

## **Instruction**

### *Teaching and Learning Standard 3*

**3.1 At Colchester High School, instructional strategies are generally consistent with the mission statement, Essential Expectations, and KUDs, which define expectations for student learning.** The school motto, “Equity and excellence in a climate of respect, responsibility, and pride” guides instructional decision making. This motto is an overarching theme into which the mission statement and Essential Expectations fall. Copies of the mission statement have been posted since 1996 and the school motto has been posted in classrooms and around the school for years. The mission statement and Essential Expectation rubrics are also publicized on the CHS website. A majority of teachers (80.6 percent) say that the “school’s mission statement influences my repertoire of teaching methods” according to the NEASC Self Study Survey. Instructional strategies are guided by KUDs, curriculum planning documents that state what students will Know, Understand, and be able to Do. KUDs include Essential Expectations and Grade-Level Expectations. Most courses currently have KUDs and those that do not should be in the process of creating them.

**CHS is “proud of its respect for individual needs” as the mission statement states. There are many ways that individual needs are prioritized through instruction.** CHS has begun to adopt the philosophy and practice of differentiated instruction as a school-wide initiative. This initiative began in 2001 with a pilot course in Green House Humanities and has begun to be adopted school-wide. Most teachers strive to differentiate content, process, and product by readiness, interest, and learner profile. Through the Green House and Teacher Advisory, students are instructed about Learning Styles as defined by Silver, Strong, and Perini. Learning Styles Week in the fall of each year encourages all teachers to attend to Learning Styles when designing instruction. All students and teachers take Learning Styles assessments, reflect

on their strengths and challenges, and then students learn and teachers instruct based on an awareness of Learning Styles. At times, students select a process or product based on their strengths or their challenge area. At times they complete task rotations where they work in all Learning Styles areas. One example is a French Learning Styles Menu, in which students can choose to write a dialogue, create a poster, answer questions, or create sentences in order to learn new vocabulary. In Green House Humanities, students select guided choice books based on interest and/or readiness and then select a product to demonstrate their learning based on Learning Style. Individual needs are also met through differentiation by readiness. At times students self-determine their challenge zone, at times parents are asked to give input, and at times teachers make decisions about readiness based on formative assessments. Examples of how teachers differentiate their instruction based on readiness include tiered assignments, orbital projects, tiered texts, and flexible grouping. Some of the many examples include the Land-Water Lab in Earth Systems Science and tiered vocabulary lists in Green House Humanities. Regular educators and special educators work together to modify instruction to meet the instructional needs of students on IEP and 504 plans. *We struggle in using formative assessment to attend in timely ways to students' emerging range of readiness needs.*

**Another part of the mission statement reads that CHS is “proud of its...commitment to integrated learning.”** Integrated learning happens to a great extent during Green House Humanities courses: Thinkers and Revolutionaries (grade nine) and American Experience (grade ten). Both of these courses integrate English and social studies. One example of an integrated unit is Cycle Four of American Experience, in which students study the Roaring Twenties and Great Depression and read *The Great Gatsby* or *Of Mice and Men*. Another specific example is that a social studies teacher and an art teacher work together to integrate their

subjects through an Italian Renaissance lesson. Other courses, like Direct Instruction, taught by Special Educators, include integrated learning opportunities. *Teachers advocate for school-wide commitment to integration in order to foster coherence and connections amongst content areas and subjects and skills within content areas. Time to develop and implement interdisciplinary units and courses has been identified as a need by teachers.*

**The mission statement lays out the belief that the school should work “in partnership with families and the community.”** Families are invited to participate in the following school activities throughout the year: the American Experience Heritage Gallery, the Science Essential Topics presentations, Public Speaking Tribute Speeches, Senior Seminar Project presentations, Vermont Student Assistance Corporation (VSAC) informative sessions, college admissions and financial aid and career planning services work sessions, Open House, and parent conferences. Opportunities are available for students to work in partnership with the community through Options credits, AP Science and Math internships, work experiences, and volunteer opportunities, such as Senior Seminar, mentoring younger students, helping at the Chittenden Emergency Food Shelf, National Honor Society and CHS Cares service projects, and helping to edit, write, and provide art work for *The Mountain Review*. Guest speakers also help instruct and strengthen the community-school connection in the academic areas such as Health, Social Studies, Business and Technology and English Language Learners. *Gaining positive and ongoing partnership and support from the community has been elusive.*

