

Health Science 6-12 Educator Standards

FINAL

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Health Science Educator Standards

- Standard I.** The health science teacher understands and applies knowledge of the sciences needed in health care, biology, anatomy and physiology, chemistry, pathophysiology, epidemiology, and microbiology.
- Standard II.** The health science teacher understands and applies knowledge of the foundations of health science concepts related to health care systems, core academics, history of health science, funding methods, research, and medical terminology.
- Standard III.** The health science teacher understands and applies knowledge of verbal and nonverbal communication skills.
- Standard IV.** The health science teacher understands and applies knowledge of wellness and the fundamentals of disease prevention to promote healthy behaviors.
- Standard V.** The health science teacher understands and applies knowledge of technical skills used in the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems.
- Standard VI.** The health science teacher understands and applies knowledge of leadership, teaming, employability, career planning, and promoting student development through work-based learning and participation in career and technical student organizations such as HOSA.
- Standard VII.** The health science teacher understands and applies knowledge of industry safety policies, safety procedures, and preventative measures to minimize injury and illness.
- Standard VIII.** The health science teacher understands and applies knowledge of ethical and legal responsibilities of health care workers.
- Standard IX.** The health science teacher understands and applies knowledge of technology applications required for all health care specialties.
- Standard X.** The health science teacher knows how to organize and manage an effective health science education program and how to work with school, community, and industry representatives to support the program.
- Standard XI.** The health science teacher knows how to plan, implement, and utilize instruction and student assessment, including academic integration.

Standard I. The health science teacher understands and applies knowledge of the sciences needed in health care, biology, anatomy and physiology, chemistry, pathophysiology, epidemiology and microbiology.

Teacher Knowledge: What Teachers Know Teachers of Students in Grades 6–12	Application: What Teachers Can Do Teachers of Students in Grades 6–12
<p>The beginning teacher knows and understands</p> <p>1.1k how to manage classroom, field, and laboratory activities to ensure the safety of all students and the environment;</p> <p>1.2k the history and nature of science;</p> <p>1.3k the process of scientific inquiry and its role in science instruction;</p> <p>1.4k the limitations of the scope of science and the use and limitations of physical, mathematical, and conceptual models to describe and analyze scientific ideas about the natural world;</p> <p>1.5k the impact of science and scientific research on society, environment, and health sciences;</p> <p>1.6k the use of scientific methods during fieldwork and laboratory investigations;</p> <p>1.7k the use of appropriate equipment and technology for gathering, analyzing, and reporting data;</p> <p>1.8k how to synthesize and communicate valid conclusions from qualitative and quantitative experimental data;</p> <p>1.9k the anatomical structures of the human body and their relationship to their physiological function;</p> <p>1.10k the energy needs of the human body and the processes through which these needs are fulfilled;</p> <p>1.11k the responses of the human body to internal and external forces;</p> <p>1.12k the human body’s effort to maintain homeostasis;</p> <p>1.13k the human body’s electrical conduction processes and interactions;</p> <p>1.14k the human body’s systems;</p> <p><i>(continued)</i></p>	<p>The beginning teacher is able to</p> <p>1.1s employ safe practices in designing, planning, and implementing all instructional activities;</p> <p>1.2s recycle, reuse, and conserve laboratory resources as appropriate;</p> <p>1.3s analyze, review, and critique the strengths and weaknesses of scientific explanations, hypotheses, theories, and models using scientific evidence and information;</p> <p>1.4s use key events and knowledge of individuals from throughout the history of science to illustrate scientific concepts;</p> <p>1.5s provide opportunities for students to use higher order thinking skills, logical reasoning, and scientific problem solving to reach conclusions based on evidence;</p> <p>1.6s develop, analyze, and evaluate different explanations for a given scientific result;</p> <p>1.7s select and use appropriate tools, technology, materials, and equipment for scientific investigations;</p> <p>1.8s interpret and analyze scientific and technical data related to health care;</p> <p>1.9s plan and implement appropriate investigative procedures, including asking questions, formulating testable hypotheses, and selecting equipment and technology;</p> <p>1.10s collect data by measurement and observation;</p> <p>1.11s organize, analyze, evaluate, make inferences, and predict trends from data;</p> <p>1.12s communicate valid conclusions;</p> <p><i>(continued)</i></p>

