

**Q&A with Superintendent Young**  
***Regarding the Innovation Agenda***  
October 26, 2011

**Interdisciplinary Learning**

- 1 What is your belief about the role and importance of interdisciplinary learning? How does it differ from disciplinary learning, and what do you see as the advantages of each?

Life is interdisciplinary. Schools have historically separated out the disciplines into academic content areas to ensure that students can acquire knowledge and skills in an orderly manner. Most teaching and learning occurs within the traditional discipline-based academic structure so that teachers and students can build upon prior knowledge and pursue topics in depth. Interdisciplinary learning offers students the opportunity to see and make connections between various parts of their educational and life experience and therefore is key to helping young people learn not only to analyze material but to synthesize it. An interdisciplinary approach complements, but does not replace, the traditional model.

- 2 How does the Upper School Program, as currently designed, support and prioritize interdisciplinary learning?

The Upper School Program seeks first to strengthen disciplinary learning by creating a standards-based curriculum that is tied to the Common Core and the Massachusetts Curriculum Frameworks. The Common Core is a national set of standards, adopted by states including Massachusetts, of what students are expected to learn in school (for more information, see <http://www.corestandards.org/>). Once that curriculum is established, our teachers and administrators will look for places of natural overlap—that is, the subjects, topics, themes, etc. that cut across the traditional disciplines—and they will develop interdisciplinary curriculum to take advantage of those natural connections. Disciplinary and interdisciplinary instruction are not in competition with each other—they can and should co-exist, as both are critical to helping students develop academically, and both are characteristic of a well-conceived curriculum. Well developed curricula, both discipline-based and interdisciplinary, afford teachers the best opportunities to teach the diverse set of learners they meet every day, from those who struggle and need additional support to those who are already performing at high levels and seek additional challenge.

- 3 What opportunities and supports will teachers have to engage in interdisciplinary and project-based learning?

Interdisciplinary and project-based learning should definitely occur during the three 3-week Project Periods (see below) and should be utilized where possible and appropriate during the 10-week regular instruction times as well. We are dedicating specific time every day to English Language Arts because we believe that strong literacy skills are the foundation for success in all school subjects and cannot be

compromised. Reading and writing in the content areas (besides ELA) will not only offer opportunities for exciting teaching and learning in the interdisciplinary format but will also reinforce the skill set every student needs in order to achieve at the highest levels. We envision these program areas as places where interdisciplinary study is not only accepted, but encouraged; where project-based-learning is the norm in all of our upper schools; where technology and other new teaching methods are employed regularly; and where our schools become laboratories where professional educators test out new ideas and approaches in meeting the learning needs of our diverse student body.

## **Innovation and Best Practices**

- 1 As we develop a coherent Upper School Program, how will we ensure that campuses are centers of innovation rather than "cookie cutter" replicas of one another?

Even if we wanted "cookie cutter replica" schools (which we don't!), it would be impossible to create them. Schools are active, living places where human beings interact every day and educators make hundreds of decisions about how to work with the students in front of them, sometimes in a planned manner, sometimes on the fly. There are some knowledge sets, skills, and habits of scholarship we believe ALL students need in order to do well at CRLS and beyond, and we are intent on providing those across the board. In addition, however, recognizing the diversity of our staff and student body, and knowing that people bring different strengths and interests to the table, we need to find ways to take advantage of that diversity. We need to encourage our teachers and embrace and celebrate what they have to contribute. The Project Periods will be one way to enable each campus to define itself. More generally, we rely on the professional expertise of our educators to challenge and support their students, and we expect in the real, daily life of schools, that those instructional strategies will take on a wide variety of effective approaches.

- 2 How will we foster innovation in the classroom, and help teachers develop a mindset and practices that embrace interdisciplinary, as well as disciplinary, study?

By reducing the professional isolation that exists for most Cambridge teachers today, by welcoming them into a professional learning community with a new set of colleagues, we are confident that they will learn from one another and discover new ways of teaching every single day. The mere fact that there will be more than one ELA teacher, for example, in a school means that ELA instruction will be constantly evolving and improving thanks to the formal and informal interactions those educators have. These discipline-based "departments" will cut across grades 6-8. Cross-hatching, so to speak, grade-level teacher teams will include educators from all subject areas allowing for ongoing discussion and planning for interdisciplinary opportunities, sometimes, believe it or not, discovered and planned by teachers a mere day or two before they try it out in class! In addition, systemwide professional development opportunities for teachers as well as the formation of professional learning communities will support and advance the values of collegiality and collaboration.