**The mission statement states that all students will become “responsible and involved citizens.” It promotes the development of “social skill and character.”** The school promotes responsible citizenship through courses like American Experience and Senior Seminar (both required courses) in which students learn about government, civics, and responsible citizenship,

a key component of social awareness. Through Senior Seminar, seniors complete a community-based service learning project, allowing students to explore an issue they are interested in. Students drive their own learning, work to make a difference in their community, develop a positive feeling of self-worth by being viewed as a resource to their community, and reflect on their accomplishments. The school also promotes responsible citizenship, social skills and character through courses like Earth Systems Science and Environmental Science, in which students learn about social and environmental responsibility. In Environmental Science classes, students complete a thorough investigation of the school's trash and recycling, and they research water quality at local sources. In part, the Learning Habits Essential Expectation promotes the development of social skill and character. At times, Special Educators and guidance counselors offer social skills groups. Some students are able to work on the development of social skills and character through their involvement in the Cross Roads Program, mentor programs at the elementary school, and the school store. The Career Services Counselor works with students on social skills that apply to interviewing and being employed. Students also have the opportunity to register to vote in school. *More opportunities to develop responsible citizenship, social skills and character should become available to a wider range of students.*

**The expectations for student learning include Reading, Writing, Problem Solving, and Learning Habits.** Essential Expectations were developed by the faculty and Leadership Team in a year long process; they were established and accepted in 2007-2008. Essential Expectations posters are displayed in classrooms and around the school. Teachers are beginning to incorporate language from Essential Expectations and the accompanying rubrics into class-specific assessments and KUDs. EEs are in a transitional process of going from theory to application. They influence instruction but are not fully embedded and used by students in all

areas. The school has stressed and honored habits that promote learning in various forms for years. The structure of these habits has evolved from “Habits of Mind” (based on Costa and Kallick’s work) to “Habits of Learning” to “Learning Habits.” *The continued use of and reference to multiple versions has led to confusion for teachers and students. Teachers also identify the need for student friendly rubrics.* In the Green House, students learn and reflect on habits that promote learning and can earn Honors Distinction based on growth and excellence in these areas.

**3.2 CHS faculty members consistently work to improve their instructional practices in an effort to meet the needs of students. Teachers vary instructional strategies based on students’ interests, readiness, and learner profiles.**

**Teachers often personalize instruction.** Teachers believe it is important to know students well in order to meet students where they are and foster growth. Teachers focus on community building activities at the start of each school year and continue these practices throughout the course. Teachers use these activities as well as entrance and exit cards, pre-assessments, learning styles data, surveys, interviews, goal setting and self reflection, journal writing, course evaluations, and conferences in order to personalize instruction. One teacher reflects that course evaluations “help me improve and personalize instruction because this offers me constructive criticism on how to improve student learning.” Students have opportunities to focus on personal interests in many courses. In Humanities, students can self select books based on interest. In math, one specific example is that students complete the Trigonometry Application Project on Sinusoidal Curves, which allows for many choices.

**Part of personalizing instruction includes students’ access to teachers and to opportunities for one-on-one help.** According to the NEASC Self Study Survey, over 80

percent of students report that they feel comfortable going to their teacher for help. In addition to making appointments with teachers for individual help after school or during study halls, students at CHS are able to access the Writers' Workshop, Math Center and Homework Club to get individualized instruction. *Previously, there was a "late bus," which gave transportation to students who stayed after school to do things such as meeting with teachers or attending homework club; the current lack of transportation presents a difficulty for some students in terms of meeting or receiving support afterschool.* Teacher Advisory, Senior Forum, Special Education, ELL, Strategic Study, Strategic Reader, and Strategic Math, Colchester Alternative Program, Target Graduation, college connections, and alternate senior year are all designed to support and individualize instruction. Some are designed to meet the individual needs of students whose needs have not been met through traditional coursework or through the traditional school setting.

