



NEW ENGLAND ASSOCIATION OF SCHOOLS AND COLLEGES
Commission on Public Schools

CTE Self-Reflection Program Report (sample)

Note: Be sure to write Foundational Element 3.6a and enter it into the Foundational Elements section of the Accreditation portal. The Foundational Element should encompass all CTE programs

FOUNDATIONAL ELEMENT 3.6 A

The school meets Foundational Element 3.6a. All career and technical education programs have a program advisory committee and implement a systematic program review process. We have effective career and technical education program advisories. Each program has a robust trade advisory committee that meets at least twice per year. Some program advisories meet more frequently. The advisories help us keep current with trends for each program. Advisory members work in the field, and some work at sites where students intern. We complete regular program reviews by examining the current trends and making changes to our curriculum and guarantee effective program design, so our students are always up-to-date in the field and prepare for and participate in scheduled state reviews of our programs, and determine compliance with any state or federal regulations.

Program Narrative for Health Technology

STUDENT DEMOGRAPHICS

Seniors, 16: 15-female, 1-male

Juniors, 16: 16-female, 0-male

Sophomores, 12: 11-female, 1- male

Freshmen, 8: 6-female, 2-male

Most students selecting this career pathway are female, possibly attributed to the stereotype of a female-dominated career choice. Less than ten percent of students are male, reflecting the national average of male nursing assistants in the US. Health Technology (HT) has had 18-20 students each year for 14 years. Enrollment in the past two years has decreased, most likely due to the Covid-19 pandemic. Parents and students have concerns about the pandemic, working conditions, and the vaccine. We require updated vaccinations. Some parents discourage students from the health field. Incoming freshmen indicated that they want to pursue a career in healthcare but do not want to meet the challenges of a demanding and rigorous program.

Note: The curriculum (2.2), instruction (2.4), and assessment (2.7) sections can be answered in this narrative or combined into the Standard 2 report for the school.

CURRICULUM

There is a written curriculum for all HT courses that includes units of study with guiding/essential questions, concepts, content, skills, grade specific goals and learning outcomes, instructional strategies, extension activities, and assessment practices, including formative assessments. The curriculum aligns with the school/district's vision of the graduate. The curriculum is designed to prepare students for college, career, and lifelong learning and is based on the National Health Science Standards and the Department of Public Health and Omnibus Budget Reconciliation Act (OBRA), which regulates the training of nursing assistants. The curriculum focuses on five areas: employability, safety, communication, health skills, and wellness and disease in grades 9, 10, and 11. Seniors focus on employability knowledge and skills and additional career pathways. The curricula for programs where students can receive licensure or certification are designed to ensure students meet all requirements. All courses contain competency-based elements for post-secondary education. Lesson objectives are discussed at the beginning of each cycle and reiterated during the cycle as appropriate. The curriculum is reviewed annually by instructors and the curriculum committee reviews and revises the curriculum every other year, for example, to incorporate additional certifications and current industry trends. In the next curriculum review, we plan to check for bias and to ensure that all students can see themselves represented.

INSTRUCTION

Instructional practices are designed to meet the learning needs of each student. Differentiated instruction is based on the needs of the students and content, such as small and whole group instruction, peer-led instruction, individual instruction, demonstration with student return demonstration, class discussion, student-led presentations, and online interactive learning programs. Tools such as graphic organizers, scaffolding, visual aids, and hands-on demonstrations allow students to engage in lessons by personalizing learning. Instructors use assessment results from the Prometric certifying nurse aide exam to inform instruction. Frequently, instructors use formative assessments, such as exit tickets or end-of-cycle reflections to ask students what learning activity seemed most beneficial, which activity seemed least helpful, and what the instructor could do differently to reach the student more effectively and to inform future instructional practices. Educators provide structure and support to provide all learners with access to rigorous learning opportunities. For example, cross-disciplinary learning in English, math, and science, and applying knowledge and skills to meaningful tasks support learning. Students often engage in higher order thinking by becoming experts in presenting information on various topics that might include different body systems, diseases, and career pathways through inquiry and problem-solving. Skills are practiced and supported by giving students patient care scenarios to work through individually or in groups to ensure the highest quality of care. Students work with real-life patient scenarios in the simulation skills lab, where they demonstrate caring for their patients appropriately. Students are encouraged to explore multiple solutions to a problem and discuss potential solutions and anticipated issues with peers. Application of this skill occurs frequently at clinical sites as students must adapt and modify plans. Mathematics supports the basic computation required in healthcare; the English department supports professional writing activities. The math and English departments seek out trade-specific scenarios to incorporate into student instruction.

