

INSTRUCTION

TEACHING AND LEARNING STANDARD

Holyoke High School's vision is evident across the school's curricular and extra-curricular activities. Students complete their academic requirements in an intellectually rich, diverse environment, well prepared for the challenges of either higher education or a lifetime career.

Holyoke High School effectively meets the broad range of academic needs of its students by offering classes at every level. For college-bound students the school offers eleven different Advanced Placement classes in five different subject areas, and college-bound students can also take an SAT Prep class. Students may attend a Financial Aid Night (available both in English and Spanish) which the school hosts and avail themselves of special trips to selected area colleges and universities.

For those students who enter Holyoke High School less prepared, or who struggle with the curriculum, the school offers special classes designed to improve their skills, such as Ramp Up (in both English and mathematics). A wide offering of tutoring programs is also available for students who have fallen behind. Programs include *Read 180*, a remedial reading program, and an Algebra/Geometry Prep class designed to help students with the Massachusetts Comprehensive Assessment System exam. MCAS Prep is offered both before and after school.

In addition, every teacher is required to offer after-school office hours to assist students who want extra individual help or who need to make up work. Guidance counselors facilitate parent-teacher meetings to improve home-to-school communication.

Pursuant to its vision statement, and in order to meet the needs of all students, Holyoke High School offers classes in marketing, Web design, and desktop publishing, as well as an introductory class in word processing, spreadsheet and presentation software. Classes such as Consumer Math offer practical mathematical skills.

Special programs provide students with non-traditional academic opportunities. Through Upward Bound, low-income students are provided with tutoring as well as an opportunity to study at one of several area academic institutions. Through the Connections after-school program, students receive an hour of tutoring and participate in community-building cultural activities. The Gear Up Program provides low-income students with the skills and encouragement they need to prepare for postsecondary education, and the Athletic Support Program offers tutoring services to students who participate in school athletics.

Holyoke High School is also responsive to the needs of the broader community and recognizes its place within that community. In recognition of the diverse groups from which the school draws its students, the school celebrates Puerto Rican Week, featuring guest speakers and special cafeteria menus. The school also celebrates Black History Month with guest speakers, performers, a keynote speaker, and morning educational announcements about black history. In its continuous attempt to embrace diversity, the school recently established a Gay/Straight Alliance.

In response to the challenges facing the larger local community, Holyoke High School takes on the community's health and safety issues with a progressive health curriculum that addresses AIDS and teen pregnancy. The curriculum is flexible and ready to respond to the greater community's changing needs. The Teen Clinic provides third

party mental health services, through which outside certified mental health providers offer support and counseling to students in need.

In response to a survey, 57.3 % of the faculty reported that the school's vision statement influenced their range of teaching methods.

At Holyoke High School, teachers report frequent use of individualized instruction. For this indicator, teachers were asked to monitor and categorize their instructional strategies for one week, and 59 % of the 83 % who responded said they personalized instruction during that week. Many teachers devote portions of their daily lessons to working one-on-one with students, and others report addressing multiple learning styles through diverse teaching methods. Student-teacher conferences, in which each student works with the teacher to set personal goals and to assess work, are another example of individualized instruction, as are small-group work and lab activities. Teachers also use journals to communicate with students individually.

Some teachers also report that their material relates to other disciplines; 36% of respondents said they taught across disciplines during the week they were surveyed. Physics and mathematics frequently overlap, according to those teachers, as do American literature and American history and art history. While those interdisciplinary connections are traditional, HHS also boasts some non-traditional connections: the first year of the Interactive Mathematics Program spends a considerable block of time discussing the westward movement of settlers on the Overland Trail, and in statistics classes, students learn a portion of mathematics through the study of genetics. The World Language Department emphasizes the art and the history of the countries in which the target language is spoken, and special education teachers report teaching across all disciplines.

