## ATTACHMENT III Text of Proposed New 19 TAC

# 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) General requirements. This course is recommended for students in Grades 11-12. Recommended prerequisites: Principles of Health Science, 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.

#### (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 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 is designed to provide for the development of advanced knowledge and skills related to speech and language acquisition and growth of developing children. Understanding of healthy development and the speech, language, and communication developmental milestones is a prerequisite for studying communication disorders. The course will provide 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) To pursue a career in communication sciences and disorders, students should learn the biological, neurological, acoustic, psychological, and developmental and cultural bases of human communication expressed both nonverbally and verbally through speech production. Students are expected to demonstrate knowledge and understanding of the how these physiological systems work together to allow for effective communication between people.
- (5) Interpersonal communication is influenced by the individual's cultural and linguistic heritage.

  Cultural and linguistic awareness and sensitivity are necessary when studying healthy

  development. Students should recognize how culture and heritage language shape and influence
  the acquisition of listening, speaking, reading, and writing skills.
- (6) Success in high school and the next steps beyond high school require effective communication and language skills in the areas of listening, speaking, reading, and writing in order to understand academic language and express meaning for academic purposes. Students are expected to demonstrate knowledge and understanding of the academic language skills needed in order to be successful in school.
- (7) To pursue a career in the healthcare industry, students should learn to reason, think critically, make decisions, solve problems, research topics of interest, and communicate effectively. Students should recognize that quality service delivery for individuals with communication disorders depends on the ability to work well with others.
- (8) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (9) 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) express ideas in a clear manner, and
  - (B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team.
- (2) The student demonstrates knowledge of basic human communication processes, including the biological, neurological, psychological, developmental, and linguistic and cultural bases for communication. 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 and contrast anatomy and physiology of the speech mechanism;
  - (D) examine anatomy and physiology of the auditory system;
  - (E) identify healthy verbal and nonverbal communication development;
  - (F) describe the developmental building blocks and prerequisites for healthy speech and language development;
  - (G) analyze and apply the terminology related to human communication, such as speech sound production, fluency (stuttering), voice, language, hearing, hearing loss, pragmatics, swallowing, and cognition; and
  - (H) interpret the social-interactive and psychological bases of communication and the linguistic and cultural influences on interpersonal communication.
- (3) The student demonstrates knowledge and understanding of various theoretical perspectives of healthy speech and language acquisition. The student is expected to:
  - (A) explain and investigate the major theories of language acquisition;
  - (B) compare and contrast the major theories of speech sound production; and
  - (C) research the connections between language development and speech development, as they relate to phonological awareness in learning to read.
- (4) The student analyzes and evaluates the healthy development of speech sound production in children. The student is expected to:
  - (A) examine the fundamentals of articulatory phonetics in relation to the respiratory system including the larynx, the vocal tract, and 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) evaluate the importance of the use of vowels in infants and young children for the development of speech and ways to categorize or describe vowel and diphthong production;
  - (E) research the development of consonant inventories in young English-speaking children;
  - (F) differentiate and evaluate the models for describing consonant production;
  - (G) summarize progression in speech development for combining sounds into syllable shapes and words; and
  - (H) analyze the linguistic and cultural influences of the heritage/native language on the development of speech sound production in English.

- (5) The student analyzes and evaluates the development of language skills in children. The student is expected to:
  - (A) explain the components of a developing language system in terms of vocabulary, grammar, and social/interpersonal communication;
  - (B) examine the components of language and discuss the prerequisite skills for developing language;
  - (C) distinguish between language delay, language disorders, and language difference;
  - (D) contrast healthy language development in terms of comprehension and expression from birth through age five years;
  - (E) summarize healthy language development in the areas of syntax, morphology, semantics, metalinguistics, phonology and phonological awareness, and pragmatics from kindergarten (age 5) through grade 5 (age 10 or 11);
  - (F) summarize healthy continuing language development in adolescence in the areas of syntax, morphology, semantics, metalinguistics, phonology, and pragmatics; and
  - (G) summarize cultural and ethnic differences in language development.
- (6) The student analyzes and evaluates the healthy development of verbal fluency skills in children.

  The student is expected to:
  - (A) define and distinguish between verbal fluency, disfluencies, and stuttering;
  - (B) identify common disfluencies;
  - (C) explain the development of speech and language skills and periods of expected disfluencies;
  - (D) distinguish between and discuss variables that may affect a child's verbal fluency; and
  - (E) compare and contrast verbal fluency for English language learners.
- (7) The student analyzes and evaluates the parameters of voice production in children and adults. The student is expected to:
  - (A) examine the physical and physiological parameters of voice production;
  - (B) compare and contrast the components of healthy voice production including voice quality, pitch, loudness, resonance, and duration;
  - (C) evaluate causes or etiologies of variations in voice production;
  - (D) differentiate changes in the parameters of voice production across the life span;
  - (E) analyze environmental variables that may affect voice production; and
  - (F) analyze the practice of speech-language pathology, allowable services, and 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.
- (8) The student analyzes and evaluates 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) describe the milestones of communication development for pragmatics, semantics, syntax, phonology and metalinguistics and compare them to the milestones of literacy development in literacy socialization, phonological awareness, print knowledge, reading, and writing;
  - (B) differentiate between interpersonal language used for conversational interaction and more formal, literate language used for learning academic content;

