Chapter 130. Texas Essential Knowledge and Skills for Career and Technical Education

Subchapter E. Education and Training


(a) The provisions of this subchapter shall be implemented by school districts beginning with the 2017-2018 school year.

(b) No later than August 31, 2016, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for career and technical education as adopted in §§130.162-130.165 of this subchapter.

(c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §§130.162-130.165 of this subchapter shall be implemented beginning with the 2017-2018 school year and apply to the 2017-2018 and subsequent school years.

(d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that §§130.162-130.165 of this subchapter shall be implemented for the following school year.


(a) General requirements. This course is recommended for students in Grades 9 and 10. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) Principles of Education and Training is designed to introduce learners to the various careers available within the Education and Training Career Cluster. Students use self-knowledge as well as educational and career information to analyze various careers within the Education and Training Career Cluster. Students will develop a graduation plan that leads to a specific career choice in the student's interest area.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate written communication;

(B) perform job-appropriate numerical and arithmetic application;
(C) practice various forms of communication such as verbal and non-verbal communication used in educational and career settings;
(D) exhibit teamwork skills;
(E) apply decision-making skills;
(F) implement problem-solving techniques;
(G) acquire conflict management skills;
(H) develop leadership skills;
(I) demonstrate professionalism; and
(J) develop effective work ethic practices.

(2) The student explores education and training careers by such means as shadowing, interviewing, career interest inventory, researching, and/or self-reflection. The student is expected to:

(A) identify and investigate the three Education and Training Programs of Study: Teaching/Training, Professional Support Services, and Administration and Administrative Support;
(B) analyze transferable skills among a variety of careers within the Education and Training Career Cluster;
(C) recognize the impact of career choice on personal lifestyle;
(D) develop productive work habits such as organization, time management, and initiative; and
(E) analyze assessment results such as an interest and ability inventory as relative to those necessary for success in education and training.

(3) The student explains societal impacts within the education and training career cluster. The student is expected to:

(A) investigate trends or issues that have influenced the development of education across the United States such as historical, societal, cultural, and political trends and issues; and
(B) predict the Education and Training Career Cluster job market by using information from sources such as labor market information, technology, and societal or economic trends.

(4) The student explores careers in the teaching and training program of study. The student is expected to:

(A) summarize the various roles and responsibilities of professionals in the fields of teaching and training;
(B) describe typical personal characteristics, qualities, and aptitudes of professionals in the field of teaching and training;
(C) investigate education or training alternatives after high school for a career choice within the student's interest areas; and
(D) examine education or training degree plans for various occupations within the field of teaching and training.

(5) The student explores careers in the professional support services program of study. The student is expected to:

(A) summarize the various roles and responsibilities of professionals in the field of professional support services;
(B) describe typical personal characteristics, qualities, and aptitudes of professionals in the field of professional support services;
(C) investigate education and training alternatives after high school for a career choice within the student's interest areas; and
(D) examine education and training degree plans for various occupations within the field of professional support services.

(6) The student explores careers in the administration and administrative support program of study. The student is expected to:
(A) summarize the various roles and responsibilities of professionals in the field of administration and administrative support;
(B) describe typical personal characteristics, qualities, and aptitudes of professionals in the field of administration and administrative support;
(C) investigate education and training alternatives after high school for a career choice within the student's interest areas; and
(D) examine education and training degree plans for various occupations within the fields of administration and administrative support.

(7) The student experiences authentic education and training opportunities. The student is expected to:
(A) experience educator duties and responsibilities through activities such as assisting, shadowing, or observing;
(B) develop instructional materials such as visuals, teacher aids, manipulatives, lesson components, and mini lessons; and
(C) formulate a personal set of beliefs relevant to education in preparation of developing a philosophy of education.

(8) The student explores options in education and career planning. The student is expected to:
(A) develop a graduation plan that leads to a specific career choice in the area of interest;
(B) identify high school and dual enrollment courses related to specific career cluster programs of study;
(C) identify and compare technical and community college programs that align with interest areas; and
(D) identify and compare university programs and institutions that align with interest areas.

