

**NARRATIVE**

**The curriculum is adequately designed to ensure that all students practice and achieve each of the school's 21<sup>st</sup> century learning expectations.** Bristol Central's program of studies is purposefully designed to ensure that all students practice and achieve each of the school's 21<sup>st</sup> century learning expectations. The program begins with an extensive table of contents followed by the school's Mission Statement and Learning Expectations. The program of studies begins with general information regarding graduation requirements, recommended course sequence, and college information. The remainder of the program details course selections alphabetically by department. The departments state their individual philosophies, and each course provides basic information. The information for each course includes grade level, credit amount, academic level, any prerequisites, and a course summary.

Bristol Central has identified six 21<sup>st</sup> century learning expectations: (1) global awareness and civic responsibility, (2) critical thinking and problem solving, (3) communication, (4) collaboration, (5) media and information literacy, and (6) life and career skills. The expectations are posted throughout the school on posters that also include the school motto, core values, core beliefs, and pictures of students. To ensure that each learning expectation is adequately emphasized, different departments have assumed responsibility for teaching, assessing and reporting on two learning expectations. Reporting responsibility for global awareness and civic responsibility expectations is the social studies, science, and the family and consumer science departments. The critical thinking and problem solving expectation is the responsibility of the math, science, technology education, art and special education departments. The communication expectation is the responsibility of the English, art, world language and music departments. The collaboration expectation is the responsibility of the world language, physical education, English and music departments. The media and information literacy expectation is the responsibility of the math, business, technology education, and social studies departments. The life and career skills expectation is the responsibility of the guidance, special education, family and consumer science, and the physical education departments. Students' understanding

of each expectation is measured and assessed with a common rubric. The rubrics are stored in the school's shared "O Drive."

Twenty-first century learning expectations are embedded into all grade and course curricula. Common Core has been a consideration in revising most subject areas and grade level curricula. The foundation of Common Core is to prepare students to achieve 21<sup>st</sup> century learning expectations. Across all course and grade levels, students have ample opportunity to collaborate on assignments, to utilize multimedia to accomplish tasks, and to employ critical thinking and problem solving. All of these skills promote 21<sup>st</sup> century expectations. For example, English I students are assigned a research project in which they create questions, research information using a variety of technology, correctly cite their research, and share their findings using both written and visual formats.

**The curriculum is written in a common format that includes: units of study with essential questions, concepts, content and skills; the school's 21<sup>st</sup> century learning expectations; instructional strategies; and assessment practices that include the use of the school-wide analytic and course-specific rubrics.** The curriculum is written in a common format.

(Directions to access the curriculum are provided below.) The format includes: a) units of study with essential questions, concepts, content, and skills which are located in the left column of page 1; b) the school's 21<sup>st</sup> century learning expectations which are consistently embedded within each unit planning guide; c) Instructional strategies which are located next to learning objectives under each unit title; d) assessment practices that include the use of school-wide analytic and course-specific rubrics which are located next to instructional strategies to the right. Currently, the Bristol Central High School curriculum is located on the district Intranet. It is located specifically under the heading of Curriculum Depot. Once on Curriculum Depot, one would click on to 9-12 where each department of the high school features courses currently offered with full descriptions, pacing guides and/or prerequisites, unit organizers, department goals, philosophies of instruction/assessment, and related Common Core Standards covered within the stated curriculum. Courses found on the intranet include all core subjects and electives offered at Bristol Central High School.

**The curriculum emphasizes depth of understanding and application of knowledge through: inquiry and problem-solving, higher order thinking, cross-disciplinary learning, authentic learning opportunities both in and out of school, informed and ethical use of technology.**