**Instructional strategies are geared toward making connections across disciplines, particularly in the Humanities.** The most developed, systematized example of instruction making connections across disciplines is in team-taught Green House Humanities courses – Thinkers and Revolutionaries and American Experience – in which connections are made between English and social studies. For example, students read *Animal Farm*, making connections to social studies and English. In addition to this strength, there are specific examples of cross-curricular connections in other areas. There are school-wide goals to incorporate reading strategies and writing into all courses. All departments have agreed to utilize the Style Manual, which is available on the shared drive and includes explanations and examples for elements of writing and reading such as grammar, voice, literary terms, works cited, editing symbols, and more. *Some departments use the Style Manual much more than others.* Another

document entitled “Nine Tips for Teaching Writing from Your Literacy Support Team” is also distributed to faculty. The faculty has utilized common reading strategies of close reading and graphic organizers. *While making connections across disciplines is a strength in the Humanities Department, there is still the need to expand this in other discipline areas. Broad integration of instruction needs to be preceded by increased integration of curriculum.*

**Instructional strategies frequently engage students as active learners at CHS.**

Throughout the school and across all disciplines, students are actively involved and teachers are acting as coaches supporting students. The NEASC Self Study survey results of students, parents, and teachers support this conclusion. Teachers use a variety of instructional strategies to engage students. Strategies include Socratic seminars, chalk-talks, partner interviews, think-pair-share, investigations, laboratory experiments, examination of primary sources, student presentations, and skits. Specific projects that are student centered include the Energy Project, Essential Topics projects, Art Show, the school store, and the Heritage Project and Gallery. Special Education students are actively engaged by participating in IEP and 504 meetings and by setting and reflecting on goals.

**Students are somewhat engaged as self-directed learners.** One strong example is Senior Seminar. There are a number of areas of the school in which students select their process, product and content. Students often make selections about tiered vocabulary lists, tiered texts, learning styles assignments and menu options based on their learner profile, interests and readiness (zone of proximal development). Students develop questions to investigate or select topic areas in science’s Essential Topics, respond to contemporary problems in AP American History, and develop a business plan for a business of their choice in Business and Technology II. Science courses at CHS use an inquiry model, in which students design their own laboratory

experiments, creating question/problem, hypothesis, identifying variables, constants, and materials. In Green House Humanities courses, students self-select books. Students also direct their own learning when they select from numerous guided choice titles, poetry packets, and primary source document packets. Students are encouraged to be self-directed learners through goal setting and reflection.

**Instructional strategies frequently involve all students in higher-order thinking to promote depth of understanding.** Course curricula are developed using the backwards design model and are planned using the Know Understand and Do model. The understanding category of the KUDs and the essential questions that courses pose promote depth of understanding. In Humanities courses, students practice a method of questioning the text where they pose, answer, and find evidence to support their analysis and interpretation. In Green House Humanities courses, students work on summarizing, analyzing, interpreting and evaluating transactional, poetic, and narrative texts. Students are engaged in current events assignments and persuasive writing in a variety of courses. In science classes, students are often given a question or problem and asked to design their own approach to investigate further or solve the problem. Specific projects include the Energy Plan in ninth-grade science, which asks students to develop their own plan for the energy future of Vermont. Gateway projects in math also require higher-order thinking.