- (C) define and give examples of tier 1, tier 2, and tier 3 vocabulary as it relates to language development and meeting grade level expectations across subject areas in the areas of academic vocabulary;
- (D) explain the development of language used for oral and written narratives and how story grammar can be used as a bridge between conversational language and academic language;
- (E) analyze the development of pragmatic-language skills and the types of verbal, nonverbal, and written communication skills needed to do well in school; and
- (F) define emergent literacy and discuss the language base necessary for the development of reading skills.
- (9) The student explores the knowledge and skills necessary to discriminate between healthy versus unhealthy speech and language development. The student is expected to:
  - (A) describe the role of the speech-language pathologist in discriminating between healthy speech and language development and speech sound disorders and language disorders;
  - (B) research techniques for and the purpose of screening speech and language skills in children;
  - (C) analyze techniques for and the purpose of the evaluation of speech and language skills in children;
  - (D) evaluate Response to Intervention (RtI) as it relates to accurate identification of a speech or language disorder in school-age children; and
  - (E) analyze 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.
- (10) The student demonstrates verbal and nonverbal communication skills. The student is expected to:
  - (A) describe and demonstrate in simulations the communication skills appropriate to the situation when interacting with elementary age students, classroom teachers, speech-language pathologists, principals, and parents regarding healthy communication skills;
  - (B) identify 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;
  - (C) demonstrate use of electronic communication and technology devices that may be used when interacting with children with communication disorders; and
  - (D) distinguish between oral interpretation and translation skills from English to a second language or from a heritage language into English.
- (11) The student analyzes and evaluates 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) interpret terms such as pidgin and creole that may influence the development of speech and language development;
  - (C) describe and analyze how speech and language patterns vary as a function of language, age, socioeconomic status, and geography;
  - (D) analyze the characteristics of American English dialects in terms of speech sound production and language use;

- (E) summarize the influence of heritage language on the speech sound production and grammar development of English in English language learners; and
- (F) analyze considerations for English language learners in terms of expected speech and language development.

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

(a) General requirements. This course is recommended for students in Grade 11-12. Recommended

Prerequisite: 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.

#### (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 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 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) The professionals that specialize in communication sciences and disorders have credentialing and ethical practice standards that regulate the delivery of services across the lifespan for individuals with communication disorders, and across a variety of practice settings. Emphasis in this course will be on communication disorders in preschool and school-age, children, youth, and adults.

  Students are expected to demonstrate understanding of and differentiate among communication disorders of speech sound production, stuttering, voice disorders and language comprehension and verbal and written expression.
- (5) To pursue a career in communication sciences and disorders, students should learn to reason, think critically, make decisions, solve problems, research topics of interest, and communicate effectively. Students should recognize that quality service delivery for individuals with communication disorders depends on the ability to work well with others, with sensitivity and understanding of cultural and linguistic influences on the individual's communication patterns.
- (6) Speech-language pathologists and audiologists are engaged in the assessment, diagnosis, and plan of care or treatment, provision of services, counseling, and referral to other professionals for individuals with communication disorders. In addition, prevention of hearing loss and prevention of speech, language and communication disorders are important professional responsibilities.

  Students are expected to identify activities, skills, and expertise needed for each of these professional responsibilities.
- (7) To pursue a career in the health care industry, students should learn to reason, think critically, make decisions, solve problems, research topics of interest, and communicate effectively. Students should recognize that quality service delivery for individuals with communication disorders depends on the ability to work well with others.
- (8) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (9) 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) express ideas in a clear, concise, and effective manner; and
  - (B) exhibit the ability to cooperate, contribute, and collaborate as a member of a team.
- (2) 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 function of the peripheral and central auditory pathways;
  - (B) describe the physical and psychological attributes of sound;
  - (C) identify the different types of hearing loss;
  - (D) describe the impact of hearing loss on speech and language development;
  - (E) compare and contrast the processes of speech, language, and hearing in people of various cultures;
  - (F) identify and relate disorder differences in relationship to communication skills; and
  - (G) explain the concepts of speech, language, hearing, and communication disorders across the human lifespan.
- (3) The student demonstrates knowledge of the etiologies, characteristics, anatomical/physical, acoustic, psychological, developmental, and linguistic and cultural correlates of communication disorders across the human lifespan. The student is expected to:
  - (A) compare and contrast 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; and
  - (D) evaluate the impact of communication disorders on the individual; and
  - (E) evaluate cultural variations in how communication disorders are perceived.
- (4) The student describes the types of communication disorders most commonly seen in children and services provided by professionals in communication sciences and disorders to provide habilitation or rehabilitation services for these communication disorders. The student is expected to:
  - (A) analyze speech sound disorders in terms of the child's phonological system and in terms of a description of the production of the 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, loudness, resonance, and duration;
  - (F) develop 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 and contrast evidence-based treatment approaches for language disorders in preschool and elementary-age children.
- (5) 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;
  - (C) employ electronic communication and technology devices when interacting with children with communication disorders with appropriate supervision in a school setting; and
  - (E) demonstrate translation skills from English to a second language or from a heritage language into English with appropriate supervision.
- (6) 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 ethnographic 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) explain the issues to be considered when working with an interpreter or translator to communicate with a child with a communication disorder, or the child's family;
  - (E) apply design strategies for culturally sensitive family-centered practices for children with communication disorders; and
  - (F) explain the terms language disorder, language delay, language difference, Spanishinfluenced English, and dialect for describing the communication patterns of a young child.
- (7) 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, reception, expressive, and social language skills.
- (8) 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

  <u>Association as a protocol to evaluate research evidence;</u>
- (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 an action research project in the field of communication disorders.
- (9) 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 and contrast two treatment approaches for speech sound disorders;
  - (B) compare and contrast two treatment approaches for fluency disorders;
  - (C) practice treatment approaches for voice disorders in the areas of vocal quality, pitch, loudness, resonance, and duration;
  - (D) compare and contrast two treatment approaches for language disorders in preschool children;
  - (E) compare and contrast two treatment approaches for language disorders in elementary school-age children; and
  - (F) identify treatment for language disorders with children with other disabilities such as autism, intellectual disability, cleft palate, or cerebral palsy.