Inquiry, problem solving, and higher order thinking skills are incorporated into the curriculum through the creation of essential questions and big ideas. The mathematics department recently purchased new textbooks incorporating an increased amount of problem solving and higher order thinking skills. Each department creates quarterly common formative assessments to be given in courses. The data from these assessments is gathered in a school wide spreadsheet via Google Docs. Faculty also collaboratively creates performance tasks with Smarter Balanced-type tasks to be used in courses. Departments have revised midterms and final exams to incorporate more DOK level 3 questioning. Although no new novels were added to the English curriculum in 2012-2013, in recent years the English department has used a "Novel Preview Team" that consisted of teachers from Bristol Eastern and Bristol Central. After reading a proposed book, the team discussed and determined whether the book belongs in the curriculum and what grade level would be the most appropriate placement. The Novel Preview Team is responsible for the introduction of several more contemporary, higher-level titles into the standard curriculum. In the World Language department, teachers are working closely with Karin Hess's DOK chart and have increased the rigor of the curriculum in all four languages by adding more performance tasks and higher level grammar topics to each unit. The Social Studies department further enhances their curriculum by using primary source documents to supplement their textbooks. In the science department, a specific component of inquiry instruction is addressed within each guiding question within each curricula document.

Cross-disciplinary learning is limited at Bristol Central High School. Built into the design of the freshman team approach is the opportunity for those core subject teachers to meet as teams for 45 minutes every other school day. Although it is not explicitly stated in the curriculum and it is not the primary objective of the freshman teams, these meetings allow teachers the opportunity to plan and implement cross-curricular activities. The other grade level teachers do not have time devoted to meet with other departments and create cross-disciplinary units, but they do occur. English teachers approach literary works in context, thus requiring the components of history, biography and culture. Consequently, English teachers engage in research and informally consult with teachers of other disciplines. Student projects on literary works often

emphasize the grounding of the work in its appropriate history or culture. In addition, the Office of Teaching and Learning at the Board of Education organizes sharing sessions among departments, such as those between Social Studies and English in units such as the research paper. The World Language department has worked with the foods teachers to cook authentic Spanish food. Freshman science teachers collaborate with English teachers for editing/revising lab reports. In addition, teachers of Physical Science work with the library media specialist to review credibility of websites. Elective courses have crossed curriculums in interesting ways. Art classes have illustrated student samples from the Creative Writing classes, and writing students have used works of art and photography as the inspiration for poetry and narrative writing.

In its design and the models provided for teachers, the curriculum emphasizes authentic learning opportunities. English teachers have numerous assignments for students that are "real world." For example, senior teachers assign "the college essay" for students in the fall. Junior teachers have students research biographies of American authors in semester one and then connect those lives to the literary works those authors have created in semester two, demonstrating the realistic relationship between life and art. Summer reading assignments in the English department are structured so that students have the autonomy to make choices of real world reading. Starting in Grade 9, history students are required to complete a research project where they are able to pursue a topic of personal interest as it relates to history. Throughout the year, the teachers provide opportunities to relate current events to the lessons taught using technology and major news networks. Each year, there are opportunities for students in history courses to hear from various speakers relating to real world issues and interact with people who provide oral histories. There are job shadow programs that allow students to work as interns within the building for course credit. There is a pre-school program in the building in which students create and teach lessons.

The extra-curricular opportunities enhance the curriculum in many meaningful ways. Bristol Central High School has an active Math League that participates in competitions around the state. The school fields teams in the regional Academic Bowl competitions in art, music, poetry, public speaking, and trivia. Bristol Central students have won recognition in business (FBLA) and music (McDonalds All-American Marching Band) in state and national competitions. Every

Latin student at Bristol Central participates in the State and National Latin Exams each year; a huge percentage of those students win awards of excellence. A very strong performing arts department stages concerts and drama productions annually; a number of musicians, vocalists, and actors have won state awards. There are exchanges to France and Italy every two years with the exchange students coming here in the “off” years. There are numerous field trips that extend the cultural experiences of world language students. For example, trips to area restaurants encourage students to speak in Italian, French, or Spanish to order food and pay the bill. Enrichment trips are planned to Spain in April 2015 and to Peru in 2016. An annual winter Multi-Cultural Night for students and families has drawn hundreds of visitors to the school to experience the different foods of the various ethnicities found in Bristol and surrounding towns.

