

Educator Standards Board

C. MASTER TEACHER APPLICATION/NARRATIVE

SECTION I: Candidate Information

- A. Name Melissa Sand
- B. School district and building(s) Princeton City Schools, Princeton High School
List all that apply
- C. Current assignment Art, grades 9-12
- D. Teaching license/certificate number OH1370169
- E. Area(s) of licensure Visual Art, grades K-12
- F. Total number of years teaching 11
- G. Degree(s) earned M.A. Education with a Concentration in Art, B.A. Art,
Teacher Leader Endorsement
- H. Date submitted 4/30/2013

A. Describe how you have demonstrated consistent leadership in your school community and the teaching profession.

During my time at Princeton High School, I have had the privilege to work with many individuals in a variety of leadership roles as various initiatives have been developed in our school. Within the past two years, the driving force behind many of my leadership roles has been to help promote and develop the use of technology by teachers with and for our students. During the 2011-2012 school year, I worked closely with one of our instructional coaches to help organize the staff professional development plan for the year. During this process, teachers were encouraged to volunteer their expertise in using technology to support best practice with students. As a teacher leader who supported this PD plan, I worked individually with teachers to help encourage them to share their work and to help organize their PD workshop in an organized presentation. I also helped our instructional coach implement the use of computer freeware (Edmodo) to help our teachers plan and schedule their PD workshops. During the PD workshops, I presented twice myself throughout our sessions. I introduced the use of a variety of technology based student portfolios and the use of Google's free presentation, email, and document creation software provided within our district. (as seen in evidence E1). I also helped to host a question and answer session about project based learning (as seen in evidence E1). During this school year, I saw many teacher trying new digital tools themselves and offering more opportunities for choice with their students. I began to see the most significant impact of the PD technology workshops during a Common Core planning workshop during the summer of 2011. During the week, I became one of the "go-to" people to help teachers collaborate together using some of the digital technologies we had shared the previous school year. Teachers shared curriculum planning, best practices for Common Core, and unit planners through our digital tools we had shared.

The PD work over the course of the summer and previous school year allowed me to see the need for more technology exposure and integration into our classrooms. As a result, I participated in Edmodo teacher training to receive certification in introducing Edmodo to my colleagues. This school year I have continued to work with our instructional coach to identify teachers who need or want extra help working with Edmodo, Google docs, or digital student portfolios and project-based learning. At the beginning of the school year, I presented three workshops to middle and high school teachers who wanted information and training in Edmodo. I created an instructional Edmodo group as a social networking platform where teachers who chose to use Edmodo could continue to access me and other colleagues for help. (as seen in evidence E1) Additionally, I have introduced the use of Edmodo and Google documents to our district art teachers as a means for communication and sharing artworks for the district Festival of the Arts. I also had the opportunity to share my knowledge and experience in digital technology by leading a workshop at the Ohio Art Educators Association annual conference. I presented information about digital tools twice over the course of the conference and shared with over one hundred art educators who work with kindergarten through post-secondary level students.

As a result of my efforts in leading opportunities for increasing best practice through the use of technology, I have been privileged to work with and share ideas with many educators over the past few years. I have had many face-to-face and online discussions with educators as we have shared ideas to help all our students find more success in our classes through the use of technology. Personally, I have become vested in the use of Edmodo as a social media tool with my students. It has become a venue where we share information and resources, plan projects together, assess progress, and build stronger relationships with one another. Also, I have been able to advocate for and begin two new digital arts classes in our department (Animation and Foundations of Digital Design- as seen in evidence E10). Now that almost two school years have passed since I first helped to introduce more digital technology to my colleagues, I have seen students become increasingly more supportive and reliant on using digital technologies because they understand digital technologies are another set of tools meant to help them become more successful in their work. Students have worked with me to expand their knowledge of certain technologies we have used in class for other assignments they have in other classes. I am looking forward to my newly appointed role as the Technology Coordinator for our southwest regional committee of OAEA for the next two years so I can continue to have an impact on the expansion of knowledge in technology for students and staff. Through the emails, online posts, PD workshop conversations, and my work with students,

I have witnessed that the more familiar my colleagues are with the technology, they are making advances with their students in my school, across our district, and throughout our southwest Ohio region. I am excited and proud to be a part of this movement to better serve our students and colleagues.

In addition to the leadership roles I have undertaken to increase the use of digital technology at many levels, I have also participated in a variety of leadership roles within our school and district. A district program I have helped to lead thus far has been the research and development of a possible STEAM (science, math, engineering, arts, mathematics) program (as seen in evidence E2) for our new 6-12 grade school. It was much of the work I have been doing with colleagues and students in trying to develop the use of technology over the years that has encouraged me to lead this project because I believe interdisciplinary studies are definitely possible and effective for student learning. During the 2011-2012 school year, I took the initiative to research STEAM, project based learning, and a variety of issues that could affect an expansive interdisciplinary program for our school. Then during the fall of 2012, I worked as a teacher leader with our building instructional coach to lead a committee (high school and middle school) that planned and presented a possible STEAM program as a poster presentation at the national STEMtech conference in Kansas City. I have continued to work on developing our possible program and look forward to serving as a teacher leader who could present this plan at the district level. A STEAM program could present our students with new methods for learning that could raise student motivation and performance to a different level than we currently have. Another leadership role I have undertaken this year has been to act as a PLC (professional learning community) leader for a research project I have completed this year with the Teacher Leader program I completed through the University of Cincinnati. As the leader of this PLC, I helped to work with teachers as we explored and continued to develop the resources in the STEAM program mentioned above (as seen in evidence E2). I wrote, organized and implemented an extensive PLC plan for working on this program with colleagues. As a result, my colleagues are better informed with interdisciplinary learning and can take this knowledge to their students. Additionally, I have also acted as a member of our school's Building Leadership Team (BLT) this year as the art department representative. As we do not have an official department chairperson now due to budget cuts, I have attended meetings to gather and disseminate information to my colleagues. I have participated in discussions in the building level and helped to analyze issues that need to be addressed. I felt it was important to participate with BLT not only as an art department representative, but as a teacher committed to strengthening the positive culture of our school. I am the co-leader for the Staff Relations Committee (aka The Crew) this year and have taken the conversations and issues introduced at BLT to this committee in order to find positive ways to support our colleagues. Other ways I have tried to improve school culture has been to volunteer for the past four years as the unpaid advisor for PHS Art Club as well as the designer for 70+ arts projects throughout the school (as seen in evidence E3) I believe that although these leadership roles have not been explicitly been recognized by our district, I have had a positive impact in building professional relationships with students, helping to market a positive image for our school, and helped students understand that the visual arts can be a powerful influence outside a classroom setting and that art making can be a community effort of expression unlike any other.

B. Describe how you have contributed to focused collaborative efforts with other educators, students, and families and/or the community to support student learning.

The experiences I have had as an art teacher at Princeton High School have introduced me to new opportunities for collaboration that have influenced me as a teacher, artist, and on the student learning opportunities in my classes. Perhaps the most significant chance for an initial collaboration occurred through my Commercial Art (Photoshop design) class when one of our PHS students passed away. The student was Jovante Woods who had a severe asthma attack in 2010 that sadly took his life. Jovante was a well-liked student by staff and students alike and his death was felt throughout our community. The previous year I had Jovante in class, and so his parents approached my principal and me with the opportunity for our students to create a logo for the foundation that would be started in his name (as seen in evidence E4). During the course of this project, I had students in my classes as well as other students throughout the school volunteer to work on a design in Jovante's memory. Students worked together with myself and each other to create a design that was respectful of Jovante's memory and supported the design elements that his family wanted. I even asked a friend of mine who is trained in graphic design to offer feedback to my students on their work through the process and then again at the end of the

project. I communicated regularly with Jovante's parents as they began to lay the foundation for the organization they were creating. My principal was often included in emails and discussions. Since I am not formally trained in commercial/graphic design, I had to work collaboratively with our technology education teachers to make sure my students were preparing the logo to be used on a variety of products and for a variety of media sources. To be sure, there were times throughout this project that I felt overwhelmed by the significance of what my students were attempting. However, the conversations between myself and Jovante's parents, my students, colleagues, and principals resulted in an opportunity for students to actively participate in a design project that reached far beyond their classroom experiences. Students had to work with their peers and myself to create a design that reflected the concept and level of craftsmanship appropriate for professional-level work (as seen in evidence E4). As a result, students had the opportunity to witness art making as a practical application for a real-life issue. In addition to design skills and new technology skills, students learned that art can have its own voice and that there are expectations for excellence in work that goes beyond visual arts as content learned in a classroom.

Since this initial collaborative project with the Jovante Woods Foundation, I have continued to search out and develop collaborative work that can support the success of our students at PHS. Now that I am in my fourth year of teaching Commercial Art, it has become a tradition that my students work to create the student agenda designs for the next school year. When many students first start my class, they are excited to know that they have this opportunity toward the end of the semester. This collaborative work between myself, students, and administration always becomes a process of exploring how our school's mission and vision should be visually portrayed. Students are encouraged to share their work with their peers and teachers so they receive significant feedback from a variety of sources. As the facilitator of this project, I survey staff before and throughout the design process to see what messages and images they believe our students may benefit from seeing on the agendas. Another collaborative project I tried with students during the 2012 school year was the Vans Custom Culture shoe design contest. While this contest divided student work into art, music, action sports, and local flavor design categories, I worked with students and my colleagues in similar ways that I explained above with the agenda project. Ideas and feedback for designs were shared between students, staff, and staff and students in order to develop the final designs. I look forward to the interaction with students as I help them to understand how far-reaching the work that they make can become.

Other opportunities for collaboration to support student learning are works in-progress for me. One project is the STEAM project (as seen in evidence E2) I explained in detail in the "Consistent Leadership" section of this paper. Although this project began as my own individual research, it has expanded to conversations and work I have done with individuals in my school, district, and teachers from other schools. I have worked closely with our building instructional coach, but have acted as a teacher leader to collaborate in organizing a PLC for this project twice this year. The first PLC between the building instructional coach, high school science teacher, middle school math teacher, and me resulted in a poster presentation at the national 2012 STEMtech conference. The second PLC work between eight high school teachers resulted in a program that could be used to introduce a more cohesive project-based and interdisciplinary program for our students. Also Princeton staff who are involved are looking forward to the possibility of this planning coming into action so parents and families are aware of the opportunity STEAM affords their students. Another in-progress collaborative effort of mine as an extension of the STEAM program is work that I am starting to plan with a local ceramic business, Funke Fired Arts. The education director and I are beginning work to provide a program for a team of interdisciplinary teachers to take classes that incorporate project based learning through interdisciplinary ceramic projects. I am looking forward to organizing these classes for any number of teachers in our region. Another collaborative work I am doing is with our southwest Ohio OAEA planning committee. I have been newly appointed as the technology chairperson but will work with our team to develop programs for teachers that will educate them in content and best practices for their students. Finally, I am also working on planning a summer program with a foreign language teacher at PHS as an enrichment program for students. This "Around the World" program will introduce students to a new language as well as give them opportunities to develop basic design skills on the computer.

With all of these experiences in collaboration, I communicate with families whenever a project might benefit their students or when students are finding success in the work we are doing. I often email parents to communicate with parents, but I also have a website that I use to post information and pictures. I send good news

notes home for significant events, and invite families to participate in our district events. The impact families can have on student motivation and success is a significant part of the success of the opportunities we have in collaborative projects.

C. Describe how you have demonstrated distinguished teaching through a focus on students and environment, fostering rich learning opportunities and creating a safe, enthusiastic learning environment in which all students can achieve at high levels.

As an elective teacher at PHS, I work with a diverse community of students in every one of my classes. I currently teach primarily beginning-level art classes with students in grades 9-12 who all have differing amounts of previous experience in seeing, understanding, and making art. Students definitely begin my classes with mixed emotions about their abilities and reasons for taking the class. Additionally, I work with students at every range of academic ability and with many ELL students (English language learners). Therefore, I focus on learning activities with a range of tools, resources, and assessments so all students can understand the reasons why they are learning and to promote more confidence in the work students are doing.

At the beginning of a lesson, I am keenly aware that students are sometimes nervous or uninterested in the content information that needs to be addressed. Therefore, as I introduce a lesson, I require a pre-assessment for the topics that need to be addressed. These pre-assessments range in type and amount of time required for each one, but I give students these pre-assessments so they have a more specific understanding of the skills and content information we will be addressing. Once I have an understanding of how much prior information or skills students have, I present students with information and examples they need that will help them conceptualize a final project for class and set goals for the work they want to do. Initially, I will give students a description of a project which includes references to Ohio's art standards, an outline of activities, a checklist for the project which includes an in-progress goal sheet, and a final rubric for self-assessing their work (as seen in evidence E5). By giving students this planning information, students understand the pace of a project and checkpoints for understanding they are expected to meet along the way. Additionally, with this information and tools I give students, I am able to give students feedback for the work they are doing and clearly make modifications for individual students that they understand. Throughout a project, students can use the checklist and goal sheet to self-assess their progress and quality of their work. Then this information can help students as we have group discussions and in-progress critiques about the project. While this is important for students to understand the work at hand, in-progress checks can also provide opportunities for students to make suggestions for extensions on projects or modifications that should be made to a project for the benefit for everyone in class. Sometimes I then modify projects or provide additional tools or resources for classes if student suggestions match the learning objectives for a project. I make sure to have challenge projects for students as extensions to their projects. Additionally, students who finish projects before their peers make work on enrichment activities (as seen in evidence E5) that either students or I develop so that these students continue to practice and refine their skills and content information. Once a class finishes a project, each student is expected to complete a final rubric (as seen in evidence E5) to assess their progress since the pre-assessment as well as write an artist statement that explains their progress and intent for making their project. The result of this process that I use with students from beginning to end of a project results in students completing projects that meet learning objectives based on Ohio Art Standards, assessing their work and progress, understanding their work in relationship to the work of their peers, and an understanding of what skills or information they need additional help to master. Students submit their work in a final portfolio where they can then track their progress from the beginning to the end of a semester.

The classroom culture in my project-based classes is dependent upon the personal responsibility students take to build the academic and creative environment for learning. I set the parameters for a strong learning environment by explaining expectations for students at the beginning of a semester and revisiting these expectations whenever necessary throughout a semester. I ask for student feedback any time these expectations are addressed. Parents are made aware of my expectations for behavior from the beginning of the semester when they receive my class syllabus. I prepare new material for students to work with or consider each day and make sure to start class on time so students understand the importance for the need for time to work. I also work to establish a strong classroom culture by assigning students daily points for participation so they can monitor themselves from day to day. Finally, I also use my physical classroom space to provide students with visual

references and examples to engage them in their work. However, it is each student's choice to work together as a team so all students may individually have the time and focus they need to complete their projects.

If a more positive classroom culture needs to be maintained, I have used both teacher and student generated methods to monitor behavior. Over the years, students and I have developed activities to redirect student behavior that might become classroom disruptions. If students use profanity, they are asked by me or a peer to say three words that rhyme with the profanity they could use instead. Also, students help to regulate the expectation that no one should say anything hurtful or inappropriate toward another student. Students know the expectation is that they say three nice things about the person that they were hurtful toward. Finally, students in my classes have also initiated a "buddy" system this year where each student is expected to have at least one other student supports him/her during our class. This buddy could help answer questions during class or provide support and encouragement if a student is frustrated in any way. If it happens that I need to intervene in a situation to give students consequences for their actions, I always make sure they understand the consequences are supposed to help a student refocus and they are a direct result of classroom or school rules that have been broken. With students who acquire teacher detentions, students who are not participating in class, or students who are emotionally disturbed during class, I have reflection questions (as seen in evidence E6) I use with students to help facilitate conversation to develop action plans with these students. By establishing a positive culture for student learning, my students and I have the opportunity to work together to assess student learning and goals for future projects.

D. Describe how you have demonstrated distinguished teaching through a focus on content, instruction, and assessment.

Although I work in a non-tested content area, I believe assessment is just as imperative in art as other areas for understanding student growth and progress so curricula, district initiatives, and teacher development are organized in response to student needs. It is this focus on assessment that has led me to a better understanding of how to organize instruction so students have the opportunity to master the required content. Since I began working at PHS, I have completed a M.A. in Education with a Concentration in Art as well as the Teacher Leader endorsement program through the University of Cincinnati. Additionally, I have participated in several technology-based workshops on my own time, the OAEA conference for four out of the last five years, and worked with our school's instructional coach to research and investigate new ways to explore content information. Upon returning to PHS, I have been happy to share content knowledge with my colleagues. I have discussed information with colleagues formally during PLC time and informally when my colleagues and I share ideas and concerns about our classes. Additionally, I have supported my colleagues through PD workshops in my own building, at our middle school, and during programs sponsored by our professional organization (OAEA). The most significant opportunities I have had to share with the most colleagues has been in digital technologies, but art content knowledge has been helpful to share within my own building.

