

Cambridge Junior-Senior High School Cambridge Central School District

Community, Context, Climate, and Culture

Cambridge is a small community northeast of the Capital District. It has significant historical background and is well established. The hour or more drive to any of the surrounding urban areas in New York State or neighboring Vermont provide a cushion against unwanted influence, and the community has a self-reliant, independent feel.

When the researchers arrived at the school and entered through a student entrance, a young lady approached us immediately with an offer of directions and assistance. When we told her where we were headed, she excused herself from her friends and escorted us there herself. That kind of personal attention and interaction characterized the entire visit. The district's commitment to seeing each person as an individual and to providing each person with the support needed to do the job well seems to permeate every interaction—not just those in the classroom.

The superintendent characterizes the environment by explaining that the high school principal and staff want “to create an environment that excellence is not mandated but becomes part of the intrinsic thinking. They want the students to be the best and to do all they can to make that happen.”

Student Demographics 2005-2006: Cambridge Junior-Senior High School, Cambridge CSDⁱ

	Cambridge Junior-Senior High School	Cambridge CSD	New York State
% Eligible for Free Lunch	16%	19%	37%
% Eligible for Reduced Lunch	9%	12%	8%
% Limited English Proficient	0%	0%	N/A
Student Ethnic/Racial Distribution			
% African-American	0%	1%	20%
% Hispanic/Latino	1%	1%	20%
% White	97%	97%	53%
% Other	1%	1%	7%
% Students Meeting or Exceeding State Standards on Secondary Level English Assessments	93%	85%	69%
% Students Meeting or Exceeding State Standards on Secondary Level Mathematics	92%	85%	71%
% Students Graduating	88%	82%	67%
Total Enrollment	598	1,092	2,772,669

High school administrators and staff are remarkably unified in their approach to producing excellence. They focus on results and use data extensively to make decisions, and everyone is clear about what the goals and results need to be. The principal holds himself responsible for results, saying that if goals are not met, either he didn't listen or he did not do a good job of distributing resources appropriately. The associate principal speaks about using collaborative dialogue and encouraging teachers to use the same to unify people around common goals. The teachers, to a one, state the same goals as the principal and also unanimously voice praise for the professional support they feel in attaining those goals. Administrators praise the dedication of staff, saying that teachers teach six classes a day and do significant work after school and at home to keep pace.

As in many places, funding is an issue and money is tight. However, there seems to be overall agreement about spending priorities: students come first. For example, the superintendent's desk is set up in a very open elementary school office because the building that had housed the district administrative and board offices needs repairs that are now in their second year of being put off.

Involvement

All stakeholders are involved in the life of the school. Parents are very involved with their children and their education. One teacher says:

The community is very diverse and eclectic. Very involved. I know when report cards go out because the voice mail is full. Only one time have I not been supported by parents. Most value education. There is a lot of positive peer pressure. Students have a work ethic. Students are very tolerant of accepting new ideas and it makes for a good learning environment.

Almost every teacher speaks about calling parents or having parental input on planned changes, and the school encourages teachers to reach out to parents:

We are proactive in getting in touch with parents and the school is very up on communication. [We have] voice mail and email now so parents can contact us. We are supposed to check voice mail every day. The office will check to see who is answering voice mail.

The involvement, however, goes beyond the parent dimension. There are a wide variety of ways for students to be involved with school beyond academics. The majority of students participate in some extra-curricular activity—sports, music, theatre, quiz bowl, ski team, Spanish club, Latin club—and teachers are encouraged not only to sponsor these activities, but to see them as part of the larger picture. According to the principal,

We encourage all teachers to be involved in extra curricular activities as a way to make this connection. Sports and theatre are as much about connecting with students as it is about theatre and sports. The result is academic success. Academic success is still the highest priority. How do you get there? Connections.

Celebrating success is another component of the culture in Cambridge. The goals are clear. Paths to success are paved in many ways. Connections and communication are established. While much is done to make success possible for students, their efforts in the process are not ignored. Every fall, there is an assembly entirely dedicated to celebrating the academic successes of the

students in the previous year. Honor rolls are announced. Regents mastery, highest course averages, scholar athletes—all are recognized. The effect is not only for individual student recognition. The placement of this assembly in the fall also sets the stage and refocuses the attention of the whole academic community on the goal of the continuation of these successes.