Standard I. The health science teacher understands and applies knowledge of the sciences needed in health care, biology, anatomy and physiology, chemistry, pathophysiology, epidemiology and microbiology.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
1.15k the process of human growth and development; 1.16k infection control processes; 1.17k the relationship between microorganisms and health; 1.18k the role of pathogens in infectious diseases; 1.19k the need to use a variety of techniques and procedures to identify microorganisms; 1.20k the immune response to infection; 1.21k mechanisms of drug resistance; 1.22k new and changing patterns of infection and the effect on global health; 1.23k the mechanisms of pathology; 1.24k the process of pathogenesis; 1.25k a variety of human diseases; 1.26k the aging process; 1.27k the structure and function of living systems; 1.28k methods and reasons for evaluating scientific literature and promotional materials; 1.29k appropriate methods of statistical analysis; and 1.30k biomedical therapies as they relate to prevention, pathology, and treatment of disease.	1.13s make responsible choices in selecting everyday products and services using scientific information; 1.14s communicate experimental results using charts, tables, and graphs; 1.15s relate the physiological function to the anatomical structures within the body systems; 1.16s analyze biological and chemical processes that maintain homeostasis; 1.17s analyze the chemical reactions that provide energy for the body; 1.18s identify the means, including the structure and function of the digestive system, by which nutrients are processed and energy is utilized or stored; 1.19s analyze the effects of energy deficiencies (e.g., in malabsorption disorders such as diabetes, hypothyroidism, Crohn’s disease) and energy excesses such as obesity; 1.20s analyze and describe the effects of pressure, movement, torque, tension, and elasticity on the human body; 1.21s explain how coordination of nerves, muscles, bones, and joints allows movement of the body; 1.22s identify and relate the changes in structures and functions due to trauma, disease, and environmental conditions; 1.23s describe conduction systems such as nerve transmission or muscle stimulation; 1.24s analyze the physical, chemical, and biological properties of the circulatory, respiratory, integumentary, endocrine, and excretory systems; 1.25s describe the development of cells, tissues, organs, and systems; 1.26s summarize the human development cycle; 1.27s describe the historical development of microbiology as it relates to health care; (continued)

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Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
	1.28s identify the chemical processes, morphology, and characteristics of microorganisms; 1.29s describe and discuss the results of lab procedures used to identify microorganisms; 1.30s determine the factors required for microbial reproduction and growth; 1.31s classify microorganisms using dichotomous keys; 1.32s identify normal flora of the human body; 1.33s describe the infectious disease process; 1.34s identify pathogens of the human body; 1.35k investigate drug-resistant microorganisms; 1.36s evaluate the effects of antimicrobial agents; 1.37k categorize diseases caused by microorganisms; 1.38s identify biological and chemical processes at the cellular level; 1.39s associate disease processes with changes in homeostasis; 1.40s identify factors contributing to disease, including age, gender, environment, lifestyle, and heredity; 1.41s evaluate stages in the progression of diseases; 1.42s identify pathogenic organisms, mutations, and neoplasms and their associated disease processes; 1.43s illustrate the stages of pathogenesis, including incubation and symptomatic periods, exacerbation, and remission; 1.44s analyze the body’s natural defenses against infection, including inflammatory and immune system responses; (continued)

Standard I. The health science teacher understands and applies knowledge of the sciences needed in health care, biology, anatomy and physiology, chemistry, pathophysiology, epidemiology and microbiology.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
	1.45s evaluate the effects of chemical agents, environmental pollution, and trauma on the disease process; 1.46s identify and describe congenital disorders and childhood diseases; 1.47s evaluate public health issues related to asepsis, isolation, immunization, and quarantine; 1.48s evaluate treatment options for diseases; 1.49s describe diseases that threaten world health; 1.50s identify the physiological and cognitive patterns of change in aging individuals; 1.51s analyze scientific research to ascertain its effects on society and the environment; and 1.52s guide students in making systematic observations and measurements.

