Tri-State
Consortium

Dobbs Ferry Union Free School District

TRI-STATE CONSULTANCY

2017

Technology Integration, March 1-3, 2017

Table of Contents

Tri-State Consortium

Dobbs Ferry Union Free School District

TRI-STATE CONSULTANCY

2017

Technology Integration, March 1-3, 2017

Rob Milller, Co-leader
Director of Technology
Ridgefield
Ridgefield Public Schools
70 Prospect Street, Ridgefield, CT 06877
203-894-5550 Ext. 22043
rmiller@ridgefield.org

Joan Mast, Co-leader
Assistant Superintendent
Scotch Plains-Fanwood
Scotch Plains-Fanwood
667 Westfield Road
Scotch Plains-Fanwood, NJ 7076
908-232-6161 Ext. 4005
jmast@spfk12.org

Kelly Spooner
Principal
Madison
Ryerson Elementary School
982 Durham Rd, Madison, CT 06443
203-245-6440
Spoonerk@madison.k12.ct.us

Peter Rodrigues
ELA Chair
Bedford
Fox Lane High School
PO Box 390, Bedford, NY 10506
914-241-6000
prodrigues3481@bcsdny.org

John Krouskoff
Director of Technology and Innovation
Brewster
Brewster High School
50 Foggintown Road, Brewster, NY 10509
845-279-5051 Ext. 1157
jkrouskoff@brewsterschools.org

Michele Merlini
Technology
Edgemont
Edgemont Jr./Sr. High School
200 White Oak Lane, Scarsdale, NY 10583
914-725-1500
mmerlini@ehsl.edgemont.org

Ahava Steinbauer
Technology, K-12
Hastings
Hastings High School
One Mount Hope Boulevard
Hastings-on-Hudson, NY 10706
914-478-3284
steinbauera@hohschools.org

Joyce Chapnick
Principal
Irvington
Main Street School
101 Main Street, Irvington, NY 10533
914-591-1961
joyce.chapnick@irvingtonschools.org

Kathryn Hart
Principal
Madison
Jeffrey Elementary School
331 Copse Rd, Madison, CT 06443
203-245-6460
hartk@madison.k12.ct.us

Doreen O'Leary
Principal
Madison
Island Avenue Elementary School
20 Island Ave, Madison, CT 06443
203-245-6450
olearyd@madison.k12.ct.us

Brian McClintock
Technology
Mt. Pleasant
Westlake High School
825 West Lake Drive, Thornwood, NY 10594
914-769-8311
bmcclintock@mtplcsd.org

Daniel Novak
Assistant Principal
Mt. Pleasant
Westlake High School
825 West Lake Drive, Thornwood, NY 10594
914-769-8311
dnovak@mtplcsd.org

Edward Kliszus
Superintendent
Port Chester
Port Chester Public Schools
113 Bowman Avenue, Rye Brook, NY 10573
914-934-7900
ekliszus@pcschool.lhric.org

Matt Borawski
Social Studies
South Orangetown
Tappan Zee High Schoool
15 Dutch Hill Road, Orangeburg, NY 10962
845-680-1000
mborawski@socsd.org

Chris Lorusso
Science
South Orangetown
Tappan Zee High Schoool
15 Dutch Hill Road, Orangeburg, NY 10962
845-680-1000
clorusso@socsd.org

Bryan Rickert
Assistant Principal
Trumbull
Hillcrest Middle School
530 Daniels Farm Road, Trumbull, CT 6611
203-452-4466
rickertb@trumbullps.org

TRI-STATE LIAISONS:

Kathleen Reilly
Director of Training
Tri-State Consortium
203-762-2004
kathleenreillyct@gmail.com

Martin G. Brooks
Executive Director
Tri-State Consortium
631-478-9954
mgbrooks@optonline.net

"The Dobbs Ferry School District strives to develop independent, curious, and open-minded learners who think critically, work collaboratively, act ethically and are knowledgeable about the world around them." District Mission Statement

The Dobbs Ferry School District invited a team of representative members of the Tri-State Consortium to benchmark its current approach to the integration of technology, K-12, March 1-3, 2017. The Consortium mission statement describes a, ***"...dynamic learning organization of public school districts that values systems thinking as the foundation for continuous improvement. The Consortium assists its member districts in using quantitative and qualitative data to enhance student performance and to build a rigorous framework for planning, assessment and systemic change...."*** As the Consortium moves through its third decade, our core beliefs remain centered on authentic and interdisciplinary teaching and learning and purposeful assessment practices directly linked to optimal student performance. Further, the Consortium is devoted to the analysis of multiple forms of student assessment data designed to advance instructional practices and programs.

