

Minutes: Curriculum Sub-Committee  
May 25, 2016  
Watertown High School Library

Present; Eileen Hsu-Balzer, Chair; Liz Yusem; Candace Miller; Superintendent Jean Fitzgerald; Kimo Carter, Principal Watertown Middle School; Elizabeth Kaplan, Principal Lowell School; Kraig Gustafson, 6-12 Social Studies Coordinator; Linsey Kraemer, 6-12 Science Coordinator; Maureen Regan, 6-12 Language Arts Coordinator; Laura Rotondo, Career and Technical Education Coordinator; Megan Slesinger, Fine, Applied and Performing Arts Coordinator; Toni Carlson, K-12 Educational Technology and Library Coordinator.

In the audience, John Portz and Kendra Foley, School Committee; Watertown Town Councilor Lisa Feltner; parents. The meeting was recorded.

The meeting was called to order at 6:00 PM.

Dr. Fitzgerald handed out paper copies of the slide presentation, attached.

Global Competence is one of the major goals of the District. Students need to understand that they are part of the larger world; that the world is diverse, dynamic and interconnected; that in the future they will work with people from all over the world; that they can act creatively and ethically to improve their local and global communities; and that global issues and events will have an impact on their lives. Teachers need to understand global competency because they need to prepare students to live in, interact with, and flourish in our world.

Global competency is a thread which is woven throughout the curriculum. It requires a shift in the way education is delivered and the way that students learn in Watertown. Teachers will work in small groups, collaboratively, to inventory what they do, discuss how they can change things, and find where there are holes which need to be addressed. The District goal is to develop more project-based learning.

The District STEAM Team K-12 has visited the Needham schools and has viewed the Project Lead the Way online arts integration conference, in preparation for this initiative. STEAM is an educational approach to learning that uses Science, Technology, Engineering, the Arts and Mathematics as access points for guiding student inquiry, dialogue, and critical thinking. The desired results are students who take thoughtful risks, engage in experiential learning, persist in problem-solving, embrace collaboration, and work through the creative process. True STEAM experiences involve two or more standards from STEAM subjects to be taught AND assessed in and through each other.

Student social-emotional wellness is the connective tissue among all the District's endeavors, including this one. Approximately 134 teachers have received training from Wayside, and more staff will be trained in FY17.

A survey of District teachers about professional development shows that most want support in developing expertise in project-based learning, alignment of professional development across buildings, grades and disciplines, and development of common themes. It is not about re-inventing the wheel. Mr Gustafson said we have all the wheels, and we just need to put them on the same car.

In short, the silo model of education, in which each subject stands alone, is no longer useful. After we have looked at what we currently do, a team of educators will meet in late June to examine what we are already doing well on a systemic level, as a District, and plan what the District can do to move teaching and learning forward. In the fall, other teachers will help further develop and refine this important interdisciplinary approach.

An example of this approach already in action in our District was given. In elementary music, music teacher Anthony Spano showed a carrot with a clarinet mouthpiece at the top, and a bell made from a funnel at the bottom. He asked the students whether they thought it would play. The students said yes. The adults in the room were generally dubious. Subsequently, the students suggested carving out the carrot so it would be a hollow tube, and adding finger holes to allow notes to be played. These steps were carried out, and the result was a functioning carrot clarinet. The lesson combined engineering and art, through a collaborative experimental process. The carrot clarinet is an exercise that the students will not forget.

Examples of current global citizenship learning were given, including a number of ways in which water is used as the focus of multiple units in WMS. In 6th grade the English/Humanities reading includes *A Long Walk to Water*, a memoir of the Lost Boys of Sudan, child soldiers and an examination of water needs in Africa. In 7th grade, the historical study of water usage in ancient Rome is discussed and compared to water usage in other places and times. The subject of water has resonance with many disciplines, such as environmental studies, politics, and health.

This kind of real world application is another way learning becomes relevant to students. Hsu-Balzer noted a recent Boston Globe article about a young woman trained in fashion design, who has branched out into designing clothing which can be transformed by the wearers into tents, sleeping bags and baby carriers. There are obvious applications for refugees, campers, the homeless, and disaster victims. These designs require knowledge of the properties of materials, temperature and weather, mathematics and human behavior. They require a melding of the art of fashion design with many other STEAM disciplines.

Foreign language in elementary schools, known as FLES, was also discussed as a way to augment global citizenship, while stimulating brain growth in our younger students.

The faculty attending were asked to give the sub-committee their thoughts about possible directions in which they would like to see the curriculum develop, which may surface next year during the FY18 budget discussions.

Maureen Regan--would like to broaden what the students read, and allow for more personal choice. She said that despite the ubiquity of technology, kids still love books. She would like kids to read more, she would like to purchase a wider range of books, and she would like to develop even deeper relationships with the Watertown Library, which represents a rich and yet free local resource. She currently facilitates a process that ensures that her students all receive Library cards.

Linsey Kraemer—says in 7th grade, her department will be teaching for the first time in FY17 to the new State Science Standards, using project-based learning. They will be looking for additional resources in FY18 to further broaden and enhance the focus on the water cycle.