(9) The student documents technical knowledge and skills. The student is expected to:
(A) assemble basic professional portfolio components such as basic resume, samples of work, service learning log, assessment results, and mock scholarship applications; and
(B) present completed professional portfolio.

§130.163. Human Growth and Development (One Credit), Adopted 2015.
(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Education and Training. Students shall be awarded one credit for successful completion of this course.
(b) Introduction.
(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.
Human Growth and Development is an examination of human development across the lifespan with emphasis on research, theoretical perspectives, and common physical, cognitive, emotional, and social developmental milestones. The course covers material that is generally taught in a postsecondary, one-semester introductory course in developmental psychology or human development.

Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
   (A) demonstrate written communication;
   (B) perform job-appropriate numerical and arithmetic application;
   (C) practice various forms of communication such as verbal and non-verbal communication used in educational and career settings;
   (D) exhibit teamwork skills;
   (E) apply decision-making skills;
   (F) implement problem-solving techniques;
   (G) acquire conflict management skills;
   (H) develop leadership skills;
   (I) demonstrate professionalism; and
   (J) develop effective work ethic practices.

(2) The student understands historical, theoretical, and research perspectives of human growth and development throughout the lifespan. The student is expected to:
   (A) explain the role of theories in understanding human development;
   (B) describe theoretical perspectives that influence human development throughout the lifespan;
   (C) summarize historical influences on modern theories of human development;
   (D) compare and contrast the research methods commonly used to study human development; and
   (E) compare and contrast pedagogy and andragogy.

(3) The student understands the importance of prenatal care in the development of a child. The student is expected to:
   (A) describe nutritional needs prior to and during pregnancy;
   (B) analyze reasons for medical care and good health practices prior to and during pregnancy;
   (C) outline stages of prenatal development;
   (D) discuss the role of genetics in prenatal development; and
   (E) determine environmental factors affecting development of the fetus.

(4) The student understands the development of children ages newborn through two years. The student is expected to:
(A) analyze the physical, emotional, social, and cognitive development of infants and toddlers;
(B) analyze various developmental theories relating to infants and toddlers;
(C) discuss the influences of the family and society on the infant and toddler;
(D) summarize strategies for optimizing the development of infants and toddlers, including those with special needs;
(E) determine techniques that promote the health and safety of infants and toddlers; and
(F) determine developmentally appropriate guidance techniques for children in the first two years of life.

(5) The student understands the development of children ages three through five years. The student is expected to:
(A) analyze the physical, emotional, social, and cognitive development of preschoolers;
(B) analyze various developmental theories relating to preschoolers;
(C) discuss the influences of the family and society on preschoolers;
(D) summarize strategies for optimizing the development of preschoolers, including those with special needs;
(E) determine techniques that promote the health and safety of preschoolers; and
(F) determine developmentally appropriate guidance techniques for preschoolers.

(6) The student understands the development of children ages six through ten years. The student is expected to:
(A) analyze the physical, emotional, social, and cognitive development of children in the early to middle childhood stage of development;
(B) analyze various developmental theories relating to children in the early to middle childhood stage of development;
(C) discuss the influences of the family and society on children in the early to middle childhood stage of development;
(D) summarize strategies for optimizing the development of children in the early to middle childhood stage of development, including those with special needs;
(E) determine techniques that promote the health and safety of children in the early to middle childhood stage of development; and
(F) determine developmentally appropriate guidance techniques for children in the early to middle childhood stage of development.