Superintendent Lisa Brady, Assistant Superintendent for Curriculum and Instruction, Doug Berry, building level administrators and teachers greeted us in the Middle School Library, and Dr. Brady guided us through the district's "journey" toward the integration of technology as a critical element in students' acquisition of 21st Century skills. She described the alignment of the five-year Strategic Plan, mission statement, and the district vision with the district-wide decision to move toward inquiry-based lesson design and instruction that incorporated Tony Wagner's seven "survival skills" and the integration of technology.

Prior to our arrival in the district, we received a letter of welcome from Assistant. Superintendent, Doug Berry, who informed the team that this would be a "paperless" visit: enclosed in his letter was a link to the Tri-State Consortium page, where all documents and exemplars of student work would be housed. Before we began our work in residence, we had time to think about the Essential Questions posed to us by the district, research the district's demographics, look closely at the IB requirements and course offerings, and get a sense of the vision, "Independent Thinkers Prepared to Change the World."

The process involved in thinking about and creating the Essential Questions in Dobbs Ferry was collaborative and extensive. These questions are at the center of the Tri-State team's responsibility to respond in the spirit of collegiality, to do our best thinking based on the evidence presented and the conclusions drawn from interviews across all buildings. The Essential Questions also created the framework for a conversation between the Tri-State team and representatives from Dobbs Ferry on the final day. At that point, the team was able to ask clarifying and probing questions to ensure the district that we have understood and responded with fidelity.

Response to Essential Questions

Essential Question #1:

- **To what extent has the integration of technology been successful in supporting the development of 21st Century skills as outlined in Tony Wagner's text The Global Achievement Gap, in pursuit of the district mission of "Independent Thinkers Prepared to Change the World"?**
  - **Critical Thinking**
  - **Communication**
  - **Adaptability**
  - **Initiative**
  - **Creativity and Imagination**
  - **Collaboration**
  - **Analysis**

It was evident that students in the elementary school, middle school, and high school readily engage in work that requires students to communicate, collaborate, be creative, and demonstrate imagination. Technology tools are available as mobile labs in the elementary school and as one- to- one devices in the middle and high schools. Teachers depend on student use of these tools when asking them to engage in learning activities within the curriculum that directly support the International Baccalaureate and Middle Years Program. The seven attributes of 21st century learning described by Tony Wagner are closely aligned to the ATL (Approaches to Learning) within the IB and MYP curriculum. The elementary schools are beginning their work to incorporate the tenets of the IB and MYP approaches and, we were told, the district is discussing whether to implement the Primary Years Program at Springhurst.

It should be noted that while visiting classrooms and interviewing teachers, their desire and interest in this work was evident and a commitment to engage students in meaningful learning to become independent thinkers was also evident within the culture.

The Tri-State visiting team had conversations with students, teachers, administrators, parents and Board of Education members in addition to reviewing student work and other artifacts

housed on the website. Each digital artifact had a cover page that outlined the assignment attached with a checklist of Wagner's skills. For example, many of the artifacts represented interdisciplinary collaborative projects in English, Math, Social Studies: Algebra I "lunch study" contained graphic descriptors that illustrated student research on the frequency lunch was bought, the amount spent and conclusions about cost that drew the distinction between lunch from home and lunch outside the campus; the IB SL Exploration Project about vectors; IB English 11 project thematically based on "Dignity" demonstrated the link between a 20th Century dictatorship and the novel, The Great Gatsby ; IB SL Math Exploration Project was incrementally more challenging as the benchmarks were set for students, and the "internal assessment was available on "Prezi".

One of the strongest attributes observed and discussed by the visiting team was the culture of the district. It is one of trust, empowerment, risk taking, and innovation. Teachers feel empowered to make the right decisions in the best interest of their students. They feel trusted to innovate and take risks and in doing so are not expected to always be successful. The expectation is that educators reflect upon their practice as a part of the commitment to continuous improvement. This highly professional culture and capacity to experiment was built by purposeful, intentional leadership practices created by the Superintendent, Assistant Superintendent for Curriculum and Instruction, and building administrators. One structure that supports this culture is the weekly release time on Wednesday afternoons to engage in professional learning opportunities. By providing teachers the opportunity to take risks and innovate, the district is reinforcing the importance for students to do so as well. This culture of shared beliefs connects to Wagner's attributes of 21st century learning, primarily initiative, adaptability, creativity, and innovation.