ASSESSMENT

Learners experience a wide range of assessment practices to support and improve learning. The HT program uses a variety of assessments on a daily, weekly, and cycle basis. Progress is measured by formative and summative assessments. Assessment strategies include journal/activator questions, quizzes, tests, short answer tests, projects, papers, presentations, research papers, class discussions, skill observations, Quizlet, Kahoot!, questions embedded in EdPuzzle, and lab practicals. All freshman must pass a district-wide shop safety test before beginning trade instruction. All students take a safety test. Students must complete the 10-hour OSHA for healthcare workers program and pass the final exam to receive certification. The District Summative Assessment (DSA) has a written and practical component. A score of 70 is required on the written components and students must meet proficiency on the skills rubric. All assessment scores are recorded in PowerSchool; exams are reviewed, and content areas of weakness are readdressed with further instruction. Specific and measurable criteria for success are provided to learners before assessments. Rubrics guide student expectations and are available for skill acquisition, project/presentation, clinical experiences, and for the determination of daily trade grades. Assessment practices include regular and consistent checks for understanding. Educators talk with students consistently during class, asking questions, and clarifying students understand the concepts, content, and skills of the lesson. Specific and timely verbal and written feedback from educators, and often peers, ensures students can revise and improve their work by reading grades and notes entered in PowerSchool within a few days of an assignment. Teachers use email communication, comments on journal entries, and extra help to support students and discuss any issues or concerns. Students and guardians updated on progress in PowerSchool. Students present to authentic audiences at worksites and at times, during advisory committee meetings. Students present their work at open houses to incoming students and parents.

PROGRAM/CLUSTER BASICS

The physical layout of the space occupies for Health Technology (HT) is located on the lower level of the building. The shop area includes a classroom, computer lab, medical office suite, and clinical simulation lab. The area includes a small entryway, water fountain, sink, and laundry room that houses the required linens. The skills lab includes a clinical lab area equipped with five automatic hospital beds, privacy curtains, bedside tables, over-bed tables, simulated call lights, simulation boards, eleven manikins, and two manikins of color, interactive SMART Board, instructor table, student tables, and chairs. Another sink has storage cabinets and shelving and a storage closet for equipment and supplies. A classroom is located off the lab area, and on the other end of the skills lab is the entrance to a simulated medical office with a waiting room, reception room, and exam room. The patient waiting area with seating is connected to the reception room. The reception area consists of a large counter, two sliding patient windows, simulated phones, filing cabinets, a desktop computer and printer, a bookshelf, file cabinets, and a storage cabinet. The hallway connecting the medical suite has an instructor's office and the entrance to the computer lab. The HT classroom houses ninth and tenth graders. The area has six desktop computers for student use, one instructor computer, a printer, an interactive SMART Board, two whiteboards, file cabinets, storage cabinets, bookshelf, instructor and student tables, and chairs. The HT computer lab houses junior and senior students. There are 20 student desktop computers in the HT computer lab, one instructor computer, a printer, an interactive SMART Board, a whiteboard, storage closets and cabinets, file cabinets, instructor tables, computer counters, and chairs. All desktop computers are connected to the classroom printers. All students are provided with a Chromebook.

Equipment is located in appropriate spaces for proper use. HT maintains the equipment needed to

teach clinical skills with a hands-on approach. We have a Hoyer and SARA lift, electronic BP cuff, O2 pulse oximeters, electronic thermometers, and CPR manikins with the required electronic rate and depth compression monitors. Our equipment is up to date with current standards in health care. Manikins are in good working condition.

There are no apparent health or safety concerns. HT students and staff assist custodial staff by maintaining a clean and safe environment. Classroom management strategies are instructor-specific; however, our trade area has a handbook with shop expectations for students and guardians. The consequences of not adhering to shop expectations, policies, and procedures remain the same for all students throughout their enrollment in the HT program; likewise, privileges are granted to students with the same consistency.

Evacuation signs and instructions for various emergency scenarios are posted.

The area includes 40 lockers, a gender-neutral bathroom and an instructor bathroom.

Staffing for the program is sufficient. There is a lead instructor for each grade level. HT instructors co-teach all four grades. Students in grade 9 take Exploratory and Introduction to Health Technology, in grade 10 Exploration of Healthcare Career Pathways, in grade 11 Certified Nursing Assistant, and Advanced Career Exploration in grade 12. Seniors may take different career paths, such as pharmacy technician, phlebotomy tech, and physical therapy aide. Students choose the pathway that best suits them or interests them, allowing for a certificate. The combination of theory, project-based learning, clinical lab time, and patient care at clinical sites allows for a multi-faceted approach to teaching, learning, and applying skills. The student to teacher ratio is about 15:1.

Equipment and technology are sufficient, up-to-date, consistent with current practices in the trade, and support the curriculum. The HT program supplies each student with a handbook and course syllabus outlining the educational and course expectations and a textbook.

