESC personnel needed (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Promotion/advertisement by the ESC (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Interest among teachers (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Your time commitment (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) TEA involvement (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### 83. Are you aware that the training session(s) that you delivered and/or attended is(are) part of a statewide professional development initiative? (Select one option)

- Yes  
 No

### 84. How much do you know about the Texas Education Agency (TEA) Rider 42 Professional Development Initiative? (Select one option)

- Not much  
 A little  
 Some  
 A lot

**Branching Instructions**

Follow the branching rules in the sequence given below. Jump to the page as specified in the branching rule if all the conditions specified in the rule are satisfied.

**Rule 1**

IF ANSWER TO (Q3 is (I facilitated this PD academy's TOT session OR I attended this PD academy's TOT session as a prospective teacher-trainer) ) THEN GO TO Page46

## ***Background and Experience***

**85. What is the highest level of education you have attained? (Select one option)**

- High school degree
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctorate/professional degree

**86. How many years of experience do you have as a K-12 teacher? (Select one option)**

- None
- Less than one year
- 1 to 3 years
- 4 to 5 years
- 6 to 10 years
- 11 to 15 years
- More than 15 years

**87. How many hours of experience do you have providing professional development? (Select one option)**

- None
- 1-20 hours
- 21-60 hours
- 61-180 hours
- More than 180 hours

**88. How many hours of experience do you have as an online facilitator/educator? (Select one option)**

- None
- 1-20 hours
- 21-60 hours
- 61-180 hours
- More than 180 hours

**89. Where is your primary place of employment? (Select one option)**

- ESC that offered the PD academies
- Other ESC
- District or school in the region in which I provided training
- District or school not in the region in which I provided training
- College or university
- Texas Education Agency
- Other (please specify) \_\_\_\_\_

**90. Is there anything else you would like to tell us about your experiences as a regional trainer for this PD initiative?**

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## **Appendix 13 – Regional Trainer Response Rate by Region**

The ESC region response rate represents the percentage of academy attendees at each region who submitted a survey. For example, of the 84 regional trainers from ESC Region I, 53 (63%) responded to the survey. While response rates varied by ESC Region (see Table A13.1), between 50%-70% of attendees across the majority of regions responded. Six of the 20 ESC Regions had response rates exceeding 70%, with ESC Region III having the highest response rate at 87%. Only two regions had a response rate of less than 50%— ESC Regions XVI and XVII.

Table A13.1 Response Rate by ESC Region<sup>1</sup>

ESC Region	Total Number of Attendees	Total Number of Respondents	Response Rate
I	84	53	63.1%
II	20	11	55.0%
III	15	13	86.7%
IV	220	155	70.5%
V	23	13	56.5%
VI	36	27	75.0%
VII	22	13	59.1%
VIII	12	10	83.3%
IX	14	7	50.0%
X	155	113	72.9%
XI	103	67	65.0%
XII	42	25	59.5%
XIII	83	56	67.5%
XIV	18	15	83.3%
XV	16	11	68.8%
XVI	11	4	36.4%
XVII	21	8	38.1%
XVIII	14	9	64.3%
XIX	87	59	67.8%
XX	64	39	60.9%
<b>Total</b>	<b>1,060</b>	<b>708</b>	--

<sup>1</sup>Response rates are reported based on respondents who identified their ESC Region.

## **Appendix 14 – Participant Survey**

The survey was developed using a similar process to the ESC and regional trainer surveys wherein topics were identified for each research question (see Table A14.1) and items were developed to address those topics. The same process of review and revision of the instrument was undertaken by the evaluation team, with the final instrument being reviewed and approved by TEA.

Table A14.1. Objectives, Research Questions and Topics Addressed by the Survey of Professional Development Participants

Research Question	Topic
<i>Objective 1: Assess the content, delivery, and participation in face-to-face PD Academies</i>	
1G. In what ways and to what extent was each Academy promoted to teachers across Texas?	<ul style="list-style-type: none"> <li>▪ Academy promotion</li> <li>▪ Reasons for attendance</li> <li>▪ Interest in Academies</li> </ul>
1H. What is the quality of the training provided to teachers?	<ul style="list-style-type: none"> <li>▪ Training delivery</li> <li>▪ Instructor competence</li> <li>▪ Coverage of key content</li> </ul>
<i>Objective 2: Assess the content, delivery, and participation in online PD Academies through Project Share</i>	
2D. What is the quality of the training provided to teachers regarding the use of the Project Share system?	<ul style="list-style-type: none"> <li>▪ Delivery of project share training</li> <li>▪ Preparedness to use Project Share</li> <li>▪ Interest in using Project Share</li> </ul>
<i>Objectives 3, 4, and 5: 3) Assess the impact of PD on teacher knowledge, changes in instructional practices, and changes in collaborative behavior; 4) Determine the impact of PD received on student achievement outcomes; and 5) Determine the impact of district and campus supports on teacher knowledge, changes in instructional practices, changes in collaborative behavior, and ultimately student achievement outcomes</i>	
3A. Is there a relationship between participation in the professional development and changes in classroom instruction?	<ul style="list-style-type: none"> <li>▪ Perceived increase in teacher knowledge (general and Academy-specific) from training</li> <li>▪ Perceived increase in knowledge related to classroom instruction from training</li> </ul>
3B. What factors (e.g., administrator support, proportion of teachers participating in a school) moderate the relationship between participation in professional development and changes in instructional practices?	<ul style="list-style-type: none"> <li>▪ School-level reinforcement of PD</li> <li>▪ Coaching support</li> <li>▪ Algebra Readiness perceptions and supports</li> </ul>
3C. Is there a relationship between participation in the professional development and how teachers interact with other teachers in their school?	<ul style="list-style-type: none"> <li>▪ Perceived increase in knowledge related to collaborative practices from training</li> </ul>

# Summer 2010 Statewide Professional Development Academies

## Participant Survey

Fall 2010

page 1

As a participant in one or more Summer 2010 Statewide Professional Development (PD) Academies, we would like your feedback on the following:

- How you heard about the PD Academies
- Your motivation to attend
- The quality of the training you received
- Your change in knowledge related to core subject content, instructional strategies, and collaborative practices from participation in the professional development
- Reinforcement of the training occurring at your school

The information collected is part of a legislatively mandated evaluation of the Texas Education Agency (TEA) Rider 42 Professional Development Initiative. The intent of the study is to improve future TEA professional development efforts for teachers.

Your participation in this survey is voluntary. Responses will remain confidential and results will be reported in an aggregate manner to preserve respondent anonymity. Data collected from this survey will be stored on secure servers, and destroyed upon completion of this project. Please be assured that this is an evaluation of the teacher professional development program, NOT an evaluation of you as a teacher. It is anticipated that this survey will take approximately 15 minutes of your time.

If you have questions about the survey, please contact Elissa Yeates at [eyeates@gibsonconsult.com](mailto:eyeates@gibsonconsult.com) or (877) 328-0884 x112. If you have questions about the evaluation study, please contact Joseph Shields at [jshields@gibsonconsult.com](mailto:jshields@gibsonconsult.com) or (877) 328-0884 x101. If you have questions regarding confidentiality matters, contact [patricia.sullivan@tea.state.tx.us](mailto:patricia.sullivan@tea.state.tx.us). Thank you!

By clicking the "next" button, you are agreeing to participate in this survey. Thank you!

## Attendance

If you attended one PD academy, you are being asked to answer this survey about that academy. If you attended multiple academies, one academy has been randomly selected for you to provide your feedback. All selections are based on PD attendance records maintained by the ESCs. If the academy selected for you is not one you attended, please contact Elissa Yeates at [eyeates@gibsonconsult.com](mailto:eyeates@gibsonconsult.com) or (877) 328-0884 x112.

**1. You are completing this survey about the following PD academy: (Select one option)**

- Algebra I End of Course Success
- Math Academy for Grades 5-6
- Math Academy for Grades 7-8
- Science TEKS Overview K-12
- Science Academies for Grades 5-8
- Biology End of Course Success
- English I and II End of Course Success

**2. During the 2010-11 school year, will you be *teaching* the core subject on which this PD academy focused? (Select one option)**

- Yes
- No (If you are not teaching this subject during the 2010-11 school year, the survey will end at this point)

Go to Page No. 3

Stop, you have finished the survey

If Did Not Answer Then  
Go to Page No. 3

## Academy Promotion to Teachers

### 3. How did you hear about this PD Academy? (Select all that apply.)

- Announcement on regional educational service center (ESC) website
- Listing in ESC catalogue of PD opportunities
- Mass message (email/mail) to teachers
- Announcement on a social media network (e.g., Facebook, Twitter, Ning)
- Advertisement via traditional media (e.g., television, radio, newspaper)
- Posters/flyers at school or other venues popular with teachers
- District superintendent
- School principal
- Teacher/Other school colleague
- Other (please specify) \_\_\_\_\_

### 4. How do you think the promotion/advertisement for this PD Academy compares with the promotion/advertisement of other professional development offered by the ESC in the past year? (Select one option)

- Less promotion/advertisement
- About the same
- More promotion/advertisement
- Don't know

### Reasons for Attendance

**5. Indicate the top three reasons why you attended this PD academy, and rank them in order of significance, with 1 being the most compelling or significant reason. [ Please rank exactly 3 option(s). ]**

- I was encouraged to attend by my school or district.
- I was required to attend by my school or district.
- To receive a stipend for attending the training.
- To earn continuing education credits.
- To improve my content/subject area knowledge.
- To learn about new instructional strategies.
- To learn about the Texas Essential Knowledge and Skills (TEKS) standards.
- To learn about College and Career Readiness Standards (CCRS).
- To learn about English Language Proficiency Standards (ELPS).
- To learn about Response to Intervention (RtI).
- To learn about state assessments for students.
- To obtain useful resources and materials.