The question posed asks, "How has the integration of technology been successful in supporting the development of 21st century skills?" The visiting team saw evidence of the planned direction toward this goal within the district. Greater focus on technology integration is impressive at the high school and middle school levels and work is now progressing at the elementary school. The elementary teachers spoke about their desire to shift focus from "how to use technology" towards a focus on "how to teach towards the 21st century skills." Survey data and conversations with stakeholders demonstrate that the district has incrementally

placed a greater emphasis on faculty and student use of technology. The district is encouraged to deepen its focus on the essential question of how technology can support the development of 21st century skills. This may require shifting the question away from *"how do we want to use the technology we have"* to *"which technology resources and tools best enhance our students' opportunities to demonstrate the 21st century skills*?"

The district technology consultant functions as an emerging Technology Coach with the teachers in the district. Some initial conversations around use of a technology integration model are occurring. One such example of a technology integration model is the SAMR Model (Substitution, Augmentation, Modification, Redefinition). When teachers use the SAMR model at the S or the A levels (Substitution or Augmentation), this work is being done primarily for the purpose of using technology and will not necessarily have a greater impact on overall student learning. While working at the M or R levels (Modification or Redefinition), students will be using technology for deeper learning, most likely being asked to think critically, adapt, demonstrate initiative, collaborate, be creative, and analyze.

A shift towards use of a pedagogical model of technology integration by the consultant/Technology Coach will create a common framework with the teachers that will result in a higher degree of students using technology to support the 21st century skills and attributes. One limitation discovered by the visiting team was the lack of availability the teachers in all three schools have to the consultant/Technology Coach. In the current staffing model this coach is only available to district teachers two days per week. This has created barriers to teacher access to high quality job embedded coaching to support their understanding and application of technology in support of the 21st century skills and attributes. More time with the technology coach, and greater access to her expertise, will lead to more deeply embedded integration.

Essential Question #2:

- **To what extent has the integration of technology helped the district to further reach its goal of enhancing teaching and learning in order to maximize the potential of all students?**

The district has made a concerted and successful effort to provide an equitable educational experience for its students in the commitment to a 1:1 digital learning environment in grades 6-12. All students in those grades have been provided a Chromebook for use at school and at home. Classrooms in grades K-5 have devices such as Chromebooks, iMacs and iPads which best meet the developmental needs of students in each grade. When developing the 1:1 initiative the district engaged students in the recommendation process to select the devices that would best support their learning. The presence of student voice is impressive in Dobbs Ferry; students describe their teachers as available, open to conversation about where technology is most effective in the curriculum, and as a facilitators in a 21st Century student-centered classroom.

The district also has a practice of supporting Assistive Technology tools (e.g. speech-to-text) for all students. The majority of Assistive Technology tools implemented by the district are available to all students, regardless of need or classification. With Universal Design for Learning in mind, the district recognizes that Assistive Technology is helpful to special education students and, may also be helpful to general education students as well.

Teachers are provided opportunities on a regular basis to continue to learn about the use of technology through Wednesday professional learning time, time with the consultant/Technology Coach, and faculty book studies. One celebrated professional learning session was designed to have High School students teaching their teachers how to use the technology to best support their own learning needs. When one student we interviewed was asked about the teachers' progress, he said, "They're coming along." Indeed, they are. The district emphasis on professional learning has been invaluable in furthering the integration of the 21st century skills in instructional practices throughout the district. The teachers have a relatively high degree of comfort around the technology tools and are now poised to take their integration of technology to the next level.

One way to approach this work to ensure equitable access to a consistent technology

experience for all students is the development of a common K-12 Technology Skills and Concepts Framework. This framework can provide a roadmap that leads to understanding and selecting the technology skills and concepts that need to be taught and assessed within the core curriculum at each grade level. The visiting team recommends that the district engage the teachers and students in developing this framework in a way that allows teachers and students choice in how and when to integrate the technology skills and concepts and requires them to be addressed at their respective grade level. In other words, identify the non-negotiable components the teachers need to address while providing flexibility and professional choice regarding the instructional method and the timing within the school year. Doing so will help preserve the intellectual and open culture this district is built upon while creating an equitable technology experience for all students in the district.

Commendations and Recommendations

Thoughts to Consider:

- Provide additional technology integration support time for the technology specialist to enhance the consistent progress for all students in achieving the 21st Century Skills and using technology to achieve this goal. Her work has had a palpable impact on teachers and is greatly appreciated by them.
- We think it will be helpful to establish a vision of what success will look like and identify a common language of the skills (e.g. either the ATLs or The Seven Survival Skills). The desired skills appear to be embedded into the IB and MYP curricula. Our suggestion is that the district does a cross-walk between these curricula and the 7 skills/disposition to make sure that this is true. And, we also suggest that it is the right time to engage the Springhurst faculty in discussions about how to embed these skills/dispositions into that school's curriculum.
- Continue to incorporate student voice in technology decisions through surveys, interviews, and focus groups. We were so impressed with the students with whom we met - they know a lot and have a lot of wonderful thinking to offer.
- We think it could be helpful to establish a District Technology Committee, inclusive of all

stakeholders, to determine the ongoing vision and needs of hardware, infrastructure, educational platform and instructional goals for technology. For example, many students in the 11th and 12th grades use their own devices, potentially freeing up a good number of Chromebooks for redeployment elsewhere.