**Instructional strategies provide opportunities for students to apply knowledge or skills** through large-scale projects such as Senior Seminar, Science Essential Topics Night, math projects, Heritage Project, and through opportunities such as Options credit, internships, pen pal letters, and art shows. Almost all teachers (95 percent) say their lessons provide opportunities to apply learned concepts in new situations. In addition to the application of knowledge and skills



in the classroom, 50 percent of students responding to the NEASC self study survey identify that they have an opportunity to apply classroom learning outside of the classroom. One strong example is Senior Seminar, which requires students to conduct research and complete writing assignments to complete a community-based service learning project. The course gives students an opportunity to apply research and writing skills learned throughout their ninth, tenth, and eleventh grade years.

**Instructional strategies provide opportunities for students to self-assess and self-reflect.** The faculty promotes student self-assessment and self-reflection, and students often have the option of assessing their own achievement. Students are often asked to reflect on their learner profiles, interests and readiness and to assess their achievement through formal assessments, journals, guided questions, checklists and rubrics. This reflection happens through Learning Habits Portfolios, Honors Distinction work, mid-year and end-of-the year evaluations and reflections. Examples of this in the Humanities Department are the “Letter to Self” that ninth-grade students write to their twelfth-grade selves, “Letter to Next Year’s Teacher,” and portfolio review, processes that ask students to review and reflect on their learning and writing. Students also complete a transition letter which is provided to their next year’s science teacher. Another specific example is that part of the end-of-unit assessment for Project Adventure in Physical Education asks students to reflect on interpersonal awareness, skills, personality, and challenges.

**3.3 Teachers regularly use feedback from other teachers as a means of improving instruction, and teachers sometimes use feedback from students, supervisors and parents as a means of improving instruction.** Teachers garner feedback via Collaborative Work Groups, department meetings, the Colleague Consultation teacher evaluation component, the

shared drive, peer teacher observations, new teacher mentoring, and more. In some departments, teachers are able to receive and give feedback and to discuss improvements to instruction via team teaching, common planning time, and paid curriculum hours. *Currently, District Office controls and sets guidelines for summer curriculum hours based on New England Common Assessment Program results. The allocation of funds and time could be more inclusive to allow greater opportunity for departments not subject to NECAP testing, particularly subjects other than Humanities and math, to be allocated curriculum development funds.* Teachers sometimes use feedback from students, supervisors and parents to improve instruction. All classroom teachers are required to gather student feedback during the mid-year and end-of-the year course evaluations. Results of the survey state that 55.7 percent of students say that teachers ask for student input to improve class instruction; 51.6 percent of the staff say that input from supervisors evaluating their teaching plays an important role in improving instruction; 19.6 percent of parents say teachers ask for input regarding their son/daughter's instruction. Parent input regarding individual students occurs through regular e-mail and phone correspondence, course letters, summer reading surveys, parent/teacher conferences, Open House, and IEP and 504 meetings.

**3.4 Teachers are most often experts in their content area, knowledgeable about current research on effective instructional approaches and reflective about their own practices.** Colchester High School teachers continuously participate in school- and district-based professional development as well as in outside conferences and courses. Teachers create professional development goals and show evidence that they have achieved those goals through the Individual Professional Development Plan (IPDP) and Action Planning/Teacher Evaluation process. Students judge that: 83.7 percent of teachers know the material for class; 79.7 percent

feel that their teachers are prepared for class; and 68.8 percent reported that their teachers use a variety of teaching strategies. Additionally, 71.4 percent of parents surveyed are confident in the qualifications and expertise of their child's teachers. Several Colchester High School teachers consult with other high schools and others teach their content at the college level. Colchester High School has been involved with educational research in the area of differentiated instruction, and that process has been one that has encouraged the faculty and administration to strengthen instructional practices. Faculty and department meetings often consist of administrators, team leaders, colleagues and consultants sharing research and instructional strategies about best practice in areas such as reading, differentiation, the use of rubrics, and cognitive development research.

