#### Chapter 127. Texas Essential Knowledge and Skills for Career Development and Career and Technical Education

#### Subchapter J. Health Science

#### §127.510. Speech and Language Development (One Credit), Adopted 2025.

- (a) Implementation.
  - (1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.
  - School districts shall implement the employability skills student expectations listed in §127.15(d)(1) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.
- (b) General requirements. This course is recommended for students in Grades 11 and 12. Recommended prerequisites: Principles of Health Science, Anatomy and Physiology, and Introduction to Speech Pathology and Audiology. Students shall be awarded one credit for successful completion of this course.
- (c) 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 Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.
  - (3) The Speech and Language Development course provides advanced knowledge and skills related to speech and language acquisition and growth of developing children. Understanding healthy development and speech, language, and communication developmental milestones is a prerequisite for studying communication disorders. This course provides students with the knowledge and skills necessary to pursue further education, possibly culminating in a bachelor's degree and subsequent master's degree in communication sciences and disorders.
  - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.
  - (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.
- (d) Knowledge and skills.
  - (1) The student understands basic human communication processes, including the biological, neurological, psychological, developmental, linguistic, and cultural processes. The student is expected to:
    - (A) differentiate between communication, speech, language, and hearing;
    - (B) summarize the structural bases of speech production and hearing;
    - (C) compare anatomy and physiology of the speech mechanism;
    - (D) examine and describe the anatomy and physiology of the auditory system;
    - (E) identify and describe healthy verbal and nonverbal communication development;

- (F) describe the developmental building blocks and prerequisites for healthy speech and language development;
- (G) identify and define terminology related to human communication such as speech sound production, fluency (stuttering), voice, language, hearing, hearing loss, breathing, swallowing, pragmatics, and cognition; and
- (H) explain social-interactive and psychological bases of communication and the influences it has on interpersonal communication, including linguistic and cultural influences.
- (2) The student gains knowledge and understanding of various theoretical perspectives of healthy speech and language acquisition. The student is expected to:
  - (A) investigate and explain the major theories of language acquisition;
  - (B) compare the major theories of speech sound production; and
  - (C) research and explain the connections between language development and speech development as they relate to phonological awareness in learning to read.
- (3) The student understands the healthy development of speech sound production in children. The student is expected to:
  - (A) describe articulatory phonetics and explain how articulatory phonetics relate to the respiratory system, including the larynx, vocal tract, articulators (velopharynx, tongue, lips, and jaw), and air flow;
  - (B) analyze the foundation for speech acquisition in relation to auditory perception before birth and in infants;
  - (C) describe early vocal development in infants as a prerequisite for speech;
  - (D) explain how the use of vowels by infants and young children is important for the development of speech;
  - (E) illustrate ways to categorize or describe vowel and diphthong production;
  - (F) research and describe the development of consonant inventories in young English-speaking children;
  - (G) describe and differentiate between models for describing consonant production;
  - (H) summarize progression in speech development for combining sounds into syllable shapes and words; and
  - (I) analyze the linguistic and cultural influences of the heritage/native language on the development of speech sound production in English.
- (4) The student understands the components of a developing language system and how language skills develop in children. The student is expected to:
  - (A) identify and explain the components of a language system, including phonology, phonetics, morphology, syntax, semantics, and pragmatics;
  - (B) explain the components of a developing language system in terms of vocabulary, grammar, and social and interpersonal communication;
  - (C) describe the prerequisite skills for developing language;
  - (D) differentiate between language delay, language disorders, and language difference;
  - (E) outline the milestones of healthy language development from birth through age five years related to comprehension and expression;

- (F) summarize healthy language development from Kindergarten (age 5) through Grade 5 (age 10 or 11) and describe factors that influence age-appropriate development of language;
- (G) describe healthy continuing language development in adolescence for each component of a developing language system; and
- (H) compare cultural and ethnic differences in language development.
- (5) The student explores the healthy development of verbal fluency skills in children. The student is expected to:
  - (A) define and differentiate between verbal fluency, disfluencies, and stuttering;
  - (B) identify and explain common disfluencies and periods of expected disfluencies;
  - (C) explain the development of speech and language skills;
  - (D) differentiate between and discuss variables that may affect verbal fluency; and
  - (E) describe ways to measure verbal fluency for English language learners and evaluate the effectiveness of each method.
- (6) The student explores parameters of voice production in children and adults. The student is expected to:
  - (A) describe the physical and physiological parameters of voice production;
  - (B) describe the components of healthy voice production, including voice quality, pitch, loudness, resonance, and duration;
  - (C) explain causes or etiologies of variations in voice production;
  - (D) describe how parameters of voice production change throughout the span of life;
  - (E) analyze environmental variables that may affect voice production;
  - (F) explain the practice of speech-language pathology and allowable services; and
  - (G) analyze the ethical considerations for the speech-language pathologist in dealing with individuals with a possible voice disorder and the requirement for ongoing work with a physician.
- (7) The student understands the development of effective language and communication skills needed to demonstrate high levels of achievement in elementary and secondary school. The student is expected to:
  - (A) research and describe the milestones of communication development and literacy development;
  - (B) compare milestones of communication development to the milestones of literacy development;
  - (C) differentiate between interpersonal language used for conversational interaction and more formal, literate language used for learning academic content;
  - (D) define and provide examples of tier 1, tier 2, and tier 3 vocabulary as it relates to language development and meeting grade level expectations of academic vocabulary across subject areas;
  - (E) explain the development of language used for oral and written narratives and demonstrate how story grammar can be used as a bridge between conversational language and academic language;
  - (F) analyze the development of pragmatic-language skills and the types of verbal, nonverbal, and written communication skills needed to do well in school; and