Active learning is encouraged at Holyoke High School through research papers and hands-on learning. In classes such as Electronics, students discover the principles of resistance and current flow for themselves through lab activities. In Transportation Engineering and Design, students build rockets and Maglev cars to learn about momentum, Newton's laws, and other principles of physics. In the Interactive Mathematics Program and in some geometry classes, students learn principles of mathematics by doing hands-on work, instead of learning through the traditional lecture format. Self-directed learning is also encouraged through cooperative learning groups in many classes, through independent research on political groups, and on bioethics and its relationship to science. Students also have the opportunity to teach classes and to give oral presentations. Forty-nine percent of respondents said their teaching during the survey week involved active learning, and 40 % reported work with students as self-directed learners.

Higher order thinking is critical to instruction at HHS; 53 % of survey respondents said they encourage higher order thinking with various tools. All teachers regularly assign open response questions that stimulate higher order thinking. In English classes, students compare and assess each others' writing; in mathematics, students derive mathematical formulas for themselves; in the Business Department, students participate in a Stock Market Challenge to learn how the stock market works.

Holyoke High School students are given ample opportunity to apply what they learn. Geometry students cover an architecture unit in which a local architect teaches them to redesign the school entrance; physics students build catapults, motors, and Van der Meer generators; biology students make an atomic model. Drama and music students

perform plays, participate in Marching and Jazz Bands and in a Madrigal Choir, and Holyoke High School is the only school in Western Massachusetts with a traveling Bell Choir. In addition, students formally tutor other students, interview community members who have jobs they find interesting (for English classes), and type cover letters and resumes for business classes.

Holyoke High School promotes student assessment and reflection through the use of journals, rubrics, and assigned assessments of their own work. Thirty percent of survey respondents said they use student self-assessment as a teaching tool.

At Holyoke High School, teachers use a variety of sources to improve their instructional practices, including formal evaluation and informal sources that come from teacher-student interactions, teacher-teacher collaboration, and teacher-parent communications.

The faculty at Holyoke High School is formally evaluated (yearly for teachers without professional status; once every two years for teachers with professional status) by the principal. Feedback from these evaluations is used to augment and modify classroom instruction or may simply reinforce to the teacher that he or she is meeting the school's instructional goals. According to a faculty survey, 56 % of the staff agrees strongly that input from a supervisor's evaluation plays an important role in improving instruction.

The only formal platform for discussion of instructional strategies is the monthly department meeting, but, in practice, strategies are rarely discussed. In general, this is a weakness that should be addressed.

Parents are involved in developing educational plans (504 and IEP) for their children that may involve instructional practices. While 69.1% of parents responding to

the survey are satisfied with the qualifications and expertise of the teachers, only 27.9 % agree that teachers ask for their input regarding instruction. This suggests that teachers at Holyoke High School must do more to involve parents in their children's instruction.

Informal sources, especially student-teacher interactions, enable teachers to modify and augment their instructional strategies. Teachers regularly modify their lessons based on the results they achieve. Student feedback may come from observational evidence, comments or questions posed by the students, and/or from student assessments such as tests and quizzes. Students are encouraged to ask questions and to interject during a lesson when they find themselves getting confused.

While only 39.3% of the respondents to the student survey said they believed that teachers solicit their input, 74.1% said they feel comfortable going to their teachers for help, and 55.2% agreed that despite large class sizes, teachers spend one-on-one time with them when needed. Teachers at Holyoke High School are very receptive to student input into their instructional practices and work diligently to provide the most effective instruction possible. More than 91% of the teachers reported that their instruction is student centered. The faculty is continually modifying their unit plans, developing new lessons, and implementing new ideas, in order to improve instruction and increase student achievement.

The disparities between teacher respondent numbers and student numbers show that the teachers at Holyoke High School need to better communicate with their students, and to demonstrate how student input modifies instruction.

Although time is limited, teachers occasionally share ideas with colleagues about various instructional practices; 83% of the teachers surveyed agreed that they discuss

instructional strategies with their colleagues. It is not uncommon for teachers who are teaching similar courses to discuss different activities and lessons, though it is rarely possible for teachers to observe other colleagues' classes. Parent input is always welcomed by the staff, but is sporadically given. Some teachers contact parents by phone or through conferences when a student is having difficulties in class. These interactions may lead to changing instructional practices in that class.

Through these formal and informal methods, teachers at Holyoke High School use all the feedback that they receive to improve and augment their extensive knowledge of teaching techniques and tools.