Laura Rotondo—will be expanding Project Lead the Way. Engineering would hope to add another capstone course in FY18, taught by one of our new teachers, with the goal of allowing students to take an Engineering course each of the four years in high school if so desired. She also added that in two years, WHS will be out of space for additional courses in Project Lead the Way. The Superintendent noted that the Phillips School has an old science room on the second floor, which might be able to be converted for Engineering. She added that she is determined that the District will not allow physical constraints to stop our educational programming.

Ms. Rotondo also mentioned that she is exploring the possibility of offering an EMT program in the future. It may fall outside the school day, and would include students going out on calls. Arrangements could be made for a way in which students could earn credits for such a course.

A parent asked if we are able to push Project Lead the Way down to elementary and Middle School. Ms. Rotondo said that the department did have someone come in to talk with them about it, but that the PLTW curriculum requires each student to have an iPad and other technology, which we cannot currently supply.

Ms. Rotondo also has grant funds which have enabled her to purchase a shopbot for the wood shop. The CNC router allows students who have designed three-dimensional projects to cut them out of wood in the shop. She is looking for a community partner, to enable the students to view a CNC router in use in an authentic industrial setting.

Ms. Rotondo is also looking to expand the ways in which Virtual High School courses can be accessed by students for Career Pathways classes we do not currently offer.

Megan Slesinger—would like to have fewer part-time music teachers, as the need for teachers to drive from building to building each day makes scheduling difficult. There is currently no full-time music teacher at the high school. Having one would permit adding music history and music theory classes, and the department could satisfy current high student demand for electronic music and guitar, by providing double the number of sections of each class. The Superintendent noted that the possible change in school start times currently under discussion would require hiring additional Fine and Performing Arts teachers simply to maintain the status quo of current curriculum offerings, without adding anything new.

Elizabeth Kaplan—will be looking for ways to give teachers more time to plan together. This was a common need expressed by all the faculty present. Ms. Kaplan will also continue to address class size and space issues in next year's budget process.

Kraig Gustafson—would like to have the funds to be able to expand partnering with the community, by bringing in speakers and taking more field trips. He also emphasized the current time constraints on planning time, and stated that many things end up being done on teachers' own time. Currently his department has a staff of 6.4 teachers serving 700 students. In addition, the core materials, for example history materials purchased in a previous year from National Geographic, would be strengthened if the District were able to buy access to the additional depth and links continuously being added to these previously purchased programs. These links to more resources are available on multiple reading levels, so they would enhance the ability of all students to learn on subjects of their own interest. As previously purchased educational materials are improved by publishers, the District would like to gain the value of purchasing these improvements for our students.

Toni Carlson—mentioned that some districts give teachers a half day every week to plan together. In FY17, in addition to the maker space being added to the middle school, mini-maker spaces, including STEAM littleBits Electronics and LEGOs, will be added to all elementary schools. The Chrome Book program will be added to 11th and 12th grades. An example of how additional technology can be used to amplify the classroom experience is a project Engineering did this year in collaboration with a school in Alabama. In FY18, she will continue to look for additional technology resources, and enhancement of the maker spaces.

Jean Fitzgerald—will be looking to enhance the potential for pre-school at the Phillips, which might include pre-school programming which includes intergenerational opportunities with the senior center. Another one of her focuses will be staffing issues.

Audience comments:

Mr. Portz said he found this emphasis on global competence exciting. We should let people know what we are doing. We also need to assess what we do, to know if we are successful. Another audience member said we should look for opportunities outside the four walls of the school buildings to let the public know what we are doing. Ms. Feltner said that as a musician, she knows that anyone who studies music knows that science is involved.

A brief discussion of "mistakes" led to a remark by Ms. Hsu-Balzer that it will be a difficult change for all of us to be more accepting of the role of mistakes and failure in learning. We are all products of educational systems in which the smart people were defined as never making mistakes or asking questions. That definition discourages experimentation, creativity and learning. For some reason, no one tells a person trying to learn to ski that if they fall, they are obviously not meant to ski and should stop trying.

The principle of recognizing the value of mistakes in learning should be something the District embraces. Failure is a component of learning.

Three themes which emerged across all the Curriculum discussions, then, were, 1) moving away from the silo model of approaching disciplines as completely separate intellectual pursuits; 2) enhancing student learning by linking projects to real world applications; and 3) recognizing that students need to feel safe to make mistakes as part of the learning process. The District should seek to graduate students who are problem solvers.

The administration:

- Will create a transparent plan that outlines a series of specific action items among the strands of FLES/Multilingualism, STEAM, Global Citizenship, School Culture, Service Learning and Community Partnerships.
- In collaboration with the new professional development council, create a PD structure that supports teacher work.
- Provide resources of funding, time and PD opportunities.
- Develop school/community partnerships.
- Support the necessary productive teamwork.
- Recognize good work, build connections among teachers, and lead the thinking about scaling up.

The motion was made and seconded to adjourn at 8:30 PM.