Best Practices: An Overview

Tuesday's Child

The guidance department calls the weekly Tuesday's Child meeting the "key meeting" of the week at Cambridge. Tuesday's Child is a committee consisting of guidance counselors, nurse, crisis counselor, secretary for record keeping, director of special education, and associate principal and, on occasion, the principal.

At each meeting, the group discusses at-risk students – those who are not making academic progress, who are having a personal or family crisis, who are suffering from abuse or are abusing drugs, any issue that impedes progress. One or more people from the group or faculty are assigned to each student. There is a weekly update on each student on the list, and plans are made accordingly for academic intervention, referral to a PINS (Person in Need of Supervision) petition, etc. If a student seems to be progressing well, he or she is taken off the list. Students are added to the list almost weekly by reference from any faculty member. At the time of the interview, the guidance office reported that about 50 regular education and 15 special education students were being considered each week—plus an additional 20-30 students being watched for truancy issues.

In-house GED program

As part of the goal to have 100% of their students graduate, three years ago Cambridge created an in-house GED program. Faced with a large number of students who wanted to drop out of school, the district wanted to make it hard for them to do so. School officials felt that they had a stronger commitment to these students than any external GED program would. The idea came from Tuesday's Child meetings and was funded with money the district had been spending to send GED students to out-of-district programs. The Tuesday's Child committee and the principal did about a year of thinking and planning and visited other schools' programs before sending the plan to the superintendent and the board for consideration and approval.

The academic part of the program runs from 8-10:30 in the morning with one teacher and an aide. There is now a protocol for entrance, a predictor test, and a discipline code, which came about as a result of a first-year struggle with the placement of students inappropriate for the program. The desire was for the program to be a true alternative education program and not another layer of special education. It now functions as a school within a school. The GED teacher reports that the size varies but hovers around 20 students. It follows the school year and the daily schedule. Students come in when they need the program and leave when they get their GED. Many students attend a focused BOCES program in the afternoons and some even finish their BOCES program after they have received their GEDs. Other students have ongoing connections to the work force during the afternoons.

A Closer Look

These practices are indicative of the individual attention that is evident across five broad themes that frame the best practices study of which this case is one partⁱⁱ. The sections that follow discuss specific practices at Cambridge High School within each theme.

Curriculum and Academic Goals

Common goals

Nearly everyone gives exactly the same answer when asked about goals. One part of the answer is the 90-40 Regents results goal: 90% of the students will pass each Regents exam and 40% will achieve mastery (a score of 85% or better) on each exam. The principal explains that a 3% variance from that for any individual teacher's collective scores is OK, but any more is not. All teachers know about this goal, and they report that they knew about the goal coming in. The associate principal even says that the student results on Regents exams are one of the reasons he took the job with the district.

My view is if it is worth teaching, it is worth knowing you have taught. We are a data-driven school. The staff and the students all understand that. Company line: 90/40 on state assessments. If you are below that, something is wrong. Our average in AP should always be above 3.

- administrator

Another goal is having all students work toward an advanced Regents diploma. Cambridge has set—and sustained—a goal that 70% of students will graduate with an advanced Regents diploma. Indeed, Cambridge is one of the few schools in the area that has even approached achieving this goal, with a percentage of 64.5% in the 2005-6 school year. The school and district expect that all students can achieve at high levels, and students are placed in the most challenging classes up front. The principal notes that if the 70% of students between the top 20% and the bottom 10% are not being encouraged to do more than just get by, then their potential is being “squandered.” He goes on to say that the practice of putting students in the most challenging classes creates a culture of excellence and affects the drop-out rate.

The expectations are from the top. . . . they WILL get advanced diplomas. We set up the expectations early. We take the early door of opportunity to set up this expectation and plan accordingly.