As a result of my deepening content knowledge in art and digital technologies, I have been able to advocate and develop curricula for my classes that align with Ohio Art Standards and our school and district priorities. Working with my principals and PLCs has helped me to refine the activities for students in my classes. Most significantly, I have been able to develop a new course this year in Animation. I have used the Ohio Art Standards, Common Core reading and writing standards, and our school's initiative for increased use of technology in our classes to plan the activities and projects for this Animation class. Students in my class have been asked to perceive current and past animations, produce artworks with a variety of tools and materials, and then reflect upon the quality of their work as the Ohio State Standards require for intermediate art students (as seen in evidence E8). In order to incorporate Common Core reading and writing standards, I have introduced students to texts in the history and creation of animation. Students have been asked to write about the process of their work, about the reasons they have been inspired to make the work they do, and to compare and contrast their work to master animators. Throughout the course of Animation class, students are expected to try several different digital technologies to produce animation and create portfolios of their work. As these students move from my class into other classes, they will have acquired the skills and confidence to use some of these digital technologies in other classes.

The use of assessments with my students is imperative to maximize learning opportunities for all students no matter what their strengths. At the beginning of a semester class, I emphasize to my students that each student will have strengths in different areas that pertain to creating art in a classroom setting. Some students will become masters with art making with certain skills and tools. Other students will excel in understanding the significance of the history of making art and will be able to better articulate the influence of certain decisions artists have made in their work. Finally, some students will be the ones who generate fantastic ideas for art projects and might inspire others to develop their projects in unexpected ways. I ask students to complete a learning styles inventory and to seriously assess what part of art making is the most significant to them (as seen in evidence E7). Then throughout the semester, students understand their strengths and weaknesses as well as their likes and dislikes as we work through individual units. During the course of individual units, I provide formative assessments for students in skills and content knowledge as well as progress checks for project completion. Depending on the project and needs of the students in my classes, sometimes these formative assessments are individual and other times they involve receiving peer feedback during in-progress critiques. I believe this range of assessments throughout projects allows for optimum student growth because students can see their strengths highlighted in a variety of ways. These formative assessments are crucial as I facilitate project planning and any necessary modifications to help struggling students or challenge projects/enrichment activities (as seen in evidence E5) for students who are more advanced. Finally, the summative assessments in my classes are typically in the form of rubrics and artist statements (as seen in evidence E5) at the end of a project as well as midterm and final exams. The rubrics again are helpful for students to monitor their strengths and needs for future projects, and the artist statements offer students the opportunity to reflect on a holistic view of the progress they have made. The data I collect from rubrics and artist statements help me to layer any remedial work into the next project and reteach skills and concepts as necessary. Midterm and semester exams include opportunities for students to build comprehensive portfolios of their work as well as more direct assessment in content and skills to determine mastery. I always tell my students that I expect them to make significant progress throughout a semester class with me, no matter how much experience in art and design they have brought to my class. My goal for each student is that s/he discovers the style of art making s/he is most comfortable and interested in making, and s/he understands the ways s/he learns best to work toward individual goals. The use of all forms of assessment is critical for this discovery to occur.

The information and data that I collect from student assessments as well as my participation in leadership and collaborative projects has given me a more holistic understanding of student needs. At this time, I am working with my department PLC to craft end of course assessments and SLOs for our shared courses. The work we discuss in BLT centers around data from our Effective Schools survey and the North Central evaluation last year. At this time, we are working with data results in our individual PLCs to itemize specific initiatives that should be emphasized in our building. Additionally, I am personally interested in how I can help to continue develop the district initiatives of incorporating more technology into classrooms and planning a STEAM program for our new 6-12 school. While I am involved in several staff committees that are beginning to address the need for new initiatives, my own role in school and district initiatives is still developing. I am helping to collect and disseminate information to other teachers. I am ready to continue the work I have started in technology and STEAM as well as take on additional organization and implementation as the opportunities present themselves.

E. Describe your professional growth activities from the last three to five years

The professional development activities I have sought over the past five years have been choices I have made to learn new skills and content information that could benefit my students. I have been fortunate to be able to participate in a variety of activities at the local and regional level so I have been able to gain a broader understanding than I would if I only participated in our school professional development.

First of all, I have been involved in two post-graduate level programs at two area colleges between 2008 and 2013. I chose to pursue a M.A. in Education with a Concentration in Art through the College of Mt. St. Joseph because I knew that I needed a more in-depth understanding of content information for my students. While at MSJ, I chose a concentration in ceramics because student at Princeton are very much interested in learning more about this craft. I had very limited experiences in ceramics as an undergraduate and wanted to make sure I was prepared to help our students with this content area if the opportunity presented itself. However, as I was

immersed in this program at MSJ, I made the switch in our department from a fine art teacher to predominantly a digital technology design teacher. I still chose to attend a reoccurring ceramics workshop during the summer of 2011 at Funke Fired Arts to even further develop my skills and knowledge, but I knew my professional development goals needed to change. Therefore, after I earned my M.A., I chose to pursue the Teacher Leader endorsement program through the University of Cincinnati to further diversify my skills for students. Through this program, I was able to learn about leading PLCs, helping to organize school change, and took opportunities for research to explore topics in project -based learning and STEAM. As a result, I believe I have some very concrete tools and resources our school could use to begin a STEAM program for students (as seen in evidence E2). The work I have completed through this Teacher Leader endorsement program has helped me to organize and network within our school to plan for a STEAM program. In the fall of 2012, I was able to present a plan for STEAM at both the STEMtech conference in Kansas City and the Ohio Art Educator Association conference in Cincinnati. As a result of Teacher Leader endorsement program, I have also learned how to craft and refine teaching strategies in my own classroom while working in project -based learning, particularly with English Language Learners. Much of this research was inspired by a High Aims Problem/Project Based Learning Workshop I attended in the fall of 2011. After attending the PBL workshop, I realized that the work I do in the art classroom with my students needed to be further refined and analyzed in a way that I did not previously have experience doing. As a result of this research, I have more resources and tools to use with my ESL students so they can learn to successfully monitor their progress and learn content-area vocabulary(as seen in evidence E9).

Many of the other professional development opportunities I have explored over the past five years have been a direct result of my change from a fine art to primarily a digital art teacher at PHS. I have attended workshops in Dreamweaver, Adobe Photoshop Elements, Digital Photography, and Introduction to Graphic Design through the Art Academy of Cincinnati's community education program. I also attended EdCamp Cincy in the fall of 2012 and became an impromptu presenter for one of the sessions in Edmodo. As a result of all these workshops, I had the time to refine my skills with certain technologies that my students are expected to know to be college and career ready in the arts. I have been able to introduce more advanced opportunities in design with my students. This year I have been able to begin a new Animation class and effectively advocate for a new intermediate level to the beginning level digital design class we have (as seen in evidence E10) because I have the detailed information I need to support the addition of these classes in regard to best practice and the Ohio Art standards.

Additionally, an important advantage for my professional development choices has been that I have had enriching experiences in critical and creative thinking that I can then share with my students. In the summer of 2012, I attended the first Crayola "Champion Creatively Alive" for educators where connections were made between the four "Cs" of the 21st Century learning standards in support of the arts. This program helped me to return to my classroom to develop a more detailed tool (as seen in evidence E7) to help students determine their strengths for designing and thinking about art. On the regional level, I have also been an active member in the Ohio Art Educator Association by attending conferences, presenting at conference three times in 2012, and working as a membership committee chairperson in 2012. After my work on the conference committee this year, I was recently asked to serve as the southwestern Ohio local committee technology chairperson. The networking and information shared through my professional organization has helped me to find new resources to use with my students and knowledge how to advocate for my art programs. At the school level, this has transpired to work that I do on collaborative projects in graphic design for the school, in leading technology-based professional development in Edmodo and Google software, in advising Art Club, and volunteering as a BLT member. In the summer of 2012, I voluntarily attended the Common Core training in order to better understand the role of the arts in relationship to the changes that are happening. All of the work I do at the school level is work I choose to do to help promote the positive culture of our school, to better understand the interconnectedness of all content disciplines, and to promote additional opportunities for our students.

In the near future, I plan to continue work that makes connections between the professional development I have sought out in technology, art content, school improvement, and best practice in the classroom. In the summer of 2012, I plan to attend the STEAM Educator Certification Camp, which is the first ever for individual teachers and administrators. From this workshop, I plan to learn more about the STEAM framework, STEAM-based classroom management, STEAM Team creation & cultivation for educators and students, themes and existing

lesson plans to expand them to be STEAM curricula, and a basic fund-raising, sponsorship and community outreach structure. Additionally, this summer I also plan on continuing the work I am beginning with Funke Fired Arts as a community partner in our school and possible STEAM program. I also have plans to look for graphic design companies and individuals who would be willing to mentor both me and some of my students to help us with more advanced digital design information and skills. The work I am doing with my PLC and OAEA will provide easy access to more networking and shared experiences with other educators. With all of this professional development to look forward to in the near future, I am excited for the opportunities in art and technology that I can bring to my students.

Evidence to Support Master Teacher Portfolio

Melissa Sand

Evidence 1 pgs 11-12

Staff Training in Edmodo, Google, and PBL

Evidence 2 pgs 13-35

STEAM PLC Plan, Tools, and Resources

Evidence 3 pgs 36

Princeton City Schools 70+ Design Projects

Evidence 4 pgs 37-39

Jovante Woods Project

Evidence 5 pgs 40-51

Sample Project Description and checklist/goal sheet, Unit Plan, Rubric, Artist Statement, Enrichment Activities - use animation lesson

Evidence 6 pgs 52-54

Individual Detention with Sand, monitor participation, and "Tell Me" Emergency removal forms

Evidence 7 pgs 55-58

Learning Styles Inventory and Art Style Inventory

Evidence 8 pgs 59-63

Animation Activities aligned with Ohio Standards and Common Core

Evidence 9 pgs 64-95

Using Graphic Organizers with ESL Students in Project Based Learning

Evidence 10 pgs 96

Polaris Class Descriptions for New Animation and Foundation of Digital Arts classes (intermediate level)

Evidence 1 Staff Training in Edmodo, Google, and PBL

Princeton City Schools

This screenshot shows the Edmodo interface for the 'Edmodo_Staff Training Group'. The page features a navigation bar with search and account options. On the left, there is a sidebar with a list of groups, including 'Edmodo_Staff Training Group' which is highlighted. The main content area displays a grid of member profiles, each with a name and a small profile picture. The members listed include Ms. Melissa Sand, Mrs. Kelly Brown, Mrs. Marri Durham, Mr. Paul Hudnagel, Mr. Brian Lien, Mr. Daniel Rebbas, Dr. Bob Stark, Mr. Steve Watson, Mrs. Karl Acton, Mrs. Brooke N. Boyce, Mr. Michael Fadesley, Mr. Melissa Koenig, Mr. Dinetop Meyer, Mr. Jamie Sowders, Mr. William, Mr. Eric Walker, Mrs. Linda Adams, Mr. Dan Dockery, Ms. Valerie Habib, Ms. Jamie Lewis, Mr. Michael Popee, and Mr. Justin Wilson. On the right side, there are group settings, a 'Join Group URL', and a 'Recent Activity' feed showing login events for Anthony A. at Princeton High School.

OAEA Conference

This screenshot shows the Edmodo interface for the 'OAEA Secondary' group. The layout is similar to the previous screenshot, with a navigation bar and a sidebar. The main content area displays a grid of member profiles for the OAEA Secondary group. Members listed include Mrs. Stacy, Mrs. Holly Jenkins, Mrs. Dawn Batten, Mrs. Anne Cault, Tim Cook, Mr. Cameron, Mrs. Kate Delay, Mrs. Annette, Mrs. Emma, Mr. Fuller, Mrs. Amy Gratz, Mrs. Lindsay, Mrs. Terry Haynes, Mr. Tim Hildebrand, Mrs. Buffy, Mrs. Jean Ines, Mrs. Traci Keller, Mrs. Kristin Lee, Mrs. Wendy Martz, Mrs. Vonda, Mrs. Dawn Horne, Mrs. Denise Pannell, Mrs. Kim Roman, Mrs. Laurie Rosenthal, Mrs. Chrston, Mrs. Jacqui Schult, Amy Speth, Mrs. Peggy Glover, Mrs. Corinne Thayer, Mrs. Thomas, Mrs. Tricia Thornley, Mrs. Meena Vixie, Kristina Wheeler, and Mrs. Lisa Williams. The right sidebar shows group settings and a 'Recent Activity' feed with login events for Anthony A. and Clayton B. at Princeton High School.

Sample Collaboration through Edmodo

This screenshot shows a post within the Edmodo_Staff Training Group. The post is titled 'Grow a beautiful flower garden in this game specially designed for elementary school students' and includes an image of the game's interface. The post was made by Mr. Walker on Feb 20, 2013. Below the post, there is a reply from Mrs. Boyce dated Feb 20, 2013. Her reply discusses her current use of Edmodo as a tool for communication and collaboration, mentioning that she uses it to communicate during various lessons and to provide feedback to students. She also notes that she has utilized Edmodo quizzes and polls, which she finds to be effective for interaction. The right sidebar shows the group settings and a 'Recent Activity' feed.

Introduction to Edmodo



Edmodo is a free, secure social network for classroom use and teacher professional development. Collaborate with this tool to share content and ideas, and to access announcements and grades. Edmodo can be accessed online or through a portable device. Increase communication by using this tool with your students or with colleagues.

-Mobile connection: m.edmodo.com
-iPad: use the FULL VERSION-

-Creating your account profile

How to create a NEW account

1. Go to www.edmodo.com
2. Select to create a "teacher account".
3. You may select your own username, password, and email.
4. The title, first name, and last name that you enter is what others will see on your homepage.

Edmodo Staff Training
Group Code:
aequib

Once you have created an account in EDMODO, you may join a group:

5. Look to the left side of your homepage. Find "Groups". Then select "Join". Enter the code given to you by a group organizer.

-Creating groups (including parent access)

-Student badges (to recognize positive behaviors)

-Posting notes, alerts, assignments, quiz, polls, links, and files

- Tag Posts, link to posts, add posts to library
- Using the folders and files (alone or with Vikingmail)
- Calendar

-Exploring Edmodo professional development options

- Finding other teacher connections
- Using the Edmodo help

(Future use: Using the Edmodo Gradebook) -Currently, it's a 3 step process to transfer grades from Edmodo to Progressbook.

Callouts in the screenshot include:

- Home, Calendar, Grades, Library, Apps
- See/edit group members for the selected group on the left
- find connections -invite other teachers
- Change your profile picture -email -password -school affiliation -email/text notification
- Notifications: -see "turned in" assignments -alerts -comments for you to review -new group members
- Group code you can give to individuals to join
- Create or Join groups
- Select a group here: To view posts here:
- Professional Development Communities (for teachers only)

PHS PD to PHS PD 2011-2012

Online Communications (Vikingmail, Edmodo, Progressbook, and more) - Wednesday, November 30th - Melissa Sand

Turn In DUE: Nov 30, 2011

What: The internet provides so many opportunities to share information and resources with our students sometimes it's difficult to find the best one to use with the time that you have. This workshop will provide an opportunity to compare a few resources that are not social media sites. Features on Progressbook, Vikingmail/Google Apps, Edmodo, Weebly, and creating QR codes will be discussed. Then will you will have time to start building your own online communications and discuss how other teachers are using these resources. (Please save class documents and graphics that you might want to use on your H: drive or a flash drive.)

Where: Media Center (Main Library)

Show Less

Nov 27, 2011

Linda DiMarco - 1 Linda DiMarco
Nov 27, 2011

Show 21 more replies...

PHS PD - CLOSED!!!!!!!!!!!!
Nov 29, 2011

PHS PD to PHS PD 2011-2012

Ok, so I went to the PBL sessions...now what?? - Lizzy Hartman, Melissa Sand, and Heidi Messbarger - Naviance Lounge

Turn In DUE: Mar 22, 2012

Let's discuss and digest we learned from our full PD day on PBL. You will be given the opportunity to discover what resources you should be using now to start planning a PBL lesson/unit. PBL resources are available online and how easy, with a little searching, those resources can make your planning. Our goal is to spend most of this time answering your questions and providing guidance for those of you ready to jump into building a PBL lesson. Please be sure to bring your binders and any questions you may have.

Location: Naviance Lounge

Mar 19, 2012

Mrs. Randall - sonya randall-1
Mar 19, 2012

PHS PD - 2. Dave Buquo
Mar 19, 2012

Mr. Fritz - bob fritz #3
Mar 21, 2012

Type a reply...

Evidence 2
STEAM PLC Plan, Tools, and Resources

PLC STEAM Program
Goal Plan

1. What is the guiding topic for the Professional Learning Community?

The guiding topic was for our PLC to explore, define, and then find practical applications for interdisciplinary teaching and learning.

2. What is the purpose of the Learning Community Collaboration?

The purpose of this PLC was to plan an interdisciplinary program that is appropriate for a diverse cultural and socioeconomic population of students. In the end, our PLC developed the foundation for a transition to a new approach to teaching with an interdisciplinary program designed specifically for our school. Within the next five years, our student population will be developing into a more complex ELL population. Currently, our student demographics also indicate that more than half our students live in poverty and almost a quarter of our students have special needs. We do not expect our challenges for serving a diverse student body to change, but more changes will need to be made due to our emerging ELL population. The purpose then of an interdisciplinary program is to provide an opportunity for students to work with heterogeneous groups of their peers while providing the best supports for all students to succeed in demonstrating interdisciplinary connections in their studies.