### 3 Will teachers have opportunities to incorporate existing best practices?

When the teacher teams described above observe a best practice (that is, a strategy that produces excellent student outcomes), of course they should experiment with it, incorporate it, assess it, modify it, test it out again, and share it with their colleagues from across the city. Schools are places where not only students, but also the educators LEARN. This adult learning occurs in a formal setting through organized professional development where we intend to create forums for teachers to share existing best practices; the learning also occurs in informal settings every day, through planned and spontaneous conversations among professional educators, where practices can be weighed and vetted by colleagues as they eventually determine what is “the best.” Our teachers are currently meeting on these topics, and we can expand on what is happening today and make it even better.

### 4 How can we ensure and assure that CPS will continue to value the individuality of our teachers and respect their ability to ignite student passion?

The most important interactions that occur in a school system are not the ones that take place in the Superintendent’s office, the School Committee meeting room, or the principal’s conference room. They are the ones that take place daily between teachers and students in classrooms, rehearsal rooms, common spaces, playing fields, and so on. We want every CPS teacher to love coming to work every day because they know they will be making a difference in their students’ lives. To make a fine distinction, our teachers should be teaching students first, curriculum second. The best teachers thus are student-centered—they know who their kids are, what they need to know and how they learn, and what engages them in the work at hand. At the same time, they understand that being truly student-centered means placing adult needs or desires behind student needs. It is our responsibility as the adults to ensure that the students learn what they need to learn, without excuses and doing whatever it takes to get them there. With appropriate expectations and supports, we will hold educators accountable for strong student outcomes. We will not micromanage our teachers; instead, we will continue to trust them to do what they know their students need in order for students to learn what they need to learn.

## **Curriculum/Units of Study**

### 1 What is a "unit of study"? Please share an example.

Cambridge teachers are now deeply engaged with their departments in writing innovative units of study—descriptions of learning goals and a range of approaches teachers might use to challenge and support their students. A unit of study typically takes approximately 4-6 weeks to complete. The design and implementation may be discipline-based or interdisciplinary. Key components of the units include: goals, understandings, essential questions, critical skills, authentic assessments developed by teachers to address content, topics, MA State Curriculum and Common Core standards, and domain specific vocabulary. Teachers are using *The Understanding by Design Guide to Creating High Quality Units*, by Grant Wiggins and Jay McTighe, as a

reference in creating these units. This organizing framework is sometimes referred to as “backwards design.”

To give you an example, one unit of study might be a 6<sup>th</sup> grade social sciences unit designed to investigate the topic of Ancient Egypt. During a 6-week period of time, students will be exploring the major understandings posed through these questions:

- What is a civilization?
- How were early civilizations shaped by their geography?
- How did humans and human culture develop over time?
- How have past civilizations influenced modern democracy?

The unit of study will then include the skills, standards, authentic and performance assessments, and vocabulary to support student understanding of these questions.

Units of study are not--I repeat, *are not*--lesson plans that all teachers are supposed to use daily in their classes. Units of study are living documents that will be modified and expanded by our teachers as they test out the ideas and strategies contained within them. Some parts of the units will work better than others, and thus they are always subject to revision and improvement. The units will contain not only the basics on what students need to know regarding a particular topic, but also creative ideas for making those topics engaging and exciting. If, for example, a CPS teacher has invented a unique way for teaching about immigration, that idea will become part of the unit of study, which, in the end, serves as a resource and guide for the classroom teacher. In this respect, it is important to remember that every year CPS brings new teachers into our faculty, and these educators, especially if they are first-year teachers, benefit greatly from having a roadmap to use in their classroom instruction. The other extremely important aspect of these units of study is that they will create the grades 6-12 pathway we have discussed. That is, these units, and the upper school curriculum in general, will feed into the CRLS curriculum, ensuring first that there is coherence and connection between what students learn in the middle grades and what they learn in high school, and second that all students, whether they have special needs, are learning English as a second language, or are accelerated learners will be able to be challenged and supported in all subject areas. For the first time, Cambridge will have an organized approach in grades 6-12 to curriculum, academic requirements, and, most important, high expectations for all learners.