The Bristol Board of Education has a district wide internet policy which can be found at <http://policy.cabe.org/bristol/>. The World Language department uses EDmodo/Voicethread and Newsela to research topics, answer questions and read newspapers in the target language. In the English department, students present projects via PowerPoint or Prezi on the SMART Board. The students have varying degrees of understanding regarding technology; their experiences using Chromebooks and research strategies such as Noodle Tools are good examples. The internet ICONN is another tool that is used in various classrooms. Starting with the freshman projects in history courses, students are taught how to use the website Noodletools and how to discern quality sources from less reliable ones. Physical Science classes works with the library media specialist to review the credibility of websites.

**There is clear alignment between the written and taught curriculum.** The school’s administrative team – the principal and the two assistant principals – serve as the primary supervisors and evaluators for all teachers in the building. Tenured teachers are required to have one formal and two informal observations per school year. Non-tenured teachers are required to have three informal observations per year. Of the four domains that administrators use to evaluate teachers, domain three specifically targets an alignment between the written and taught curriculum. Domain three reads, “Teachers implement instruction to engage students in rigorous and relevant learning and to promote their curiosity about the world at large.” Per district mandate, teachers are required to post objectives and essential questions for each lesson.

There is also a common lesson plan overview document that teachers are required to fill out and bring to their pre-observation meeting with their supervisor. According to the Endicott Survey, 89% of the teachers in the building were in “total agreement” with the statement, “the written and the taught curricula are aligned.”

**Effective curriculum coordination and vertical articulation exist between and among all academic areas within the school but is somewhat lacking with sending schools in the district.**

Curricular coordination exists between and among academic areas within the school and with the other high school in the district. Curriculum coordinators oversee the vertical articulation with the sending public schools. Bristol Central High School review cycle is driven by School District review policy and is changed as state and/or national standards are changed. Department chairs and teachers representing both high schools in math, English, and history have been at the forefront of the revision process and their curricula are close to completion. Other departments, such as science, have plans to follow the common format adopted by these three departments and intend to start their revisions when the new state standards are adopted. When writing new curriculum, teachers are called out of class for a day of work at the board of education or meet during the summer. Teachers from both Bristol Central High School and Bristol Eastern High School have met by grade level to revise their curricula under the supervision of the district wide Office of Teaching and Learning. The curriculum coordinators help to ensure the curriculum is articulated with the middle schools. The district uses a board of education run intranet that stores all curricular documents, pacing guides, and related materials which keeps articulation between buildings clear.

Although currently at Bristol Central teachers meet bi-monthly in subject-specific data teams, limited curricular coordination exists between all academic areas in the school. During these meetings teachers create and modify assessments driven by student data, discuss new reading and writing based strategies and how to implement them in the classroom, as well as create rigorous instructional units that focus on all four DOK (Depth of Knowledge) levels. Bristol Central High School also provides individual departments time to meet collaboratively once a month. The department meeting model includes curriculum development and discussion or sharing of instructional and assessment practices. Teachers at the high school level are given

time during an in-service PDD day to work with content area teachers at the sending schools to ensure vertical alignment between schools.

**Staffing levels, instructional materials, technology, equipment, supplies, facilities, and the resources of the library/media center are adequate to fully implement the curriculum, including the co-curricular programs and other learning opportunities.** Class sizes vary by department based on space, safety, and availability. In the 2013-14 school year, the range of class sizes school wide was 0-62. Courses with 0-1 students enrolled are typically sections of electives within self-contained SPED programs which exist so students are able to be scheduled into all of the necessary classes. These low-enrollment courses may also be Service Learning, Internships, or Independent Studies where teachers are overseeing a student's work during a prep period or another class. Class sizes vary within a department as well.

In Art, class sizes range from 1-25; CATE/Business: 6-20; CATE/Family & Consumer Science: 4-20; CATE/Engineering & Tech Ed: 1-20; English: 1-27; Math: 5-29; Music: 1-62; PE/Health: 1-34; Science: 3-26; Social Studies: 1-29; Special Education: 1-18; World Language: 1-29. With the exception of music courses such as Physical Education (capped at 35 students), Band, and Chorus, all academic classes are limited to 30 students or less.