- (G) define emergent literacy and analyze the language base necessary for the development of reading skills.
- (8) The student explores healthy and unhealthy speech and language development. The student is expected to:
  - (A) describe the role of the speech-language pathologist in determining healthy speech and language development and speech sound disorders and language disorders;
  - (B) explain the purpose of and describe techniques for screening speech and language skills in children;
  - (C) explain the purpose of and describe techniques for evaluating speech and language skills in children;
  - (D) analyze the Response to Intervention (RtI) method for accurately identifying a speech or language disorder in school-age children; and
  - (E) discuss the role of the speech-language pathologist in referral, counseling, and providing basic information when there are concerns about a child's speech or language development.
- (9) The student demonstrates effective verbal and nonverbal communication skills. The student is expected to:
  - (A) describe and demonstrate appropriate communication skills when interacting with elementary age students, classroom teachers, speech-language pathologists, principals, and parents in various situations;
  - (B) identify and demonstrate verbal and nonverbal communication techniques that should be used when communicating with children who have sensory loss, language barriers, cognitive impairment, and other learning disabilities;
  - (C) identify and evaluate electronic communication and technology devices that may be used when interacting with children with communication disorders; and
  - (D) differentiate between oral interpretation and translation skills from English to a second language.
- (10) The student explores the influence of dialects of Standard American English or native language on the development of speech and language skills in English and on the production of English. The student is expected to:
  - (A) provide examples of how a common phrase may be expressed across Standard American English and three different dialects;
  - (B) describe how speech and language patterns vary as a function of language, age, socioeconomic status, and geography;
  - (C) analyze the characteristics of American English dialects in terms of speech sound production and language use;
  - (D) explain the influence of heritage language on the speech sound production and grammar development of English in emergent bilingual students; and
  - (E) analyze speech and language patterns of English language learners in terms of expected speech and language development.

#### §127.511. Speech Communication Disorders (One Credit), Adopted 2025.

- (a) Implementation.
  - (1) The provisions of this section shall be implemented by school districts beginning with the 2025-2026 school year.

- (2) School districts shall implement the employability skills student expectations listed in §127.15(d)(2) of this chapter (relating to Career and Technical Education Employability Skills, Adopted 2025) as an integral part of this course.
- (b) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: at least one credit in a course from the Health Science Career Cluster. Recommended prerequisites: Principles of Health Science, Anatomy and Physiology, Introduction to Speech-Language Pathology and Audiology, Speech and Language Development, and Human Growth and Development. Students shall be awarded one credit for successful completion of this course.
- (c) 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 Health Science Career Cluster focuses on planning, managing, and providing therapeutic services, diagnostics services, health informatics, support services, and biotechnology research and development.
  - (3) The Speech Communication Disorders course is designed to provide for the development of advanced knowledge and skills related to an overview of communication disorders that occur in children and adults in the areas of speech sound production, stuttering, voice disorders, and the language areas of semantics, syntax, pragmatics, phonology, and metalinguistics. An overview of treatment for hearing loss and deafness will also be provided.
  - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other organizations that foster leadership and career development in the profession such as student chapters of related professional associations.
  - (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.
- (d) Knowledge and skills.
  - (1) The student demonstrates knowledge of the nature of speech, language, hearing, and communication disorders and differences. The student is expected to:
    - (A) identify the anatomy and describe the function of the peripheral and central auditory pathways;
    - (B) describe the physical and psychological attributes of sound;
    - (C) differentiate between the different types of hearing loss and their causes;
    - (D) describe the impact of hearing loss on speech and language development;
    - (E) compare the processes of speech, language, and hearing in people of various cultures;
    - (F) identify and relate disorder differences in relationship to communication skills;
    - (G) explain the concepts of speech, language, hearing, and communication disorders across the human lifespan; and
    - (H) explain potential barriers and solutions that an interpreter or translator must consider when communicating with a child with a communication disorder.
  - (2) The student demonstrates knowledge of the etiologies, characteristics, and anatomical/physical, acoustic, psychological, developmental, linguistic, and cultural correlates of communication disorders across the human lifespan. The student is expected to:
    - (A) compare common causes of hearing impairment in children and adults;
    - (B) analyze the causes of speech, language, and hearing disorders across the lifespan;