Ideally, we wanted to create a PLC that would be able to not only create tools and planning for the new interdisciplinary program in our school, but actually be able to implement their use to help the planning of the program. However, from the beginning of this school year until this time, the importance of planning an interdisciplinary program has lessened in place of other issues and concerns in our building. We had difficulty trying to find leadership opportunities to take our project to the point where our products could be applied for practical use. However, we were still able to meet our purpose for the PLC in that we were able to create an action plan and specific tools for planning an interdisciplinary program in our school if and when the time is right.

3. What are the goals of the project? (What do you want to accomplish?) Which steps will you take first to reach each goal, and when will this step be done?

(see goal plan below)

By the end of this practicum, it was expected that we would have:

- analyzed the differences between STEM, STEAM, Project Lead the Way, and New Tech programs/philosophies
- selected and/or developed an appropriate means for developing a program of interdisciplinary courses in our building
- produced a plan to differentiate these interdisciplinary lessons that are sensitive to students with diverse linguistic and cognitive abilities in light of their cultural and economic influences

Due to the variety of individuals with whom we worked, our PLC actually was able to create a much broader set of tools and resources to be used for our potential interdisciplinary program. We were surprised by the number of teachers (particularly second semester) who were willing

to participate in the work we were doing and who wanted to see our plan implemented. Now that our project is finished, we are pleased with the products of our work which could not have been created without the variety of staff members who were willing to share their ideas and time for this program planning.

4. Who is the individual or group responsible for initiating and/or sustaining each step toward achieving the goal?
(see chart below)

During the course of this PLC, we had the experience of learning about the issues that can drive the culture and organization of our school. While we took responsibility for continuously looking for answers for developing the products of our PLC, we realize now that we were somewhat naive in understanding how far reaching our plan could be used. In the future, we now know of staff members who are knowledgeable and interested in possibly implementing change. However, we would have to find more concrete avenues for advocating for our work to stakeholders other than our colleagues.

5. What final product will be accomplished through the Learning Community collaboration?

- a vision for an interdisciplinary program for our 6-12 building which will include:
 - comparison of a variety of interdisciplinary curricula/philosophies
 - action plan for developing interdisciplinary courses in our building
 - a checklist for assessing new interdisciplinary courses
 - a list of best practices that will help to differentiate interdisciplinary lessons
 - expectations for outcomes that includes all learners that can be shared with students, families, staff, and community stakeholders in the future

Goals	Who is Responsible	Dates
<u>1. Analyze the differences between STEM, STEAM, Project Lead the Way, and New Tech programs/philosophies</u>	Team	1/7/13-2/4/13 (4 weeks)
1a. STEM analysis and discussion	Team Member #1	1/14
1b. STEAM analysis and discussion	Team Member #2	1/21
1c. Project Lead the Way analysis and discussion	Team Member #3	1/28
1d. New Tech analysis and discussion	Team Member #4	2/4
2b. Presentation to our PHS instructional coaches of the progress	Melissa and Chris	4/5 and 4/8
2c. Revise information to PHS administration/instructional coaches , as necessary	Melissa and Chris	4/8-4/10
2d. Develop structure for unit plan for each interdisciplinary course	Team	2/4/13-4/15/13
<u>3. produce a plan to differentiate these interdisciplinary lessons that are sensitive to students with diverse linguistic and cognitive abilities in light of their cultural and economic influences</u>	Team	
3a. Analyze subgroups of our student body	Team	3/11/13-3/18/13
3b. research information about best practices with diverse learners	Team	3/18 /13-4/15/13
3c. develop list of best practices to present to staff/instructional coaches	Melissa and Chris will provide instructional coaches with the tools and resources collected- share in a Google Doc folder	4/15

Scope Plan

Duration of the learning community project	January- April 2013
Depth of the learning community project	-analysis of a diverse topic -evaluation of a choice for practical use -development of tools
Technology needed for the learning community project	-computer research is required -computer presentation tools -shared/common folders online for sharing work (Google Docs) -graphic representation of the various programs to be considered in a Google Docs spreadsheet that can be shared will all staff
Complexity of outreach the learning community project will involve	6th-12th grade program
Partnerships the learning community project will involve	-teachers, instructional coach, principal -community resources such as Knovation, Funke Fired Arts, GE, etc. (with future applications)
How and/or extent to which the results of the learning community project will be shared	-instructional coaches -6 to 12th grade staff who will be working with this program -principals -central office administration -school board -community partners and with student families

2. Submit the data compiled from your assessments as well as a brief comment on what the data indicates to you.

At the beginning of our PLC process, Chris and I were involved with one other teacher and an instructional coach. As we selected our mission and shared goals for this PLC, three out of four PLC members had previous discussions about interdisciplinary lesson planning. However, no one had been involved with a formalized PLC process to develop single interdisciplinary lessons, much less tools, resources, or a philosophy for an entire program plan.

During the course of our PLC second semester, we worked with six different teachers and one instructional coach. One of these six teachers was the same teacher with whom we worked first semester. The assessment below shows the results of how effective these staff members considered our PLC to be (our own opinions are also included):

Effectiveness of Our PLC

	1	2	3	4
Shared Mission: Purpose, Values, Goals			7	2
Learning Focused Collaboration		5	4	
Collective Inquiry		1	8	1
Action Research				9
Results Orientation for Quality Work			4	5
Collective Responsibility		2	7	
Positive Orientation			6	3
Mutual trust, respect, and support			1	8
Establish norms for procedures, including use of agendas, protocols, reporting mechanisms, etc.		8	1	
Time and Resources			9	
Commitment to PLC sustainability and growth			4	5

Overall, this data from our final survey shows that our colleagues believed that the work we were doing together was effective

and could benefit our students and school culture in the future. While our colleagues felt supported and open to discuss our shared mission, values, and goals, there were some interpersonal tensions that some of our colleagues noticed throughout the process. It was difficult to establish norms for sharing information as we developed so many different products for this program between different staff members and without input and decision-making from administration to then implement use of our products. Although our colleagues felt a collective responsibility to ensure the success of all students in this new program we were developing, it would have been better to leave our PLC team members at the end of the process with a more concrete understanding of the impact of our work even though we will not be using the products we developed at this time.

3. State what product was created as a result of your work and briefly explain how it will benefit your school/student learning.

The following list are the products we created during our PLC:

- comparison of a variety of interdisciplinary curricula/philosophies: STEM, STEAM, Project Lead the Way, and New Tech
- an action plan for developing interdisciplinary courses in our building
- a checklist for assessing new interdisciplinary courses
- expectations for outcomes that includes all learners that can be shared with students, families, staff, and community stakeholders in the future
- description of characteristics of a successful student in this program
- lists of possible classes
- internal and external resources
- an analysis of the students in our building so we understand the diverse needs of ESL and students with special needs
- a unit plan that can be used for interdisciplinary planning
- a list of best practices that will help to differentiate interdisciplinary lessons

At the end of this project, we believe we have the tools and resources prepared for sharing and/or for use (depending on the documents). While we would have liked to share our final products this semester with principals and more staff members, we realize we may have to wait for a better time for that opportunity. We have products that can be used, so we are satisfied to work with our instructional coaches when they think the time might be right to advocate for an interdisciplinary program that has plans in place to support ESL and students with special needs. When the time is right, we believe the tools and resources we have created will help staff members understand the broad scope of planning that will be required for this program. If staff members are presented with information at the beginning of an implementation process, we believe the transition to this new program might be easier and more effective for everyone in their work.

4. Submit a list of resources that were actually useful for your PLC work.

The resources selected for our program was to provide background information on STEM, STEAM, Project Lead the Way, and the New Tech Network. This information will then be used by our staff to plan and implement an interdisciplinary program of studies in our school for our diverse learners.

Boix-Mansilla, V. (2010). *My guide to interdisciplinary teaching and learning*. Manuscript submitted for publication, Graduate school of education, Harvard University, Cambridge, MA, Retrieved from <http://balimyp.files.wordpress.com/2010/05/myp-guide-to-interdisciplinary-teaching.pdf>

Bottoms, G. (2007). Treat all students like the "best" students. *Educational leadership*, 64(7), 30-37.

Drake, S. (2012). *Creating standards-based integrated curriculum: The common core state standards edition*. (3 ed., p. 232). London, UK: Sage.

Jacobs, H. (2010). *Curriculum 21: Essential education for a changing world*. (1 ed., p. 251). Alexandria, VA: Association for Supervision & Curriculum Development.

Author Abstract: This source introduces the following topics:

Kuchak, D., & Eggen, P. (2012). *Learning and teaching research-based methods*. (6 ed., p. 439). Boston, MA: Pearson.

NTN. (2012). *Ntn:about us*. Retrieved from <http://www.newtechnetwork.org>

Piro, J. (2010). Going from stem to steam. *Education week*,29(24), 28-29.

PLTW. (2012). *Overview:pltw*. Retrieved from <http://www.pltw.org/>

White, H. (2010). *Steam – not stem whitepaper*. Retrieved from <http://steam-notstem.com/articles/whitepaper/>

Yakman, G. (2012, 08). Recognizing the a in stem education. *Middle ground:The magazine of middle level education*, 16(1), 15-16.

Yakman, G. (2012). *Steam: A framework for teaching across the disciplines*. Retrieved from <http://www.steamedu.com/index.html>

Zemelman, S., Daniels, H., & Hyde, A. (2012). *Best practice, fourth edition: Bringing standards to life in america's classrooms*. (4 ed., p. 304). Portsmouth, NH: Heineman.

5. Complete a reflection using the Bullock and Hawk model below.

a) Description

The experience of developing and sustaining a professional learning community aligns with both the Standards for Ohio Educators (Standard 6.3-7.3) as well as the Standard for High Quality Professional Development. If an educator is actively engaged in the planning of a PLC, s/he is committed to working with other teachers, administrators, and staff so that a carefully crafted and purposeful plan for professional growth is followed. Over the course of a PLC, there should be continuous development as teachers strive to make positive changes in instruction, in their schools, and in helping students find success. As these changes are made, teachers in a PLC should always act in a professional manner so that they are within the realm of professional ethics and legal codes of conduct. In summary, teachers who develop and sustain PLCs need to understand how to initiate positive change, work effectively with colleagues, monitor progress, and revise plans as necessary so that the work of the PLC reflects the best interests of a school, its students, and its staff.

b) Analysis

The high school at which we are working is in the midst of significant cultural changes that will be driving forces for the need for different types of instruction in our building. The voters in our district have passed both a building levy and an operating levy for our schools. The monies from the building levy will produce a new 6-12 grade facility for our students. This will be the first time in our district's history that students will be taught in a 6-12 grade building. Students will be provided with all the newest opportunities for technology use in our school as well as shared common areas. Teachers will be encouraged to use shared spaces and redesigned classroom environments to engage students. With so much excitement revolving around the new school, our district has also experienced significant financial losses due to the loss of tangible personal property tax that used to provide a significant amount of revenue for our schools. As a result, we experienced significant reductions in force in our middle school and high school two years ago. Staff morale has been low, and budget cuts continue to occur each year. Over the past two years, we have had to trim over \$2500 in spending per pupil. While the operating levy that voters passed last year saved the elimination of elective and extra-curricular opportunities for students, now departments have to find creative solutions for maintaining academic excellence. Our school earned the "effective" rating during the 2010-2011 school year and 11 out of 12 indicators but did not meet AYP for economically disadvantaged and students with special needs. Our school is currently one of the most diverse high schools in the state when one examines our racial, cultural, and socioeconomic student demographics. Our student population of 1653 students was divided into diverse subgroups, reporting 55% Black, 32% White, 6.1% Hispanic, and 3.1% Asian or Pacific Islander. We maintained a graduation rate of 93.9% although 51.2% of our students lived in economically disadvantaged homes, 19% of our students had special needs, and collectively our students speak 30+ languages at home. Students met the indicator for all portions of the Ohio Graduation Test except for Science. Within the next five years, more changes will continue to occur as our student demographics are projected to represent the first school district in Ohio where the students will be equally proportioned into 33% White, Black, and Hispanic subgroups, our population of students who are economically disadvantaged will rise above 60%, and we will have an increasing population of students (currently 14.5%) who are transient.

With all of these changes occurring culturally and financially within our district, our principal is concerned with maintaining the dedication to excellent academic opportunities that will help to foster college and career-ready students. Our high school is in need of a

individualized program that will meet the needs of all students as well as allow for and encourage growth in 21st century learning. Our staff was engaged last school year with immersion workshops in technology and Common Core training (which includes revised state standards as well). With this foundation in mind, we discussed the opportunity to study and develop a PLC around the topic of planning interdisciplinary curricula that is appropriate for a diverse cultural and socioeconomic population of students. With a unique new 6-12 grade school building, staff will be able to share more resources than ever before and regularly access technology as a teaching tool for our students. The breadth of information to students during the school day will then both deepen and diversify. In the end, the work from our PLC will be laying the foundation for the possibility for a transition to a new approach to teaching with an individually-designed interdisciplinary program for an evolving student population. This work proves that there is a need for our school to take full advantage of the opportunities that are developing due to our cultural, physical, and organizational changes. While the work will be intense to implement the action plan developed from our PLC project, it will be our advantage to work together to find the connections between disciplines and commonalities in expectations for learning.

c) Planning where to go next

As a result of the work of our PLC, our team of teachers has had the opportunity to think about interdisciplinary learning in light of the needs of our diverse student population. The work from our team has produced a set of tools that can be used by both individual teachers as well as teacher teams as they planned shared lessons. Most importantly, several teachers have said they will be interested to use the interdisciplinary unit planner. Even if they plan to teach just their own classes, teachers appreciated having this tool so they could actually see where and when considerations for interdisciplinary learning should be happening. Additionally, the list of best practices is going to be a resource for teachers working with ESL students and students with special needs.

We believe our team of teachers has been influenced to work together with shared goals in the future. Already, we have had discussions amongst each other about the possibility of shared lessons and resources. Without the PLC this school year, this interactions most likely would not have happened. Both Melissa and an instructional coach would like to extend their professional learning in the local STEM/STEAM movement and plan to pursue membership in the Cincinnati STEM Partnership. Also, several teachers have expressed an interest in more professional development for working with ESL students. We have made contact with a team member from the Hamilton County Education Service Center to help us develop more culturally responsive practices in our classrooms. In the future, we believe that revising school policies to include more culturally responsive practices will be an important step to best support our students as our school culture continues to significantly change over the next few years. Through the work of this PLC, we have strengthened the collegial relationships between teachers that will help to build resources for our students.

6. Write a personal reflection (circa one page) on the application of building shared goals, managing shared work, and assessing for shared accountability. (What did you learn, personally, as a result of this experience in the teacher as leader?)

This PLC project presented us with opportunities to work in the capacity of self-directed teacher leaders in our building that we may not have individually initiated under regular

circumstances. In the beginning, we both agreed that developing plans for an interdisciplinary program could be important for our school. Our school board had already adopted the resolution to develop a STEAM program in the future, so we both knew we wanted to help shape this program. The shared vision of this work was clear to both of us even though we both initially often found ourselves planning the program through the viewpoint of our own disciplines (art and science). In planning specific goals for this PLC project, we worked together to plan holistically for all students who might be a part of the interdisciplinary program. Additionally, we knew that we wanted to create specific tools and a list of resources that would be easy and efficient for teachers from any discipline to use. We believe that part of the strength of this PLC project were the opportunities we had to share our viewpoints with one another as the initiators of this project. In any other circumstance, we do not believe we would have as thoroughly developed the scope of this project without the help from each other.

Managing the shared work for this project proved to be a daunting task throughout the PLC project, particularly because it was not familiar for either of us to be in the role to assess our colleagues' work. As teacher leaders, we have both worked with other staff members on projects for our classes. In those situations, the personal relationships we had with our colleagues laid the foundation for good working experiences during a shared project. However, in this PLC project, we had to act more like project managers since we were trying to pull together many different staff members for different products. It was difficult to know exactly what to do when we assessed the progress that was being made and found that some work could not be finished until we had contact with a specific person. Then we had to try to assess how much we could do with the people who were available and decide who would pursue the work that needed to be postponed later. We learned that with such a complex project that involves a variety of disciplines, amount of support needed at the teacher and administrative level, and information from many different resources that this project had many moments where parts of the work had to be postponed even though we definitely wanted to finish it before moving on to another part. In working together as teacher leaders, we had to juggle our full teaching loads and still find time to communicate about all these complexities and assess how quickly we could move the project forward.

In the end, we are satisfied with the work that we accomplished. As teacher leaders, we have learned that "over-communication" is necessary to complete a complex project. Finally, we learned that individuals must consistently assess the parts of the project they choose to manage as well as look for feedback from others so that each part can be brought to completion no matter how difficult the bureaucracy of a school system can sometimes become.

7. List what you see as the advantages and disadvantages of using the PLC to create needed change. Briefly explain what is necessary to make the PLC a viable tool for reform? (You might consider hindsight's perfect vision...)