Over the last three years (2011-2014) the expenditures for instructional materials, technology, equipment, supplies and library-media resources have decreased. In 2011-12 and 2012-13 the expenditures were consistent (\$185,273 and \$185,270, respectively). In the most recent school year, expenditures have decreased significantly, along with the overall available budget. In 2013-14, \$125,986 was spent on instructional materials, technology, equipment, supplies and library-media resources. Departments were surveyed on the positive and negative impacts of the facility in terms of space, supplies/equipment, and access to technology. Summations of their responses follow.

The Art department reports that the classrooms are sufficient in size, but the location of some classrooms is too far from major supply storage areas. The art program has sufficient supplies and funds available to repair or replace equipment as needed. Teachers have access to quality supplies and there is a protocol in place to replace inferior products/supplies sent by district vendors. The art department has some gaps in the area of technology. Available technology has

increased; two classrooms recently had SMART Boards installed. However, the Design class in particular lacks sufficient technology. There are only 10 computers in the lab (class size exceeds 10 students) and no SMART Board.

The World Language department reports sufficient desks and storage space in each classroom, however some teachers must share classrooms and others have large enrollments, making physical classroom space very tight. In some cases, there is not enough space for teachers to properly move between the rows or create an alternate seating arrangement. There are sufficient text books available to students in class and to take home, however there are limited numbers to online licenses for texts within the department. This limits instruction promoting 21st century skills. Access to technology has improved in the current (2014-15) school year. The World Language department shares a cart equipped with 30 Chromebooks. Several SMART Boards are in need of repairs and there are extremely limited resources or personnel available to troubleshoot or fix broken equipment.

The Career and Technical Education (CATE) department is divided into three components: Business and Finance; Family & Consumer Science (FCS); and Engineering and Tech Ed. Each area has unique strengths and drawbacks. The Business and Finance classrooms are sufficient given the current level of staffing, however many physical attributes of the classroom could be improved. The computer labs are long and narrow with limited whiteboard space. Students are not situated to face the front of the room which limits collaboration and student engagement. The computer monitors are below the desks which limit visibility/accessibility for students who are overweight, in wheelchairs, or require the aid of a paraprofessional who cannot see the screen. Regarding supplies, the classroom printer is very old and frequently breaks down. Requests for replacement or repairs have gone unanswered. The department has a color printer, but lacks funds to purchase ink. All of the business/finance courses are taught in computer labs; however monitors are old and are not in an ideal position. Software programs are out of date and the district process for approval and acquisition of new software applications is very difficult.

Most of the Family Consumer Science (FCS) classrooms have sufficient space and the Early Childhood Education (ECE) room has new desks and chairs. There is limited space, however, in the ECE classroom. There is no technology of any kind in the classroom, and very limited whiteboard space. If a computer or SmartBoard are required for a lesson students may go into the

pre-school classroom, however the chairs and desks are designed for pre-school students. The foods room has insufficient whiteboard space. Books were recently purchased for ECE and Child, Family, and Community Courses. The FCS department severely lacks resources for the Foods program. There are insufficient funds to replace equipment in the Foods Lab and the budget is extremely limited for per student expenditures (\$13.45 per student for 45 class sessions). Students do not cook in some sections of the curriculum due to lack of funds for groceries. Access to technology is somewhat sufficient. The department has a set of iPads for students to use, but there is some difficulty getting apps approved and loaded.

The Engineering and Tech Ed department has sufficient space required for delivery of curriculum given the current level of staffing. One major drawback is that the Video Production Lab is directly beneath the Band room and is not soundproofed; therefore no recording can take place while the band is playing. One of the classrooms (Room 18) is not conducive to conventional teaching and learning. The room, formerly the auto shop, is cold, smelly, and loud. Lawn equipment is stored in a portion of the room. The oil, gas, and other chemical smells often linger. The Chorus room, located directly above, is not sound-proofed, making communication difficult. Supplies and equipment are sufficient. Perkins Funding allowed for the replacement and repair of equipment in the Materials Science Lab including two saw-stop table saws purchased last year. The department can also boast a high end Video Production Lab, though there are insufficient funds to replace video cameras as they reach the end of their life-cycle. Equipment acquired through Perkins Funds is not supported in the following year's annual budget; therefore the department is not always able to afford materials and supplies to make use of the equipment (i.e., the 3-D Printer). This department generally has sufficient access to technology.