- guidance

Cambridge also offers an extensive Advanced Placement program, with more than 50 students writing more than 70 AP exams. The goal here is to have an average AP score of above 3 for all AP courses. Administrators talk of hoping to add two more AP classes to the current roster—AP English Language and Composition and AP Computer Science—and another 15 or more tests being written. These expectations are supported with a lot of flexibility with the schedule to get teachers to the trouble spots—even if it means changing a teacher's schedule during the school year—and with a flexible and intense AIS (Academic Intervention Services) program discussed below.

A third common goal is a 100% graduation rate. “Individual attention” may get a lot of lip service in education, but it is clearly acted on in Cambridge. Programs like Tuesday’s Child and the new GED program discussed earlier are aimed at maintaining the commitment to graduation for all students. The associate principal gives a passionate explanation of the purpose of these programs:

All kids need to have goals, and kids were coming to us with high needs. . . . It is immoral to reject kids for their needs. [If] they can’t fit in our system of high academic standards, we need to do something. And so the [GED] program was aimed at our zero drop-out goal. Tuesday’s Child sometimes gets contentious because we sometimes have differing opinions regarding the appropriate program for kids.

End-of-year progress report to the board

Each year the principal and other school personnel compile a special report for the school board that includes all test results, all actions taken in terms of resource allocation—time, money, faculty assignments and undertakings, etc. This report is separate from and well beyond in scope and detail the state-mandated school report card. The report is not only an attempt to communicate clearly and directly with the school board and the community about what is going on, it also serves as a focused record for faculty and administrators of what they did in the past school year to target their ambitious goals.

Staff Selection, Leadership, and Capacity Building

Leadership

Cambridge’s focus on high achievement includes the expectation of high performance for everyone—students, faculty, administrators. In addition to expecting strong and focused building leadership from the principal, each professional is expected to step up and take on leadership roles in decision making and problem solving. The principal talks about his place in the leadership continuum:

People can’t be pushed; they must be led. My relationship with the students, teachers, and administration is one of personal trust—[a feeling] that we really care about them. If they think we are filling time in a job, we will not get outstanding performance.

It is our job to help teachers do a better job. [We ask], “How can we help you fix it?” There is a great deal of trust between administration and faculty here. Everyone has a place on the team. The administration has to be willing to listen. A good leader listens to the best ideas. [It is] the essence of being a leader. They trust you. Our overall goal is student success. A good leader can say, “I made a mistake; I was wrong.” Face up to it and let the teachers know. Too many of my colleagues feel they have to live in a world where there are no mistakes.

Tenure decisions

The principal talks very candidly about the tenure decision for teachers at Cambridge. He says that they are a small school, and a tenured teacher is with them for a long time. He cannot take a chance on a questionable decision. He says he is not there to win a popularity contest but to put all possible resources toward academic excellence and student achievement.

Our pay is not what it is at other schools. Teachers stay because they do not want to be at a school that is not “going for it,” where excellence is not celebrated. If we can come close with the pay and we can make them feel good, we can do it. They do tend to stay. Schools that have more money know our performance is good. If a teacher gets tenure here, he is a good teacher. If other districts have a need, they will look here for teachers.

Individual debriefing sessions

At the end of each school year, the principal and associate principal hold individual debriefing sessions with all of the teachers. In these sessions, they discuss the goals that were established and the results. They also discuss what needs to be done in terms of course development and professional development over the summer. Both administrators say that 90% of the teachers are doing an excellent job—and this is one opportunity to tell them this, using actual assessment data. Teachers report that they look forward to this debriefing as an important professional discussion and an opportunity to get feedback on their teaching.

Professional development

In Cambridge, professional development is expected of all teachers, but with a remarkable degree of flexibility in content and source. This is not to suggest the policy is “anything goes.” It is just the opposite. Instead, teachers are held responsible for identifying for themselves, their courses, and their students’ performance what kinds of professional development they need and where they might best find it. The district has no mandated professional development program, no school or district initiatives to train all teachers in things like differentiated instruction or curriculum mapping. The decision making is left to the teacher, but it is expected that the teacher will use information from student performance and state standards and assessments to make those professional decisions. Funding for these initiatives is usually available, although we heard a few grumblings about priorities and funds being used early this year.

I never liked forced professional development. I like organic professional development. . . . I talk about the opportunities to talk and try to approve and support all that. If you ask teachers to do a lot, you better support them. You lose trust by nitpicking over their choices. Within the budget, we try to be supportive.