From the onset of this project, we were both supporters of the PLC model. We both agreed that PLC offered concrete time opportunities to dedicate to projects and problem-solving with our colleagues that would not typically be addressed. The information available to a PLC can be limitless due to the experiences and commitment of PLC members. Additionally, if a PLC becomes an accepted part of a school culture, the mere existence of the PLC sometimes validates the authenticity for the work that is accomplished. Other staff in the

school might look at the issues addressed by a PLC to be more urgent or relevant because it is a team of professionals who are working together to solve problems.

After working through the PLC process specifically as PLC teacher leaders, we have realized that there can be disadvantages to a PLC. First of all, when a PLC is not specifically part of a school's professional development schedule, it can be difficult to find the time or ways to best communicate with colleagues. Additionally, although the work of a PLC can be purposeful and well-organized, there is nothing to say that this work can be used to directly influence school culture. A PLC can be respected for the work accomplished, but a single PLC is not often a major player in driving the school's culture or need for change. A careful balance needs to be maintained for those teachers involved with the work of a PLC so they feel validated in the work they do, and so they are encouraged to finish it.

Therefore, we have learned that a PLC may need to be very flexible in how it is organized so it can become a viable tool for reform. While some PLCs may function with very specific meeting times and agendas, we found that our PLC needed to work in response to the time and resources our colleagues had available. In the end, the work was successful so we were able to meet our goals. However, we had to be very aware of working together to understand our shared responsibilities while maintaining a clear mission for the work we were trying to do. In order to actually create reform in a school, a PLC must be consistent in the work and clearly communicate concerns and successes with one another. In the end, the more accustomed PLC team members are to working together, the more satisfied they will be with the work they have accomplished together and the future tasks they may be able to address.

STEAM TOOLS and RESOURCES

Action Plan for developing new classes

Summer-August

1. Analyze test scores to target content standards.
2. listing themes that correspond to the power standards that need to be addressed.
3. find teachers who have content knowledge/skills/license necessary to teach within the themes.
4. Teacher create pacing map based on content standards.
5. Teachers align pacing maps into one cohesive unit.
6. Teachers plan for resources and supplies.
7. Teachers decide on internal and external resources available.

October

8. Final plan is presented to administration, guidance counselors
-Check title and content for NCAA requirements
9. Revise as necessary

November-December

10. Present to school board for approval

By January

11. Add to Polaris (student handbook of classes)

Checklist for assessing new interdisciplinary courses

Curriculum based on data

Curriculum based on standards

Licensed teacher available- with skills and content knowledge

Summative assessment clearly links to standards

Time available for teacher collaboration

Internal Resources available

External Resources available

Supplies available

Unit Planner

Teacher(s):	Unit:	Expected Unit Dates:
Length of Unit:	Shared Unit Topics	Grade Level(s)/ Class:

Topics within content areas:		
English	Math	Science
Social Studies	Art	Music
Physical Education	Health	Foreign Language
Business	Technology Education	

Issues to address	
<u>English Language Learners</u>	<u>Special Education</u>

Content Area Standards

CCSS Reading Literature	CCSS Writing
Listen for - Retell - Define - Find the main idea - Compare - Summarize - Rehearse - Persuade - Write	

Deconstructed Standards

I CAN...

Essential Question:

Summative Assessment(s): (i.e. Quarterly/Semester Exams, Performance-Based)
--

Key Text(s):	Informational Text(s):
---------------------	-------------------------------

Best Practices (What Best Practices are you implementing during this unit? Reference Best Practice Resource Handout)

Activities and Assessments	
-----------------------------------	--

Shared Interdisciplinary :	Dates:
-----------------------------------	---------------

Individual Teachers:	Dates:
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Materials and Resources Required

Opportunities to showcase summative work/assessments

STEAM Curricular Elements

http://www.21stcenturyschools.com/Critical_Attributes.htm

CRITICAL ATTRIBUTES

All frameworks for our units of curriculum include the following elements:

- Interdisciplinary
- Thematic
- Project-Based
- Research-Oriented
- Connected to Community - local, state, national and global
- [Global Classroom](#) - students will use the Internet to conduct research as well as to create and publish, and will collaborate with students, organizations, and experts from around the world in research projects.
- Multicultural
- Authentic Assessments - performance-based and rubrics
- [Multiple Intelligences](#)
- Multiple literacies
- Multiple Media Literacies - students will utilize media literacy skills to analyze and critique as well as produce media messages
- Critical Pedagogy - all frameworks will address issues related to social justice as well as helping the students learn to critique what they see and hear in the world, then envision possibilities for improvement and make and implement plans of action for personal and social change.
- State and National Standards - teachers will be sure that all standards are met within the units.
- Assessments, Activities, Materials and Desired Outcomes are fully aligned
- Multiple intelligences
- Service-learning possibilities
- Provide for parental participation and contribution

All Frameworks include:

- Individual, small group and whole group activities, instruction and assessments
- Utilize multiple forms of media for implementation and assessment
- Strategies for developing independent and interdependent students
- Resources - from recommended children's literature to web sites, agencies and organizations

Instructional Strategies

<http://olc.spsd.sk.ca/DE/PD/instr/categ.html>

Direct Instruction

- **Possibilities include**
 - [Structured Overview](#)
 - [Lecture](#)
 - [Explicit Teaching](#)
 - [Drill & Practice](#)
 - [Compare & Contrast](#)
 - [Didactic Questions](#)
 - Demonstrations
 - Guided & Shared - [reading](#), listening, viewing, thinking

Interactive Instruction

- **Possibilities include**
 - [Debates](#)
 - [Role Playing](#)
 - Panels
 - [Brainstorming](#)
 - [Peer Partner Learning](#)
 - [Discussion](#)
 - Laboratory Groups
 - [Think, Pair, Share](#)
 - [Cooperative Learning Groups](#)
 - [Jigsaw](#)
 - [Problem Solving](#)
 - [Structured Controversy](#)
 - Tutorial Groups
 - Interviewing
 - Conferencing

Indirect Instruction

- **Possibilities include**
 - [Problem Solving](#)
 - Case Studies
 - [Reading for Meaning](#)
 - [Inquiry](#)
 - [Reflective Discussion](#)
 - [Writing to Inform](#)
 - [Concept Formation](#)
 - [Concept Mapping](#)
 - [Concept Attainment](#)
 - [Cloze Procedure](#)

Independent Study

- **Possibilities include**
 - Essays
 - [Computer Assisted Instruction](#)
 - [Journals](#)
 - [Learning Logs](#)
 - Reports
 - Learning Activity Packages
 - Correspondence Lessons
 - [Learning Contracts](#)
 - Homework
 - [Research Projects](#)
 - [Assigned Questions](#)
 - Learning Centers

Experiential Learning

- **Possibilities include**
 - [Field Trips](#)
 - [Narratives](#)
 - Conducting Experiments
 - [Simulations](#)
 - Games
 - Storytelling
 - [Focused Imaging](#)
 - Field Observations
 - [Role-playing](#)
 - [Synectics](#)
 - Model Building
 - Surveys

Instructional Skills

- **Possibilities include**
 - [Explaining](#)
 - [Demonstrating](#)
 - [Questioning](#)
 - [Questioning Technique](#)
 - [Wait Time](#)
 - [Levels of Questions](#)

Best Practices for ESL and SPED

	SPED	ELL	ALL
1. Graphic Organizers for project planning			
2. Graphic Organizers to assess progress			
3. TEACH method http://www.familieswithasd.org/node/318 http://teachinglearnerswithmultipleneeds.blogspot.com/2008/02/slide-show-of-teach-type-tasks.html			
4. Task Analysis http://autismpdc.fpg.unc.edu/content/task-analysis			
5. PECS (Picture Exchange Communication System) Boardmaker Writing with Symbols			

Block Scheduling

<http://www.menc.org/resources/view/block-scheduling-resources>

GLOSSARY

Block scheduling

4 x 4 Block Schedule: Four classes, approximately ninety minutes in length, every day for the first semester. Four completely different classes, again ninety minutes in length, every day for the second semester. Each class equals one credit.

A/B Block Schedule: (also known as the alternate plan) Four classes, approximately ninety minutes in length, meeting every other day ("A" days) for an entire school year. Four completely different classes, again ninety minutes in length, meeting on alternate days ("B" days) for an entire year. Each class equals one credit.

Combination Block Schedule: A combination of 4 x 4 and A/B block schedules.

Flexible Schedule: A combination of 4 x 4 and A/B block schedules, but class length varies from day to day. One example: On three out of every five days throughout the school year, each class could be 90 minutes in length. On the other two days, designated as Advisement/Resource Days, each class is 75 minutes in length. An Advisement/Resource Hour is 60 minutes in length.

All of the above from: [The Change Process and Alternative Scheduling](#), accessed 6/4/06

Intensive Block: In this format, students attend two core classes at a time. These core classes can be coupled with up to three other year-long elective classes. Students complete the core classes in 60 days and then move on to another two. School years are organized into trimesters (Jones, 1995; Canady & Rettig, 1995). Read more at www.nwrel.org

Modular: the modular schedule system is similar to the traditional block schedule, but differs in that it allows for each day of the week to have classes (sometimes referred to as "mods") scheduled in a different order.

Modified block: "build your own" block schedule; e.g. schools may have students attend school based on a 4 x 4 block on Monday through Thursday, and a regular 8 period schedule on Friday. Or, they may have two blocked classes in a day, combined with three regular periods (Rettig and Canady, 1996). Read more at www.nwrel.org

Parallel block: The parallel block is used primarily in elementary schools, whereas the modified block, alternating A/B, the 4 x 4 block, and the intensive block are used primarily in secondary schools. Parallel block takes a class of students and divides them into two groups. One group of children stay with their classroom teachers for instruction in a subject such as math or language arts, while the other group attends physical education or music, or visits the computer lab; after a prescribed length of time

the two groups swap. This schedule provides all students with a more individual learning experience (Canady, 1990). Read more at www.nwrel.org

Pullout: elective classes that take some students, but not all students, out of the regular classroom to participate in group practices or individual lessons. [MENC's Position Statement](#)

Trimester: The instructional year is divided into three cycles.

Year-round: Schools that follow a year-around schedule do not literally meet for the entire year. The instructional year is divided into four cycles, which generally run from late July-September, October-December, January-March, and April-early June. Each nine-week instructional cycle is followed by an approximate two-week break, and other seasonal breaks (i.e., Winter, Spring) are included.

Web Resources

Website	Creator	What can be found on this site?
http://www.oaae.net/index.php?option=com_content&view=article&id=58&Itemid=114	Ohio Alliance for Arts Education	-specific resources for advocacy, schools who participate in STEAM, community partnerships
http://www.artstem.org/?p=1328	ARTStem is dedicated to forging a deep and innovative relationship between UNCSA (University of North Carolina School of the Arts) faculty and public school educators by promoting collaborations that explore the relationship between learning and teaching in the arts and the so-called “STEM” disciplines of Science, Technology, Engineering, and Mathematics. During 2009-2010, ARTStem involved a group of eighteen faculty from across UNCSA and R.J. Reynolds High School. This year, ARTStem aims to generate a series of faculty projects that will bring ARTStem core ideas to a broader set of students, instructors, and	-Links to websites and examples of: art/science. Music/science dance/STEM Film/TV/ STEM MUSIC/STEM THEATER/STEM

	staff at both institutions.	
http://steam.cs.ohio.edu/index.php	Ohio University	The STEAM (Science and Technology Enrichment for Appalachian Middle-schoolers) project, funded by the NSF GK-12 program, aims to broaden graduate education for engineering students at Ohio University and improve learning in science courses for middle schoolers at surrounding middle schools.
http://mosaicaeducation.com/2011/07/28/steam-academy-of-youngstown-opens-on-august-8th/	Mosaic Education	STEAM K-8 school in Youngstown, Ohio- just open August 2011
http://www.changemakers.com/stemeducation/nominations/seed-money-stemarts-us-and-s-korea-collaboratory-george	Ahoska- Changemakers	
http://meartsed.wordpress.com/2010/01/11/reaching-students-through-stem-and-the-arts/	Maine Art Ed	-National Science Teachers Association article on the necessity of arts and creativity - <i>From STEM to STEAM</i> Megan Simmons, education program manager for the Institute for the Study of Knowledge Management in Education (ISKME), a nonprofit research institute in Half Moon Bay, California, recently led a workshop at a California Science Teachers Association conference called <i>From STEM to STEAM: Incorporating the Arts Into Science Learning.</i>
www.oercommons.org		

/browse/tag/STEAM		
http://wiki.oercommons.org/mediawiki/index.php/STEAM		
http://www.aep-arts.org/files/publications/arts_integration_book_final.pdf	<p>Suggested by Nancy Pistone- Nancy Pistone Fine Arts Consultant (614) 466-7908 nancy.pistone@ode.state.oh.us</p> <p>Committee for the Arts and Innovative Thinking (CAIT)- through ODE – (Kristen Walker--Closest teacher 10-11 school year from Clinton Massie)</p>	Options for various levels of arts integration
http://www.edutopia.org/search/apachesolr_search/Connecting%20STEM%20and%20Arts%20%28TEAMS%29%20to%20Spur%20U.S.%20Innovation%3A	Edutopia- authored by Betty Ray	**Particularly part 4 of 5 Ohio's TEAMS model http://www.edutopia.org/blog/ohio-arts-integration-stem-initiative
http://artiseducationcleveland.org/	Cleveland Ohio Metropolitan School District	<p>Art is Education program- developed in 3 schools currently</p> <ul style="list-style-type: none"> - The Art is Education Collaborative is made up of 30+ arts, cultural, educational and philanthropic organizations in the greater Cleveland area, all of which serve a number of programmatic, advisory, advocacy and administrative roles in the project. - <p>http://artiseducationcleveland.org/what.php</p>

		Alludes to their alliance to STEAM
http://q21.org/node/14	NYC school- Quest to Learn	-Uses technology and interdisciplinary approach to 6-12 curriculum -
http://www.battelleforkids.org/About_Us.html?sflang=en	Battelle for Kids	-non-for-profit that "specialize in creating strategies that advance human capital, the use of strategic measures, the implementation of effective practices and communication with all stakeholders in schools."

Character Development	names, body type, ethnicity, race, languages spoken, skills/abilities, family, friends, job, personal style, personification								
Systems	body, eco, games								
Monsters and heroes	conflict, resolution, problem solving, superlatives								
Communications	digital, hand-crafted, persuasion, informational, media's influences								
Human Rights	cultural views, geography, politics, history								
Discord/Harmony	superlatives, systems, structure, adjectives								
Travel	geography, economics, time, resources, transportation								
Traditions	culture, countries,								
Digital VS. Analog	technologies, history								
Consumerism	economics, product design, media influence, budgets, financial responsibility, inflation								

STEAM--Implementation and Philosophy

-PHS Model

--2011-2012 Traditional

---Independent Model of courses and content

--2012 PBL Implementation

---Multidisciplinary approach 2 or more disciplines organized around a theme

OR

Interdisciplinary organization of most courses around a common theme

---PBL framework for planning some units/lessons

---Real-World applications for content information

---Emphasis on 21st Century Skills <http://p21.org/overview>

--2013- PCMS STEAM Implementation / 2014- PHS STEAM Implementation

---Transdisciplinary -organization around student questions, where concepts and skills are developed through real-life context

"Teach THROUGH the project, not about it" -Brian Lien

---PBL framework for planning some units/lessons

---Real-World applications for content information

---Emphasis on 21st Century Skills <http://p21.org/overview>

---Product-based (because students will synthesize information themselves to create new connections)

---Theme-based learning (by grade level)

<http://gomakesomething.com/ht/thebasics/theme-ideas/>

----Fashion

----Community

----Economics

----Time

----Digital Narratives

----Ethics

----Habitats

-Architecture and interior design

----Character Development

----Systems

-Games

----Monsters and Heroes

----Communications

----Human Rights

----Discord/Harmony

----Travel

----Traditions

----Digital vs. Analog

----Consumerism

<u>New Tech</u> <u>Introductory New Tech Video</u> <u>http://www.youtube.com/watch?v=RQcMKBqDAdw&safety_mode=true&persist_safety_mode=1&safe=active</u>	<u>STEAM</u>
Student centered	Student centered
PBL	PBL
Technology-infused, not centered	Technology-infused, not centered
Pre-existing curriculum	NO Pre-existing curriculum
Adaptable, flexible, collaborative, teams, student engagement,	Adaptable, flexible, collaborative, teams, student engagement,
National, State, Private funding available	Funding available, but more difficult to find b/c “STEAM” and not just “STEM”
Numerous schools currently exist with certification in this program	ONE school currently certified with this program
PHS has been assessed positively for readiness in New Tech program	PHS has NOT YET been assessed positively for readiness in this program

Curriculum will include individual and group assessment of acquired content information as well as opportunities for communication, collaboration, critical thinking/problem solving, and creativity/innovation in consideration of themes within the themes of:

Global awareness

Financial, economic, business and entrepreneurial literacy

Civic literacy

Health literacy

Environmental literacy

Life and Career Skills

Technology awareness and skills

Technology for Online Standardized Testing vs. Technology for Teaching, Learning, and Creative Inquiry