**6. List any other significant factors that led you to attend this PD Academy that are not listed above, if any:**

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**7. How did your interest in this PD Academy compare with your interest in other professional development opportunities offered by the ESC in the past year? (Select one option)**

- Less interested
- About the same
- More interested

## PD Academy

**8. Was this PD Academy held at the ESC? (Select one option)**

- Yes
- No

**9. Where was the lead instructor of this PD Academy from? (Select one option)**

- The ESC that offered the PD Academy
- Another ESC
- A district or school in the ESC region
- Another school or district
- A college or university
- Don't know

**PD Academy Quality****10. Indicate your level of agreement or disagreement with the following statements regarding this PD Academy:**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
(a) The PD Academy was well-organized. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) The PD Academy was appropriately paced. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) The PD Academy was of an appropriate length. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) The physical space of the training site was conducive to learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) The PD Academy provided ample opportunities for participants to voice questions or concerns. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) The PD Academy provided ample opportunities for participants to share their knowledge or experience. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) The PD Academy provided me with ample opportunities to practice the concepts or strategies taught. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) The PD Academy provided me with ample opportunities to network with other teachers in my content area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) The overall goal or purpose of the PD Academy was clearly articulated. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) The overall goal or purpose of the PD Academy was met. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) Materials (e.g., manuals, handouts) were clear. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(l) I acquired new knowledge and skills as a result of attending the PD Academy. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(m) Attending the PD Academy was a good use of my time. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**PD Academy Instruction**

**11. Indicate your level of agreement or disagreement with the following statements regarding the instructor of this PD Academy:**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
(a) The instructor presented information in a clear and comprehensible manner. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) The instructor was knowledgeable about the content covered in the training. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) The instructor modeled effective instructional activities (e.g., lessons that can be taught to students). (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) The instructor consistently extended learning based on participants' knowledge of the content covered in the training. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) The instructor was responsive to participants' questions or concerns. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) The instructor was dynamic in presenting the training material. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**PD Academy Content**

<b>12. To what extent did this PD Academy cover each of the following:</b>				
	<b>Not at All</b>	<b>Minimal Extent</b>	<b>Moderate Extent</b>	<b>Great Extent</b>
(a) TEA's expectations for what teachers need to know about the TEKS standards. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Practical ways for teachers to integrate current CCRS into planning and implementing lessons for students. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Practical ways for teachers to integrate ELPS into planning and implementing lessons for students. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Practical ways for teachers to use RtI to guide their instruction to meet the needs of all students. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) New strategies or approaches for teaching various lessons and TEKS to students. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) An overview of state assessments for students. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) An overview of the Project Share system. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Project Share Training

**13. Approximately how long was the Project Share portion of this PD Academy?**  
(Select one option)

- Project Share was not covered in the PD Academy.
- 1-10 minutes
- 11-20 minutes
- 21-30 minutes
- 31-40 minutes
- 41-50 minutes
- 51-60 minutes
- More than an hour

### **Branching Instructions**

Follow the branching rules in the sequence given below. Jump to the page as specified in the branching rule if all the conditions specified in the rule are satisfied.

#### **Rule 1**

IF ANSWER TO (Q1 is (Algebra I End of Course Success) AND Q13 is (Project Share was not covered in the PD Academy.) ) THEN GO TO Page10

#### **Rule 2**

IF ANSWER TO (Q13 is (Project Share was not covered in the PD Academy.) AND Q1 is (Math Academy for Grades 5-6) ) THEN GO TO Page8

#### **Rule 3**

IF ANSWER TO (Q13 is (Project Share was not covered in the PD Academy.) AND Q1 is (Math Academy for Grades 7-8) ) THEN GO TO Page9

#### **Rule 4**

IF ANSWER TO (Q13 is (Project Share was not covered in the PD Academy.) AND Q1 is (Science TEKS Overview K-12) ) THEN GO TO Page11

#### **Rule 5**

IF ANSWER TO (Q13 is (Project Share was not covered in the PD Academy.) AND Q1 is (Science Academies for Grades 5-8) ) THEN GO TO Page12

#### **Rule 6**

IF ANSWER TO (Q13 is (Project Share was not covered in the PD Academy.) AND Q1 is (Biology End of Course Success) ) THEN GO TO Page13

#### **Rule 7**

IF ANSWER TO (Q13 is (Project Share was not covered in the PD Academy.) AND Q1 is (English I and II End of Course Success) ) THEN GO TO Page14

#### **Rule 8**

IF ANSWER TO (Q13 is (1-10 minutes OR 11-20 minutes OR 21-30 minutes OR 31-40 minutes OR 41-50 minutes OR 51-60 minutes OR More than an hour) ) THEN GO TO Page7

**14. What resources were utilized during the training on the use of Project Share?  
(Select all that apply.)**

- Computers with which we could log in and use the system.
- Computer used by instructor with projector to demonstrate Project Share's functionality.
- Printed screen shots of important components or functions of Project Share.
- Printed instructions for using important components or functions of Project Share.
- Printed instructions of the use of Project Share that we could take with us.
- No equipment or materials were used.
- Other (please explain) \_\_\_\_\_

**Project Share Training****15. To what extent did the facilitator of this PD Academy do the following while training you on Project Share?**

	<b>Not at All</b>	<b>Minimal Extent</b>	<b>Moderate Extent</b>	<b>Great Extent</b>
(a) Encouraged us to share our experiences and insights when using Project Share. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Modeled discussion behavior when using Project Share. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Emphasized the use of Project Share to build learning communities. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Stressed collaboration in Project Share to build collective capacity. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Offered ongoing assistance on Project Share to participants. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Indicated that a group, or learning community, would be created within Project Share consisting of teachers who attended the PD Academy. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**16. After attending this PD Academy, how prepared were you to use Project Share? (Select one option)**

- Not at all prepared
- Somewhat prepared
- Prepared
- Very prepared

**17. After attending this PD Academy, how interested were you in using Project Share? (Select one option)**

- Not at all interested
- Somewhat interested
- Interested

- Very interested

### **Branching Instructions**

Follow the branching rules in the sequence given below. Jump to the page as specified in the branching rule if all the conditions specified in the rule are satisfied.

#### **Rule 1**

IF ANSWER TO (Q1 is (Math Academy for Grades 5-6) ) THEN GO TO Page8

#### **Rule 2**

IF ANSWER TO (Q1 is (Math Academy for Grades 7-8) ) THEN GO TO Page9

#### **Rule 3**

IF ANSWER TO (Q1 is (Science TEKS Overview K-12) ) THEN GO TO Page11

#### **Rule 4**

IF ANSWER TO (Q1 is (Algebra I End of Course Success) ) THEN GO TO Page10

#### **Rule 5**

IF ANSWER TO (Q1 is (Science Academies for Grades 5-8) ) THEN GO TO Page12

#### **Rule 6**

IF ANSWER TO (Q1 is (Biology End of Course Success) ) THEN GO TO Page13

#### **Rule 7**

IF ANSWER TO (Q1 is (English I and II End of Course Success) ) THEN GO TO Page14

**Impact of Professional Development on Knowledge**

If Q18(a) is not Answered, then Go to Page No. 15

<b>18. To what extent did this PD Academy increase or improve your knowledge related to the following:</b>				
	<b>Not at All</b>	<b>Minimal Extent</b>	<b>Moderate Extent</b>	<b>Great Extent</b>
(a) Delivering hands-on student-centered instruction in the classroom. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P15	P15	P15	P15
(b) Content covered in my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Teaching skills. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Integrating CCRS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Integrating ELPS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Using RtI to guide classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Utilizing new strategies or lessons to teach the required TEKS for my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Improving student outcomes. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Disaggregating or analyzing data to better understand gaps in student learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) Providing effective instruction on comparison of fractions. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) Providing effective instruction on equivalent fractions. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(l) Providing effective instruction on fraction/decimal relationship. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(m) Providing effective instruction on addition and subtraction of fractions. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(n) Successfully moving students from additive to multiplicative thinking. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(o) Providing effective instruction on rate and ratio. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(p) Using the Universal Screener. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(q) Applying the Grade 5-6 Math TEKS in lesson planning/implementation. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(r) The overall vertical alignment of the Math TEKS. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Impact of Professional Development on Knowledge

### Math Academy for Grades 7-8

If Q19(a) is not Answered, then Go to Page No. 15

**19. To what extent did this PD Academy increase or improve your knowledge related to the following:**

	Not at All	Minimal Extent	Moderate Extent	Great Extent
(a) Delivering hands-on student-centered instruction in the classroom. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P15	P15	P15	P15
(b) Content covered in my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Teaching skills. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Integrating CCRS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Integrating ELPS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Using RtI to guide classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Utilizing new strategies or lessons to teach the required TEKS for my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Improving student outcomes. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Disaggregating or analyzing data to better understand gaps in student learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) Providing effective instruction on proportionality. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) Identifying student misconceptions about proportionality, such as misapplication of the cross-multiplication shortcut. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(l) Providing effective instruction on percentages and percentage change. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(m) Providing effective instruction on algebraic representations. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(n) Using the Universal Screener. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(o) Applying the Grades 7-8 Math TEKS in lesson planning/implementation. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(p) The overall vertical alignment of the Math TEKS. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Impact of Professional Development on Knowledge

### Algebra I End of Course Success

If Q20(a) is not Answered, then Go to Page No. 15

**20. To what extent did this PD Academy increase or improve your knowledge related to the following:**

	<b>Not at All</b>	<b>Minimal Extent</b>	<b>Moderate Extent</b>	<b>Great Extent</b>
(a) Delivering hands-on student-centered instruction in the classroom. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P15	P15	P15	P15
(b) Content covered in my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Teaching skills. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Integrating CCRS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Integrating ELPS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Using RtI to guide classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Utilizing new strategies or lessons to teach the required TEKS for my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Improving student outcomes. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Disaggregating or analyzing data to better understand gaps in student learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) Preparing students for success on the Algebra I EOC assessment. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) Providing effective instruction on functions, functional relationships, and linear functions. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(l) The Math TEKS related to Algebra. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(m) The overall vertical alignment of the Math TEKS. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Impact of Professional Development on Knowledge