Standard II. The health science teacher understands and applies knowledge of the foundations of health science concepts related to health care systems, core academics, history of health science, funding methods, research, and medical terminology.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <p>2.1k how to integrate mathematics, English language arts, and social studies into health science;</p> <p>2.2k the historical development of health care and the contributions of individuals;</p> <p>2.3k major trends in health care and the ways that health care is funded globally;</p> <p>2.4k the impact that age, culture, and religion may have on clients’ views on health care;</p> <p>2.5k the terminology related to health care;</p> <p>2.6k how to use professional resources and references;</p> <p>2.7k how to communicate using appropriate medical terminology; and</p> <p>2.8k the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems within health care.</p>	<p>The beginning teacher is able to</p> <p>2.1s relate the importance of a strong academic foundation to success as a health care worker;</p> <p>2.2s solve mathematical problems relating to the health sciences;</p> <p>2.3s describe major historical events in the development of health care and communicate their impact on society;</p> <p>2.4s explain the impact of emerging issues in health care;</p> <p>2.5s describe the global economic impact of the health services on society, the systems that finance health, and different health care reform plans;</p> <p>2.6s describe the role of local, state, and national government in the health science industry;</p> <p>2.7s describe the steps necessary for entrepreneurship in a free enterprise society;</p> <p>2.8s identify age and cultural influences that impact health care delivery;</p> <p>2.9s compare and contrast strategies used by different cultures to solve health related problems;</p> <p>2.10s identify medical abbreviations, acronyms, and symbols;</p> <p>2.11s identify the meaning of prefixes, suffixes, and roots in the medical lexicon;</p> <p>2.12s use medical and dental dictionaries and multimedia resources;</p> <p>2.13s interpret and transcribe medical terminology accurately;</p> <p>2.14s translate medical terms to conversational language to facilitate communication;</p> <p>2.15s report observations using medical terminology; and</p> <p>2.16s identify the systems related to health care.</p>

Standard III. The health science teacher understands and applies knowledge of verbal and nonverbal communication skills.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <ul style="list-style-type: none"> 3.1k the components of and barriers to effective communication; 3.2k therapeutic and nontherapeutic communication techniques; 3.3k how to communicate effectively in speaking and writing; 3.4k how to communicate comprehension; 3.5k appropriate communication in stressful situations; 3.6k effective verbal and nonverbal communication; and 3.7k how to communicate appropriately in medical environments. 	<p>The beginning teacher is able to</p> <ul style="list-style-type: none"> 3.1s distinguish between therapeutic and nontherapeutic communication; 3.2s adapt communication to the needs of individuals in a diverse society; 3.3s describe the importance of accurate communication with clients and members of the health care team; 3.4s organize and compile ideas to write reports and summaries; 3.5s apply speaking and listening skills; 3.6s plan, prepare, and deliver an oral presentation; 3.7s demonstrate comprehension of assignment; 3.8s communicate industry standards and high expectations for learning; 3.9s role play techniques used in stressful situations; 3.10s communicate effectively with clients and team members regarding health care procedures, therapies, and other information; 3.11s demonstrate appropriate communication skills in a variety of settings; and 3.12s evaluate the effectiveness of verbal and nonverbal communication.

Standard IV. The health science teacher understands and applies knowledge of wellness and the fundamentals of disease prevention to promote healthy behaviors.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <ul style="list-style-type: none"> 4.1k the fundamentals of wellness and the prevention of disease in a global society; 4.2k the importance of preventive health behaviors; 4.3k the importance of building and maintaining healthy relationships; 4.4k factors affecting world health (e.g., access to health care; infrastructure; cultural, political, educational, and technological issues); 4.5k the importance of research in the study and treatment of disease; 4.6k the impact of disease prevention and control; and 4.7k the organizations which promote and maintain world health. 	<p>The beginning teacher is able to</p> <ul style="list-style-type: none"> 4.1s evaluate wellness strategies for the prevention and control of disease; 4.2s identify warning signs and explain the importance of early detection; 4.3s relate concepts of health and wellness to each phase of the life span; 4.4s identify human needs according to Maslow’s Hierarchy of Human Needs; 4.5s explain the relationship between nutrition, disease, and quality of life; 4.6s evaluate health-related social issues (e.g., access to health care; cultural, socioeconomic, educational, and political factors); 4.7s analyze risk factors and consequences of unhealthy behaviors; 4.8s demonstrate skills in building and maintaining healthy relationships; 4.9s relate the effects of positive and negative relationships on physical and emotional health; 4.10s promote healthy behaviors and wellness strategies, products, information, and services; 4.11s evaluate information and products as related to traditional and alternative health care; 4.12s describe the role of individuals and organizations in the prevention and containment of disease in a global society; and 4.13s develop a plan for personal health and wellness.