By Patrick Ledesma on May 20, 2012 12:03 PM

Tech needed in 1-5 years:

http://blogs.edweek.org/teachers/leading_from_the_classroom/2012/05/dreaming_about_future_technologies_during_online_testing_season_the_2012_nmc_horizon_report_k-12_edu.html

STEAM—Resources

STE@M founder	<u>1.Georgette Yakman</u> <u>www.steamedu.com</u>
<u>2. Great Oaks Vocational Schools</u>	
<u>Colleges/Universities</u>	
3. University of Cincinnati	
4. Northern Kentucky University	
5. Xavier University	
6. Miami University	
7. College of Mt. St. Joseph	
<u>Businesses</u>	
8. http://www.knovationlearning.com/ - Knovation/Nettrekker	
Bob Claymeier	
<u>Other Schools</u>	
9.North Arlington H.S. Toledo, Ohio	
10. Sycamore High School Cincinnati, Ohio	
11. Dayton STEM school Dayton, Ohio	
--Worthington	
--Mary Sheridan Pickerington, Ohio Schools Integration Specialist	

<u>Educational Resources</u>
12. Hamilton County ESC
13. Clermont County ESC
14. Stan Hoffman Ohio Board of Education
15. CET learning services
16. Knowledgeworks/ EDworks
-Dayton Regional STEM Center
<u>Parent/Family Participation</u>
<u>Online Partnerships/Resources</u>
<u>Student/School Competitions and Award opportunities</u>
-- Governor's Thomas Edison Awards for Excellence in STEM Education

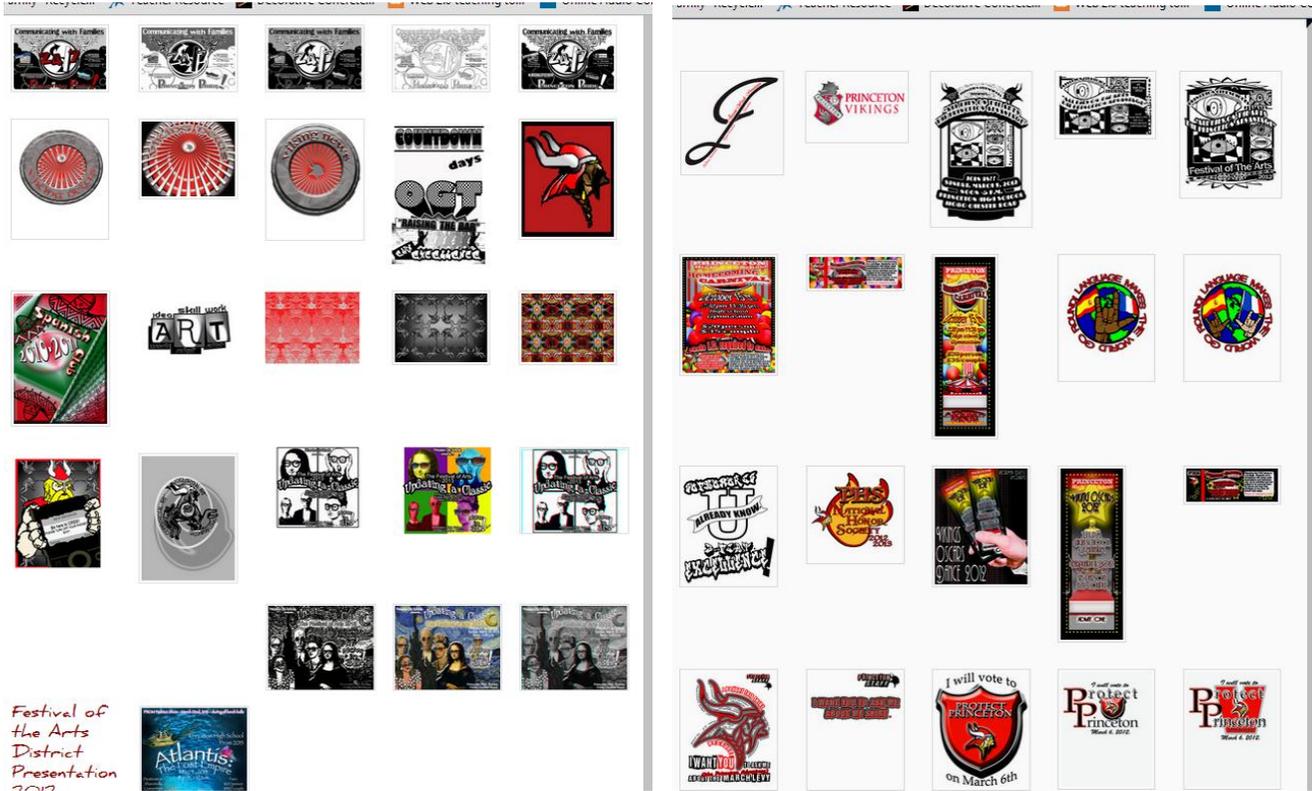
STEAM- Scheduling Options

<p><u>1. Traditional Schedule</u></p>	<p>Bell 1 --45min Bell 2 --45min Bell 3 --45min Bell 4 --30min Bell 5 --10min Bell 6 --30min Bell 7 --10min Bell 8 --30min Bell 9 --45 min Bell 10 --45min</p> <p>7 classes - 3.5 credits/semester</p>			
<p><u>2. STEAM Schedule</u></p>	<p><u>Option #1</u></p> <p>Bell 1 --45min Bell 2 --45min Bell3-8 STEAM classes 155minutes (125 with lunch)</p> <p>A/B Schedule typically STEAM 1-60 minutes class change-5 minutes STEAM 2- 60 minutes</p> <p>Bell 9 --45min Bell 10 --45min</p> <p>6 classes - 3credits/semester</p>	<p><u>Option #2</u></p> <p>Bell 1 --45min Bell 2 --45min Bell3-8 STEAM classes 155minutes (125 with lunch)</p> <p>A/B Schedule typically STEAM 1-55 minutes class change-5 minutes STEAM 2-55 minutes (10 minute skills/research/ presentation/session/journaling/ workshop)</p> <p>Bell 9 --45min Bell 10 --45min</p> <p>6 classes - 3credits/semester</p>	<p><u>Notes:</u> On A/B schedule, STEAM classes meet either separately for 600min/2 weeks instead of 450 for 2 weeks --30 students per class</p> <p>One A/B STEAM schedule would involve 4 teachers each day and up to 120 students</p> <hr/> <p>Students could receive credit for 1 extra class/ semester</p> <hr/> <p>Teachers could elect to bring students together into a larger seminar when needed. On an A/B schedule, time there could be an all-STEAM session once every 2nd week to present work, introduce speakers, staff present new resources to students, field trips (virtual or actual) etc.</p> <p>Session could be the entire 155/125 minutes+lunch.</p> <p>OR</p> <p>Time could be divided into shorter class times, and students could have a "research time" to work on developing projects in groups.</p>	<p>Flex Credit? Credit Recovery?</p>

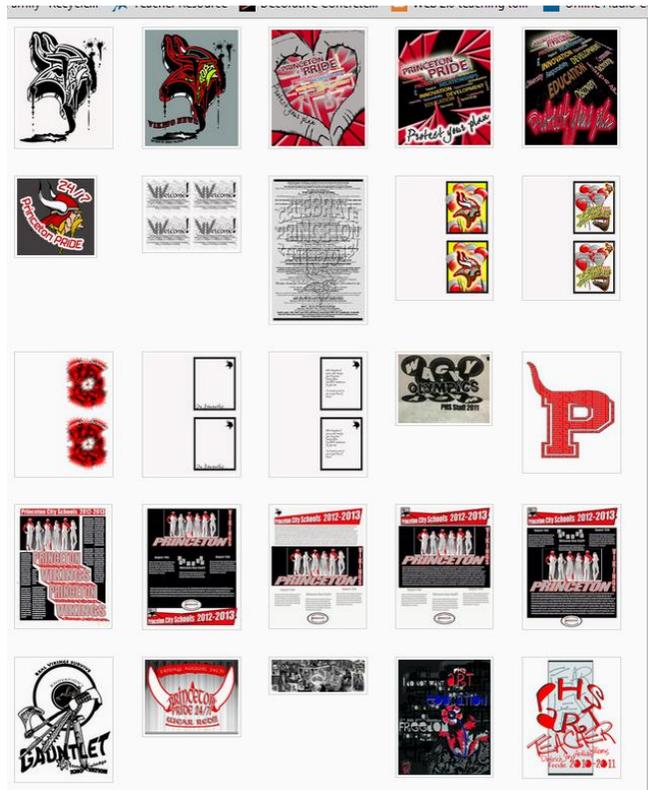
<u>Sample Schedules</u>	<p>Traditional Sample Freshman Schedule</p> <p>Bell 1 --Social Studies Bell 2 --Math Bell 3 --Science Bell 4 /5 -- English Bell 6/7 --FL Bell 8 --LUNCH Bell 9 --GYM Bell 10 --Band</p>	<p>STEAM Sample Freshman Schedule</p> <p>Bell 1 --Social Studies Bell 2 --Math</p> <p>STEAM 1 --"Constructing Cultures" (FL/Technology) STEAM 2 -- "Biodomes as Habitat" (Science/English)</p> <p>Bell 9 --Gym Bell 10 --Band</p>		

Evidence 3

Princeton City Schools 70+ Design Projects



Festival of the Arts District Presentation 2012



Evidence 4
Jovante Woods Project

Beginning of the process:

Re: Jovante Logo Contest
[Sprankles, William](#)

Sent: Tuesday, August 31, 2010 8:35 PM

To: [Sand, Melissa](#); [Wiseman, JoAnne](#)

Cc: [Williams, Rachelle](#); [Dietrich, Emily](#)

Thx!

William T. Sprankles III
Princeton HS, Principal

----- Original Message -----

From: Sand, Melissa
To: Wiseman, JoAnne; Sprankles, William
Cc: Williams, Rachelle; Dietrich, Emily
Sent: Mon Aug 30 22:40:01 2010
Subject: RE: Jovante Logo Contest

I'll plan on working with my Commercial Art classes on a logo project this week and give students the option to make a logo for Jovante or for themselves. My students haven't had experience designing a logo yet, but I'll see what they can do on Photoshop by Friday.

Melissa Sand
PHS Art
Commercial Art, Exploring Art, & Printmaking
Art Club Advisor

From: Wiseman, JoAnne
Sent: Monday, August 30, 2010 3:38 PM
To: Sprankles, William
Cc: Williams, Rachelle; Dietrich, Emily; Sand, Melissa
Subject: FW: Jovante Logo Contest

William, here is what we heard this morning from Jovante's family. I have copied Rachelle and her department just so they know what is coming (short notice). Please let me know if anyone else will be part of the contest.

From: Chandra Baldwin [<mailto:cbaldwin@newhorizonscu.com>]
Sent: Monday, August 30, 2010 2:28 PM
To: Wiseman, JoAnne; wsprinkles@princeton.k12.oh.us
Cc: Kaufman, Scott
Subject: Jovante Logo Contest

As discussed earlier today,
We are starting a foundation in the name of Jovante Woods Foundation.
This is to focus on asthma awareness, teenage organ donation, and
education. We would like Princeton to have a contest to create the logo
incorporating the focus on those 3 things. The contest would have to
end on Friday. Ickey and myself will go through the submissions and
choose the one we like best. Please have them put thier name and grade
on the drawings. We will also announce the winner at the Jovante Woods
Band in the Sand, Kick Off Benefit on Sept. 18th at Tim McGee's Bar and
Grill in Mason. We would also like Princeton to be the first recipient
of the Jovante Woods Scholarship for both a female and male athelet in
Apr. Promotion for the Scholarship is "3.8 to be Great" meaning they
must have at least a 3.8 gpa to qualify. More details later as I
believe the scholarships will be for \$5k but dont hold me to that. That
will be announce at a black tie affair at the Museum Center in Apr with
silence auction etc. Let me know if you need any other details.

Thanks for all you do,

Chandra Baldwin-Processor
New Horizons Credit Union
637 Vine Street
Cincinnati, OH 45202
PH: 513-562-6614
FX: 513-651-4272
cbaldwin@newhorizonscu.com

End of the Process:

RE: T-Shirt

Chandra Baldwin [cbaldwin@newhorizonscu.com]

Sent: Tuesday, September 21, 2010 9:47 AM

To: [Sand, Melissa](#)

Thanks again, glad you got your shirt. Hope Meredith was pleased with
the logo. We will keep her abreast on upcoming event for I would like
her to be recognized through out. But I only know to reach her through
you.

Chandra Baldwin-Processor
New Horizons Credit Union
637 Vine Street
Cincinnati, OH 45202
PH: 513-562-6614
FX: 513-651-4272
cbaldwin@newhorizonscu.com

-----Original Message-----

From: Sand, Melissa [<mailto:msand@princeton.k12.oh.us>]
Sent: Monday, September 20, 2010 9:25 PM
To: Chandra Baldwin
Subject: RE: T-Shirt

I did get a tshirt after I spoke with you. Thank you again for it and for your kindness in recognizing Meredith!
Congratulations on the successful event on Saturday.

Best wishes to you and Good Luck.
Take Care,
Melissa Sand
PHS Art
Commercial Art, Exploring Art, & Printmaking Art Club Advisor

From: Chandra Baldwin [cbaldwin@newhorizonscu.com]
Sent: Monday, September 20, 2010 11:44 AM
To: Sand, Melissa
Subject: T-Shirt

Good afternoon Ms. Sand,

I just wanted to be shure you got your t-shirt. I ran around looking for you with t-shirt in hand but was unsuccessful. I really cant sasy thank you enough for all that you have done.

Chandra Baldwin-Processor
New Horizons Credit Union
637 Vine Street
Cincinnati, OH 45202
PH: 513-562-6614
FX: 513-651-4272
cbaldwin@newhorizonscu.com



Evidence 5
Sample Project Description and checklist/goal sheet, Unit Plan, Rubric, Artist Statement, Enrichment
Activities

Commercial Art
PHS Agenda Project
2013-2014

1. Review the 10 Layout Styles in Edmodo.

Define the 10 layout styles here.

1. Mondrian	
2. Picture Window	
3. Copy-Heavy	
4. Frame	
5. Circus	
6. Multipanel	
7. Silhouette	
8. Big Type	
9. Rebus	
10. Alphabet	

2. Grayscale + Red photo

2.1) Open the Photoshop document posted in Edmodo.

2.2) Find one photo that you think best represents Princeton. This picture can be one of your own, or you can find a picture on the PHS website under "PHS Photos" on the left side. Copy this photo into Photoshop. Be sure that you use an actual PHOTOGRAPH, not an illustration, drawing, or logo. DO NOT delete the red rectangle on the Photoshop project.

To make your picture grayscale:

2.3) Make a copy of your picture layer.

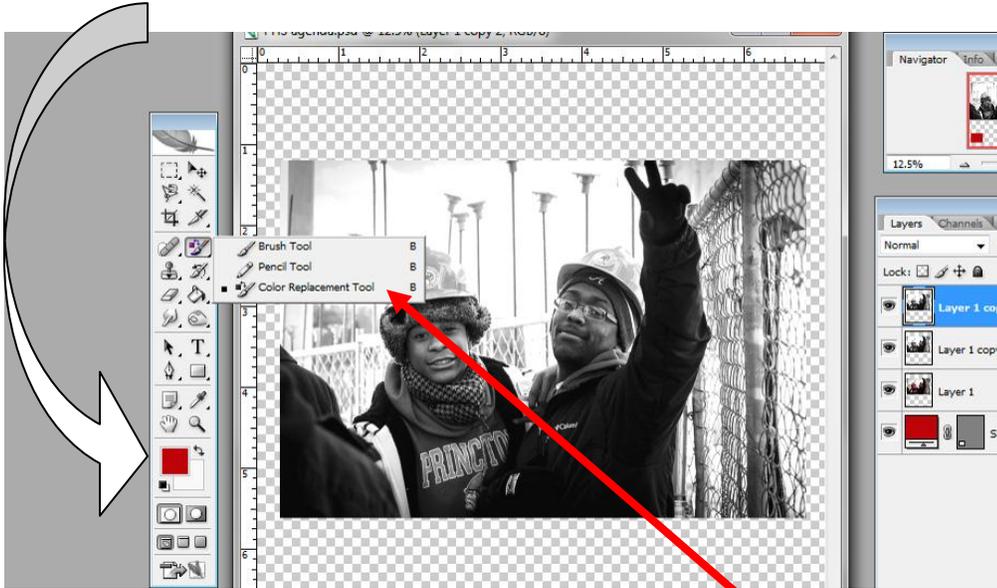
2.4) Go to the top of Photoshop. Select Image> Adjustments> Desaturate (This will change your project to black, white, and gray.)

2.5) Go to the top of Photoshop. Select Image> Adjustments> Brightness/Contrast (Increase the contrast and brightness so you can see white, gray, and black values.)

2.6) Make a copy of your grayscale picture layer.