### Science TEKS Overview K-12

If Q21(a) is not Answered, then Go to Page No. 15

#### 21. To what extent did this PD Academy increase or improve your knowledge related to the following:

	Not at All	Minimal Extent	Moderate Extent	Great Extent
(a) Delivering hands-on student-centered instruction in the classroom. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P15	P15	P15	P15
(b) Content covered in my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Teaching skills. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Integrating CCRS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Integrating ELPS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Using RtI to guide classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Utilizing new strategies or lessons to teach the required TEKS for my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Improving student outcomes. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Disaggregating or analyzing data to better understand gaps in student learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) The Science TEKS as they relate to my specific grade level. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) The overall vertical alignment of the Science TEKS. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Impact of Professional Development on Knowledge

### Science Academies for Grades 5-8

If Q22(a) is not Answered, then Go to Page No. 15

**22. To what extent did this PD Academy increase or improve your knowledge related to the following:**

	Not at All	Minimal Extent	Moderate Extent	Great Extent
(a) Delivering hands-on student-centered instruction in the classroom. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P15	P15	P15	P15
(b) Content covered in my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Teaching skills. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Integrating CCRS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Integrating ELPS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Using RtI to guide classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Utilizing new strategies or lessons to teach the required TEKS for my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Improving student outcomes. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Disaggregating or analyzing data to better understand gaps in student learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) Preparing students for success on the Science EOC assessments. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) Providing effective instruction on weatherization and erosion. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(l) Providing effective instruction on tectonic plates and the layers of the Earth. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(m) The Grades 5-8 Science TEKS. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(n) The overall vertical alignment of the Science TEKS. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Impact of Professional Development on Knowledge

### Biology End of Course Success

If Q23(a) is not Answered, then Go to Page No. 15

**23. To what extent did this PD Academy increase or improve your knowledge related to the following:**

	<b>Not at All</b>	<b>Minimal Extent</b>	<b>Moderate Extent</b>	<b>Great Extent</b>
(a) Delivering hands-on student-centered instruction in the classroom. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Go to Page No.	P15	P15	P15	P15
(b) Content covered in my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Teaching skills. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Integrating CCRS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Integrating ELPS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Using RtI to guide classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Utilizing new strategies or lessons to teach the required TEKS for my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Improving student outcomes. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Disaggregating or analyzing data to better understand gaps in student learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) Preparing students for success on the Biology EOC assessments. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) The Science TEKS as they relate to Biology. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(l) The overall vertical alignment of the Science TEKS. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Impact of Professional Development on Knowledge

### English I and II End of Course Success

**24. To what extent did this PD Academy increase or improve your knowledge related to the following:**

	<b>Not at All</b>	<b>Minimal Extent</b>	<b>Moderate Extent</b>	<b>Great Extent</b>
(a) Delivering hands-on student-centered instruction in the classroom. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Content covered in my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Teaching skills. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Integrating CCRS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Integrating ELPS into classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Using RtI to guide classroom instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Utilizing new strategies or lessons to teach the required TEKS for my subject area. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Improving student outcomes. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Disaggregating or analyzing data to better understand gaps in student learning. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(j) Preparing students for success in the different types of writing on the English EOC assessments (e.g., expository, persuasive). (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(k) Preparing students for success in reading on the English EOC assessments. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(l) The overall purpose and importance of the English EOC assessments. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(m) Providing effective instruction on the steps of research (i.e., locate a range of relevant sources and evaluate, synthesize, and present ideas and information). (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(n) The overall vertical alignment of the English TEKS. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Impact of Professional Development

<b>Impact of Professional Development on Classroom Instruction</b>					
<b>25. To what extent did this PD Academy provide you with new information or enrich your existing knowledge related to the following instructional strategies or practices?</b>					
	<b>Not at All</b>	<b>Minimum Extent</b>	<b>Moderate Extent</b>	<b>Great Extent</b>	<b>Not Applicable to the Core Subject</b>
(a) Effective questioning and discussion strategies. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Differentiated instruction (both remedial and enrichment). (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Hands-on activities. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Scaffolding. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Visual representations. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) "Think, Pair, Share" activities. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Think alouds. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) 5E Model (Engage, Explore, Explain, Elaborate, Evaluate). (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(i) Formative Assessments (e.g., journaling, sample test items, etc.). (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Impact of Professional Development on Collaborative Behavior****26. To what extent did this PD Academy provide you with new information or enrich your existing knowledge related to the following collaborative practices?**

	<b>Not at All</b>	<b>Minimum Extent</b>	<b>Moderate Extent</b>	<b>Great Extent</b>
(a) Either formally or informally sharing ideas and knowledge with other teachers at your school. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) Meeting with other teachers at your school to discuss ways to incorporate instructional strategies. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) Working with other teachers to develop materials or activities for particular classes. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Observing another teacher's classroom to offer feedback. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Observing another teacher's classroom to get ideas for your own instruction. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Reviewing student assessment data with other teachers to make instructional decisions. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) Participating in learning communities (face-to-face or online through Project Share) for professional growth and development. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Reinforcement of PD Academy**

**27. Indicate your level of agreement or disagreement with the following statements regarding reinforcement of this PD Academy at your school:**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
(a) The principal and/or assistant principal at my school are aware of my participation in the PD Academy. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) The principal and/or assistant principal at my school have discussed the concepts from the PD Academy with teachers (whether or not they attended the PD Academy). (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) The principal and/or assistant principal at my school has observed teachers (either formally or informally) for evidence that strategies from the PD Academy are being implemented in the classroom. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) Concepts (related to instruction, assessment, and collaboration) emphasized at the PD Academy are aligned with other initiatives at my school. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) Other teachers at my school are interested in what I learned at the PD Academy. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) I have been asked or invited to present (either formally or informally) what I learned at the PD Academy to my school. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) I have presented (either formally or informally) what I learned at the PD Academy to my school. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(h) Teachers who attended the same PD Academy regularly meet to extend our collective knowledge. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Coaching Support

**28. Have you met with a content instructional coach in your subject area so far during this school year? (Select one option)**

- Yes
- No, but I plan to work with a coach during this school year.
- No, and I do not plan to meet with a coach during this school year.

**Branching Instructions**

Follow the branching rules in the sequence given below. Jump to the page as specified in the branching rule if all the conditions specified in the rule are satisfied.

**Rule 1**

IF ANSWER TO (Q1 is (Math Academy for Grades 5-6 OR Math Academy for Grades 7-8) AND Q28 is (No, but I plan to work with a coach during this school year. OR No, and I do not plan to meet with a coach during this school year.) ) THEN GO TO Page18

**Rule 2**

IF ANSWER TO (Q1 is (Algebra I End of Course Success OR Science TEKS Overview K-12 OR Science Academies for Grades 5-8 OR Biology End of Course Success OR English I and II End of Course Success) AND Q28 is (No, but I plan to work with a coach during this school year. OR No, and I do not plan to meet with a coach during this school year.) ) THEN GO TO Page21

**Rule 3**

IF ANSWER TO (Q28 is (Yes) ) THEN GO TO Page17

**29. What was the nature of the coaching activity? (Select all that apply.)**

- Co-taught a lesson with me
- Collaborated on lesson planning
- Modeled instruction for a particular lesson
- Observed me in the classroom
- Provided feedback after a classroom observation
- Provided me with resources and materials
- Other (please specify) \_\_\_\_\_

**Branching Instructions**

Follow the branching rules in the sequence given below. Jump to the page as specified in the branching rule if all the conditions specified in the rule are satisfied.

**Rule 1**

IF ANSWER TO (Q1 is (Math Academy for Grades 5-6 OR Math Academy for Grades 7-8) ) THEN GO TO Page18

**Rule 2**

IF ANSWER TO (Q1 is (Algebra I End of Course Success OR Science TEKS Overview K-12 OR Science Academies for Grades 5-8 OR Biology End of Course Success OR English I and II End of Course Success) ) THEN GO TO Page21

### Algebra Readiness Grant Program

30. This year (2010-2011), are you teaching at a campus which receives Algebra Readiness grant funding (if you are unsure, a list of these campuses can be found [here](#))? (Select one option)

- Yes
- No

Go to Page No. 19

Go to Page No. 21

If Did Not Answer  
Then  
Go to Page No. 19

## Algebra Readiness Grant Program

**31. Before taking this survey, were you aware of the Algebra Readiness grant program at your campus? (Select one option)**

Yes

Go to Page No. 20

No

Go to Page No. 21

If Did Not Answer  
Then

Go to Page No. 20

**Algebra Readiness Grant Program****32. Indicate your level of agreement with the following statements:**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
(a) There is a need in my school for the Algebra Readiness grant program. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(b) The administration at my school is effectively leading the implementation of the Algebra Readiness grant program. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(c) I am actively participating in the implementation of the Algebra Readiness grant program at my school. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(d) The math department at my school is effectively implementing the Algebra Readiness grant program. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(e) The math department at my school is restructuring itself in line with the goals of the Algebra Readiness grant program. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(f) Most of the teachers at my school support participating in the Algebra Readiness grant program. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(g) I am aware of the school-level requirements involved (i.e., math content coaches, extended learning time for math, common planning time for the math department) with the Algebra Readiness grant program. (Select one option)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Teacher Background

**33. How many years of teaching experience do you have? (Select one option)**

- This is my first year
- 2-5 years
- 6-10 years
- 11 or more years

**34. How many years of experience do you have teaching this core subject? (Select one option)**

- This is my first year
- 2-5 years
- 6-10 years
- 11 or more years

**35. Is there anything else you would like to tell us about your experiences with this PD academy?**

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# **Appendix 15 – Participant Response Rate by Region**

The ESC region response rate represents the total number of respondents divided by the total number of invitations sent to participants attending a PD Academy with an identifiable ESC region, as determined by teacher email addresses. For example, 1,330 of the invitations to teachers that attended PD Academy were able to be identified using their email address as being from ESC Region I. Of these 1,330 invitations, 637 responded to the survey, which results in a response rate of 48 percent for that region. As shown in Table A15.1, response rate varied by ESC region. The majority had a response rate of between 40 percent and 60 percent. ESC Region 20 logged the highest response rate at 63 percent, while ESC Region 18 had the lowest response rate of 23 percent.