## 2 What is the role of teachers in creating units of study for use at all Upper School campuses?

ALL teachers have been invited to participate in the process of writing units of study in their current role as members of a citywide department (e.g., ELA, Social Studies, Math, Science, etc.). By virtue of their particular assignment, CPS teachers who are part of our “Aspiring Leaders” program as well as all instructional coaches are required to be involved in this process. During the current school year, ten (10) department meetings are being devoted to the process of writing the units; in addition, teacher sub-sets of the departments are being compensated to do even more detailed composition and planning.

Collaborative teacher planning is an important component of any curriculum implementation effort. As is currently the custom, CPS teachers will need to make both long-range and short-term curriculum decisions that support identified content standards. This work is most effective when completed with a content area teaching colleague and/or team of colleagues. A typical planning session might include discussions relative to: instructional strategies, cross-content learning activities, shared use of time with students during the project period, resources, and/or an interdisciplinary culminating performance assessment.

For example; given the grade 6 unit of study designed to investigate Ancient Egypt, the English Language Arts teacher working with the History/Social Sciences teacher and Visual & Performing Arts staff might choose to plan together so that students would be expected to perform an original play about life along the Nile for peers, family, and community members as part of a culminating student exhibition. Planning with the end in mind, teacher collaboration would include teaching & learning steps such as working with students to:

- Research primary source documents for key historical facts/events
- Write/revise/edit a short play based on identified research
- Generate period artwork & scenery to support the student authored play
- Practice & perform the play for peers, family members, and the community
- Assess the project components in preparation for future learning experiences

### 3 What is the role of teachers in creating units of study for use at their own campus?

As the staffing assignments become clearer, we have been able to get teachers together with their new campus colleagues. (For more information about how staffing assignments will be made, please [click here](#). These meetings will continue during the year and the new “faculties” will coalesce even further as the assignment process crystallizes. Once these new cohorts of professionals are established, they will build upon the work they accomplished in the department meetings and begin designing the Project Periods—periods of approximately three weeks in length, during which individual campus teams will collaborate to create interdisciplinary learning experiences with a special project-based quality for their students. This is just one important way in which our teachers will be making important decisions about the educational program. Campus #1 will not be required to use Campus #2’s material for the Project Periods, although we expect the professional community that develops across the city to allow for and encourage sharing among campuses of best practices, particularly as they pertain to Project Period curriculum.

## ELA/Social Sciences

- 1 What is the ELA/Social Sciences program and what priorities for students does this reflect?

As noted above, we are committed to improving ELA in all schools so that all students enter high school with strong literacy skills. To put it bluntly, we believe that if a student cannot read and write well, he/she is not going to do well in any subject in high school. We are not going to allow this to happen. Moreover, a powerful ELA curriculum will be flexible enough to ensure that those students who are reading and writing above grade level will find the kind of academic challenge they need in order to continue to grow as learners. Virtually all CPS educators, including CRLS English teachers, agree that more emphasis needs to be placed on ELA in the middle grades. The way we put “more emphasis” on a subject is to ensure that our teachers spend time teaching it, utilizing well-designed curriculum content and employing a varied repertoire of effective instructional strategies. In Social Sciences, students will develop important skills in literacy, reading primary and secondary source material, conducting research, and learning about key social justice issues, as well as practicing different forms of expository writing.

- 2 Were Cambridge educators involved in the design of the Upper School ELA and Social Sciences program?

Yes. Last spring, we convened a group of middle grades teachers from across the city to form the Innovation Agenda Teacher Planning Team. This team considered a number of issues, one of which was the question of how best to provide middle grades instruction in ELA/Social Studies/Humanities. Two full meetings were dedicated to this topic. At the first meeting, CRLS deans presented current programming and challenges at the high school. Then teachers and coaches from the four schools where we currently teach Humanities (Cambridgeport, Graham and Parks, Martin Luther King, and King Open) gave presentations to their peers about the Humanities program at their school, as did teachers and coaches offering separate ELA/SS periods at their school. Lively discussion ensued. The conversation continued at department meetings and among school principals and coordinators. Following several months of deliberation, we arrived at the decision that was presented to the School Committee on October 18, 2011 and captured in the document available on the CPS website.

- 3 The program uses the term "social sciences" rather than "social studies." What does each term mean, and why did we decide to use the term "social sciences"? Did we consider using the term "humanities" instead?