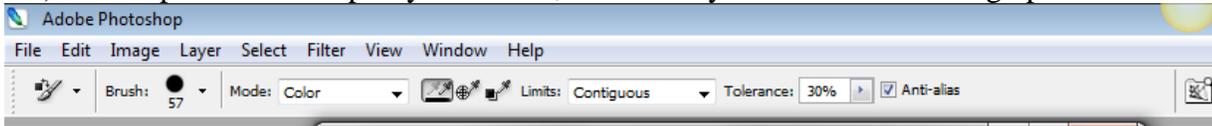
Now you will need to change the parts of your picture you want to highlight the most in red. These red shapes will be the most noticeable in your project.

2.7) In your toolbox, use the eyedropper tool to select the red color on the rectangle in your project.



2.8) Then hold down on the paintbrush tool. Select the "color replacement tool".

2.9) In the options at the top of your screen, make sure you have the following options:



2.10) When you see the circle with the plus sign in it, hold down the ALT key on your keyboard and select the RED RECTANGLE on your project.

2.11) Now color in the areas of your project that you want to be red. If you make a mistake, switch to painting with WHITE and your project will be changed back to grayscale.



-Use Window>Navigator to zoom in or out on your project.

-Change the size of your brush as necessary.

3. Viking "V" logo

3.1) Copy and paste the images below into Photoshop.



3.2) Change these 3 pictures to grayscale.

3.3) Use the lasso tools to select one of the objects. Copy and paste this selection to a new layer. Continue copying shapes you need to create a "V" logo using a variety of objects (similar to the V below). Use must use at least 10 objects for this design.



3.4) Use the color replacement tool (under the paintbrush) to change parts of your logo to red. Be sure to select each layer that you are changing first.

3.5) Finally, add the words "Princeton High School" to your design.

4. Agenda Layout

4.1) Choose one of the layout styles we have studied in class.

4.2) On your agenda layout, you must show:

	Started on:	Finished on:
1. Your grayscale+red Princeton photo		
2. Your grayscale+red "V" logo for Princeton High School		
3. the words "Princeton High School" and "2013-2014" as the title		
4. one copy of our Viking logo (see below)		
5. 50% of your design should be red/gray		
6. a gradient		
7. a pattern		
8. at least 5 spaces for students to write on the agenda (you choose the categories for these spaces)		
9. your images and text must be carefully arranged and sized to match the layout style you chose		
10. nothing should be in the exact center of your design		
11. your name		



Unit Plan

<p>Teacher(s): Sand</p>	<p>Unit: Logo design</p>	
	<p>Unit Topic(s): Gestalt, logo design, abstraction</p> <p>Photoshop skills: lasso tool, desaturation, color replacement tool, layers and filters</p>	<p>Grade Level(s)/ Class: 9-12, Commercial Art</p>

Reading Literature	Writing
<p>Listen for - Retell - Define - Find the main idea - Compare - Summarize - Rehearse - Persuade - Write</p>	
<p>4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics. (Photoshop instructions)</p> <p>5. Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy). (Gestalt to logo design)</p> <p>6. Analyze the author’s purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address. (Gestalt)</p>	<p>3. Narrative Accounts: In science and technical subjects, students must be able to write precise enough descriptions of the step-by-step procedures they use in their investigations or technical work that others can replicate them and (possibly) reach the same results. (Project self-assessment)</p> <p>9. Draw evidence from informational texts to support analysis, reflection, and research. (Good logo design)</p> <p>10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. (Checkpoints and artist statement)</p>

Deconstructed Standards
<p>I CAN...</p> <ol style="list-style-type: none"> 1. Understand the importance of Gestalt theories 2. Use the lasso tool, desaturation, color replacement tool, layers and filters to create a logo 3. Create a logo with symbolism for PHS 4. Use correct vocabulary when describing how to make art 5. Try different options when planning an art project to find the best solution 6. Use the elements and principles of art to organize a piece of art that I make and finish an artwork showing good craftsmanship 7. Explain the basic tools that we have used in Photoshop with step-by-step instructions

Summative Assessment(s): (i.e. Quarterly/Semester Exams, Performance-Based)

- 1) design project
- 2) artist statement

Key Text(s):	Informational Material(s):
Gestalt Article http://www.allgraphicdesign.com/graphicsblog/2008/03/04/the-rules-of-the-gestalt-theory-and-how-to-apply-it-to-your-graphic-design-layouts/	PowerPoint on Gestalt and logo designs Variety of websites with logo galleries (listed at end of PowerPoint)

Essential Question:

-How can using a Gestalt principle develop a logo that effectively conveys an idea?

Best Practices (What Best Practices are you implementing during this unit?)

Reference Best Practice Resource Handout

- Phil Schlechty's "Working on the Work"
- [Personal Response](#) - *More than one right answer - Students may create artworks that demonstrate mastery of concepts or define important concepts with more than one right answer.*
- [Clear/Modeled Expectations](#) - *Student knows what success "looks like" - Students will see exemplar projects*
- [Emotional/Intellectual Safety](#) - *Freedom to take risks Students will have opportunities to revise their work.*
- [Learning with Others \(Affiliation\)](#) - *Learning has a social component- Students will work together to define and assess work*
- [Sense of Audience](#) - *Student work is shared - Final compositions will be displayed in the artroom, on Artsonia.com, and maybe at our Festival of Arts or on the school agendas*
- [Choice](#) - *Students have meaningful options - Students may choose tools/materials and group partners*
- [Novelty and Variety](#) - *Learning experiences are unusual or unexpected - Students will be encouraged to use new materials*
- [Authenticity](#) - *Connections to experience or prior learning - craftsmanship and skills from previous projects*

Revised Art Standards (2012)

- 1PR Demonstrate basic technical skill and craftsmanship with various art media when creating images from observation, memory and imagination.
- 2PR Apply the elements and principles of art and design using a variety of media to solve specific visual art problems.
- 3PR Explore multiple solutions to visual art problems through preparatory work.
- 4PR Establish the appropriate levels of craftsmanship when completing artworks.
- 3RE Use appropriate vocabulary to define and describe techniques and materials used to create works of art.
- 6RE Identify various venues for viewing works of art.

Activities and Formative Assessments

- Day 1
1. Students review basic Photoshop skills as a class
 2. Students begin to work with their scanned images in Photoshop
- Day 2
1. Class review of selection tools and working with layers
 2. Students cut out 10 images they want to use and arrange on individual layers (Begin arranging shapes if they have time.)
 3. Checkpoint- Students turn in their projects to Edmodo (formative assessment)
- Day 3
1. Class introduction to Gestalt principles and logo design- discuss Princeton mission statement, logos, etc.
 2. Students work on arranging their shapes into the final logo
- Day 4
1. Students finish arranging shapes, add red, make copies of layers, merge layers together, and add filters
- Day 5
1. Students share work with one another for an in-progress critique
 2. Students revise artworks, complete self-assessment, and turn in projects
- Day 6
1. Students complete artist statements on final presentations

Challenge Project: (10 points)

- design a school crest using your logo
- place your logo on a realistic photo so it looks like it has been printed on the object in the photo
- Compare and contrast your logo with a logo for another school

Possible Modifications for students with special needs:

- work in groups when possible to generate and share ideas
- fewer number of shapes to be used for some students
- some students can start with text "V" and add shapes for decoration only

Implications for further studies:

- students will use knowledge of layout and Gestalt principles to work with collaged images and deconstructed images

Rubric for Agenda Layout

	5 (Advanced)	4 (Accelerated)	3 (Proficient)	2 (Basic)	1 (Limited)
<u>Composition/Subject matter</u>					
Includes: 1.grayscale+red Princeton photo 2. "Princeton High School" and "2013-2014" as the title 3. one copy of our Viking logo 4. 50% of your design should be red/gray 5. a gradient 6. a pattern 7. red and gray V logo	Project includes all required elements	Project includes all required elements except one.	Project includes most required elements in addition to 1.grayscale+red Princeton photo 2.red and gray V logo 3."Princeton High School" and "2013-2014" as the title	Project includes: 1.grayscale+red Princeton photo 2.red and gray V logo 3."Princeton High School" and "2013-2014" as the title	Project includes: 1.grayscale+red Princeton photo 2.red and gray V logo
Your images and text must be carefully arranged and sized to match the layout style you chose Write layout style here:	Layout style is easy to identify		Layout style is somewhat easy to identify	Some elements match the layout style.	Pictures and text are randomly placed in the composition.
Nothing should be in the exact center of your design	Nothing in center				Something is in the center
<u>Craftsmanship</u>					
Images are clean around the edges	All images do not have rough edges or have not been made too blurry	Most images do not have rough edges or have not been made too blurry	Most images do not have rough edges , but some edges are too blurry to see	Some images have rough edges	Edges that aren't needed have not been carefully erased
Shapes are carefully filled in	All shapes are carefully filled in		Most shapes are carefully filled in		Most shapes are not carefully filled in
<u>Critical Thinking/Creativity</u>					
Students used checklists and carefully considered revisions	Student used checklist and made revisions. Student could explain revision in his/her artist statement.	Student used checklist and made revisions based on feedback in class	Student used checklist and made revisions to finish basic requirements	Student used checklist but did not make revisions	Student did not use checklist or make revisions
Final project symbolizes a positive message for PHS	Positive			Neutral message	Negative message
Project is a unique solution to the layout design	Project does not look like any other student project. There is a surprise element in the design.	Project does not look like any other student project.	Project does not look like any other student project, but student had to ask for suggestions multiple times in class.	Project somewhat resembles a project from another student.	Project very much resembles a project from another student.

<p style="text-align: center;"><u>Collaboration</u></p> <p>Students participate in class discussions and in-progress critiques</p>	<p>Always participates</p>	<p>Often participates</p>	<p>Sometimes participates</p>		<p>Never participates/negative participation during any group discussion</p>
<p style="text-align: center;"><u>Effort</u></p>	<p>Student watched demonstrations, asked specific questions when appropriate, checked the tutorials online, Student worked the entire class. Student writes her/his name on the project.</p>	<p>Student watched demonstrations, asked specific questions when appropriate, checked the tutorials online, Student worked during most of the class. Student writes her/his name on the project.</p>	<p>Student watched demonstrations, asked specific questions when appropriate, Student worked during most of the class. Student writes her/his name on the project.</p>	<p>Student watched demonstrations, Student worked during most of the class. Student writes her/his name on the project.</p>	<p>Student watched demonstrations, Student worked during some of the class . Student writes her/his name on the project.</p>

Challenge Project: (10 points)

- design a school crest using your logo
- place your logo on a realistic photo so it looks like it has been printed on the object in the photo
- Compare and contrast your logo with a logo for another school

ARTIST STATEMENT

1. Describe how your project looks.
2. What tools and techniques did you use to make your project?
3. What is the idea or subject matter you created in this work?
4. How does your work compare to the examples you were shown in class?
5. What was easy about this project? What was difficult?
6. What would you change (if anything) now that your project is finished?

ENRICHMENT ACTIVITIES

Enrichment activities are art activities you can do when you are finished early on a project. These may be something that you do for yourself, for PHS, or to help Ms. Sand.

Art Projects

1. Create a self-portrait with a tattoo covering your entire face so it looks realistic.
2. Create an artwork that combines your favorite food and your favorite mode of transportation.
3. Create a self-portrait so that you look 200 years old.
4. Create a family crest.
5. Make something normal seem impossible!

Others?

Reflection Projects

1. Write an argument/poem/song that supports visual art as its own language/type of communication.
2. Journal about a significant event in your life that you would like help expressing in an artwork.
3. Look at the list of art themes in your Edmodo folder. What themes are most relevant to your life or what you are interested in expressing in your work? Please write a reflection to explain your choices.

Web Research

1. www.googleartproject.com
2. www.melissasand.com > Make FREE art online (You can PRINTSCREEN your work and save your it in Photoshop.)
3. Reference photo search- use the internet to search for images you would like to use for projects. Then save them on your H: drive.
4. www.artsonia.com – Check out some fantastic student artwork and become fans of student pages!

Help PHS/Ms. Sand

1. Create PRINCETON PRIDE artwork!
2. Ask Ms. Sand what can be done around the art room.
3. Think about the most UNINTERESTING room or hallway you see in PHS. How could you redesign it to make it better? Sketch your ideas in color.
4. What would be appropriate uniforms for ALL PHS students to wear? If you were able to design student uniforms, what would you create?

Evidence 6

Individual Detention with Sand and "Tell Me" Emergency removal forms

Student Participation Assessment

Student Name: _____

Date: _____

Your total Points for Participation: _____

Your total Project points: _____

Overall grade: _____

1. What is your opinion on how much or how little you have participated in class?

2. Why have you failed to participate in class lately?

3. What can Ms. Sand do to help you accomplish the goals in class every day from now on?

4. What are YOUR measurable goals for participating in class from now on?

(You and I both need to be able to understand and keep track of how well you are working. For example, you could write "4/5 days a week I will log into my computer within the first 5 minutes of class, and will then save my work on the flash drive or in Vikingmail during the final 3-5 minutes of class.)

5. Do you need any more time outside of class to catch up on your work? When can you stay?

TELL ME FORM

Your Name:

Grade:

Principal:

Parent/Guardian Name:

Parent/Guardian Phone Number:

1. How are you feeling right now?
2. Why do you feel this way?
3. Who are the other people involved who are a part of making you feel like you cannot be in class?
4. What would it take to help you settle down do you can come back to class?
5. What needs to change in class to make it easier for you to focus on your work?
6. What do you think the goals are for class today?
7. What is your goal for this class? (grade, making art, learning something new, etc.)
8. Who are other adults in PHS who understand you and might be able to help you in this class?

Evidence 7
Learning Styles Inventory and Art Style Inventory

Learning Style Inventory

Take a moment to answer the following questions and circle the most appropriate answer. Some may be difficult to answer, but try to respond according to how you would react most often.

1. **You usually remember more of a meeting or training session when:**
 - a. You do not take notes, but listen very carefully
 - b. You sit near the front of the room and watch the speaker
 - c. You take notes (whether or not you look at them again)

2. **You usually solve problems by:**
 - a. Talking to yourself, spouse or friend
 - b. Use an organized, systematic approach with lists, schedules, etc.
 - c. Walk, pace or do some other physical activity

3. **You remember phone numbers (when you can't write them down) by:**
 - a. Repeating the numbers orally
 - b. "Seeing" or "visualizing" the numbers in your mind
 - c. "Writing" the number with your finger on a table or wall

4. **You find it easiest to learn something new by:**
 - a. Listening to someone explain how to do it
 - b. Watching a demonstration of how to do it
 - c. Trying it yourself

5. **You remember most clearly from a movie:**
 - a. What the characters said, background noises, and music
 - b. The setting, scenery, and costumes
 - c. The feelings you experienced during the movie

6. **When you go to the grocery store, you:**
 - a. Silently or orally repeat the grocery list
 - b. Walk up and down the aisles to see what you need
 - c. Usually remember what you need from the list you left at home

7. **You are trying to remember something and so you:**
 - a. Try to see it happen in your mind
 - b. Learn in your mind what was said or the noises that occurred
 - c. Feel the way "it" reacted with your emotions

8. **You learn a foreign language best by:**
 - a. Listening to record or tapes
 - b. Writing and using workbooks
 - c. Attending a class in which you read and write

9. **You are confused about the correct spelling of a word and so you:**
 - a. Sound it out

- b. Try to “see” the word in your mind
 - c. Write the word several different ways and choose the one that looks right
10. **You enjoy reading most when you can read:**
- a. Dialogue between characters
 - b. Descriptive passages that allow you to create mental pictures
 - c. Stories with a lot of action at the beginning (because you have a hard time sitting still)
11. **You usually remember people you have met by their:**
- a. Names (you forget faces)
 - b. Faces (you forget names)
 - c. Mannerisms, motions, etc.
12. **You are distracted most by:**
- a. Noises
 - b. People
 - c. Environment (temperature, comfort of seating, etc.)
13. **You usually dress:**
- a. Fairly well (but clothes are not very important to you)
 - b. Neatly (in a particular style)
 - c. Comfortably (so you can move easily)
14. **You can’t do anything physical and you can’t read, so you choose to:**
- a. Talk with a friend
 - b. Watch TV or look out the window
 - c. Move slightly in your chair or bed
15. **You are driving to a new location, you get directions by:**
- a. Asking for them over the phone and remembering them
 - b. Get a map out and examine the route, taking the map with you
 - c. Get a vague understanding and drive around until you find it
16. **You get your news and current events by:**
- a. Listening to the radio on the way to work or other places
 - b. Reading a newspaper or watching TV
 - c. Don’t follow news or current events

Scoring

1. Count the number of responses for each letter you circled above and write them below:
 - a. _____ Auditory
 - b. _____ Visual
 - c. _____ Kinesthetic
2. Is one of the categories significantly higher or lower than the others or are there two that are close in number?
3. Are the results what you expected them to be? Is that how you see yourself?
4. Tell me about someone who you are close to now or have been close to in the past who you think tells a good story. What is it you liked best about that person and how s/he tells a story?

Art Style Inventory

Circle the most appropriate answer below.