- Strengthen the communication and collaboration between the teaching staff and administrators with the Technology Department, primarily around technical support and acquisition of resources. Parents and students shared with us stories of long waits to replace broken computers, inconsistent Wi-Fi signals around the school, and other easily fixable concerns.
- Continue to emphasize professional development, including a framework that supports teacher choice as well as additional opportunities for students to inform teachers regarding their learning needs.
- We loved how the first Essential Question identified 7 significant skills/dispositions for students to attain. Our question to the district has to do with the extent to which they are equally valued by the district - are some more important to the district than others, and do they each stand alone or do they form a cohesive package in which the whole transcends its parts? And how is technology used to support them?
- We suggest the development of a technology skills and concepts framework K-12, inclusive of digital citizenship, technology skills, information literacy, and especially the 21st Century Skills (e.g. ATLs and/or the seven survival skills). We also wonder if the creation of a computer applications course would be helpful for students. And, we suggest that the district adopt, promote, and provide instructional support around a commonly understood and supported technology integration framework, such as SAMR.
- Engage teachers in district calibration of grade level expectations developed through identifying exemplars of student work to guide consistency. To some extent, this can be done by developing assured student experiences.
- Perhaps nothing stood out more than the district's unique culture of trust among all stakeholder groups. With this in mind, we cautiously offer the suggestion that the district consider focusing supervision and evaluation on the skills/dispositions it considers important and the technology used to support them in the classroom. Doing this will solidify for the staff the importance of this work ... while keeping in mind that teacher autonomy is highly valued in the district.

- Reassess device selection and allocation of the following:
    - Laptop deployment, specifically for 11th and 12th grade. Consider not providing high school students who elect bringing in their own device with a district Chromebook in order to shift the technology to the primary grades.
    - Technology needs in grades K-5 to determine the best technology to support student learning of the 21st Century Skills. Consider how to leverage and customize Google Apps tools with primary students (e.g. turning off undesired Google Apps tools such as Gmail).
- Explore ways to capture evidence of student work to better understand the impact of the focus on the essential questions so the community and staff can see and celebrate the worthy outcomes (e.g. the seven survival skills) and the work students are doing. We encourage the inclusion of "soft" data in the evidence (e.g. reduction in SE referrals, alumni feedback, student research, increase in social media learning applications). None of the worthy outcomes identified by Wagner are assessed through tests, at least not through any of the tests currently available, so identifying other ways to recognize success will be imperative as the initiative evolves.
- We were impressed with the parents with whom we met - they seemed aware of and most interested in the district's technology integration work, and expressed support for (and have seen evidence of) the seven skills/dispositions on which the district is focusing. Some parents raised questions about the need for the district's emphasis on technology integration, and expressed worry that some students may be spending too much time in front of computers. Thus, we think it will be important for the district to organize ongoing parent education and communication to help them understand the role of technology in developing 21st Century Skills, and to provide opportunities for parents to voice their questions and concerns.

Summary

The visiting team thanks Dobbs Ferry Public Schools for the warm welcome and kind attention throughout the visit. We especially thank Doug Berry, Lisa Brady, and the remainder of the hosting committee who coordinated a visit that provided meaningful evidence and extensive

opportunity to spend time in the schools observing classes and interviewing students, parents, and teachers. Doug Berry's thank you message to the Tri-State team appeared in our email shortly after we left the district! This gesture, in our view, was the culture in action! The digital portfolio of evidence provided on a Tri-State website was a great touch for a focus on technology integration. The team consistently discussed how open the educators were in describing their commitment to integrating technology and the staff knows how proud the community is of their collective work. This trust is not to be taken lightly but something that the district should celebrate. The overall consensus among the visiting team was one of excitement as we experienced the culture of the Dobbs Ferry system, the widespread use of technology throughout the district, the willingness among teachers to innovate and take risks, and the overall readiness level of the district to transform and set the pace for the next level of work. The visiting team encourages the district to pause and take a collective breath to celebrate their successes and appreciate where they currently are in the initiative. This will allow the district to build upon its success collectively and collaboratively while moving the district forward within the culture that it has developed.