**3.5 The discussion of instructional strategies is a significant part of the professional culture of the school.** These discussions often support the philosophy and practice of differentiated instruction, research on brain development, and research on best practices in teaching. Faculty continue the model of professional learning communities called Collaborative Work Groups by forming small groups that closely examine the effectiveness of particular instructional strategies on student learning. Faculty and department meetings and in-service days are also often devoted to the discussion of instructional strategies. Most teachers utilize the shared drive to develop, share, and access common materials for courses. This fosters conversations about instructional strategies. The agreement to share materials and strategies across the entire faculty, such as the Style Manual and reading strategies, promotes further discussion of instruction. In the Science, Special Education, Humanities and Art departments, some teachers benefit from common office space. In the Humanities Department, team teaching, common planning time, and curriculum hours further promote discussion of instructional

strategies. Special Educators also have common planning time with one another. Department meetings serve as a forum for the discussion of best practices and current research. Teachers continually participate in professional development opportunities outside the school, such as Association for Supervision and Curriculum Development (ASCD) conferences, weeklong DI seminars, and university coursework. CHS has built a reputation as being a resource for other schools' professional development in the area of differentiated instruction. In the recent past, many faculty members have taken advantage of the teacher evaluation option of Colleague Consultation, consisting of a common action plan designed to improve student learning. *While much time is devoted to these areas, teachers often comment that even more common planning time and curriculum hours to collaborate within and between departments would be beneficial.*

**3.6 Technology is consistently and regularly integrated into and supportive of teaching and learning.** This happens on a continuum; all teachers are integrating technology at some level. The implementation of technology as a means to improve instruction happens on three levels: school-wide, interdepartmentally, and on an individual course level. School-wide, teachers can access examples of and framework for differentiated instruction, explanations of instructional strategies, copies of assignments, assessments, KUDs, and more. Business and Technology I and II are graduation requirements that have evolved from Keyboarding and Computer Applications into more inclusive courses. Elective courses such as Modern Media, Yearbook, and Journalism thoroughly integrate technology into instruction. All students are exposed to the use of graphing calculators, spreadsheets, word processing, Office Suite, Publisher, and PowerPoint. All are required to complete research on the Web and use technology to organize and share their learning. *It would be beneficial if the teaching of research and other necessary technology skills could be coordinated among and within*

*departments. Teachers in every discipline should be aware of how technology affects their curriculum.*

Individual teachers can set up shared drive folders to view work of other teachers and students, work collaboratively, and utilize software. Teachers vary methods of delivery by integrating technology. Some teachers and students utilize Polyvision and Smart Boards, physics simulators, calculator-based probes, graphing calculators and math software, Automated Accounting, ReadWriteGold, Tumblereadables.com, Inspiration, textbooks and labs online, Audacity, online platforms, blogs, class wikis, and Google Docs. In-service training has included ReadWriteGold, Tumblereadables.com, useful Web sites, Web page design, and more. Some teachers utilize Web sites to post plans and homework. Others use Web sites, blogs and wikis to promote discussion among students.

*Teachers feel there is a need for increased and equitable access in training in terms of technology such as computer labs, projectors, and more. Many teachers express a need for a coordinated and ongoing effort to collect, organize, and support the implementation of technology. Many teachers take this on individually and would benefit from more training and access.*

**3.7 CHS's professional development program is guided by identified instructional needs and provides opportunities for teachers to develop and improve their instructional strategies.** In the recent past, the focus of formal professional development, such as in-service time, faculty meetings and department meetings, has been differentiated instruction and literacy. The effort to improve NECAP scores has now become a focus. Some departments have more access to funds for curriculum and instructional needs due to standardized testing scores. The faculty has been surveyed annually via exit cards to determine their needs. The process of

Collaborative Work Groups and the previous teacher evaluation model allowed teachers to determine needs, examine student work, collect data, and develop intervention steps that led to revised instruction. CWG formation and structure has most recently been driven by changing instruction to improve assessment results (common assessments or NECAP assessments). The results of preparation for NECAPs influences the use of department time and curriculum hours, which are often used to discuss strategies to prepare students for the types of tasks that are tested and the content that is tested.