1. It is easy for me to remember names and faces.
True or False
2. It's interesting to me to have conversations that don't have a specific ending.
True or False
3. I would prefer to create something rather than read a book or watch tv.
True or False
4. Learning about how things work is important to me.
True or False
5. I am never satisfied with the first answer someone gives me. I like to ask why.
True or False
6. I like making lists.
True or False
7. I like to experiment and take risks.
True or False
8. Beautiful/interesting things are important to me.
True or False
9. I don't have any interest in the style of my bedroom. Plain white walls are okay with me! True or False
10. I like to ask questions instead of believing exactly what someone tells me the first time. True or False
11. Attention to detail is important to me.
True or False
12. I like learning facts about history or about different cultures.
True or False

Add the number of "true" answers in each section below to determine your preferred art style.

<u>Skills/Techniques</u>	<u>Content Information</u>	<u>Concepts and Emotions</u>
<u>4</u>	<u>1</u>	<u>2</u>
<u>3</u>	<u>6</u>	<u>5</u>
<u>7</u>	<u>9</u>	<u>8</u>
<u>11</u>	<u>12</u>	<u>10</u>
<u>Total</u>	<u>Total</u>	<u>Total</u>

Evidence 8
Animation Activities aligned with Ohio Standards and Common Core

	Caricature	Political Cartoon	Drawn Comic Strip	Pixton Comic Strip	Thaumatrope	Gif	Flipbook	Claymation	GoAnimate	Muvizu	Gamestar
<u>Perceive/Knowing</u>											
Examine the context details of visual imagery and explain the social and cultural influences on the images		X	X				X				
Describe sources visual artists use to generate ideas for artworks	X	X	X			X	X	X			
Explore the relationship between community or cultural values and trends in visual art.		X				X	X				
Analyze the work of individual artists and explain how they are influenced by cultural factors	X										
Explore the application of technology to the production of visual artworks				X		X		X	X	X	X
Connect processes and decisions made in the design of everyday objects, environments, and communications	X	X					X	X			
<u>Producing/Performing</u>											
Demonstrate proficient technical skills and craftsmanship with various art media when creating images from observation, memory, or imagination	X	X	X	X	X	X	X	X	X	X	X
Make informed choices in the selection of materials and techniques as they relate to solving a visual problem.	X	X	X	X	X	X	X	X	X	X	X
Generate a variety of solutions to visual arts problems through preparatory work	X	X	X		X		X	X			X
Establish and apply appropriate levels of craftsmanship to complete artworks.	X	X	X	X	X	X	X	X	X	X	X
Understand and demonstrate how to access available digital tools and innovative				X		X		X	X	X	X

technologies to create and manipulate artwork.											
Incorporate visual literacy as a means to create images that advance individual expression and communication	X	X	X	X		X		X	X	X	X
Responding/Reflecting											
Apply methods of art criticism when discussing selected works of art	X	X	X	X	X	X	X	X	X	X	
Apply assessment practices to revise and improve their artworks and to document their learning.	X	X	X	X	X	X	X	X	X	X	X
Expand the use of arts-specific vocabulary to define and describe techniques and materials used to create works of art.	X	X	X	X	X	X	X	X	X	X	X
Explain the role of innovative technologies in the creation and composition of new media imagery.				X		X		X	X	X	X
Compare and contrast various theories of aesthetics and visual culture.		X					X	X			
Identify the challenges various venues present to the creation of works of art.		X				X					
Explore and discuss opportunities for lifelong involvement and advocacy in the arts.	X					X					X

	Caricature	Political Cartoon	Drawn Comic Strip	Pixton Comic Strip	Thaumatrope	Gif	Flipbook	Claymation	GoAnimate	Muvizu	Gamestar
Writing Standards											
1. Write arguments focused on discipline-specific content.		X				X					
2. Write informative/explanatory texts, including the narration of historical events, scientific procedures/ experiments, or technical processes			X						X		
3. The Standards require that students be able to incorporate narrative elements effectively into arguments and informative/explanatory texts. In history/social studies, students must be able to incorporate narrative accounts into their analyses of individuals or events of historical import.	X			X							
4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.		X	X	X				X			
5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach, focusing on addressing what is most significant for a specific purpose and audience.								X			
6. Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically								X		X	
7. Conduct short as well as more sustained research projects to answer a question (including a self-generated question) or solve a problem; narrow or broaden the inquiry when appropriate; synthesize multiple sources on the subject, demonstrating understanding of the subject under investigation							X				
8. Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the							X				

flow of ideas, avoiding plagiarism and following a standard format for citation.											
9. Draw evidence from informational texts to support analysis, reflection, and research.		X				X	X				
10. Write routinely over extended time frames (time for reflection and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	X	X	X	X	X	X	X	X	X	X	X
Reading Standards	Caricature	Political Cartoon	Drawn Comic Strip	Pixton Comic Strip	Thaumatrope	Gif	Flipbook	Claymation	GoAnimate	Muvizu	Gamestar
1. Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.					X						
2. Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.		X				X					
3. Follow precisely a complex multistep procedure when carrying out experiments, taking measurements, or performing technical tasks, attending to special cases or exceptions defined in the text.				X		X		X	X	X	X
4. Determine the meaning of symbols, key terms, and other domain-specific words and phrases as they are used in a specific scientific or technical context relevant to grades 9–10 texts and topics.					X	X		X	X		
5. Analyze the structure of the relationships among concepts in a text, including relationships among key terms (e.g., force, friction, reaction force, energy).	X	X	X	X	X	X	X	X	X	X	X
6. Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, defining the question the author seeks to address.		X	X			X					
7. Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.			X				X				X

8. Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem.	X					X	X				
9. Compare and contrast findings presented in a text to those from other sources (including their own experiments), noting when the findings support or contradict previous explanations or accounts.			X	X	X	X	X	X			
10. By the end of grade 10, read and comprehend science/technical texts in the grades 9–10 text complexity band independently and proficiently.	X				X	X	X				
	Caricature	Political Cartoon	Drawn Comic Strip	Pixton Comic Strip	Thaumatrope	Gif	Flipbook	Claymation	GoAnimate	Muvizu	Gamestar

Evidence 9
Using Graphic Organizers with ESL Students in Project Based Learning

Improved Project-Based Learning for
English as a Second Language Students
Using Graphic Organizers

February 18, 2013

Tracy Yarchi

CI 7063

Written by:

Melissa Sand

Previous research has not made a specific inquiry into identifying particular strategies for English as a Second Language (ESL) secondary students to find success in project-based learning experiences in content-area classes. "The number of school-age children (children ages 5–17) who spoke a language other than English at home rose from 4.7 to 11.2 million between 1980 and 2009, or from 10 to 21 percent of the population in this age range... (school) enrollment rate increased from 90 to 93 percent between 1980 and 2009" (Institute of Education Sciences, 2012). The concern for quality ESL instruction for students is therefore increasingly becoming a responsibility of content-area teachers rather than only ESL specialist teachers. As ESL students attempt to learn during a school day full of a variety of courses and content-specific information, they must have the opportunities to develop skills to promote reading, listening, speaking, and writing. The most basic foundation for success in developing effective communication from ESL students is the vocabulary acquisition students need in academic English as well as content-specific terminology. Only after students begin to understand how to incorporate English vocabulary into their school work can they begin to use scaffolding to reach higher levels of skill and content building as they are coached through the process by teachers using effective instructional tools.

At Princeton High School (PHS), we are currently in the midst of a wave of change in student demographics. At the beginning of the 2012-2013 school year, our student demographics identified 11% of our students as Limited English Proficient (LEP) and our district mobility rate still hovers around 14.1%. Within the next five years, our school district is expected to be one of the first "30/30/30" schools, which means that our student body at PHS will be comprised of 30% student who identify as White, 30% who identify as Black, and 30% who identify as Hispanic. A vast majority of those students who are Hispanic will be students who need ESL services, and only after time will we be able to identify

the specific number of students, the levels of their needs, and the reasons why they have enrolled in our district. At PHS, the current scheduling process does not allow time for any ESL student to be in sheltered instruction/SIOP all day long. ESL students are expected to participate in elective classes and traditional content-area classes whenever possible. Therefore, with the quickly growing influx of ESL students in traditional classes, a majority which are project-based courses, PHS teachers and students will need strategies for all students to find success in completing, understanding, and evaluating the processes required for project-based learning.

ESL students face social and academic challenges in U.S. schools that their peers may not ever have to address during their lifetimes, oftentimes during experimental American classroom experiences such as project-based learning (PBL). "Not only are (ESL) students expected to master complex course content, often with minimal background knowledge or preparation, but also they have fewer years to master the English language" (Calderon & Sanchez, 2011, p.112). These pressures can play a significant role in the success of ESL students in a variety of educational experiences. As in many school districts, students at PHS are tested to determine their Limited English Proficiency (LEP) levels in order to gain a more holistic understanding of student skills and knowledge. Information about a student's abilities in language acquisition and communication is then shared with all classroom teachers. High school students have substantial life experience and potentially some content knowledge in the classes they elect to take, but sometimes it can be difficult to assess any relevant skills or content knowledge when language is a barrier to communication. Chiang (2000) writes:

students may have difficulty coping with the style of classroom management that the teacher has chosen. For example, in many countries, students are not to speak unless the teacher asks them a

question directly. To volunteer answers might be considered boastful or conceited. Many students will not question what the teacher says, even if they know it to be wrong. (p.58-69)

According to Tomlinson and Allan (2002), “all elements of instruction—content, process, and product—can be differentiated in the light of student differences in readiness levels, interests, and learning profiles-such as students’ cultural background and learning styles” (as cited in Wang, Many, & Krumenaker, 2008, p. 70). Project-based learning is one option teachers have to help ESL students make connections between the social and academic challenges they face as individuals and to differentiate learning for all students.

When one introduces the complexities of project-based learning (PBL), one must understand that a project is defined as a "long-term (several weeks) activity that involves a variety of individual or cooperative tasks such as developing a research plan and questions, and implementing the plan through empirical or document research that includes collecting, analyzing, and reporting data orally and/or in writing" (Calderon & Sanchez, 2011, p.103). While tasks introduced in PBL classrooms can seem daunting for even the most academically gifted students, PBL offers unique opportunities for all ESL students. Allen and Rooney (1998) propose that problem-based learning allows for significant differentiation among students because it should:

reflect their (students') solutions to the problem, not one suggested by the instructor. In addition, the final product should also reflect a student's ability to form a conclusion and defend a position. It is the role of the instructor to provide constructive suggestions but to avoid at all costs the temptation to give in to persistent pleas to 'tell us what you want us to do'. In time, these pleas cease as students gain more confidence in their abilities. (Allen & Rooney, 1998, p.50)

Project-based learning allows for this growing sense of independence through critical thinking experiences. However, teachers and students should both be aware "that because of different

philosophical, cultural, and linguistic beliefs that their multicultural students may bring to their classes, they may encounter conflicts and tensions in their implementation of project work" (Beckett, 2002, p.64). Students who have been accustomed to "prescriptive educational models that match their preference for orderly, hierarchically arranged, classified, segmented, and quantitative dissemination of material" (Allen & Rooney, 1998, p.51) in other cultures might have difficulty understanding the processes required for successful learning in PBL. At the end of a study evaluating student and teacher response to PBL, Beckett (2002) summarized that "students want more traditional lecture and teacher-driven lessons although general education students and teachers favored problem-based learning" (p.62) even though "evaluations show mixed results... teachers felt a loss of student respect and noted a drop in student attendance" (Beckett, 2002, p.52).

With the aforementioned potential negative consequences of PBL, schools must carefully consider the gain and loss potential for adopting PBL strategies and curricula.

Project-based instruction was introduced into second-language (L2) education in response to perceived inadequacies in Krashen's (1981) input hypothesis. Krashen claimed that comprehensible input is the most important variable in second-language acquisition. He argued that L2 learners need extensive exposure to the target language, as is the case when children learn their first language. However, Swain's (1985) evaluation of Canadian French immersion students' learning showed that comprehensible input alone is insufficient. (as cited by Beckett, 2002, p.53)

A survey of the research cited by Iakovos, Iosif, and Areti (2011) found the following connections between PBL and ESL experiences in content-area classrooms:

- It involves multi-skill activities focusing on topics or themes, rather than on specific language targets. While students focus on solving a problem or reaching a goal, they have ample

opportunities to "recycle known language and skills in a relatively natural context" (Haines, 1989:1)

- It does not have specific language aims, but what is important is the route to achieving the end product, since this promotes the development of student confidence and independence (Fried-Booth, 2002)

- It is an activity that "involves a variety of individual or cooperative tasks such as developing a research plan and questions, and implementing the plan through empirical or document research that includes collecting, analyzing, and reporting data orally and/or in writing" (Beckett, 2002; 54)

- It is an approach "in which learners investigate a question, solve a problem, plan an event, or develop a product" (Weinstein, 2006;161) .

- It emphasizes content over form, promotes individualization of activities, incorporates student input in goal setting and evaluation, and groupwork (Eyring, 2001)

- According to Stouer (2006), for effective project-based learning to take place, educators need to make sure that project-based learning has a process and product orientation, requires student involvement in topic selection in order to encourage active participation and a sense of ownership in the project, (that it) extends over a period of time, is organized in such a way that integration of skills is natural, makes students work both in groups and on their own, requires learners to assume responsibility for their own learning through the process of selecting, gathering, processing and reporting of information acquired from a number of sources (e.g. the World Wide Web, library), results in a tangible end product (e.g. a theatrical performance or multimedia presentation), and concludes with an evaluation of the process and the end product.

(p.116)

Therefore, PBL is exploratory in nature as students are given permissions to think critically, make goals, work independently and/or interdependently, and to understand the process of their learning. The language ESL students should be expected to acquire results from the natural communications necessary for successfully completing a content-area project. Beckett (2002) cited that classrooms which focus on PBL should be “intrinsically motivating students to learn, fostering problem-solving, and developing independent and cooperative working skills. It is also believed that project based instruction allows students to develop critical thinking and decision making skills and engage in in-depth learning of subject matter” (Adderly et al., 1975; Berliner, 1992; Krajcik, Blumenfeld, Marx, & Soloway, 1994; Ladewski, Krajcik, & Harvey, 1994; Vithal, Christiansen, & Skovsmose, 1995) Additionally, Gardner (1995) and Coleman (1992) stated “analytical and management skills should be developed through project work “ (as cited by Beckett, 2002, p.54). For ESL students to find success in language acquisition, think critically through a problem, make investigations, develop a solution, and communicate throughout the process, they need to be able to develop and use the organizational skills introduced by Gardner (1995) and Coleman (1992). At this point in time, there is not specific research on how to most effectively help ESL students work successfully through the academic and social issues of working on a PBL lesson so they can make equal gains that general education students have acquired again and again in PBL research studies. Since the role of a content-area teacher in a PBL setting is to work as a facilitator for all students, rather than the primary source of information (Beckett, 2002), it should be the teacher who helps ESL students to learn and practice very concrete organizational, evaluative skills they need as they work more independently on solving the content-area problems they are trying to solve.

In response to the need to help ESL students understand the process of working in PBL lessons at Princeton High School, to facilitate their understanding of necessary vocabulary that is at the

foundation of the learning opportunity, to promote better analysis of self-growth in ESL students, and to foster more independent work and critical thinking in ESL students, one strategy to help students work through project-based learning is to explore the use of graphic organizers (GO). One could ask the questions 1) In a PBL class made up of students with academic performance ranging from low to high as well as a range of emerging social and communication skills, how effective are GO to itemize essential project information, allow for practice of important vocabulary, and provide opportunities for self-analysis and feedback? 2) Are GO the tools that equalize the learning environment so general education and ESL students can meet similar levels of success in project-based learning? According to Alan and Stoller (2006), in PBL:

- Projects should be devised taking into consideration the students' interests, preferences and language needs.
- Students should be provided with real choices in relation to all aspects of the project (e.g. selection of the project theme, presentation of the final outcome, group responsibilities).
- Students should be engaged in a number of tasks which are challenging and give them the opportunity to practice language skills in a natural context. (as cited by the Canadian Center of Science and Education, 2011)

If students are given the opportunity to use GO to structure and analyze their process, they could see the visual relationships between the main topic ideas and subordinate ideas whether these connections were teacher-directed or student-directed. In the end, the goal is that students find more success by using these graphic organizers rather than working alone with their own strategies. (Horton, Lovett & Bergerud, 1990, p.12-13) These GO could provide specific elements for students to use regarding vocabulary, project tasks, self-analysis, and feedback from a teacher during the process as well as at the conclusion.

Traditionally, GO have been used to facilitate some of these tasks as a tool for reading and writing activities. Calderon and Sanchez (2011) propose using GO:

for extended discussion of text meaning and interpretations and for application of new vocabulary; ensure that each subject area involves intensive writing and use of new vocabulary...and conduct ongoing formative assessment of the students. (p.112)

Similarly, PBL activities could be organized for basic vocabulary acquisition and applications that is so important for ESL students. Additionally, Singer (1990) found that students find it easier to learn materials which are organized by themes and the work students do using GO as tools would lead them to better understand the themes in a unit of study. For ESL students, making connections between practical ideas, themes, and relevant vocabulary could be the missing pieces to equalize the progress ESL students make in project-based learning when compared to general education students.