(7) The student understands the development of adolescents ages 11 through 19 years. The student is expected to:
(A) analyze the biological and cognitive development of adolescents;
(B) analyze the emotional and social development of adolescents;
(C) discuss various theoretical perspectives relevant to adolescent growth and development;
(D) discuss the influences of the family and society on adolescents;
(E) summarize strategies for optimizing the development of the adolescent;
(F) determine techniques that promote the health and safety of the adolescent; and
(G) determine developmentally appropriate guidance techniques for adolescents.
The student understands the importance of care and protection of children and adolescents. The student is expected to:

(A) determine services provided by agencies that protect the rights of children and adolescents;
(B) summarize various resources focusing on children and adolescents;
(C) predict the impact of changing demographics and cultural diversity on the health and welfare of children and adolescents;
(D) analyze forms, causes, effects, prevention, and treatment of child abuse;
(E) explain the impact of appropriate health care and importance of safety for children and adolescents; and
(F) discuss responsibilities of citizens, legislation, and public policies affecting children and adolescents.

The student understands the development of adults ages 20 through 39 years. The student is expected to:

(A) analyze various development theories relating to early adults, including biological and cognitive development;
(B) analyze various development theories relating to early adults, including emotional, moral, and psychosocial development;
(C) discuss the influences of society and culture on early adults; and
(D) discuss the importance of family, human relationships, and social interaction for early adults.

The student understands the development of adults ages 40 through 65 years. The student is expected to:

(A) analyze various development theories relating to middle adults, including biological and cognitive development;
(B) analyze various development theories relating to middle adults, including emotional, moral, and psychosocial development;
(C) discuss the influences of society and culture on middle adults; and
(D) discuss the importance of family, human relationships, and social interaction for middle adults.

The student understands the development of adults ages 66 years and older. The student is expected to:

(A) analyze various development theories relating to those within the stage of late adulthood, including biological and cognitive development;
(B) analyze various development theories relating to those within the stage of late adulthood, including emotional, moral, and psychosocial development;
(C) discuss the influences of society and culture on those within the stage of late adulthood; and
(D) discuss the importance of family, human relationships, and social interaction for those within the stage of late adulthood.

The student explores opportunities available in education and training. The student is expected to:

(A) assess personal interests, aptitudes, and abilities as related to the various stages of human growth and development;
The student documents technical knowledge and skills. The student is expected to:

(A) update professional portfolio components such as resume, samples of work, service learning log, assessment results, and mock scholarship applications; and
(B) present completed professional portfolio to stakeholders.

§130.164. Instructional Practices (Two Credits), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Recommended prerequisites: Principles of Education and Training and Human Growth and Development. Students shall be awarded two credits for successful completion of this course.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) Instructional Practices is a field-based (practicum) internship that provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators or trainers in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate written communication;

(B) perform job-appropriate numerical and arithmetic application;

(C) practice various forms of communication such as verbal and non-verbal communication skills used in educational and career settings;

(D) exhibit teamwork skills;

(E) apply decision-making skills;

(F) implement problem-solving techniques;

(G) acquire conflict management skills;
(H) develop leadership skills;
(I) demonstrate professionalism; and
(J) develop effective work ethic practices.

(2) The student explores the teaching and training profession. The student is expected to:
   (A) demonstrate an understanding of the historical foundations of education and training in the United States;
   (B) determine and implement knowledge and skills needed by teaching and training professionals;
   (C) demonstrate and implement personal characteristics needed by teaching and training professionals;
   (D) identify qualities of effective schools;
   (E) investigate possible career options in the field of education and training;
   (F) discuss teaching and training in non-traditional setting such as those in corporations, community outreach, nonprofits, and government entities; and
   (G) formulate a professional philosophy of education based on a personal set of beliefs.

(3) The student understands the learner and the learning process. The student is expected to:
   (A) relate and implement principles and theories of human development to teaching and training situations;
   (B) relate and implement principles and theories about the learning process to teaching and training situations;
   (C) demonstrate and implement behaviors and skills that facilitate the learning process; and
   (D) explain the relationship between effective instructional practices and learning differences, learner exceptionality, and special-needs conditions.

(4) The student interacts effectively in the role of an educator. The student is expected to:
   (A) demonstrate effective interaction skills with stakeholders such as students, educators, parents/guardians, community members, and other professionals; and
   (B) demonstrate techniques promoting literacy.