- Freshmen: Health Science Concepts and Applications – Marshall & Roe: 2018
- Sophomores: Health Science Fundamentals (3rd edition) – Badasch & Chesebro: 2020
- Juniors: Nursing Assistant A Nursing Approach 11th edition – Acello & Hegner: 2016
- Seniors: Administrative and Clinical Procedures with Anatomy and Physiology (7th edition) – Booth, Whicker, & Wyman: 2019 The Language of Medicine (12th edition) – Chabner: 2021 (online)

The overall appearance of the HT area is a well-maintained space that is professional and safe for students, staff, and visitors. All areas are extremely clean and neat.

Technology is implemented into instruction through online learning tools, online text, and programs like CARES, OSHA, SIM Chart and electronic medical equipment such as blood pressure cuffs, thermometers, pulse oximeters, mechanical patient lifts, among others. Online textbooks, Dean Vaughn medical terminology, Applied Education Systems, HC Interactive dementia program, Career Safe OSHA program, and SIM Chart medical office program are used to support the curriculum.

Instructors submit budget needs to the program coordinator. The program coordinator prepares the budget to submit to the principal. The superintendent and school board present the budget to town departments and the town council determines the school's annual budget. The HT budget always supports replenishing consumable goods and purchases medical and office supplies to support student learning. Generally, the budget amount is similar to the prior school year with occasional increases for long-term or large projects from the capital plan. The department's budgeted is supplemented with grant funds.

WORK-BASED LEARNING OPPORTUNITIES

Students are involved in the National Honor Society (NHS) and SkillsUSA. HT students qualify to compete at the state level in certified nursing assistant and CPR/First Aid, medical math, medical terminology, and knowledge bowl every year. HT SkillsUSA participants have ranked and placed at the State competition and earned a spot to go to Nationals.

Freshmen have clinical experiences at the senior center in town, a social environment for retired adults 55 and older. This allows the students to converse with older individuals who are healthy and independently active, helping stop the stigmas/myths students might have about elders being inactive. Our 10th-grade students are junior volunteers at Dailey Hospital. During shop cycles, clinical groups interact with patients and staff by transporting patients to various patient care areas, bringing specimens to the lab, delivering flowers and mail to patients' rooms, and getting to know the workings of our local hospital. The students pair up with the senior volunteers, helping students realize many elderly individuals lead very active lives, volunteer to give back to their community, and keep busy. Students are exposed to the five health science career pathways while at the hospital. Junior clinical placement is at Treeland Nursing and Rehabilitation Center and Woodstone Post-Acute & Transitional Care. These facilities provide students with the hands-on clinical component in preparation for the nursing assistant certification exam. Seniors return to Dailey as junior volunteers during shop cycles to explore the various career opportunities. Students may be placed on patient care units and shadow a nurse or patient care technician, social worker, respiratory therapist, diagnostic imaging, rehabilitation department including physical, occupational, and speech therapy, laboratory services, and dietary, among others. Students in grade 11 earn credit towards an unpaid internship while obtaining their clinical hours at our partner long-term care facilities. Seniors earn credit toward an unpaid internship while exploring the various career opportunities at the hospital. We encourage our students to find employment as dietary aides or childcare assistants when looking for a job. Students can expand upon residents' nutritional needs and dietary modifications in a long-term care facility as dietary aides. This serves as a steppingstone to moving into a nursing assistant position once earning their certification at the end of junior year. Students interested in pursuing a career working with children are encouraged to obtain a position as a childcare assistant at a childcare facility to enhance their knowledge of the developmental stages of children.

PRODUCTION WORK

Health Technology is not involved in production work.

PROGRAM STRENGTHS

- The ongoing celebration and integration of cultural diversity that provides a safe and welcoming shop environment.
- Attainment of college credits for Health Tech students gives them an academic advantage.
- The direct hands-on clinical experiences beginning in freshmen year that provide an immediate introduction to the field.
- The numerous trade certifications students will earn, giving them a career advantage.
- Partnerships with numerous facilities and colleges provide pathways for student success.
- The support from the advisory committee, a diverse group of people from industry and college.
- The broad array of careers and experiences from the ECE course, Introduction to Allied Health Services.

OPPORTUNITIES FOR GROWTH AND IMPROVEMENT

- Increase storage to appropriately house and protect costly instructional materials.
- Increase senior career pathways opportunities.

Note: Include these two sections in the school and community summary.

STUDENT CLUBS AND AWARDS

Students are involved in the National Honor Society (NHS) and SkillsUSA. HT students qualify to compete at the state level in certified nursing assistant and CPR/First Aid, medical math, medical terminology, and knowledge bowl every year. HT SkillsUSA participants have ranked and placed at the state competition and earned a spot to go to nationals. Many HT students are involved in sports, student council, and peer mentoring.

GRADUATION RATES AND PROGRAM COMPLETION RATES

One hundred percent of the HT students who remain in the HT program have graduated over the past 15 years. About 80 percent go directly to college in a medical/nursing/healthcare program. The remainder work in the healthcare field in entry-level positions.