Teachers at Holyoke High School maintain expertise in their subject matter formally, through training and professional development, and informally, by remaining informed through books, conferences, and educational literature.

The school administration keeps staff up to date on educational research, most recently with an orientation on Japanese instructional practices, and a Master Teacher Flyer from the principal. America's Choice instructors share literature on best practices with Ramp Up teachers.

Programs recently offered such as Access, which focuses on strategies for teaching special needs and ELL students, informed teachers of different teaching strategies and provided them the opportunity to reflect on their own practices. Other programs such as QRI-4 Bilingual, MELA-O, Amen Management, The Thorough Kid, and Four Book help teachers improve their knowledge about target populations. The District also pays for faculty to attend professional development courses, such as those offered by the area's colleges and universities. Holyoke is fortunate to be just minutes

away from Mount Holyoke College, which offers nationally-acclaimed courses for teachers, especially in mathematics.

The staff is also informed through National Education Association literature, through literature from specialized professional organizations such as the National Council for the Teaching of Mathematics, and through personal reading.

Seventy-two percent of the students responding to a survey said their teachers knew the material and were prepared for class, and 69.1% of the parents who answered the survey said they had confidence in their children's teachers' qualifications and expertise. Every respondent on the District school board was satisfied with teacher qualifications and expertise.

While teachers at Holyoke High School do discuss instructional strategies, this tends to be sporadic. Formal opportunities for discussion occur when individual departments meet to revise and assess strategies and through the district's mentoring program to support new staff. While interaction among teachers, specialists, guidance counselors, and ELL support staff also provides an opportunity for discussion of instructional strategies, there is no regular forum for such discussion. A faculty survey indicated, however, that 83% of the faculty discusses instructional strategies with colleagues.

In addition, every course in the school has unit plans that are developed by the teacher or teachers who teach the course. This process is consistent with the mission statement of the district and with the educational standards of Massachusetts.

Holyoke High School has a variety of technology in use throughout the school building. Many classrooms have an Internet-accessible computer with spreadsheet,

presentation, and database software, as well as software for grading and word processing. A central server allows teachers to exchange files and e-mails.

The library offers 10 computer workstations with Internet and library-database access, and 2 computers for library cataloging and circulation. Internet access is available for Infotrac, Newsbank, EBSCO and Net Library-Microtype.

Both the Mathematics and Science Departments also have computer labs. The mathematics lab has 24 workstations, all of which are loaded with Plato, an instructional program to help students improve their mathematics skills. The Science Department recently has been updated with new computers and new software, such as circuit analysis software, that satisfies the Science Department's needs for rigorous instruction.

Through the Business Department, students are offered classes in Microsoft Office, in Desktop Publishing, and in Web Design (including software such as Microtype Pro, Adobe Illustrator, Adobe PhotoShop, and Adobe InDesign). The Business Department recently has been updated with new computers and new software, but a shortage of color printers still exists. Other programs, such as Automated Accounting, are available only in some classrooms.

Both the Mathematics and Science Departments offer a wide variety of calculators to meet different students' needs. There are 340 TI 30 scientific calculators for sophomores who need to become calculator-proficient in time for MCAS testing and an assortment of TI 82, 83, 86, 89 and 92 calculators available for IMP mathematics, Algebra II, AP Statistics, Probability and Statistics, AP Calculus, and Honors Calculus classes. The Mathematics Department also has TI CBL and CBR (calculator-based

ranger) devices for measuring motion, and the Science Department has Vernier LabPro devices that have the same capabilities.

While 64.3% of the teachers at Holyoke High School reported that they frequently integrated technology into their instructional practices, only 37% of the students who responded to a survey reported that their teachers used technology. More than half the parents who answered the survey, or 54.3%, said their children had access to technology in the classroom, and at least some of the discrepancy between these numbers might be the result of different wording (*access to technology vs. technology use*). It is clear from the numbers, however, that the faculty could be doing more to integrate technology into instruction.

In addition to standard computers with e-mail and professional software programs for all administrative and secretarial personnel, the school also has pocket PCs that enable faculty chaperones to communicate better at proms and other school functions, thereby improving security.