- administrator

Teachers report that the administration does support their professional development requests to a large extent. For example, a science teacher saw that federal nuclear fallout data were becoming declassified and wanted to use the data in class. He knew that the author of a book about the topic lives in the area. The author agreed to talk with the students, and the administration agreed to buy copies of the book for students to use as source material. And the teacher created a series of labs around the topic.

Summer curriculum work is a large part of professional development. Teachers are usually given between two and five days of work—more if it is a new class, new assessment, etc. Because the school is small, frequently only one person teaches each class, so the bulk of curriculum development tends to be done by individual teachers. The superintendent’s conference days are used for more universal topics like technology and CPR training.

Role flexibility

Cambridge is good at matching needs and talents. The associate principal says, “Programs and responses are born out of necessity.” When the district decided to institute its own GED

program, they tapped a health teacher who was in a position to see all the students and their needs to set up and run the program. As an administrator says,

When we have someone outstanding and we have a need, we have created a hybrid job. We think it is important to maintain the ability to be flexible and recognize extraordinary talents to allow people to grow the job.

Culture of professional respect

“Professional respect” is the most common answer to researchers’ question about why teachers stay in this district. A science teacher talks about how the administration created and supported a positive work environment by creating smaller, and therefore safer, lab classes and by offering financial support for focused extension projects. A math teacher mentions the degree of academic freedom. Many teachers also feel that administrators have a clear understanding of what teachers are doing and where the difficulties lie, and that they are proactive, open to suggestion, and immediately responsive to problem solving.

Instructional Programs, Practices, and Arrangements

Scheduling practices to meet goals

Both mathematics and science have adapted their programs to enable so many students to earn the three credits in each subject required for the advanced Regents diploma. One science teacher describes the program designed to keep students in science with the goal of finishing chemistry.

We sort of track. We need 3 credits of science for all kids. The old model of getting into chemistry [as a goal] has changed. We identify students for a second- year earth science program group in 8th grade. These students complete 70% of the earth science curriculum in the first year and the remaining 30% in the fall of year two. If they pass the Regents in January, OK. [If not] they can take the Regents again in June. These students go on to biology as juniors. We also have the more traditional route. . . . We are flexible in placement early in the year. There is a BOCES science for the 3rd credit for some students, kind of a fallback for students who are not functioning in chemistry.

A math teacher reports that they set up the most challenging programs they could, especially for the middle 70%, including offering Calculus AP courses, while not letting anyone fall through the cracks.

AIS

In its attempts to provide the most challenging curriculum for all students and to have a 100% graduation rate, Cambridge has worked hard to implement a viable and flexible Academic Intervention Services (AIS) program. Teachers talk about the refocus on AIS:

Now, AIS students have a period every other day. We are very selective about who we put there. Students are placed there for [standardized] test prep, not just homework support. AIS is now a teaching assignment.

We identify students for AIS throughout the school year. We don’t overload it and choose kids who will benefit. If they fail a Regents exam, this is a gateway for AIS. Science AIS is a separate class.

For AIS, [math has] one teacher who deals with AIS. She will preteach or reteach concepts and she will evaluate individually. Not all kids can schedule the class at the right time. They try to put in AIS the kids who need it most. For example, juniors are selected before 9th graders, etc. AIS meets every other day. . . . We try to keep AIS math class at 8 kids at a time so they can get individualized instruction.

If we have a section of AIS, we would like to be assigned those students who are taking the courses that we teach. Then AIS is more of a help session, individual support. . . . Students can meet a lot of success in AIS when they have that support. When we have a lot of different courses mixed in one room, that is a problem. In 7-12, there are 8 sections of math AIS. One AIS teacher can split and have AIS every other day and switch days for prep periods.

AIS placement is flexible; students can be placed in AIS at any time during the year and AIS classes can be added and dissolved at many times in the year. Since AIS meets every other day, a teacher might be scheduled for AIS during a given period on one day and have a preparation during that period the next day. Students can also test out of AIS. Placement there is not necessarily only terminated at the end of the school year.