Standard V. The health science teacher understands and applies knowledge of technical skills used in the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <p>5.1k the foundation skills of a health care worker;</p> <p>5.2k the skills necessary to monitor client health status during diagnostic and therapeutic procedures;</p> <p>5.3k the equipment, technology, and materials used in the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems; and</p> <p>5.4k appropriate responses in emergency situations.</p>	<p>The beginning teacher is able to</p> <p>5.1s explain diagnostic and therapeutic procedures;</p> <p>5.2s select and use appropriate equipment and technology in the delivery of health care;</p> <p>5.3s interpret complex technical material;</p> <p>5.4s evaluate and analyze client data, records, and technical reports;</p> <p>5.5s communicate diagnostic and therapeutic protocols;</p> <p>5.6s assess and monitor client status and accurately measure, record, and interpret vital signs;</p> <p>5.7s safely move, lift, and transport clients;</p> <p>5.8s perform first aid, cardiopulmonary resuscitation, and automated external defibrillator skills;</p> <p>5.9s demonstrate and assess skills associated with activities of daily living and rehabilitative care according to the health science industry standards, regulatory agency standards, and professional guidelines; and</p> <p>5.10s use appropriate protocols for the collection and dissemination of client health care data.</p>

Standard VI. The health science teacher understands and applies knowledge of leadership, teaming, employability, career planning and promoting student development through work-based learning and participation in career and technical student organizations such as HOSA.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <p>6.1k the role of continual self-assessment, research, and preparation in career development and strategies for engaging in career-related self-assessment, research, and preparation;</p> <p>6.2k characteristics of health care professionals as defined by the health care industry;</p> <p>6.3k career options and the preparation necessary for employment in the healthcare industry;</p> <p>6.4k the skills necessary to gain and maintain employment in the health care industry;</p> <p>6.5k the demands and responsibilities of health care professionals;</p> <p>6.6k multiple health care environments and their integrated relationships;</p> <p>6.7k the importance of interpersonal and social skills in the workplace;</p> <p>6.8k how to access current information on new and emerging careers in the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems;</p> <p>6.9k the benefits of work-based learning opportunities in health care;</p> <p>6.10k the benefits of teaming to provide quality health care;</p> <p>6.11k the leadership skills necessary to function in a democratic society;</p> <p>6.12k conflict resolution techniques;</p> <p>6.13k the opportunities available to students through Health Occupations Students of America (HOSA), such as leadership training, scholarships, and knowledge and skill development;</p> <p>6.14k the importance of professional standards and organizations; and</p> <p>6.15k how to identify problems and participate in the decision-making process.</p>	<p>The beginning teacher is able to</p> <p>6.1s analyze the use of self-development and career-development skills and techniques (e.g., participating in leadership and career development activities such as HOSA, engaging in self-assessment, conducting employment research, recognizing technical skill competencies, pursuing licensures or certifications, pursuing awards and scholarships, participating in extended learning experiences, developing a resume, developing samples of work);</p> <p>6.2s identify professional characteristics of health care providers;</p> <p>6.3s locate, evaluate, and interpret career options, employment information, and career-enhancement opportunities in the diagnostic, therapeutic, health informatics, support services, and biotechnology research and development systems;</p> <p>6.4s demonstrate the procedures necessary to seek, secure, and maintain employment;</p> <p>6.5s predict the impact of career choices on personal lifestyles;</p> <p>6.6s guide students to set realistic career and educational goals based on personal interests and aptitudes;</p> <p>6.7s develop strategies to anticipate and adapt to changing employment conditions;</p> <p>6.8s identify new and emerging careers in health care;</p> <p>6.9s demonstrate and promote productive, professional work habits (e.g., integrity, reliability, punctuality, effective time management);</p> <p>6.10s prepare students for entry-level employment and/or certification in appropriate allied health areas;</p> <p>6.11s adhere to child labor laws;</p> <p><i>(continued)</i></p>

Standard VI. The health science teacher understands and applies knowledge of leadership, teaming, employability, career planning and promoting student development through work-based learning and participation in career and technical student organizations such as HOSA.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
	<p>6.12s develop appropriate training plans for work-based learning experiences (paid and unpaid);</p> <p>6.13s explain the concept of teaming and describe how the health care team functions to provide high-quality health care;</p> <p>6.14s identify and demonstrate skills, characteristics, and responsibilities of leaders and group members;</p> <p>6.15s use teaming skills to accomplish goals;</p> <p>6.16s conduct effective meetings according to established parliamentary procedures (e.g., Robert’s Rules of Order);</p> <p>6.17s apply critical thinking to make effective decisions;</p> <p>6.18s use problem-solving skills to negotiate and resolve conflicts;</p> <p>6.19s provide opportunities for students to participate in leadership and community-service activities through Health Occupations Students of America (HOSA);</p> <p>6.20s guide students in planning for advancement in the health science industry; and</p> <p>6.21s identify related professional organizations.</p>