(5) The student plans and develops effective instruction. The student is expected to:
   (A) explain the role of the Texas Essential Knowledge and Skills in planning and evaluating instruction;
   (B) explain the rationale for having a fundamental knowledge of the subject matter in order to plan, prepare, and deliver effective instruction;
   (C) explain the rationale for and process of instructional planning;
   (D) describe principles and theories that impact instructional planning;
   (E) create clear short-term and long-term learning objectives that are developmentally appropriate for students; and
   (F) demonstrate lesson planning to meet instructional goals.

(6) The student creates an effective learning environment. The student is expected to:
   (A) describe and implement a safe and an effective learning environment;
   (B) demonstrate teacher and trainer characteristics that promote an effective learning environment;
The student assesses teaching and learning. The student is expected to:

A. describe the role of assessment as part of the learning process;
B. analyze the assessment process; and
C. use appropriate assessment strategies in an instructional setting.

The student understands the relationship between school and society. The student is expected to:

A. explain the relationship between school and society;
B. recognize and use resources for professional growth such as family, school, and community resources; and
C. collaborate with stakeholders such as family, school, and community to promote learning.

The student develops technology skills. The student is expected to:

A. describe the role of technology in the instructional process;
B. use technology applications appropriate for specific subject matter and student needs; and
C. demonstrate skillful use of technology as a tool for instruction, evaluation, and management.

The student understands the professional, ethical, and legal responsibilities in teaching and training. The student is expected to:

A. describe teacher and trainer characteristics that promote professional and ethical conduct;
B. analyze professional and ethical standards that apply to educators and trainers;
C. analyze situations requiring decisions based on professional, ethical, and legal considerations; and
D. analyze expected effects of compliance and non-compliance with Texas teacher code of conduct.

The student participates in field-based experiences in education and training. The student is expected to:

A. apply instructional strategies and concepts within a local educational or training facility; and
B. document, assess, and reflect on instructional experiences.

The student documents technical knowledge and skills. The student is expected to:

A. update professional portfolio components such as resume, samples of work, service learning log, assessment results, and mock scholarship applications; and
B. present updated professional portfolio to stakeholders.

§130.165. Practicum in Education and Training (Two to Three Credits), Adopted 2015.

(a) General requirements. This course is recommended for students in Grade 12. Prerequisite: Instructional Practices. Recommended prerequisites: Principles of Education and Training and Human Growth and Development.

(1) A student shall be awarded two credits for successful completion of this course when the student participates in at least an average of 10 hours, but less than 15 hours, per week of a paid or unpaid,
laboratory- or work-based application of previously studied knowledge and skills related to the Education and Training Career Cluster.

(2) A student shall be awarded three credits for successful completion of this course when the student participates in an average of 15 hours per week of a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to the Education and Training Career Cluster.

(b) Introduction.

(1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.

(2) The Education and Training Career Cluster focuses on planning, managing, and providing education and training services and related learning support services.

(3) Practicum in Education and Training is a field-based internship that provides students background knowledge of child and adolescent development principles as well as principles of effective teaching and training practices. Students in the course work under the joint direction and supervision of both a teacher with knowledge of early childhood, middle childhood, and adolescence education and exemplary educators in direct instructional roles with elementary-, middle school-, and high school-aged students. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, assist with record keeping, make physical arrangements, and complete other responsibilities of classroom teachers, trainers, paraprofessionals, or other educational personnel.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:

(A) demonstrate written communication;

(B) perform job-appropriate numerical and arithmetic application;

(C) practice various forms of communication such as verbal and non-verbal communication used in educational and career settings;

(D) exhibit teamwork skills;

(E) apply decision-making skills;

(F) implement problem-solving techniques;

(G) acquire conflict management skills;

(H) develop leadership skills;

(I) demonstrate professionalism; and

(J) develop effective work ethic practices.