- (C) identify common communication and hearing disorders, their typical symptoms, etiologies, characteristics, and associated correlates;
- (D) evaluate the impact of communication disorders on the individual; and
- (E) compare cultural variations in how communication disorders are perceived.
- (3) The student describes the types of communication disorders most commonly seen in children and the services provided by professionals in this field to provide habilitation or rehabilitation. The student is expected to:
  - (A) analyze speech sound disorders of the child's phonological system and describe the production of speech sounds such as place, manner, voicing, and distinctive feature analysis;
  - (B) describe and organize evidence-based treatment approaches for speech sound disorders;
  - (C) summarize fluency disorders, including secondary characteristics;
  - (D) analyze evidence-based treatment approaches for stuttering;
  - (E) identify voice disorders in terms of vocal quality, pitch, volume, resonance, and duration;
  - (F) develop a plan for an evidence-based treatment for voice disorders and the required interface with a physician;
  - (G) explain language disorders in terms of the child's use of syntax, morphology, semantics, pragmatics, phonology, and metalinguistics; and
  - (H) compare current evidence-based treatment approaches for language disorders in preschool and elementary-age children.
- (4) The student demonstrates effective verbal and nonverbal communication skills. The student is expected to:
  - (A) demonstrate communication skills appropriate to the situation when interacting with elementary age students, classroom teachers, speech-language pathologists, principals, and parents with communication disorders;
  - (B) demonstrate knowledge of verbal and nonverbal communication techniques that should be used when communicating with children that have sensory loss, language barriers, cognitive impairment, and other learning disabilities; and
  - (C) employ electronic communication and technology devices when interacting with children with communication disorders with appropriate supervision in a school setting.
- (5) The student demonstrates sensitivity and understanding of cultural and linguistic influences on an individual's communication patterns and describes how cultural and linguistic influences must be considered when working with children with communication disorders and their families. The student is expected to:
  - (A) analyze how speech and language patterns vary as a function of language, age, socioeconomic status, and geography;
  - (B) prepare a simulated interview with the parent or family member of a child referred for a hearing or communication evaluation;
  - (C) identify patterns of communication that are common for individuals from different cultural and linguistic backgrounds such use of eye contact, personal space, and gestures;
  - (D) apply design strategies for culturally sensitive family-centered practices for children with communication disorders; and
  - (E) explain the terms language disorder, language delay, language difference, heritage language, and dialect for describing the communication patterns of a young child.

- (6) The student identifies screening, evaluation, and diagnosis procedures that are used to identify hearing loss/deafness, speech sound production disorders, stuttering, voice impairment, and language disorders in children. The student is expected to:
  - (A) explain principles related to different audiometric test procedures;
  - (B) participate in a basic audiometric test (screening procedure) and interpret a variety of test results regarding whether the individual passed or failed the screening;
  - (C) interpret principles related to screening speech sound production, fluency, voice, and language skills in young children;
  - (D) evaluate developmental screening activities that include screening speech and language development; and
  - (E) synthesize the components of a comprehensive diagnostic report of findings inclusive of speech sound production, fluency (stuttering), voice production, and receptive, expressive, and social language skills to explain the test results.
- (7) The student identifies research-based and evidence-based practices in speech-language pathology and audiological service delivery. The student is expected to:
  - (A) define evidence-based practice (EBP) and differentiate EBP from scientifically-based research in the fields of speech-language pathology and audiology;
  - (B) define the set of Evidence Levels used by the American Speech-Language-Hearing Association as a protocol to evaluate research evidence;
  - (C) correlate research studies to the Evidence Levels used by the American Speech-Language-Hearing Association;
  - (D) analyze the role of expert opinion and clinical experience in evidence-based practice; and
  - (E) design and present an action research project in the field of communication disorders.
- (8) The student demonstrates knowledge and understanding of a variety of treatment approaches used with children with communication disorders. The student is expected to:
  - (A) compare two treatment approaches for speech sound disorders;
  - (B) compare two treatment approaches for fluency disorders;
  - (C) describe and practice treatment approaches for voice disorders in the areas of vocal quality, pitch, loudness, resonance, and duration;
  - (D) compare two treatment approaches for language disorders in preschool children;
  - (E) compare two treatment approaches for language disorders in elementary school-age children; and
  - (F) identify treatment approaches for language disorders with children with disabilities such as autism, intellectual disability, cleft palate, or cerebral palsy.