Table A15.1. Response Rate by ESC Region

ESC Region	Total Number of Invitations	Total Number of Respondents	Response Rate
I	1,330	637	47.9%
II	344	148	43.0%
III	214	100	46.7%
IV	2,029	945	46.6%
V	227	73	32.2%
VI	248	126	50.8%
VII	1,243	712	57.3%
VIII	400	202	50.5%
IX	289	177	61.2%
X	2,616	1,082	41.4%
XI	1,838	942	51.3%
XII	857	392	45.7%
XIII	1,090	465	42.7%
XIV	211	105	49.8%
XV	246	81	32.9%
XVI	292	176	60.3%
XVII	311	128	41.2%
XVIII	66	15	22.7%
XIX	518	221	42.7%
XX	391	248	63.4%
Total	14,760	6,975	--

The total number of invitations and the total number of respondents used to calculate response rates are reported based on invitations sent to participants with an identifiable ESC Region, based on teacher email addresses, as reported by teachers who attended PD Academies during the summer of 2010.

## **Appendix 16 – Analytic Approaches**

### ***Analysis of Expert Panel Feedback***

Experts' feedback was analyzed and discussed during conference calls between the evaluation team, expert review task leads, and each expert panel. Following the conference calls, feedback was synthesized by the task leads to reduce the data to brief points about each set of materials for each Academy. In some cases, direct comments from individual reviewers were kept because evaluation team task leads felt that the comments captured the spirit of the expert reviewers' overall feedback. These brief points were placed into matrices listing the points emphasized from the expert review and each PD Academy.

Expert review task leads from the research team read through the points included in each matrix and determined the extent to which the materials reflected best practices in teacher PD. These judgments were based solely on the feedback from the experts. Strong, moderate, and weak reflection of best practices were defined as:

- Strong – Experts' feedback indicates that the Academy materials mostly reflect best practices, and no weaknesses are noted.
- Moderate – Experts' feedback indicates that the Academy materials somewhat reflect best practices, but weaknesses are noted.
- Weak – Experts' feedback indicates that the Academy materials do not reflect, or reflect very little, best practices, and weaknesses are noted.

More detailed information from the expert reviewers will be made available to TEA so that experts' feedback can be used in the refinement of the Academy materials and the development of materials for new PD Academies.

### ***Analysis of Data Collected from Teacher Professional Development Observations***

The analytic database constructed for examining the PD observation data consisted of ratings for each of the one-day sessions, and an average rating for each of the two- or three-day sessions. Ratings were assigned in each of the four domains: training fidelity, training delivery, interactions between presenters and participants, and training climate. Domains were scored from 1 to 4.

Observation data were examined using the mean rating and standard deviation of each component. This included the synthesis statements on overall quality and fidelity. Means and standard deviations for each of these statements were computed for each of the seven Academies. Frequencies of the key variables (region, presenter role, and location type) related to fidelity were explored.

### ***Analysis of Trainer and Participant Data***

The research team conducted descriptive statistics to answer the research questions regarding participation in the TOT and face-to-face PD sessions. The TOT dataset was used to calculate the number

of sessions conducted within each Academy, and the proportion of trained trainers who turned around training to teachers.

The teacher participant dataset was used to compare the PD participants to the all teachers (PD attendee or not) within the state, and by each region, to examine the extent to which the participants were representative of Texas teachers writ large.<sup>79</sup> Utilizing additional demographic data available in the ERC data warehouse, the teacher participant database was further analyzed to compare Academy participants to non-participating teachers across the state, and by region, based on interesting demographic characteristics and school performance measures.

Specifically, descriptive analyses were used to report the following data for each Academy:

- The number of teachers across the state and within each region teaching the targeted content area in 2009-10 (e.g., middle school math, Algebra I) and the percent of those numbers attending the summer PD Academy.
- Comparisons of PD participants' gender, ethnicity and teaching experience with that of all teachers in the state teaching the targeted content area in 2009-10.
- Comparisons of the average passing rates on the TAKS, and demographic characteristics of the campuses of the PD participants with that of other campuses in the state with teachers teaching the targeted content area that did not attend a summer PD Academy.

### *Analysis of Survey Data*

Quantitative data from all surveys were cleaned, analyzed, and stored using the Statistical Package for the Social Sciences. For each survey item, results were examined using descriptive analyses including frequency distributions and calculating mean scores. For the regional trainer and PD participant surveys, frequencies and percentages were examined for all Academies together and separately by Academy, in order to address all relevant research questions.

**Regional Trainer Survey.** Three scale scores were created that could be compared across Academies. Sixteen items related to the Structure and Delivery of the Regional Training (under question 1E) measured organization, pacing, duration, physical space, and instructor competency. Data from six survey items addressing Coverage of Key Content (under question 1E) were also combined. For this construct, key content included TEA's expectations as well as practical strategies for teachers to integrate relevant standards (e.g., ELPS and CCRS) and models (e.g., RTI). Finally, eight items contributed to the measurement of Perceptions of Teacher Preparedness to Instruct Students (under question 1H). These items focused on a teacher's ability to implement in the classroom the concepts and strategies emphasized in the Academies, such as research-based strategies and differentiated instruction.

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<sup>79</sup> It is important to note that at the time of this report, 2010-11 PEIMS data were not yet available; therefore teachers can only be described in terms of their 2009-10 demographic data. Hence, the characteristics of new teachers (in 2010-11) were not analyzed.

**PD Participant (Teacher) Survey.** For this survey, 13 items relating to the quality of the delivery of the training (under question 1H) were combined to produce one scale score that can be compared across groups of teachers or Academies. These 13 items refer to the organization, pacing, duration, physical space, materials, and opportunities to network with other participants. Data from six survey items addressing the construct of Instructor Competence (under question 1H) were analyzed via the Rasch model. For this construct, instructor’s knowledge, ability to clearly present content, and responsiveness were included. Also related to question 1H, seven items contributed to the construct of Coverage of Key Content. Key content included TEA’s expectations as well as practical strategies for teachers to integrate relevant standards (e.g., ELPS and CCRS) and models (e.g., RTI).

## **Appendix 17 – NSDC Standards**

## NSDC Content Standards for Staff Development<sup>80</sup>

- *Equity*: Prepares educators to understand and appreciate all students, create safe, orderly and supportive learning environments, and hold high expectations for their academic achievement.
- *Quality Teaching*: Deepens educators' content knowledge, provides them with research-based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments appropriately.
- *Family Involvement*: Provides educators with knowledge and skills to involve families and other stakeholders appropriately.

### NSDC Context Standards for Staff Development

- *Learning Communities*: Organizes adults into learning communities whose goals are aligned with those of the school and district.
- *Resources*: Requires resources to support adult learning and collaboration.

### NSDC Process Standards for Staff Development

- *Data-Driven*: Uses disaggregated student data to determine adult learning priorities, monitor progress, and help sustain continuous improvement.
- *Research-Based*: Prepares educators to apply research to decision making.
- *Design*: Uses learning strategies appropriate to the intended goal.
- *Learning*: Applies knowledge about human learning and change.
- *Collaboration*: Provides educators with the knowledge and skills to collaborate.

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<sup>80</sup> The standards “Leadership” (requires skillful school and district leaders who guide continuous instructional improvement) and “Evaluation” (uses multiple sources of information to guide improvement and demonstrate its impact) were not included in the expert review protocols.

## **Appendix 18 – Expert Panel Summaries**

Table A18.1. Math Experts’ Perceptions of the Extent to Which the Math Academies Materials Align with Best Practices for Teacher PD (RQ1B)

NSDC Standards for Staff Development	Summary of Findings – MSTAR Math Academy for Grades 5-6	Summary of Findings – MSTAR Math Academy for Grades 7-8	Summary of Findings – Algebra I EOC Success Academy
Content Standard: Equity	<ul style="list-style-type: none"> <li>▪ ELPS references increase opportunities for teachers to make connections between the content and English language mastery.</li> <li>▪ References to encourage students to verbalize their thought processes were emphasized, but there was not much instruction on how to help ELL students do this or to identify when the problems in verbalization are related to language barriers and when they are related to the students’ understanding of the math.</li> <li>▪ Few practical suggestions were made about working with students in the classroom.</li> <li>▪ No evidence cited that the materials also meet the needs of students with disabilities.</li> </ul>	<ul style="list-style-type: none"> <li>▪ ELPS references help participants make connections between the content and English language mastery.</li> <li>▪ References to the needs of ELL students were present with little explicit instruction providing assistance in working with these students.</li> <li>▪ Materials included concrete examples of instructional techniques, explanation of concepts, and opportunities to discuss problem areas in student thinking.</li> <li>▪ Adding classroom vignettes designed to showcase various instructional strategies with opportunities for discussion would strengthen equity.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Implicit references to ELL students were made, but no examples of instructional strategies were included in the training.</li> </ul>
Content Standard: Quality Teaching	<ul style="list-style-type: none"> <li>▪ The presence of concrete examples of instructional techniques in the materials and opportunities to practice teaching and provide corrective feedback were assets of the Academy.</li> <li>▪ Participants are likely to leave with knowledge of how to implement the instructional strategies in their classrooms.</li> <li>▪ The training materials encourage the proper use of classroom assessments.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Analysis and discussion of student work should encourage quality teaching.</li> <li>▪ The materials did encourage formative assessment in planning.</li> <li>▪ Concern about the Universal Screener tool was expressed that the time spent on it is out of proportion to its usefulness to the teachers.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Strongest mathematical content focus of all math Academies.</li> <li>▪ Strong presence of useful problems/examples that can encourage quality teaching.</li> <li>▪ Overemphasis on classroom discussion and insufficient content instruction impede this effort.</li> <li>▪ Exposure to previous TAKS test questions and data was a useful tool for assessment.</li> </ul>
Content Standard: Family Involvement	<ul style="list-style-type: none"> <li>▪ There was no evidence cited in the training to suggest that the materials equip educators to engage families and other stakeholders in the learning process.</li> </ul>	<ul style="list-style-type: none"> <li>▪ There was little evidence that the materials equipped educators with the skills to engage families and other stakeholders.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The training materials did not address the topic of engaging families and other stakeholders in the learning process.</li> <li>▪ If it is to be considered in the future, it</li> </ul>