Cambridge does not have a commonly accepted definition of the term “Humanities.” As noted above, four schools teach “Humanities” and their approaches all differ. As part of our ongoing effort to find best practices both inside and outside of Cambridge, we looked to the IB (International Baccalaureate) School definition of Humanities, as it is used in their Middle Years Programme. We found that the IB description roughly approximated Cambridge’s varied practices and so have decided to use it as a guideline going forward. Now, when we use the term Social Sciences we mean it as indicating a blending of the IB topics (geography, history, economics, politics, civics, sociology,

anthropology and psychology) with our own Social Studies standards. An easy way to think of it is: IB Humanities + CPS Social Studies = New CPS Social Sciences. We considered naming this new approach Humanities but decided against that when we learned that State regulations require that in order to teach a course called Humanities, a teacher must be certified in *either* Humanities or in *both* English and Social Studies. That regulation proved too restrictive, so we decided to call the new program Social Sciences and thus preserve maximum flexibility with our staffing.

- 4 What will ELA and social sciences periods look like? Will teachers and students be able to engage in interdisciplinary and project-based work?

ELA and Social Sciences will be scheduled as separate blocks/periods during the school day. As noted in the October 18 School Committee materials and presentation, campuses may decide to schedule ELA and SS blocks back-to-back if they wish to do so. This approach would allow teachers to collaborate effectively and use time flexibly through their professional discretion to meet the needs of their students, and to allow for interdisciplinary instruction when the opportunities are present. The back-to-back periods used in this way would, in effect, create a longer block of time for sustained learning experiences. ELA and SS teachers are encouraged to design interdisciplinary projects that connect to the standards expressed in the units of study they designed at the departmental level.

- 5 There are two ELA/social sciences instructional models available to teachers and campuses: one certified teacher teaching ELA and another certified teacher teaching social sciences, or one dually certified teacher teaching both ELA and social sciences to half the number of students. Can campuses propose other alternative models?

Campus teams can propose alternative models of school scheduling to meet their needs. They can also consider alternative staffing models as long as they are consonant with existing collective bargaining agreements and citywide standards for time allocated to each of the subject areas.

## **Social Justice**

- 1 Some parents in Cambridge associate Humanities, as it is currently defined in some of our schools, as a "social justice" curriculum. These parents may be concerned that the Upper School ELA/social sciences program does not include a "social justice" curriculum or reflect a commitment to providing one to students. What is the Upper School Program commitment to social justice, and how will students experience it?

Cambridge Public Schools' core values are *academic excellence* and *social justice*. The former is at the heart of the Innovation Agenda in the ways described above and in all previous documentation. We think of social justice in two ways: teaching about it and living it. As for the first of these, we are confident that in designing units of study, our ELA and Social Sciences teachers will draw on their most successful experiences to date and incorporate elements of their current lessons into future curriculum. Those

teachers who have developed ways to promote the value of social justice in their classes will be encouraged to share those best practices with their colleagues for implementation across the system. We also are consulting with [Facing History and Ourselves](#) in an effort to utilize some of their most appealing and successful curriculum and instructional strategies into our new upper schools. The second side of social justice speaks to our actions, and here we are committed not just to talking the talk but also to walking the walk. Simply stated, we expect ALL students in Cambridge to have equitable access to excellence in education. We also want our students to live out the value of social justice, so we will build on existing best practices in the system for community service learning. One important component of the professional development calendar for the current year calls for a Middle Grades Symposium for teachers at the end of the school year in June. We are considering devoting a significant portion of this forum to a sharing of best practices in the social justice curriculum, building on some of the excellent work our teachers are doing in this area today.

### **Trimester System**

- 1 The Trimester System is organized into three approximately 13 week periods, including a 2-3 week "project period." How flexible is this time? Do all campuses have to offer the 2-3 week project period at the end of the trimester? Can individual project period weeks be offered at various times during a trimester, or incorporated in the 10 week period?

This is still to be worked out. We are planning on having common reporting periods across the city at the end of each trimester and are still exploring the use of some common assessments, in addition to the assessments individual teachers design themselves, and have not yet determined how the calendar for those assessments would be managed. This decision might or might not affect the scheduling of the Project Periods.

- 2 Does the term "project period" mean that this is the only period when students will be engaged in project-based learning?

No. Project-based learning is an effective instructional strategy that can be employed in a number of different ways at various times during the school year. Teachers will be encouraged to develop high-quality projects that make the units of study come alive for their students.

### **Additional FAQs**

- 1 Will you be publishing another Questions and Answers document like this one?

Yes. Please send your questions to [planning@cpsd.us](mailto:planning@cpsd.us) with the term "FAQ" in the subject line. We will gather and group the questions and publish another FAQ in the near future.