Standard VII. The health science teacher understands and applies knowledge of industry safety policies, safety procedures, and preventative measures to minimize injury and illness.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <p>7.1k the importance of maintaining a safe environment and eliminating hazardous situations;</p> <p>7.2k the importance of regulatory agencies such as the Occupational Safety and Health Administration, the Food and Drug Administration, and the Centers for Disease Control and Prevention;</p> <p>7.3k standard precautions as they relate to health care workers;</p> <p>7.4k procedures for controlling the spread of infection;</p> <p>7.5k industry standards related to safety and substance abuse; and</p> <p>7.6k procedures for protecting the environment.</p>	<p>The beginning teacher is able to</p> <p>7.1s evaluate environments for personal and client safety and comply with safety policies;</p> <p>7.2s identify and practice fire prevention procedures according to facility protocol;</p> <p>7.3s recognize malfunctions of health care equipment and identify the steps for reporting according to facility protocol;</p> <p>7.4s respond to emergencies appropriately;</p> <p>7.5s identify, demonstrate, and apply the principles of body mechanics for minimizing personal and client injury;</p> <p>7.6s comply with and enforce protocols related to chemicals and hazardous materials;</p> <p>7.7s demonstrate, monitor, and evaluate the use of standard precautions to prevent nosocomial infections;</p> <p>7.8s compare the functions of regulatory agencies such as the Occupational Safety and Health Administration, National Institute for Occupational Safety and Health, Centers for Disease Control and Prevention, Food and Drug Administration, National Institutes of Health, and Environmental Protection Agency;</p> <p>7.9s comply with and enforce school and workplace safety policies and procedures;</p> <p>7.10s comply with industry standards related to safety and substance abuse; and</p> <p>7.11s practice procedures to protect the environment.</p>

Standard VIII. The health science teacher understands and applies knowledge of ethical and legal responsibilities of health care workers.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <p>8.1k ethical behavior standards and legal responsibilities of health care professionals;</p> <p>8.2k malpractice, negligence, and liability issues related to health care;</p> <p>8.3k the importance of leadership and civic responsibilities;</p> <p>8.4k the importance of confidentiality as it relates to health care;</p> <p>8.5k the legal requirements and scope of practice of health care workers;</p> <p>8.6k the importance of client autonomy; and</p> <p>8.7k ethical conduction of research.</p>	<p>The beginning teacher is able to</p> <p>8.1s model ethical behavior;</p> <p>8.2s communicate the necessity of client confidentiality;</p> <p>8.3s comply with and enforce the protocols and legal requirements of the health care industry within a designated scope of practice;</p> <p>8.4s identify legal and ethical behavior standards such as patient bill of rights, advanced directives, informed consent, and the Health Insurance Portability and Accountability Act;</p> <p>8.5s identify clients’ rights and health care options;</p> <p>8.6s describe the effects of unethical practices on consumers;</p> <p>8.7s identify, analyze, and discuss issues related to malpractice, negligence, and liability;</p> <p>8.8s identify circumstances that affect clients’ rights;</p> <p>8.9s identify individual ethical and legal behavior standards according to professional regulatory agencies; and</p> <p>8.10s analyze how research on human subjects is regulated, designed, conducted, and evaluated.</p>

Standard IX. The health science teacher understands and applies knowledge of technology applications required for all health care specialties.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <p>9.1k the relationship between science and technology;</p> <p>9.2k the contributions and impact of technological advances on health care;</p> <p>9.3k technology communication skills (e.g., email, digital media, receiving and sending business communication, dissemination of information); and</p> <p>9.4k the necessity of maintaining professional knowledge of emerging technologies.</p>	<p>The beginning teacher is able to</p> <p>9.1s select and apply current and emerging technologies to address needs;</p> <p>9.2s use technology to access, retrieve, and process information;</p> <p>9.3s use technology for the collection and dissemination of client health care data;</p> <p>9.4s use technology resources to achieve goals;</p> <p>9.5s evaluate technological resources for appropriate applications in health care and analyze issues related to their use; and</p> <p>9.6s evaluate new and emerging technologies in the health science industry.</p>