NSDC Standards for Staff Development	Summary of Findings – MSTAR Math Academy for Grades 5-6	Summary of Findings – MSTAR Math Academy for Grades 7-8	Summary of Findings – Algebra I EOC Success Academy
		<ul style="list-style-type: none"> <li>▪ Family and stakeholder issues should be addressed in a separate training.</li> </ul>	<ul style="list-style-type: none"> <li>▪ should be relegated to a separate training experience.</li> </ul>
Context Standard: Learning Communities	<ul style="list-style-type: none"> <li>▪ Discussion groups, working with partners, and networking were reinforced throughout the training.</li> <li>▪ References were made to a post-Academy online learning community through Project Share as a form of follow-up, but it was unclear what this would ultimately look like.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The small group discussions and activities in which participants worked with partners exemplified characteristics of learning communities.</li> <li>▪ Curiosity was expressed about what, if any, intentional, follow-up activities would be offered.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Group activities and some networking opportunities were incorporated into the training.</li> <li>▪ Details of what this would look like, precisely, following the Academy was uncertain (Project Share, etc.).</li> </ul>
Context Standard: Resources	<ul style="list-style-type: none"> <li>▪ There were references to Project Share, but it was unclear how/when this would be accomplished.</li> </ul>	<ul style="list-style-type: none"> <li>▪ There were references to Project Share but there were no relevant details regarding logistics or materials.</li> </ul>	<ul style="list-style-type: none"> <li>▪ There were references to Project Share but it was unclear how/when this would be accomplished.</li> </ul>
Process Standard: Data-Driven	<ul style="list-style-type: none"> <li>▪ The purpose of the Universal Screener might be to interpret data, but it was not clear and the coverage of the Universal Screener in the materials would be of little use to teachers on an individual basis.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The purpose of the Universal Screener might be to interpret data, but it was not clear and the coverage of the Universal Screener in the materials would be of little use to teachers on an individual basis.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The data showing percentages of students choosing particular answers on the assessment was particularly useful and was relevant to classroom activities.</li> </ul>
Process Standard: Research-Based	<ul style="list-style-type: none"> <li>▪ While the terms “research” and “research-based” were used throughout the Academies, there are no proper instructions for participants on how to interpret or use research data to inform their decision making.</li> </ul>	<ul style="list-style-type: none"> <li>▪ While the terms “research” and “research-based” were used throughout the Academies, there are no proper instructions for participants on how to interpret or use research data to inform their decision making.</li> </ul>	<ul style="list-style-type: none"> <li>▪ References to research to support the goals of the Academy are included, but no references are made to actually show participants how to use that data for their own teaching strategies.</li> </ul>
Process Standard: Design	<ul style="list-style-type: none"> <li>▪ There was too much emphasis on educational theory and not enough attention paid to relevant mathematical content.</li> <li>▪ There was a lot of focus of how the activities fit into the framework, but not clear that there is help for teachers on how to convey</li> </ul>	<ul style="list-style-type: none"> <li>▪ Mathematical concepts were underrepresented compared to other PD programs with which experts are familiar.</li> <li>▪ More time would be needed to accomplish the goals of the Academy, particularly for more content-related</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pedagogy without content mastery, especially at the elementary and middle school grade levels, is ineffective.</li> <li>▪ Inclusion of hands-on activities benefited teachers and therefore students.</li> </ul>

NSDC Standards for Staff Development	Summary of Findings – MSTAR Math Academy for Grades 5-6	Summary of Findings – MSTAR Math Academy for Grades 7-8	Summary of Findings – Algebra I EOC Success Academy
	<p>this knowledge to students.</p> <ul style="list-style-type: none"> <li>▪ Materials do not show teachers how the content area is utilized in future grades.</li> <li>▪ Presence of numerous mathematical and terminological errors.</li> <li>▪ Insufficient activities exist for participants to develop conceptual understanding and computational mastery.</li> <li>▪ Lack of an emphasis upon content knowledge would likely result in minimal gains in student achievement.</li> </ul>	<p>activities.</p> <ul style="list-style-type: none"> <li>▪ It is likely to help teachers understand how math content fits into a broader curriculum.</li> <li>▪ Mathematical content covered by the materials is insufficient.</li> <li>▪ Academy needs to help teachers become familiar with what is taught in upcoming grades.</li> <li>▪ Materials contained errors in the use of mathematics terminology.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The actual test questions included in the materials (with percentages of students choosing particular answers, i.e., learner profiles) are helpful for teachers.</li> <li>▪ The addition of content activities provides a platform for teachers to ask questions and clarify their own understanding of the material.</li> <li>▪ Overemphasis upon instructional strategies (discussion) at the expense of robust mathematical content.</li> <li>▪ The current definitions and relevant discussions about the meaning of function, slope, and linear relationship are inadequate.</li> <li>▪ Little information is included in the contents about the structure of the Algebra I EOC assessment.</li> </ul>
Process Standard: Learning	<ul style="list-style-type: none"> <li>▪ Discussion-based approach to training is aligned with best practices in instruction.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Discussion-based approach to training is aligned with best practices in instruction.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The instructional strategies correspond with best practices for working with adult learners, including discussions and team-related exercises.</li> </ul>
Process Standard: Collaboration	<ul style="list-style-type: none"> <li>▪ Opportunities exist for teachers to work with material at grade level through group discussions.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Opportunities to discuss materials with other grade-level colleagues promote familiarity with new instructional strategies.</li> </ul>	<ul style="list-style-type: none"> <li>▪ There was sufficient emphasis on participant engagement through discussion.</li> </ul>

Source: Analysis of findings from the expert review panel reports.

Table A18.2. Science Experts' Perceptions of the Extent to Which the Science Academies Materials Align with Best Practices for Teacher PD (RQ1B)

NSDC Standards for Staff Development	Summary of Findings – Science TEKS Overview K-12	Summary of Findings – Science Academies for Grades 5-8	Summary of Findings – Biology EOC Success
Content Standard: Equity	<ul style="list-style-type: none"> <li>▪ While disabilities were not explicitly referenced in the materials, various types of instruction were encouraged.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Attentiveness of the materials to ELPS and RtI was modeled through differentiated instruction.</li> <li>▪ Not enough attention to providing opportunities for teachers to have dialogue about their concerns, questions, and ideas for including ELL students in the classroom.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The materials supported the importance of differentiated instruction both in their design as well as during the four debriefing exercises which encourage participants to identify specific examples of how the lessons support the needs of ELL students and those with other needs.</li> </ul>
Content Standard: Quality Teaching	<ul style="list-style-type: none"> <li>▪ Materials contained items that model quality teaching (e.g., collaboration/group work, graphic organizers, drafting working definitions, gauging rigor and relevance).</li> </ul>	<ul style="list-style-type: none"> <li>▪ Materials encourage quality teaching by providing tangible instructional strategies for participants to support students' academic achievement.</li> <li>▪ Utilization of the 5E Instructional Model that emphasizes modeling, guiding, facilitating, and continually assessing student work was effective.</li> <li>▪ Experts agreed that the lessons draw attention to formative assessment and its role in identifying student understanding of the materials before it is too late to intervene.</li> <li>▪ It was recommended that greater explanation about how alternative assessment strategies can be used in the classroom would be helpful to the teachers.</li> <li>▪ The lack of opportunities for teachers to elicit prior knowledge and share existing ideas was deemed to be a weakness by the experts.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants were provided with a thorough overview of the changes to TEKS.</li> <li>▪ The presenter was to model quality teaching/instructional strategies through the cultivation of an "inquiry-rich" learning environment.</li> <li>▪ More time is needed to allow teachers to explore their own understanding of effective teaching strategies; identifying their own questions and concerns; and identifying ways that can improve the conditions and opportunities in their own classrooms.</li> <li>▪ Allowing participants to complete the strategies presented while in the session allows them to identify with their students.</li> <li>▪ Hands-on activities encouraged informal exploration.</li> <li>▪ Opportunities for reflection writing and worksheets formalize the assessment without adding pressure.</li> </ul>

NSDC Standards for Staff Development	Summary of Findings – Science TEKS Overview K-12	Summary of Findings – Science Academies for Grades 5-8	Summary of Findings – Biology EOC Success
			<ul style="list-style-type: none"> <li>▪ The Academy provided examples of both formative and summative assessments as well as stressing the importance of differentiated instruction.</li> </ul>
Content Standard: Family Involvement	<ul style="list-style-type: none"> <li>▪ No evidence that suggests that the training materials equip educators with the skills to engage families and other stakeholders in the learning process.</li> </ul>	<ul style="list-style-type: none"> <li>▪ No evidence reported that the materials equip educators with the skills to engage families and other stakeholders in the learning process.</li> <li>▪ It was determined, however, that families could be engaged.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The materials do not address family involvement.</li> <li>▪ It could easily be accomplished by adding a slide and some discussion time about how learning can extend beyond the school day.</li> </ul>
Context Standard: Learning Communities	<ul style="list-style-type: none"> <li>▪ At the start of the Academy, participants were organized into small groups based upon grade level or course.</li> <li>▪ There were numerous instances where participants engaged one another in activities.</li> </ul>	<ul style="list-style-type: none"> <li>▪ While opportunities for teachers to direct their own learning were minimal, there was evidence of the formation of professional learning communities through small group activities, expert groups, presenting to the larger group, and networking.</li> </ul>	<ul style="list-style-type: none"> <li>▪ At the start of the Academy, participants are organized into small groups based upon grade level or course.</li> <li>▪ There were numerous instances where participants engage one another in activities.</li> <li>▪ There was evidence throughout the Academy materials that participants were organized into learning communities.</li> </ul>
Context Standard: Resources	<ul style="list-style-type: none"> <li>▪ No indication of follow-up or ongoing training noted by the experts.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Little attention placed upon this component; although online opportunities for learning through Project Share existed, experts were not sure what this would ultimately look like.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Project Share was cited as the primary post-Academy activity.</li> </ul>
Process Standard: Data-Driven	<ul style="list-style-type: none"> <li>▪ Materials do not include information on the vertical alignment of the TEKS.</li> <li>▪ Materials present the possibility of insufficient time to prepare educators (especially K-4’s understanding of changes).</li> <li>▪ There is a need for greater critical</li> </ul>	<ul style="list-style-type: none"> <li>▪ While greater tools could be provided to teachers to better use research/data, the Academy did include the use performance data to support the theme/construction of the Academy.</li> <li>▪ The content was data-driven and accurate.</li> <li>▪ The side-by-side comparison of the</li> </ul>	<ul style="list-style-type: none"> <li>▪ Participants are asked to identify the trends in the data; the similarities to TAKS data; and how to use the data to better prepare themselves and their students for EOC success.</li> </ul>