(2) The student explores the teaching and training profession. The student is expected to:

(A) analyze current trends and issues that impact education such as political, societal, and economic trends and issues;

(B) demonstrate and implement knowledge and skills needed by the teaching and training profession;
(C) update assessment of personal characteristics needed to work in the teaching and training profession;
(D) explore qualities of effective schools;
(E) refine professional philosophy of education based on a personal set of beliefs;
(F) explore the educational/academic requirements and possible degree/certifications available in education;
(G) refine personal career plan in preparation for a career in the field of education or training;
(H) explore teaching and training in non-traditional setting such as those in corporations, community outreach, nonprofits, and government entities; and
(I) explore educational high-needs and teacher-shortage areas.

(3) The student understands the learner and learning process. The student is expected to:

(A) apply principles and theories of human development appropriate to specific teaching or training situations;
(B) apply principles and theories about the learning process to specific teaching or training situations;
(C) analyze the dynamics of personal and student behaviors that facilitate the learning process;
(D) analyze teaching skills that facilitate the learning process; and
(E) demonstrate and evaluate effective instructional practices to accommodate diversity such as learning differences, learner exceptionality, and special-needs considerations.

(4) The student interacts effectively in the role of an educator. The student is expected to:

(A) demonstrate and evaluate effective interaction skills with stakeholders such as students, educators, parents/guardians, community members, and other professionals; and
(B) demonstrate and evaluate techniques promoting literacy.

(5) The student plans and uses effective instruction. The student is expected to:

(A) apply principles and theories that impact instructional planning;
(B) develop instructional materials that align with the Texas Essential Knowledge and Skills;
(C) demonstrate competency in core and non-core subject areas;
(D) create lessons plans that meet instructional goals;
(E) analyze concepts for developing effective instructional strategies;
(F) evaluate and analyze effectiveness of lessons plans and instructional strategies; and
(G) explain how learner and professional feedback is used to guide selection and adjustment of instructional strategies.

(6) The student creates and maintains an effective learning environment. The student is expected to:

(A) create and maintain a safe and an effective learning environment;
(B) integrate teacher or trainer characteristics that promote an effective learning environment;
(C) apply classroom management techniques that promote an effective learning environment; and
(D) demonstrate specific conflict management and mediation techniques supportive of an effective learning environment.

(7) The student assesses instruction and learning. The student is expected to:
(A) develop and apply assessments to foster student learning;

(B) use assessment strategies to promote personal growth and teaching or training improvement; and

(C) use reflective techniques to promote personal growth and teaching or training improvement.

(8) The student understands the relationship between school and society. The student is expected to:

(A) identify and support learning through advocacy;

(B) select family, school, and community resources for professional growth; and

(C) promote learning and build support through positive school partnership activities with stakeholders such as families, schools, communities, and business/industry.

(9) The student develops technology skills. The student is expected to:

(A) access and use current technology applications appropriate for specific subject matter and student needs; and

(B) integrate the skillful use of technology as a tool for instruction, evaluation, and management.

(10) The student understands the professional, ethical, and legal responsibilities in teaching and training. The student is expected to:

(A) develop teacher and trainer characteristics that promote professional and ethical conduct;

(B) analyze professional and ethical standards that apply to educators and trainers;

(C) analyze situations requiring decisions based on professional, ethical, and legal considerations; and

(D) analyze expected effects of compliance and non-compliance with Texas teacher code of conduct.

(11) The student explores the need and opportunities for continued professional development for educators and trainers. The student is expected to:

(A) identify strategies and resources for the professional development of educators or trainers such as research and assessment;

(B) demonstrate teacher or trainer characteristics that promote ongoing professional development and lifelong learning; and

(C) plan for professional growth.

(12) The student continues to participate in field-based experiences in education or training. The student is expected to:

(A) apply instructional strategies and concepts within a local educational or training facility; and

(B) document, assess, and reflect on instructional experiences.

(13) The student documents technical knowledge and skills. The student is expected to:

(A) gather artifacts and documentation that support attainment of technical skill competencies;

(B) update a professional portfolio to include components such as a resume, samples of work, service learning log, recognitions, awards, scholarship essays, letters of recommendation, certifications, and evaluations; and

(C) present a professional portfolio to interested stakeholders such as educators, community members, and business/industry partners in a professional setting.