AIS is forever cycling. . . . It used to be more of a dumping ground for kids who do not do homework. Now it is more for and about state assessments. Kids have to pass an assessment to get out of AIS. Every quarter there are exit criteria, but that is up to each department and core teacher recommendation. The number of sections is part of my job as scheduler. . . . We prioritize [student placement] with the state standards, then we go by teacher recommendation for failure, and then room. As a scheduler, I will look at when the kids cluster with time. At the beginning of the year, we have a lot of kids in AIS.
- guidance

Monitoring: Compilation, Analysis and Use of Data

Data and district culture

Data use is not just for the faculty in Cambridge. Students are aware and involved in the school's focus on using data and objective measures of results. A teacher offers the example of how the school uses the five-week reports and report cards to keep the focus on academics. If a student is on a failing list, she or he is not allowed to leave study hall. Attendance at a dance or an extra-curricular event depends on having a passing average for the week. A list of students who are not passing is at the entrance to games, plays, dances, etc. The teacher goes on to say that data are not used just as a stick. Students are recognized for effort, and success is recognized immediately.

The principal is adamant about using data and the state standards as a consistent measure of results and success. He says he insists on accountability. He holds himself accountable for results and then uses the data to reinforce the team approach to meet the goals. "We won't pretend the results are not the results," he says.

You can't mix messages with assessments. We analyze classroom grades and the Regents results. We would like teachers to be within 3%. . . . if you go beyond 6% difference, we will have a talk. The standards are supposed to be the standards. . . . We do a huge spreadsheet and we do an analysis. . . . [We suggest to some teachers that] maybe you

are not addressing the standards. We are not saying a teacher can't go beyond the standards, but we are trying to get them to do the basics first and then go way beyond.

A teacher explains how he was brought into the data culture at the school. The first part was the emphasis on assessments. He assesses students every other day in multiple ways, saying that this is his only way of holding kids accountable for material and knowing who knows what. His midterms and finals have to mirror the state assessments and be approved by both the department chair and the associate principal, but the formative assessments integral to his specific curriculum are mixed and reflect a good mix of styles. He attributes a lot of understanding about data use to the principal.

When I first came, the principal was hands off. His style has evolved to emphasize the use of the information rather than just send it out. Assessment is huge.

Other teachers echo this teacher on the use of frequent formative assessments in order to measure student learning and to make immediate adjustments. In addition to written measures, teachers also report using the dynamic of class discussion, the “grumblings” about in-class work, and lab activities to measure student learning. All teachers report mirroring state assessments multiple times to ready students for those tests.

Recognition, Intervention and Adjustments

Flexibility with teacher schedules

The principal holds himself responsible for allocating resources in a focused and purposeful way so goals can be met. One of the most precious resources is the teachers themselves. He feels one of the keys to success in meeting high academic goals has been his willingness to move the talent to the need. This may mean mid-year adjustments in teachers' schedules. It may also mean taking on new classes and giving up some favorites. Cambridge has created a team mentality that focuses all decisions on the needs of the students.

Because you have been teaching X course for 5 years does not mean you will do it next year. For example: The 7th grade showed ELA problems. I reassigned the department chair to that trouble spot. I gave her paid time in the summer to prepare and whatever was needed to succeed. I have not had a teacher yet who resisted. Now it is part of the culture. Change is always stressful. . . . We are not constrained by the contract on this. I advise fledgling administrators to look at the contract. If you can't reassign teachers, you can't do anything. Team attitude: It is not about you as a math A teacher; it is about the program. . . . Be nimble with the teacher schedule and with the curriculum. There must be 6-7 configurations of math A and B. This is a small school; we have to be nimble enough to give the students all they need.

In looking at middle school data, the principal saw less than satisfactory ELA scores. Administrators met with teachers across the curriculum and heard that the problem seemed to be a reading issue. Students were tested with an age appropriate standardized reading test. Students who scored below grade level were assigned to reading every other day; students who scored significantly below grade level were scheduled for daily reading instruction. A high school English teacher with reading expertise was reassigned to teach these classes. The school reports a “dramatic improvement in student reading scores” since the implementation of this program.