NSDC Standards for Staff Development	Summary of Findings – Science TEKS Overview K-12	Summary of Findings – Science Academies for Grades 5-8	Summary of Findings – Biology EOC Success
	<p>thinking and more explicit connectedness of some activities to TEKS.</p>	<p>1998/2010 TEKS was helpful (especially allowing participants to provide their own descriptions of the changes).</p>	
<p>Process Standard: Research-Based</p>	<ul style="list-style-type: none"> <li>▪ Rigor/Relevance Framework was very useful to teachers as it provided insight to teachers about the standards and how they can plan instruction accordingly.</li> </ul>	<ul style="list-style-type: none"> <li>▪ While the training did use the term “research” and “research-based”, experts responded that there were insufficient opportunities to explore how research/data can be used in the development of tangible instructional strategies.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The materials support the use of a wide range of methods to encourage learning and to assess it.</li> </ul>
<p>Process Standard: Design</p>	<ul style="list-style-type: none"> <li>▪ Materials were well-organized, visually appealing, informative, and encourage discussion.</li> <li>▪ The Rigor/Relevance Framework is a positive tool to help participants with the distinction between the 1998 science TEKS and the 2010 science TEKS.</li> <li>▪ Allotted time for the Academy (one day) is sufficient based upon the explicit learning objectives for the Academy.</li> <li>▪ Insufficient number of opportunities for the discussion of assessments and their impact upon classroom instruction.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The materials were well-organized and aesthetically pleasing.</li> <li>▪ Structuring each lesson around the BSCS 5E Instructional Model provided a solid infrastructure to increase the content knowledge of participants.</li> <li>▪ The incorporation of technology (primarily PowerPoint/video) was consistent with standard PD delivery.</li> <li>▪ The amount of time allotted for the Academy was sufficient.</li> <li>▪ Additional time spent reviewing samples of work, sharing personal experiences, and reviewing the 5 E Instructional Model would be helpful.</li> </ul>	<ul style="list-style-type: none"> <li>▪ For those teachers who do desire to effectively integrate technology into their classrooms, a series of organizations with corresponding websites were presented in the TEKS summary report.</li> <li>▪ The amount of time devoted to establishing a useful framework for understanding the differences between the 1998/2010 TEKS and the overview of the new Biology EOC exam was sufficient.</li> <li>▪ Structuring each lesson around the BSCS 5E Instructional Model provided the necessary infrastructure to increase the content knowledge of participants.</li> <li>▪ More time should be allotted for a more in-depth overview of the 5E Instructional Model.</li> </ul>
<p>Process Standard: Learning</p>	<ul style="list-style-type: none"> <li>▪ Adults are relevancy-oriented, and the materials clearly articulated the rationale behind the design and relationship to instruction.</li> <li>▪ Adults are practical, and exercises that</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adults are relevancy-oriented, and the materials clearly articulated the rationale behind the design and relationship to instruction.</li> <li>▪ Adults are practical, and exercises that</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adults are results-oriented, and the Adults are relevancy-oriented, and the materials clearly articulated the rationale behind the design and relationship to instruction.</li> </ul>

NSDC Standards for Staff Development	Summary of Findings – Science TEKS Overview K-12	Summary of Findings – Science Academies for Grades 5-8	Summary of Findings – Biology EOC Success
	<p>targeted rigor and relevance for each grade level allowed participants to be engaged in activities that required immediate practical application to learning/assessment.</p> <ul style="list-style-type: none"> <li>▪ Adults are results-oriented, and the Academies provided numerous opportunities for participants to exercise decision-making and see the outcomes of their work.</li> </ul>	<p>targeted rigor and relevance for each grade level allowed participants to be engaged in activities that required immediate practical application to learning/assessment.</p> <ul style="list-style-type: none"> <li>▪ Adults are results-oriented, and the Academies provided numerous opportunities for participants to exercise decision-making and see the outcomes of their work.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adults are practical, and exercises that targeted rigor and relevance for each grade level allowed participants to be engaged in activities that required immediate practical application to learning/assessment.</li> <li>▪ Adults are results-oriented, and the Academies provided numerous opportunities for participants to exercise decision-making and see the outcomes of their work.</li> </ul>
Process Standard: Collaboration	<ul style="list-style-type: none"> <li>▪ Adults learn best when they can make contextual application of the materials to their work, and participants were encouraged to share stories and provide examples from their years of professional experience.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adults learn best when they can make contextual application of the materials to their work, and participants were encouraged to share stories and provide examples from their years of professional experience.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Adults learn best when they can make contextual application of the materials to their work, and participants were encouraged to share stories and provide examples from their years of professional experience.</li> </ul>

Source: Author’s analysis of findings from the expert review panel reports.

Table A18.3. ELA Experts' Perceptions of the Extent to Which the Academy Material Align with Best Practices for Teacher PD (RQ1B)

NSDC Standards for Staff Development	Summary of Findings – English I and II EOC Success Academy
Content Standard: Equity	<ul style="list-style-type: none"> <li>▪ Materials emphasize the importance of differentiated instruction.</li> <li>▪ Materials do not adequately address the needs of all students; especially ELL students or students with disabilities, and would be difficult to accomplish in just one day.</li> <li>▪ The availability of both paper and online assessments; range of genres; spoken, written, and visual language conventions that are encouraged; variety of writing processes suggested for students; and types of student research described are considered strengths of the Academy as they appeal to the interests and instructional needs of a diverse student populations.</li> </ul>
Content Standard: Quality Teaching	<ul style="list-style-type: none"> <li>▪ The training increases teachers' understanding of English I and II EOCs structure.</li> <li>▪ Materials do not provide tangible instructional strategies for participants to support students' academic achievement.</li> <li>▪ Materials discuss the importance of assessment (summative rather than formative) throughout, but they do not address how to assess students.</li> </ul>
Content Standard: Family Involvement	<ul style="list-style-type: none"> <li>▪ Materials do not equip educators with the skills to engage families and other stakeholders in the learning process.</li> <li>▪ The mention of English language learners reinforces the cultural awareness competency that is critical to family involvement.</li> </ul>
Context Standard: Learning Communities	<ul style="list-style-type: none"> <li>▪ Training contains numerous opportunities for meaningful dialogue and collaboration.</li> <li>▪ Truly effective learning communities take time to evolve and not as a result of a single PD program.</li> <li>▪ Project Share was deemed to be an important component of the learning community and is likely to encourage learning beyond the face-to-face Academy.</li> </ul>
Context Standard: Resources	<ul style="list-style-type: none"> <li>▪ The training clearly articulates its goals and encourages adult collaboration during the training and via Project Share.</li> <li>▪ Since an identified goal of Academy is to show educators how they can help their students achieve success as well as the importance of differentiated instruction, it might be helpful to provide relevant websites for teacher use (e.g., Thinkfinity, Edutube, Teachertube, Photostory, and Animoto).</li> </ul>
Process Standard: Data-Driven	<ul style="list-style-type: none"> <li>▪ While data are available for instructional planning, there is little evidence that the Academy provides participants with adequate information about how to use these data.</li> <li>▪ The lack of sample individual and class reports weakened participants' understanding of how to use the EOC data.</li> </ul>
Process Standard: Research-Based	<ul style="list-style-type: none"> <li>▪ The goal of promoting an understanding of the relationship between classroom implementation of state standards and student achievement in general and as measured by the EOC assessment is accomplished.</li> <li>▪ The Academy is lacking activities that ask participants to evaluate samples of student performance on EOC items to gauge students' learning of the standards and how teachers might be able to increase student performance through specific instructional strategies.</li> </ul>

NSDC Standards for Staff Development	Summary of Findings – English I and II EOC Success Academy
Process Standard: Design	<ul style="list-style-type: none"> <li>▪ The presentation of the material was determined to be clear and logical.</li> <li>▪ Academy effectively incorporates technology in the program as indicated by the use of Project Share and PowerPoint.</li> <li>▪ Videos that could be used to encourage participants to better support the needs of ELL students were not included.</li> <li>▪ One day is sufficient because the goal of the Academy is only to promote an understanding of the purpose and structure of the English EOC assessments and the relationship between classroom implementation of state standards and student achievement in general and as measured by the EOC assessment.</li> </ul>
Process Standard: Learning	<ul style="list-style-type: none"> <li>▪ Instructional strategies described in the Academy materials correspond with best practices for working with adult learners.</li> </ul>
Process Standard: Collaboration	<ul style="list-style-type: none"> <li>▪ Handouts provided to participants were effective as they encouraged meaningful collaboration.</li> </ul>

Source: Author's analysis of findings from the expert review panel reports.