The Math department has enough chairs and desks in the classrooms and space is sufficient. Some teachers could use an extra table or shelves in their rooms. Larger classrooms would be ideal to facilitate cooperative groups and stations. The department has a new supply of textbooks/workbooks for the core courses each year. They are able to purchase calculators each year to replace damaged or missing items. The department lacks document cameras, which would be useful so students could share their work with the class. The department generally has sufficient access to technology. There is a computer, SMART Board, and projector in each

classroom. The Math Foundations classes have access to computers for students to work on a program to reinforce skills learned in class. The drawback in technology is that not every class has regular access to the computer lab, and the department only has 14 laptops to share. The number of laptops is not sufficient to supply even one class with 1-1 access to technology.

The Science department has sufficient space in most classrooms. Classes are capped at 24 students for lab safety. Classrooms are equipped with a lab bench in the front of the room with water and gas. Physics is the only discipline with its own Lab. There is not enough lab space for all disciplines. The labs are shared among multiple subjects and classes and there is a need for additional stools for seating. Classrooms are shared with non-science classes (study halls, Italian, etc.). Some teachers do not have access to their classrooms during prep periods. Science classes have access to sufficient supplies. Lab equipment is frequently updated and replaced as needed. The department no longer has access to warehouse materials and the budget for replacement has decreased. The science department has limited access to technology. All classrooms have SmartBoards; however there are only a few computers available for student use in the labs. Labs do not have SMART Boards. Ventilation in the labs and acid cabinets needs updating. The shared copiers throughout the building frequently fail or break down.

The Social Studies department has sufficient space. They have a bookroom for all texts, and an office that serves as a workspace for department members. Within the classroom, sufficient space is provided; however, two teachers share a classroom and must travel every other day. This has a negative impact due to the lack of mobility of some curricular resources. The department has sufficient supplies for core courses, but more are needed for the department's elective offerings. There is a book issue within the department. If a student loses a book, the fine collected goes into a general fund and cost of replacing the book comes out of the department budget. Textbooks become especially limited when teachers are required to supply books to tutors working with homebound or expelled students. The social studies department has sufficient access to technology. All classrooms have SMART Board and the department has access to 30 Chromebooks or the library as needed. Again, the department is negatively impacted by the failing copiers and they could benefit from a working color printer in the department office.

The Special Education Department has sufficient space within its classrooms; however, four teachers do not have their own rooms and must travel around the building using carts. The department is spread throughout the building, making it difficult to collaborate. Other departments try to include special education areas into their budgets for supplies and materials, but special education classes still need more graphing calculators and batteries, text books, and lab equipment. Self-contained classes do not have any lab time incorporated into their curriculum. The department's access to technology is limited; the department does benefit from having its own copier. Study Skills classes especially could benefit from more classroom computers and/or another Chromebook set.

Bristol Central has adequate funding to support co-curricular programs and other learning opportunities. Bristol Central offers a wide variety of boys and girls athletics, clubs, and leadership groups that support student learning and student engagement. Funding is provided for equipment, supplies, and staffing for many activities. All head coaching positions and some assistant coaching positions receive a stipend. Stipends are provided to advisors of all classes - freshman through senior - as well as to sponsors of drama, newspaper, literary magazine, yearbook, music, (vocal, band, instrumental), cheerleading, National Honor Society, vocational clubs (FBLA), AVID (Advancement Via Individual Determination), gifted program, and Math League. Some positions or activities may receive additional funding through grants, parent-run booster clubs, or building funds as determined by the Principal. The staff at Bristol Central is generous with their time and personal resources, which allows the school to offer more to students than funding would typically support.

A list of the co-curricular activities offered by Bristol Central is included in the evidence box. Students are generally not charged fees for participation, but may be required to provide their own equipment (e.g., proper footwear for athletics, instruments for band, ski/snowboard equipment for Ski & Snowboarding Club, etc.) or pay a small fee for field trips or activities associated with the group.