Willingness to make mid-year adjustments

Decisions in Cambridge are made on the basis of evidence, frequently student test data. And decisions about interventions are made when the need becomes evident, even mid-stream if necessary. For example, Math B students were allowed to take the Math B Regents exam in January as a pre-test. One year the scores were alarmingly low. The principal met with the math department chair, the Math B teachers and the former Math B teacher. The group went to work analyzing exam results and developed an intervention plan that would start immediately in order to get the students ready for the retest in June. They changed some schedules to get more students into AIS and some teacher schedules to be sure the AIS teacher was competent in the Math B curriculum. They purchased review books for the students. The principal gives credit to a staff that could develop a plan, was willing to take reassignments mid-year and willing to reallocate funds on short notice. Because they “developed a plan instead of excuses,” the students did well in June.

Full inclusion of special education students

Meeting Cambridge’s high academic goals with the entire student population has posed problems with the special education population. The first part of the problem came with differing conceptions of the best program for special education students. The associate principal explains:

When I first got here, the self-contained model was [in place]. . . . I felt we would be inhibiting students in staying with that model. We pay content area teachers and special ed teachers to do different jobs. Content specialists are responsible for the academic performance of those students included in their classrooms. If more than one person is responsible, then no one is responsible. We include kids as much as we can. We are able to address their needs. . . . Our data have recently shown that included special ed students do much better on state assessments than self-contained students. And we found anecdotally that included kids feel far better about themselves. The key to the problem resolution was having good data. We keep asking, “What we can do to make all kids successful?”

When they went to full inclusion, some good things happened. Discipline referrals have gone way down, and some outstanding teaching assistants have stepped in to assist. Although some unresolved issues of responsibility between subject area teachers and special educators persist, district administrators say they will look at teacher assignment -- and “fit teachers to student needs, not the other way around.”

Independent study/at risk homeroom

The guidance department keeps track of at-risk seniors with special rigor. Those students at risk of not graduating are placed in a special homeroom for the second semester, where the homeroom teacher checks on their progress daily. The associate principal meets with them weekly. Some of the students have independent studies for courses that they need to pass and cannot fit in their schedules. Teachers will tutor students independently. The school has combined the senior social studies courses of Economics and Government into a course called Political and Economic Systems. During the summer, there is a special program complete with tutors for seniors who need to make up courses. During the summer, the teachers receive a small compensation for the extra independent study and tutoring responsibilities. During the school year, teachers contribute “out of the goodness of their hearts,” according to the guidance department.

Technology

Because of finances and an aging infrastructure, technology continues to pose a problem. Several teachers mention technology, or the lack thereof, as one of the challenges facing the district. While each teacher has an internet connected computer in the classroom, students do not have a lot of access in school. One teacher reports that she never gives an assignment that involves computer use a 24 hour turn-around. She allows at least a week if an assignment requires the internet. A computer lab at the high school is used mostly by the English and social studies classes. Some teachers worry that the students are not as aware of the tech resources as they need to be for college.

In a Nutshell

Cambridge sets and attains high academic goals by having a very dedicated staff practice data driven, focused, and flexible decision making, with purposeful and targeted distribution of resources.

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ⁱ Demographic data are of students in the 2002 entering cohort and are from the 2005-06 New York State Report Card (<https://www.nystart.gov/publicweb/AllDistrict.do>). This case study was conducted in spring, 2008.

ⁱⁱ This case study is one of a series of studies conducted by Just for the Kids-New York, beginning in 2005. For the study of high schools, conducted during the 2007-08 school year, research teams investigated ten consistently higher-performing and five average-performing high schools based on student performance on New York State Assessments of English, mathematics, science, and history. Researchers used site-based interviews of teachers and administrators, as well as analyses of supportive documentation, to determine differences in practices between higher- and average-performing schools in the sample. In half the higher-performing schools, from one-third to three-quarters of students qualify for free or reduced lunch. Average-performing schools were matched as closely as possible to the higher performers in terms of student poverty levels, geographic location, size, and student ethnicity. Results were organized along five broad themes that form the framework of the national Just for the Kids study of which the New York study is part. The national study has been sponsored by the National Center for Educational Achievement (NCEA).