Table A18.4. Alignment of PD Academy Materials to Best Practices in Instruction

PD Academy	Best Practices for Instruction	Alignment to TEKS and National Standards
MSTAR Math Academy for Grades 5-6	<ul style="list-style-type: none"> <li>▪ There were frequent references to the importance of encouraging students to vocalize their understanding as a key component for learning.</li> <li>▪ There were opportunities for students to practice writing and talking about their own thinking.</li> <li>▪ The Academy promoted encouragement to help students connect various levels of mathematics.</li> <li>▪ The Academy is likely to increase participants’ understanding of the new TEKS math and language standards.</li> <li>▪ Mathematical accuracy and math content (particularly a broad understanding allowing for multiple problem-solving approaches) were lacking in the materials.</li> <li>▪ All experts agreed that the learner profiles included in the Academy were appropriate for Grade 5-6 teachers.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Materials aligned with the relevant state math standards for students taking the math courses in grades 5 and 6.</li> <li>▪ No specific state standards were considered unaddressed in the materials.</li> <li>▪ The problem is not in the choice of which national standards to address, but in the inadequate way the topics from the national standards are addressed.</li> <li>▪ Pedagogical instruction did not follow strong content instruction.</li> </ul>
MSTAR Math Academy for 7-8	<ul style="list-style-type: none"> <li>▪ The connection between various levels of math that is presented in the materials is helpful to students, and the opportunities that are provided to teachers to practice explaining their own thought processes were identified as representative of best practices.</li> <li>▪ The materials did not align with best practices because, while various problem areas are identified, there is no attempt to increase the participants’ understanding of the mathematical principles involved or teach them how they might better explain the concepts to their students.</li> <li>▪ The greatest strength of the Academy is its ability to increase the understanding of the new Texas math standards (but is much less likely to significantly increase understanding of math).</li> <li>▪ Other strengths observed were the hands-on activities, focus on proportional thinking, thinking skills, and practice of relevant instructional strategies.</li> <li>▪ The primary item lacking in the Academy was content instruction in that the Academy should devote considerable time to increasing math content expertise as well as pedagogy and instruction, which can contribute to a broad perspective that can assist the teachers in showing students that multiple approaches may exist to solving a particular problem.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Alignment did exist between the PD Academy and relevant state math standards (TEKS) for students taking math courses in grades 7 and 8 for all relevant state standards.</li> <li>▪ The national standards address proportions and percents, which were addressed by the Academy; however, there was concern about how these standards were addressed. Math experts felt that integral to effective PD is an intentional effort to increase the participants understanding of mathematical principles and provide numerous opportunities for participants to explain the concepts to others. Experts felt that proportions and percents can only be effectively taught if the underlying mathematical concepts and reasoning are also presented.</li> </ul>

PD Academy	Best Practices for Instruction	Alignment to TEKS and National Standards
	<ul style="list-style-type: none"> <li>▪ A need to further explain mathematical structures was cited as important as well as pattern of identifying areas of weakness in understanding/preparation without providing suggestions explaining how to address the problems.</li> <li>▪ The learner profiles were appropriate for grades 7-8.</li> </ul>	
Algebra I EOC Success	<ul style="list-style-type: none"> <li>▪ The materials are mathematically correct and encourage meaningful dialogue.</li> <li>▪ Overemphasis on internalizing content can distract from the fixed meanings of some concepts and there is a need for more conceptual instruction. Various problem areas are identified, but there is little attempt to increase the participants understanding of the mathematical principles involved or teach them how they might better explain the concepts to their students.</li> <li>▪ Numerous, relevant hands on activities that can be used in the classroom were provided.</li> <li>▪ The review of past test problems from the EOC assessment was effective.</li> <li>▪ The group discussion engages participants with one another.</li> <li>▪ Relevant mathematical content was the most significant item lacking within the content, including things like logical explanation of mathematical structures (definitions); strong understanding of slope; importance and relevance of linear and non-linear equations; and use of inequalities in realistic problem situations.</li> <li>▪ There is not enough time designated for teachers to practice explaining concepts to one another.</li> <li>▪ The lessons included in the Academy are appropriate for students taking Algebra I since the problems were selected from the EOC assessment.</li> <li>▪ The math experts agreed that the Algebra I EOC was the strongest math academy in terms of mathematical accuracy and overall structure.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Experts agreed that the content of the PD Academy does align with the relevant math TEKS.</li> <li>▪ Experts determined that the materials included relevant national math standards including equations, functions, and inequalities.</li> </ul>
Science Academies for Grades 5-8	<ul style="list-style-type: none"> <li>▪ Hands-on activities or “Guided Inquiry Learning”; small group work; the development and presentation of models; and reflective writing with concurrent feedback are aligned with best practices for math instruction.</li> <li>▪ Prevalence of activities encouraging students to, “explore, explain, extend, and evaluate their progress, the presentation of science as a way of knowing” (AAAS, 2009), and the Academy’s placement of the teacher in the role of student.</li> <li>▪ The six important learning experiences that are engaged by effective science</li> </ul>	<ul style="list-style-type: none"> <li>▪ The experts agreed that the content aligns with the relevant TEKS for students taking the science courses in grades 5 through 8.</li> <li>▪ One expert did identify inaccuracies between the content and TEKS.</li> <li>▪ The national science standards were addressed.</li> <li>▪ Specific examples include: science as inquiry; science</li> </ul>

PD Academy	Best Practices for Instruction	Alignment to TEKS and National Standards
	<p>instruction described by the National Science Education Standards (National Committee on Science Education Standards and Assessment &amp; National Research Council, 1996) described were observed in the Academy and are as follows:</p> <ol style="list-style-type: none"> <li>1. Involve teachers in actively investigating phenomena that can be studied scientifically, interpreting results, and making sense of findings consistent with currently accepted scientific understanding.</li> <li>2. Address issues, events, problems, or topics significant in science and of interest to participants.</li> <li>3. Introduce teachers to scientific literature, media, and technological resources that expand their science knowledge and their ability to access further knowledge.</li> <li>4. Build on the teacher's current science understanding, ability, and attitudes.</li> <li>5. Incorporate ongoing reflection on the process and outcomes of understanding science through inquiry.</li> <li>6. Encourage and support teachers in efforts to collaborate.</li> </ol> <ul style="list-style-type: none"> <li>▪ The Academy integrated critical thinking exercises; small group work; goal setting and reflection; an environment suitable for adult learning; dynamic interaction regarding the new standards; well-prepared materials; and use of graphic organizers, models, and teaching stations.</li> <li>▪ It was observed that the Academy adheres to the four critical components that help teachers learn new strategies and skills: (1) presentation of theory, (2) demonstration of the strategy or skill, (3) initial practice in the workshop, and (4) prompt feedback about their teaching (Darling-Hammond, 1997; Darling-Hammond, 1999; Gersten, Chard, and Baker, 2000; IASA, 1996; Joyce and Showers, 1988; Showers, Joyce, and Bennett, 1987; Sparks, 1983; Sparks and Hirsch, 1997).</li> <li>▪ A pedagogical overview of the BSCS 5E Instructional Model was lacking.</li> <li>▪ The amount of content-related material was insufficient.</li> <li>▪ Overall, experts were in agreement that the lessons included in the Academy were appropriate for students in Grades 5-8. They did, however, identify a need for more student initiated work.</li> </ul>	<p>perspectives; physical science; Earth and space science; and life sciences.</p> <ul style="list-style-type: none"> <li>▪ The activities provided a quick overview of the national standards and provided the teachers with the materials to implement the standards into their classroom easily.</li> <li>▪ It would be useful to see the standards identified at the beginning of each exercise to help the participants see how the TEKS are met.</li> <li>▪ The lessons were aligned with and adequately addressed an understanding of the structure of the Earth system and Earth's history.</li> </ul>

PD Academy	Best Practices for Instruction	Alignment to TEKS and National Standards
Science TEKS Overview – K-12	<ul style="list-style-type: none"> <li>▪ The contents are consistent with best practices for teacher PD (Louks-Horsley, Love, Stiles, Mundry, and Hewson, 2003) due to their emphasis upon opportunities for active engagement; discussion and reflection to consider relationship of preexisting ideas to new ones; contextual familiarity (relevant application of materials); and strategies that can serve a diverse body of students.</li> <li>▪ The opportunities to collaborate with colleagues about the new standards and practices both in small and large groups were deemed positive by experts (liked the positive approach to discussing changes rather than as an opportunity to engage in overly critical and ultimately harmful discussion).</li> <li>▪ Exposure to the Rigor/Relevance Framework encouraged an active orientation to the materials rather than passive, listening-only behavior among participants.</li> <li>▪ A science content review, though useful to all participants, would be particularly relevant to K-4 educators whose certification programs generally require very few science courses. The review activity could boost their confidence in and command of their materials.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The content of the PD Academy aligns with state standards to the extent that the teachers analyze the rigor/ relevance of each standard and objective in order to determine a plan of implementation.</li> <li>▪ The national standards of science as Inquiry were reinforced throughout the Academy, but were not met as science content was not a key component of the training.</li> </ul>
Biology EOC Success	<ul style="list-style-type: none"> <li>▪ The Academy does reflect best practices for science instruction. One expert indicated that the Academy nicely aligns with the National Science Education Standards as it accomplishes the following:               <ol style="list-style-type: none"> <li>1. Involves teachers in actively investigating a phenomenon that can be studied scientifically, interpreting results, and making sense of findings consistent with currently accepted scientific understanding.</li> <li>2. Introduces teachers to scientific literature, media, and technological resources that expand their science knowledge and their ability to access further knowledge.</li> <li>3. Builds on the teacher’s current science understanding, ability, and attitudes.</li> <li>4. Incorporates ongoing reflection on the process and outcomes of understanding science through inquiry.</li> <li>5. Encourages and supports teachers in efforts to collaborate.</li> </ol> </li> <li>▪ Several other best practices were observed including Guided Inquiry Learning (5E Model), reflective writing, early introduction to terminology, small group interaction, and modeling.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The content Academy closely aligns with the TEKS.</li> <li>▪ Activities that promoted comparison between the old and new standards were determined by the experts to be very useful.</li> <li>▪ Additional Biology TEKS should be added to the alignment information.</li> <li>▪ Although national standards are not explicitly identified in the training, experts agreed that national standards were met in the training.</li> <li>▪ It was suggested by the experts that it would be helpful to see national standards identified in the beginning of the Academy to prepare participants to see how the training addresses them.</li> </ul>

