### Summary of Additional Analyses To Date to Confirm Substantial Progress in Reading Language Arts, 2019-2022

July 1, 2022

#### SUMMARY:

Field testing and equating ensures that the STAAR test is the same level of difficulty each year. For more information, watch this <u>short video</u>.

Texas has invested heavily in reading and learning acceleration since 2019. Results from the 2022 STAAR administration revealed substantial progress in Reading Language Arts across 2019-2022. Given the impact of COVID-19 and the substantial increase in Reading Language Arts proficiency, TEA conducted additional analyses of the data as part of an enhanced due diligence process. This summary covers the analyses that we have conducted to date. We believe that further analyses will better help us understand this substantial increase in RLA proficiency.

## Analyses:

- Student population and external context: The Texas student population reflects similar student demographics
  across years, but saw an increase in student mobility between 2019 and 2022.
  - There was roughly 10% fewer 3-8 STAAR tests taken in 2022 compared to 2019. There was a 0.2% decrease between 2018 and 2019. This increase in student mobility may have contributed to the increases in proficiency rates.
- **Test design:** Analyses showed no evidence that what the test assessed (revised 2017 TEKS) or how it was assessed (mostly online) were related to increased student proficiency in RLA.
  - TEA did find the percentage of students testing online in 2022 with availability of the content and language supports accommodation has increased to 15% compared with roughly 5% in 2019.
  - The move to online testing means more students had access to the accommodations they need, which likely enabled some students to better demonstrate what they know.
- Field testing and equating: Comparing trends across time relies on common test questions in adjacent years.
  - 2021 was an unusual year due to the impacts of COVID-19 (e.g., participation rates, motivation) and more students testing online. The 3-8 RLA tests were built with more items from the 2021 field test than other content areas.
  - Analyses showed that the common items performed similarly across years.
- Quality control processes: In addition to existing quality control processes, TEA conducted an additional quality control audit.
  - The audit found no errors in the processing of the data.
- **Test security:** TEA conducted a test security analysis.
  - o Preliminary analysis did not find any unforeseen irregularities.

## Student Population and External Context

- 1) Were there changes in the overall student population?
  - a) The Texas student population reflects similar student demographics across years, but saw an increase in student mobility between 2019 and 2022.
  - b) There was roughly 10% fewer 3-8 STAAR tests taken in 2022 compared to 2019. There were 0.2% fewer 3-8 STAAR tests taken in 2019 compared to 2018. This increase in student mobility between 2019 and 2022 may have contributed to the increases in proficiency rates.
- 2) Were there changes to the policy or pedagogical context of state test administration?
  - a) Texas has invested heavily in reading and learning acceleration since 2019.
    - i) The 86<sup>th</sup> Texas Legislature passed comprehensive school finance reform in 2019 that also included strong supports for literacy including, but not limited to, requiring:
      - (1) All K-3 teachers and principals to go through reading academies, comprehensive professional development grounded in the Science of Teaching Reading by the 2022-2023 school year
      - (2) All new Pre-K-6 teacher pass a science of teaching reading exam as of January 1, 2021
    - ii) The 87<sup>th</sup> Texas Legislature took further action to respond to COVID 19. House Bill 1525 launched Texas COVID-19 Learning Acceleration Supports (TCLAS), which provided districts with \$1.4B in learning acceleration services and grants for strategic planning, instructional materials, teacher pipelines, more instructional time, and innovative school models. House Bill 4545 provides targeted tutoring for the students who need it most—thirty hours of additional instruction for each test a student did not meet grade level on. This year's results seem to indicate that implementation of these robust academic supports provided by the 87th Texas Legislature—along with other previous legislative efforts—are proving beneficial to Texas students.
    - iii) Additionally, in 2021, the State Board of Education updated the Dyslexia Handbook to better support identification and support. Beyond the changes to the Texas Dyslexia Handbook, TEA is offering a completely digital dyslexia intervention platform through Amplio Learning to all LEAs in Texas free of charge.
  - b) Texas eliminated the 5<sup>th</sup> and 8<sup>th</sup> grade promotion requirement associated with STAAR, which eliminated all student-level consequences associated with STAAR 3-8. This change only impacted grades 5 and 8 and would not lead to the increase in RLA proficiency that we saw across grades 3-8.

# Test Design

- 3) Were there changes to the RLA test?
  - a) 2022 was the first year of completely assessing the 2017 revised RLA TEKS. The revised RLA TEKS had over 70% overlap with the 2009 TEKS, and there were two years of assessing the overlap standards. Psychometricians and content experts reviewed the 2022 STAAR test and concluded there was no construct-related drift that would have impacted student performance.
- 4) Did more students taking the RLA test online increase student proficiency in RLA?
  - a) 87% of STAAR tests were taken online in Spring 2022 compared to 11% in Spring 2019.
  - b) The equating process was re-run using online only, paper only, and paper and online together. The same process was done for field test data. The result was no difference in outcomes by test mode, which shows no evidence that the transition to online administration increased student proficiency in RLA.
- 5) Did increased access to content and language supports increase student proficiency in RLA?
  - a) Content and language supports are available online to students who meet the eligible criteria.
  - b) The majority of students tested online this year.
  - c) 10 percentage points more of the student population had access to content and language supports in 2022 than in 2019. The move to online testing means more students had access to the accommodations they need, which likely better allows these students to show what they know.

d) There was a smaller change in English I and II, with 5 percentage points more students with access to content and language supports in 2022 compared to 2019. Because content and language supports support reading comprehension, this impact would be less prominent in math.

# Field Testing and Equating

- 6) Were field test statistics from 2021 impacted by COVID-19, the transition online, or fatigue?
  - a) Tests are equated using field test statistics from previous years. 2021 was an unusual year due to the impacts of COVID-19 (e.g., participation rates, motivation) and more students testing online. The 3-8 RLA tests were built with more items from the 2021 field test than other content areas.
  - b) Typically, most STAAR tests are pre-equated to facilitate faster delivery of results. We ran multiple additional post-equating analyses to verify the pre-equating results, using different methods (common item mean equating and fixed parameter calibration) and different student populations (excluding and including students testing online and with accommodations). These analyses did not provide evidence of any directional impact of COVID-19, the transition online, or fatigue.

# **Quality Control Processes**

- 7) Were there any errors in the processing of the RLA data?
  - a) A rigorous quality control process is conducted to ensure accuracy of student scores. Independent teams check student scoring at multiple points during the scoring and reporting process. This happens in the testing of systems before student data is collected and after student data is collected.
  - b) We conducted an additional audit to confirm scoring accuracy, which showed no evidence of errors in the processing of data. A psychometrician compared the item parameters for all reading forms in the item management system, scoring system, and the historical data files. All parameters matched. A second psychometrician again re-created all scoring tables and confirmed the scoring tables were accurate.

# **Test Security**

- 8) Is this a cheating issue?
  - a) There is no evidence that items or passages were compromised. If specific items or passages were compromised, we would see that reflected in how many students answered each item correctly versus what was expected based on the item difficulty.
  - b) We have yet to find any evidence of irregularities that would have had a significant impact on overall state results. We are continuing to analyze district performance over time to identify any potential irregularities.