**3.8 The high school and district are in the process of changing the model for teacher supervision and evaluation process.** Currently, twenty-two high school teachers are participating in the piloting process of the new model, based on the Danielson model. The pilot model was developed by the Tel-T committee, a district-wide committee with two CHS teachers and one CHS administrator. At the end of the 2009-2010 school year, teachers and administrators who participated in the pilot process will be able to give feedback. The model will be presented to the school board and the Colchester Education Association for a vote. The model used until the 2008-2009 school year was somewhat useful in improving instruction for the purposes of enhancing student learning and meeting students needs. The model identified important areas of teaching and provided indicators of success.

## **Instruction**

### *Executive Summary*

Instruction at Colchester High School is guided by the needs of students as outlined in the Mission Statement and Essential Expectations. Instructional strategies are geared toward meeting the needs of students with diverse readiness, interests, and learning styles. In some areas, substantial connections are made across disciplines. Instructional practices at Colchester High School give students substantial opportunity to delve into higher-order thinking to promote depth of understanding and to self-assess and self-reflect. Students have some opportunity to be engaged as self-directed, active learners and to apply knowledge and skills. In all areas, there is a desire to make more connections across disciplines.

Teachers are very knowledgeable in their content areas and in current research on effective instructional approaches. Teachers are reflective about their own practice. This happens formally and informally, individually and collaboratively through means such as CWG, IPDP, faculty and department meetings, in-service meetings, outside professional development, the shared drive, KUD work and more.

Student and colleague feedback is essential in guiding instructional practices. Discussion of instructional strategies is a significant part of the school's professional culture. Technology is integrated into and supportive of teaching and learning, and teachers recognize the need to continue to integrate technology to meet students' needs. The professional development program is guided by needs identified by teachers and administrators, and is currently based in large part on standardized testing results. The teacher supervision and evaluation process is being revised currently.

**The Instruction Committee believes that CHS deserves an acceptable rating for its instruction.**

# Instruction

## *Strengths and Needs*

### Strengths

- Focus on individual needs through differentiated instruction as a school-wide initiative as well as through alternative programs housed both inside and outside of CHS
- Opportunities such as Senior Seminar and internships allow for application of knowledge and skills, self direction, connections across disciplines, and work with the community
- Student access to individual instruction during and after school (e.g., Homework Club, Math Lab, Writer's Workshop)
- Culture of teachers having the desire and willingness to collaborate as a professional learning community
- Integrated curriculum and team teaching (e.g., Green House Humanities and Special Education)
- Professional development is focused on DI, best practices, instructional strategies, and cognitive development in order to inform instruction
- Collaborative work groups, common planning time, KUD design, and shared drive
- provide powerful mechanisms for teachers to look critically at instructional strategies and learning outcomes
- Technology is integrated into instruction
- Student feedback is sought regarding instruction and classroom practice



## Needs

- More opportunities for self-directed learning, high readiness learners, the application of knowledge or skills in real life and the development of social skills and character
- More flexibility in structure and purpose of Collaborative Work Groups and other professional development opportunities
- Equitable distribution of school-wide time and funding to support professional and curriculum development
- Increased time for collaboration within and between departments to support, nurture and further discussion of best practices and instructional strategies
- Focused structural changes, resources, commitment, and time to develop and implement interdisciplinary courses and cross-curricular units
- Increased and ongoing training on the integration of technology and knowledgeable personnel to support integration
- Equitable training and distribution of technology to support teaching and learning
- Increased opportunities for feedback from parents in regard to instruction
- School-wide coordination for instruction of specific Essential Expectations including examination of EEs and credit, graduation requirements, assessment and grading
- Teacher Advisory (9-12) needs to be realigned to better meet the diverse needs of Students
- Increased flexibility of diverse instruction opportunities outside the traditional school setting/day (Lack of after school transportation is a partial factor.)
- Continued professional development in the effective use of formative assessment to attend in timely ways to students' emerging range of readiness needs.