The Guidance Department uses the Rediker System for scheduling, attendance, discipline, and grade reporting. The Academic Coordinator and the lead teacher for Project Success utilize *TestWiz*, a web-based program that accesses students' current and historical MCAS, MEPA, and MELA-O scores.

Holyoke High School's professional development programs provide multiple opportunities for teachers to develop and improve their instructional practices, and they are guided by identifying instructional needs.

The Holyoke Public Schools Professional Development priorities are:

A. Educational Equity for Diverse Learners

- B. Literacy and Numeracy Development for all
- C. Curriculum Frameworks Implementation and Alignment
- D. Data-Informed Decision Making
- E. Safe and Drug Free Schools
- F. Increased Graduation Rates
- G. Integration of Educational Technology Across the Curriculum

Cost-Free Professional Development Re-Certification Program booklets are distributed to teachers three times a year. There are also opportunities to attain Professional Development Points (PDPs) by participating in various workshops during in-service days before the beginning of each academic year and on an in-service day in the Fall.

Each teacher (with the assistance of his/her department chair and the principal) constructs a professional development plan in accordance with the Commonwealth of Massachusetts' Department of Education guidelines. These are reviewed frequently and kept on file.

While 100% of the school committee reported that teachers have the opportunity to take advantage of professional development in instruction, only 44.9% of the faculty agreed. It was the consensus of the Instruction Committee that while the school offers its teachers excellent outside professional development, the in-house classes are not adequate, especially in the area of instruction.

In order to improve teacher performance and enhance professional growth, the district requires the principal to formally evaluate those teachers with professional status

every two years, and those without professional status yearly. In addition, the principal tours the building at least five times a day, observing and evaluating.

The principal uses the evaluation instrument to promote effective instruction in the following areas:

1. Currency in curriculum
2. Planning and assessment
3. Classroom management
4. Instruction
5. High standards and expectations
6. Equity and diversity
7. Professional responsibilities

Department heads also observe their teachers, enabling them to view the quality of instruction and to provide assistance when needed. This further offers department heads the opportunity to share effective teaching methods with others in their department. Faculty mentors to new teachers also observe and meet with their mentees regularly.

When the school's practices are compared to the Instruction Standard Rating Guide, Holyoke High School performs in the **ACCEPTABLE** category.

Adopted by staff on December 15, 2006

INSTRUCTION STANDARD

EXECUTIVE SUMMARY

Instruction at Holyoke High School demonstrates a variety of teaching methods that address various learning styles and course levels. The instruction challenges all students' abilities and provides the opportunity for each student to acquire the knowledge and skills needed to graduate and succeed in a diverse society.

Holyoke High School teachers are committed to personalized instruction, so that students become higher order thinkers and self-directed learners. Evidence also supports the fact that teachers often use cross-disciplinary techniques.

At Holyoke High School, teachers use a variety of sources to improve instructional practices, including informal sources that come from teacher-student interactions, teacher-teacher collaboration, and teacher-parent communications. In addition to the formal evaluation process, the principal informally observes the entire faculty as part of his daily routine.

Technology at Holyoke High School is utilized to support instruction and improve classroom learning. With computers in many classrooms, in labs, and in the library, students have access to technology and a wide array of tools to assist in their endeavors.

As evolving learners, Holyoke High School teachers are aware of the most effective instructional methods. These techniques are continually evaluated to provide growth opportunities for teachers. Formal and informal observations may be conducted by administrators, department chairs and, in select cases, mentors who assist teachers in identifying areas of desired improvement with regard to instruction and student achievement.

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INSTRUCTION STANDARD

STRENGTHS AND NEEDS

Strengths

- Variety of courses that meet a broad range of academic needs
- Instruction which reflects the vision statement and student expectations
- Instruction which is personalized
- Higher order thinking skills which are reinforced
- Connections made across disciplines
- Highly qualified teachers who are well-versed in their content area
- Administrative evaluation of teachers which allows for feedback on instruction

Needs

- Increase student self assessment and self reflection opportunities
- Establish a formal setting in which teachers can discuss instructional strategies
- Improve accessibility and upkeep of computers
- Institute professional development in instructional strategies
- Provide more professional development in content areas
- Communicate connections made across disciplines more effectively to students and
parents