PD Academy	Best Practices for Instruction	Alignment to TEKS and National Standards
	<ul style="list-style-type: none"> <li>▪ The strengths of the Academy are rooted in the four critical components that help teachers learn new strategies and skills. These include: presentation of theory, demonstration of the strategy or skill, initial practice in the workshop, and prompt feedback about their teaching (Darling-Hammond, 1997; Darling-Hammond, 1999; Gersten, Chard, and Baker, 2000; IASA, 1996; Joyce and Showers, 1988; Showers, Joyce, and Bennett, 1987; Sparks, 1983; Sparks and Hirsch, 1997).</li> <li>▪ Additional strengths identified were the integration of critical thinking exercises that do not allow students to provide only memorized answers, small group work allowing participants to evaluate and reflect upon the new standards and share with others, goal setting activities, the strategic placement of the activities throughout the training days, proactive collaboration about the changes rather than a critical treatment of them, and well-written, aesthetically-pleasing materials.</li> <li>▪ Specific references to items not present in the Academy include an example of the Frayer Model Graphic Organizer, and a pedagogical overview of the BSCS 5E Instructional Model.</li> <li>▪ Greater attentiveness to detail in the content is needed.</li> <li>▪ Unlike many EOC exams which focus on specific assessments, the material in this Academy also includes the acquisition of content, the employment of critical thinking, and provides rich inquiry experiences.</li> </ul>	
English I and II EOC Success	<ul style="list-style-type: none"> <li>▪ Materials emphasized the correlation between understanding standards, consistent monitoring of progress, and differentiated instruction.</li> <li>▪ The clarity, organization, relevance, and alignment of the EOC assessment to standards eliminate “guesswork” from the new expectations and can increase teacher confidence.</li> <li>▪ The extent to which participants are exposed to how these practices can be integrated into classroom instruction is insufficient.</li> <li>▪ The amount of time allocated for peer discussion was insufficient; more time is needed.</li> <li>▪ Additional handouts that further develop the concept of how educators can help students achieve success is suggested, i.e. Bloom’s Taxonomy of Learning.</li> </ul>	<ul style="list-style-type: none"> <li>▪ The Academy addresses the twelve national NCTE/IRA standards.</li> <li>▪ The concepts presented in the Academy are consistent with over half of the NCTE/IRA standards and to a lesser extent.</li> <li>▪ The content of the PD Academy aligns with the relevant TEKS for students taking the English I and II and ESOL I and II courses.</li> <li>▪ The Academy stresses the importance of teaching all of the TEKS, not just those that are addressed directly by the EOC assessments.</li> </ul>

PD Academy	Best Practices for Instruction	Alignment to TEKS and National Standards
	Examples of EOC items and student work that exemplify both excellent and insufficient performance would enhance the training.	

Source: Analysis of findings from the expert review panel reports.

## **Appendix 19 – ESC Survey Responses**

Table A19.1. ESC Involvement in Academy Delivery

	Not Involved	Involved to a Minimum Extent	Involved to a Moderate Extent	Involved to a Great Extent
Facilitated communication among stakeholders (e.g., trainers, schools, TEA)	--	--	5%	95%
Provided or disseminated materials	--	--	--	100%
Provided administrative/logistical support (e.g., scheduling training space, copying presentation materials, setting up training room)	--	--	--	100%
Provided technical support (e.g., setting up projectors and presentation materials, trouble-shooting equipment issues)	--	--	5%	95%

Table A19.2. Other Types of ESC Involvement in Academy Delivery

Type of Involvement	Number of comments	Percent of comments
Managing trainers (choosing them, observing them, paying them, etc).	6	23%
Delivery of teacher PD	5	19%
Handling payment of stipends to teachers	4	15%
Online registration, acquiring names of attendees	3	12%
Reporting, collecting data	3	12%
Advertising	2	8%
Providing technical support (i.e., Project Share)	1	4%
Preparing materials	1	4%
Finding locations for off-site meetings	1	4%

# **Appendix 20 – Additional Data from PD Observations**

## Presenter Delivery

Table A20.1. Observer Ratings of Indicators of Presenter Delivery

Indicator of Presenter Delivery	N	Mean	SD
Presenter(s) answered participants' questions at the time they were asked.	29	3.74	0.39
Presenter(s) effectively managed transitions between activities.	29	3.54	0.71
Presenter(s) provided feedback to participants.	29	3.49	0.55
Presenter(s) provided clear instructions for how participants should complete activities.	29	3.49	0.63
Presenter(s) circulated around the room to make connections with participants.	29	3.45	0.74
Presenter(s) were dynamic in their delivery of the training content.	29	3.42	0.56
Presenter(s) established participant buy-in for the training.	29	3.36	0.61
Presenter(s) extended learning based on participants' knowledge of the content covered in the training.	28	3.14	0.81
Presenter(s) reinforced effective instructional strategies by modeling them.	27	3.14	0.89
Presenter(s) modeled effective instructional activities (i.e., lessons that can be taught to students).	27	3.10	1.03
Presenter(s) used questioning strategies to measure participant comprehension of the material.	29	2.88	0.82
Presenter(s) answered participants' questions posted in a "parking lot."	19	2.75	1.32
<b>Synthesis Rating: Overall, how would you rate the delivery of the training session?</b>	<b>29</b>	<b>3.16</b>	<b>0.65</b>

Note: Each indicator was rated on a four-point Likert scale where "1" equals "no evidence," "2" equals "little evidence," "3" equals "some evidence," and "4" equals "strong evidence."

Source: Teacher PD Session Observations

## Interactions between Presenters and Participants

Table A20.2. Observer Ratings of Indicators of Interactions between Presenters and Participants

Indicator of Interactions between Presenters and Participants	N	Mean	SD
Presenter(s) were collegial in their interactions with participants.	29	3.84	0.35
Participants were collegial in their interactions with each other.	29	3.76	0.39
Participants were actively engaged with each other during hands-on activities.	27	3.71	0.42
Participants were actively engaged with each other during table group activities/discussions.	29	3.67	0.48
Participants were actively engaged with each other during expert group activities/discussions.	17	3.64	0.43
Participants were actively engaged with each other during pairs activities/discussions.	21	3.50	0.59
Participants were on task throughout the training.	29	3.40	0.46
Participants showed intellectual rigor in their responses.	28	3.04	0.74
<b>Synthesis Rating: Overall, how would you rate the interactions of presenters and participants during the training session?</b>	<b>29</b>	<b>3.48</b>	<b>0.47</b>

NOTE: Each indicator was rated on a four-point Likert scale where “1” equals “no evidence,” “2” equals “little evidence,” “3” equals “some evidence,” and “4” equals “strong evidence.”

Source: Teacher PD Session Observations

## Training Climate

Table A20.3. Observer Ratings of Indicators of Training Climate

Indicator of Training Climate	N	Mean	SD
Presenter(s) respected the contribution of all participants.	29	3.90	0.28
Presenter(s) answered participants' (verbal) questions.	29	3.85	0.33
The facilities where the training was held were conducive to the activities presented in the training.	29	3.53	0.64
Presenter(s) encouraged participation of all participants.	29	3.47	0.58
Presenter(s) encouraged participants to ask questions.	29	3.32	0.74
Presenter(s) answered participants' parking lot questions.	18	2.62	1.29
Presenter(s) encouraged participants to place questions on a parking lot.	24	2.42	1.24
<b>Synthesis Rating: Overall, how would you rate the training climate during the session?</b>	<b>28</b>	<b>3.46</b>	<b>0.51</b>

NOTE: Each indicator was rated on a four-point Likert scale where “1” equals “no evidence,” “2” equals “little evidence,” “3” equals “some evidence,” and “4” equals “strong evidence.”

Source: Teacher PD Session Observations

## Overall Capsule Ratings

Table A20.4. Mean Capsule Ratings by Academy

Academy	N	Mean	SD
MSTAR Math Academy for Grades 5-6	5	3.53	0.65
MSTAR Math Academy for Grades 7-8	5	3.47	0.87
Algebra I EOC Success	4	4.38	0.48
Science TEKS Overview K-12	3	3.33	0.58
Science Academies for Grades 5-8	4	3.75	1.26
Biology EOC Success	4	3.50	1.00
English I and II EOC Success	4	3.00	0.82

## Qualitative Results

**Session Pacing.** Pacing issues were the most frequently-reported problems. Many times observers attributed pacing problems to the perception that there was simply too much material to cover adequately in the time allotted. Observers made frequent reference to the pace of the training, whether a segment felt rushed and was cut off too soon, or seemed to drag, with more time allowed than was needed. Other pacing problems resulted from difficulties associated with the size of the group.

**Project Share.** Project Share was unevenly represented in the sessions. Observers noted a number of issues during the presentation of Project Share that may have contributed to the uneven representation of the information:

- Lack of Internet access
- Placement toward the end of the training session when presenters were often running out of time
- Comfort level of the presenter with online material

**Interactions between Presenters and Participants.** Presenter and participant behaviors and actions are key to understanding the interactions that contributed positively toward accomplishing the training objectives. In reviewing the data collected from observations, the following positive behaviors and actions for both presenters and participants were noted:

### Presenters

- Elicits interaction/question extension
- Incorporates “differentiation”
- Shares his/her teaching experiences
- Gauges teacher understanding
- Models activities
- Calls on reticent participants
- Validates teacher comments
- Table visits/circulation
- Answers participants’ questions (at time of asking or via Parking Lot)
- Researches answer to question
- Highly knowledgeable
- Offers contact information

### Participants

- Actively engaged
- On task
- Good energy level
- Share their experiences
- Learn from each other
- Collegial behavior

Observers also noted presenter and participant behaviors that sometimes distracted the group from achieving training goals. These included:

**Presenters**

- Failed to elicit interaction/question extension
- Rhetorical questioning (answers own questions)
- Lecture vs. discussion mode
- Cuts discussion short
- Not knowledgeable

**Participants**

- Weakly engaged
- Off task
- Low energy level
- Do not understand exercise
- Non-collegial behavior

There were a variety of positive approaches and strategies used by presenters during the various Rider 42 PD Academies. Presenters often shared their personal experience with participants. Presenters also used techniques to “energize” the group. Occasionally participants would ask the presenters about the validity of the material, and they dealt effectively with this. However, there were other presenter approaches that warrant attention. For example, presenters relied on rhetorical questioning or on a lecture format when presenting the materials. Failure to extend certain discussions also limited learning opportunities for participants.