Standard X. The health science teacher knows how to organize and manage an effective health science education program and how to work with school, community, and industry representatives to support the program.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <p>10.1k roles and responsibilities of the health science education teacher (e.g., program coordinator, advisor);</p> <p>10.2k methods and strategies for planning, implementing, and maintaining a health science education program;</p> <p>10.3k the importance of basing classroom instruction on business and industry standards;</p> <p>10.4k strategies for establishing partnerships with individuals, groups, and organizations (e.g., teachers, parents/guardians, businesses, health care facilities, community groups, postsecondary institutions);</p> <p>10.5k roles and responsibilities of community, industry organizations, and advisory committees (e.g., evaluating the health science education program, ensuring that the curriculum meets industry standards, HOSA, health care related community resources);</p> <p>10.6k the importance of various professional organizations (e.g., THOA, ACTE, Chamber of Commerce) for professional growth and development;</p> <p>10.7k types and characteristics of professional development activities (e.g., conferences, graduate work) to ensure lifelong learning in health science education; and</p> <p>10.8k the necessity of maintaining professional knowledge of current developments in health care.</p>	<p>The beginning teacher is able to</p> <p>10.1s plan a sequence of courses for a health science education program (e.g., exploratory, technical, comprehensive, specialized);</p> <p>10.2s identify curriculum needs and apply performance standards in meeting those needs;</p> <p>10.3s collaborate with education, community, and industry partners (e.g., other faculty, advisory committees) to design health science instruction that integrates knowledge and skills from core academic subjects;</p> <p>10.4s apply feedback from a variety of sources (e.g., internal reviews, advisory committees) to evaluate the quality and effectiveness of the health science education program and use assessments to establish program improvement goals;</p> <p>10.5s document the ability of the health science education program to meet established goals;</p> <p>10.6s organize and work effectively with advisory committees and ensure the equitable representation of all stakeholders (e.g., special programs staff, community members, parents/guardians, business representatives) on advisory committees;</p> <p>10.7s use partnerships to prepare students for the transition from secondary to post-secondary education and employment in the health care industry;</p> <p>10.8s develop articulation agreements with education and training partners;</p> <p>10.9s work effectively with community and industry representatives and local and civic organizations to encourage involvement in and support for the health science education program;</p> <p>10.10s use marketing strategies to promote the health science education program and recruit students into the program; and</p> <p>10.11s model professional standards as a health care provider by maintaining a current license, certification, or registration.</p>

Standard XI. The health science teacher knows how to plan, implement, and utilize instruction and student assessment, including academic integration.

Teacher Knowledge: What Teachers Know <i>Teachers of Students in Grades 6–12</i>	Application: What Teachers Can Do <i>Teachers of Students in Grades 6–12</i>
<p>The beginning teacher knows and understands</p> <p>11.1k state content and performance standards in health science education, as defined by the Texas Essential Knowledge and Skills (TEKS);</p> <p>11.2k instructional strategies and activities that engage students, provide positive and effective learning experiences, and model business practices (e.g., group brainstorming, conducting research, making presentations, engaging in teamwork, exhibiting leadership);</p> <p>11.3k instructional strategies for working effectively with students who have diverse strengths, needs, and backgrounds;</p> <p>11.4k the importance of integrating health science education with concepts and skills in academic areas, including language arts, mathematics, science, and social studies;</p> <p>11.5k strategies for using current and emerging technologies as tools for learning and communicating health science education concepts;</p> <p>11.6k strategies and techniques for communicating effectively in the classroom; and</p> <p>11.7k a variety of assessment instruments and methods, including performance-based methods, for evaluating instructional effectiveness and determining students' progress and needs.</p>	<p>The beginning teacher is able to</p> <p>11.1s use personal health care experience and skills to enhance student learning in the classroom;</p> <p>11.2s select and use effective instructional practices, strategies, activities, technologies, and materials to promote students' knowledge, skills, and progress in health science education;</p> <p>11.3s use multiple forms of assessment to evaluate instructional effectiveness, determine students' progress and needs, and plan instruction;</p> <p>11.4s assist students in developing and evaluating career objectives;</p> <p>11.5s use strategies to keep abreast of and apply current research, trends, and practices in health science education; and</p> <p>11.6s identify health care industry sources for learning about emerging trends and practices.</p>