**The district adequately provides the school's professional staff with a satisfactory amount of personnel, time, and financial resources for ongoing and collaborative development, evaluation, and revision of the curriculum using assessment results and current research.**

Based on staff survey results, 43% of staff agreed that sufficient time was given to engage in

curriculum evaluation, review, and revision work. Having said that, 75% felt they were directly involved in curriculum evaluation, review, and revision work. All teachers within the district are allotted two conference days per year to seek professional development. However, conference authorization is based on board of education approval and substitute availability. In the 2011 through 2013 school years, roughly \$4,500 was spent per year for in-district sub coverage, \$6,800 for conference reimbursement/sub-coverage, and \$900 for professional development presenters. However, the monies distributed during that time period for in-district sub coverage and presenter pay decreased by half. Conversely, the conference reimbursement increased by half. Each district employee has specific responsibilities delineated with clear expectations stated. The district provides a plethora of resources evidencing that much research was used in the development of curricula.

## EXECUTIVE SUMMARY

Bristol Central High School's curriculum is purposely designed to ensure that all students ultimately practice and achieve the school's 21<sup>st</sup> century skills. The six 21<sup>st</sup> century skills – global awareness and civic responsibility; critical thinking and problem solving; communication; collaboration; media and information literacy; and life and career skills – were first articulated by the Common Core Values Creation Committee in June 2011, and then approved by the staff during a professional development day in August 2012. Curriculum coordinators, working out of the Board of Education's Office of Teaching and Learning, ensure that curriculum is written in a common format that adheres to Common Core State Standards and emphasizes depth of understanding, inquiry, problem-solving, and higher order thinking skills. The curriculum, explicitly and implicitly, encourages authentic learning opportunities for students in and out of school. As indicated by the Endicott Survey responses from staff and students, Bristol Central has a clear alignment between the written curriculum and the taught curriculum.

Although there is somewhat of a curriculum disconnect between Bristol Central and the sending schools, there is an effective coordination and vertical articulation between and among academic areas within the school. Reduced staffing levels, in particular in the CATE department, have hindered the capacity to teach vital courses beyond the core curriculum to all students in need. Technology components such as copy machines, SMART Boards, computers, and printers that break down and are not repaired in a timely manner, adversely impact the ability of faculty to effectively teach curriculum in all departments. Because of limited building space, some teachers are forced to travel between classrooms or to vacate their own classrooms during prep time, making it difficult to touch upon all aspects of the curriculum. A limited number of printers make it difficult for teachers to fully implement all aspects of the curriculum. Although professional development is offered to all teachers, the board policy which limits the amount of teachers allowed out for conferences presents problems for some teachers who are approved for a conference, then denied the day before or the day of because of a lack of substitutes.

Bristol Central High School has demonstrated adherence to the standard of Curriculum as **ACCEPTABLE**.

**STRENGTHS:**

- Curricula across disciplines that reflect 21<sup>st</sup> century skills.
- A clear alignment between the written curriculum and the taught curriculum
- Curriculum across disciplines that emphasizes
  - depth of understanding (DOK levels)
  - higher order thinking skills
  - authentic learning opportunities in and out of school
  - ethical use of technology
- Curriculum coordinators from the Office of Teaching and Learning who ensure a common, detailed curriculum that includes essential questions, skills, and instructional strategies
- Effective curriculum coordination and vertical articulation between and among all academic areas within the school
- Availability of Chromebook carts for department use
- Variety of Advanced Placement courses offered
- Authentic learning opportunities beyond the classroom

**NEEDS:**

- Provide more cross disciplinary learning opportunities
- More efficiently coordinate and articulate curriculum with sending schools in the district
- Explicitly state the 21<sup>st</sup> century learning expectations in all curriculum documents
- Maintain and repair all technology resources in a timely manner
- Provide additional building copy machines; computer labs; classroom printers and white boards
- Ameliorate the restricted space issues to fully implement all components of the curriculum
- Upgrade computer labs and software

- Reconfigure CATE labs that presently face the front of the classroom
- Accelerate the software approval process
- Soundproof the video production lab presently located directly under the band room
- Outfit science labs with appropriate seating and ventilation.
- Provide essential materials in special education classes (calculators, lab equipment, textbooks)
- Increase staff in elective courses, particularly in the CATE area.