When implementing the use of GO as strategic tools in their classrooms, many teachers know that “the lack of competency in the use of visual information or a particular medium of visual information does not necessarily imply low cognitive function” (Serpell & Deregowski, 1979 as cited by Cooper, 2002, p.138). However, it is important to mention that the challenge for the teacher who is acting as the facilitator of PBL needs to understand the development of how ESL students could react to GO and the troubles they might encounter with their use. For example, a teacher must make the decision regarding how much native language versus English (second) language to use on the graphic organizer. Then the teacher must also create a balance between necessary text and helpful visual imagery. It is important for these teachers to acknowledge that when students view a graphic representation for meaning, two possible viewpoints must be considered: “1) How well the graphic depicts the visual information intended for communication; and, 2) How well the viewer is able to relate to and understand the intended message “(Serpell & Deregowski, 1979). (Cooper, 2002, p.129). Goldsmith (1984) reported

on research for how children recognize visual imagery. His research showed that children first can recognize that an image is present, then they match the image to a familiar object (even if the match is incorrect), and finally children label or name an image. Sitz (1996) described how individuals respond to visual information as a whole and tend not to analyze separate components individually, or they understand the parts to comprehend the whole. (as cited by Cooper, 2002, p.132) Therefore, the notion introduced by Cooper (2002) emphasized the importance of those teachers acting as facilitators must be careful to review with students how they should interpret graphic organizers. This is especially true for ESL students who may need more information to understand cultural symbols and how to look at other visual representations. Schiffman (1996) wrote that there are “three types of visual symbols: 1) Intentional symbols, 2) Connotative symbols, and 3) Interpretive symbols developed from a variety of pictorial conventions employed by various cultures make cross-cultural interpretation more difficult” (as cited by Cooper, 2002, p.134). For example, in our Western culture, in a visual layout, the top of a page is typically where one looks to see the beginning of a process and a sequence of steps typically follows from left to right. Outlines and silhouettes of shapes “have been associated by some cultures with devils, ghosts, or monsters (Schiffman, 1996 as cited by Cooper, 2002, p.137), which could be distracting to students during the learning process if teachers are not aware of how their students might understand these visual clues. If ESL students do not understand where to begin using a GO, how to follow its structure, or what symbols and shapes represent, the tool becomes a hindrance rather than a help to the PBL process. While these intricate design details may seem insignificant to some, a teacher who truly wants to create GO that serve the needs of all students must be sure to carefully design and explain the use of these tools to all students in context of our cultural understanding.

Through the research proposed in this study, students will be assessed for acquisition of important vocabulary, an understanding of the PBL process, use of self-analysis, and response to

feedback during and at the end of the PBL process. A graphic organizer will be developed that will provide opportunities to assess all students in the aforementioned areas. Finally, a comparison will be made between the successes of ESL students and general education students during a PBL lesson.

Methodology

Participants and Context

In this study, the primary issues that were addressed surrounded how using graphic organizers (GO) for vocabulary acquisition and to monitor project completion could help equalize the success of (English as a second language) ESL students to the successes of their peers. The participants of this study were all high school students in beginning level graphic design classes. These students were ninth through twelve graders who had various levels of English proficiency, varied prior experience with using technology, and different levels of experience in the visual arts. One class was Commercial Art (CA), and the second was Introduction to Graphic Design (GD). Two CA classes and two GD classes were the focus of this study. There were a total of eighteen students selected for this study. The CA class was coded as an art class while the GD class was coded as a technology education class, however similar vocabulary was taught during two project-based lessons (PBL). The CA teacher has taught for 11 years, with experience teaching ESL students for the past 5 years. The teacher of the GD class has taught ESL students in her classes for 16 years, and she also has a reading teaching endorsement for her Ohio State teacher's license.

The CA class was an art class for beginning-level students with a curriculum based on the Ohio Revised Art Standards. Projects in this class were organized to provide students with opportunities to perceive, produce, and analyze artworks. During this study, students were asked to consider the design challenge of how to create a layout for the school agenda cover that provided individual students with the best opportunities to chronicle their school year by using the cover. Students had already become

familiar with using some tools and skills in Adobe Photoshop computer software, but were still learning a variety of design skills, including layout design.

The GD class was a beginning-level technology class with curriculum based on the Ohio Technology Standards. Projects in this class were organized to provide students with opportunities to conceptualize and produce a variety of products both digitally and physically. Students were expected to use a variety of tools and software to produce these products. During this study, students were asked to consider the design challenge of how to create a business card layout for a company while still incorporating unusual design elements (shape, form, movement, etc.). Students had already become familiar with tools and skills in several Adobe software programs (Illustrator, Photoshop) as well as web-based text editors. However, students in this class were also still learning a variety of design skills, including layout design.

During this study, both classes had similar resources available and were structured in the same way. Classes were held for 46 minutes for 5 days a week. These two classes were in classrooms with both studio and computer lab space available for each student in the class. For these projects, both groups of students used Adobe Photoshop or Adobe Illustrator, which have very similar tools and layout capabilities. The PBL projects were introduced with each teacher presenting the design opportunity. Then students worked together to create a driving question that would help to define the goals for the products they would make. Once the project goals were made, students were given a pre-assessment on content vocabulary. Then students had eight days to work on their layout projects. Finally, students were given a post-assessment, completed a final self-assessment of their project using a rubric, and shared their work with one another.

Data

In response to the need to help ESL students understand the process of working in PBL lessons at Princeton High School, to facilitate their understanding of necessary vocabulary that is at the

foundation of the learning opportunities, and to foster more independent work and critical thinking in ESL students, one strategy to help students work through project-based learning was to explore the use of graphic organizers (GO). The data that was collected in this study was intended to indicate whether or not GO could help ESL students perform similarly in vocabulary acquisition and completing components of a project to the performance of general education/non-ESL students (GENED). Therefore, the essential questions for this research were: 1) Will ESL students acquire content-area vocabulary with similar proficiency to GENED students by using GO during a PBL unit? 2) Will ESL students finish components of a project to the same level of completion as GENED students through the use of GO during a PBL unit?

The data for this research study was collected before, during and after the PBL lesson. Students in two CA classes and two GD classes were first given a pre-test in content area vocabulary (Appendix) in order to establish their prior knowledge and to find ESL and GENED students who were performing at similar levels of mastery. This pretest was a multiple choice test rather than a test with open-ended questions so student misperceptions could be addressed between content-area knowledge and definitions of vocabulary in a real-world context. Some words were vocabulary words previously covered in class while other words were specific to the new PBL layout project. After the pretest was given, students were selected for this study. In CA class 1 (CA1), I selected the three ESL students in class for this study as well as three GENED students who performed at similar levels of vocabulary mastery as the ESL students. Class CA1 was the experimental group for this project. In CA class 2 (CA2), I selected three GENED students who performed at similar levels of mastery as those students in CA1. Class CA2 was the control group for this project. The same process was followed for the GD1 and GD2 classes by the technology education teacher. In all, nine CA students and nine GD students were a part of this research study.

During the course of the PBL unit, students in CA1 and GD1 were studied for how they used a GO (Appendix) for vocabulary acquisition and to complete components of the project. Once the project goals were established for each PBL lesson, students in the CA and GD classes were given the GO. The GO provided places for content-area vocabulary information as well as a guide to help students plan and monitor project completion. The GO was a tool that students had available during class each day for their use. At the beginning of the PBL, students were expected to make assumptions about the progress they would make in class each day and record their plans on the GO. Each day students were introduced to new vocabulary, they were expected to write the vocabulary and definitions on the GO. At the end of class, students were expected to write about the goals they accomplished and what they had learned each day by using content-specific vocabulary in their explanations. During the eight days students worked on this project, the two teachers monitored the students' use of the GO on day 1, day 3, day 6, and day 8. Conversely, when the GENED students in CA2 and GD2 were given vocabulary words for their projects, they were simply asked to write down and define the words. Data was kept on whether students completed the definitions on the same days that the GO were checked in the other classes. Students in CA2 and GD2 were expected to meet benchmarks for project components by following written and oral instructions from their teachers. Finally, on day 6 of this PBL unit, I held an interview (Appendix) with the technology education teacher to make sure she did not have any questions about using the GO with her GD1 class.

At the end of the PBL unit, students were assessed and a teacher interview was held between myself and the technology education teacher. Students were given another version of the multiple choice vocabulary test to determine if any change in mastery occurred. Additionally, students were expected to complete a checklist (Appendix) to assess project completion. Students in CA1 and GD1 who had used the GO throughout the project were allowed to use the GO to complete the project checklist. The teacher

interview at the end of the project was held in order to determine the teacher's perception on the use of the GO during class as opposed to not using the GO.

The data for this project was collected over the course of a week and a half in late February and early March 2013. All data from the pretest, use of GO, post-assessment, and teacher interview was collected by the researcher of this study after school hours. Data was compiled and assessed during the third and fourth weeks of March 2013.

Protocol

At the beginning of this study, I knew I wanted to find a tool to help my ESL students who were struggling to complete projects during class when my GENED students were finishing easily. I had spoken with other teachers who used projects as instructional methods during a majority of their classes and found that several teachers also struggled to find solutions to help ESL students. It has been predicted that the numbers of our school's ESL population will be increasing within the next few years due to high enrollment of elementary level ESL students in our district. Additionally, PBL units have been encouraged in our district so teachers understand that we need effective tools and methods for working with ESL students. Therefore, I selected one other teacher to work with me in this study who teaches classes with similar tools, resources, and content area vocabulary.

Since I chose to work with a technology education (TE) teacher, I had to be especially assured that we were both working under the same protocol and had shared understandings of the content information. When I proposed this study, my co-teacher was eager to participate. We met first to discuss the idea for the study and to clarify the essential questions that would drive the study. Then we shared the content information that we would both be teaching and the PBL process that we would follow. Also, we discussed what each of our roles and responsibilities would be for the project. Then I developed the pretest and GO for students and shared with my co-teacher. After revisions, the TE

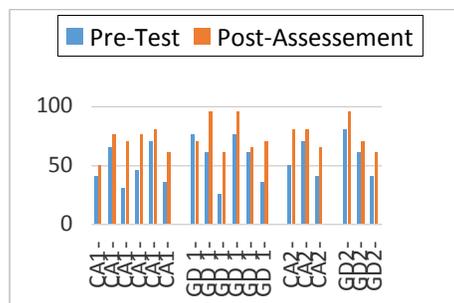
teacher and I met to discuss the protocol for this study. We discussed the ESL students in our classes and the method we would use for introducing vocabulary. Throughout the eight day PBL process, I briefly met with this teacher on days 1 and 3 to collect the student pretests and GO. On day 6 I met with this teacher to make sure she did not have any questions or concerns about using the GO. Finally, at the end of the PBL unit, a more formal interview was held with the TE teacher to assess her perceptions of the success that did or did not occur with students. All interactions with the TE teacher were face-to-face discussions and interviews.

Throughout this study, I wanted to be sure that I was working collaboratively with my co-teacher to make sure that the results from this study were valid. Therefore, I made sure that we met several times before the study so we could both be clear on the goals. Since I would be taking the lead role for analyzing the data that was taken from the tools I created, I wanted to be sure that I was available to coach my co-teacher throughout the process if she needed any clarification. I made sure to see this teacher on days 1,3,and 6 during this study. I was fortunate in this situation since there was a lot of giving and sharing of feedback during this peer coaching experience. Since I had a prior friendly relationship with this teacher, we had already established a trusting, working relationship together. We also both understood the drive in each other to help our ESL students. Therefore, I believe we both could listen to one another without judgment, and we were fortunate we did not have to address any significant conflicting issues between us. Using a GO in my class as a part of the daily routine was a new experience for me whereas my co-teacher had done some work like this in previous years. The only somewhat conflicting opinions we had during this study was about the levels of comfort we had in using GO with our students. Even though we both made sure to use the GO with our experimental groups, my co-teacher fell back into using GO much easier than I did for the first few days of the study. Throughout this study, this truly was a collaborative peer coaching experience. By the end of the study, my co-

teacher was eager to share results from the data and to have discussions with me about the future implications for our students and other teachers in our school.

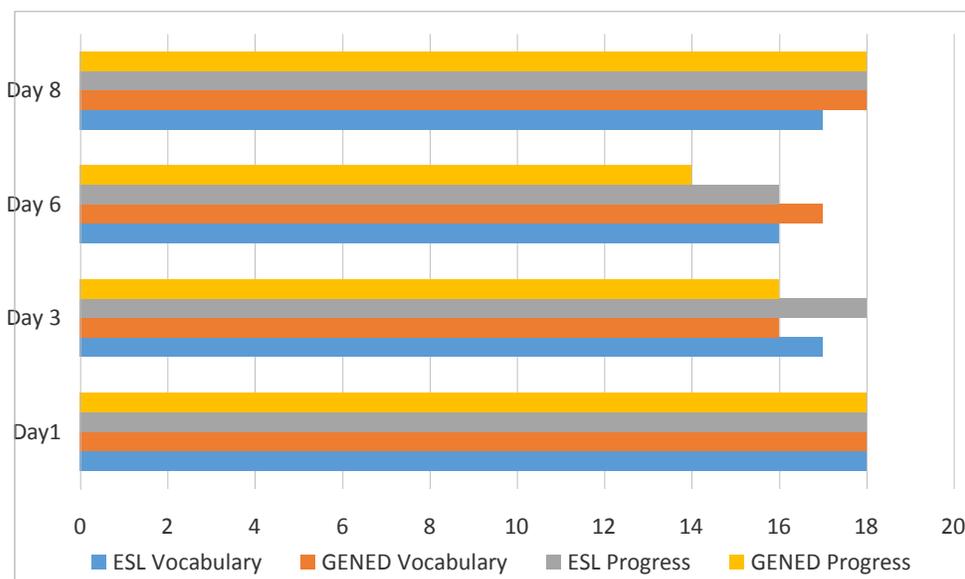
Findings and conclusions

At the conclusion of this action research project, post-assessment data was compared to pre-assessment data to understand if students made gains in content area vocabulary acquisition as well as if they completed the individual components required on the PBL layout projects that they were designing. As a result of this study, one can see in the chart below that there were changes in students' vocabulary acquisition:



When these scores were averaged to determine the amount of growth of each subgroup, the data shows that CA1 GENE students who used a graphic organizer scored the same on average as CA2 GENE students who did not use a graphic organizer. The CA1 ESL students who used a graphic organizer scored an average of 1.67 lower as a group over time when compared to GENE students in either of the two CA classes. However, all CA groups on average improved their test scores over time approximately 20 points. As for the GD classes, the GD1 ESL students scored 1.67 higher on average when compared to GD 1 GENE students. However, the GD1 students who used a GO scored higher on average than the GD2 students who did not use the GO. As a result, this data could imply that students overall could perform at the same or higher level due to the use of a GO. While one out of the two ESL groups fared slightly better than the GENE students, the difference was not significant.

These findings could have been influenced by the fact that students were using the GO daily. The chart on the next page shows the amount of use each day.



Although the data does not show that ESL students benefited significantly more than GENED students from using the GO, the data from this chart does show that the use of a GO could have led to the ESL students performing close to the same levels as their GENED peers who were also using a GO. The participation of ESL students in using the GO (17.175 average) was slightly higher than their GENED peers (16.8625 average). In particular, ESL students used the GO to monitor progress at an 96.66% of the time (average of 17.4) versus the GENED students who used the GO 92.5% of the time (16.65 average).

Additionally, data regarding the levels of completion for their individual PBL projects was assessed. The results are in the table below:

	Completed project components (Max=10)
CA1-ESL 1	8
CA1-ESL 2	9
CA1-ESL 3	10
CA1-GENED 1	8
CA1-GENED 2	10
CA1-GENED 3	7
GD 1-ESL 1	8
GD 1-ESL 2	10

GD 1-ESL 3	8
GD 1-GENED 1	10
GD 1-GENED 2	9
GD 1-GENED 3	8
CA2-GENED 1	9
CA2-GENED 2	10
CA2-GENED 3	8
GD2-GENED 1	9
GD2-GENED 2	8
GD2-GENED 3	8
ESL Mean	8.83
GENED Mean	8.67

Therefore, while the difference between ESL and GENED students is not significant, the data does show a slight increase in the work that ESL students finished on their projects overall as opposed to GENED students.

During the course of this research, I was surprised by two events. One element I saw was that the assessment scores of CA2 students were higher than GD2 students. These students were all taught vocabulary with the more traditional strategy of copying definitions instead of the GO. The difference between these two groups was significant. Additionally, I was slightly surprised to see data that proved ESL students were participating in monitoring their progress more than GENED students. Without taking time to develop this action research project, I would have assumed participation was equal or even a little less by the ESL students due to my own classroom experiences as well as conversations I had with my co-teacher during our interview sessions. During our conversations throughout and at the end of the PBL, I noted the following limitations for the research we were doing:

- more students might need to be studied over time so their previous levels of design, computer experience, and teacher experience could be considered
- introduce how SP ED students would benefit
- consider the English proficiency of ELL students instead of just relying on pretest

-pretest and post-assessment same exact test questions, some test learning might have occurred over the relatively short time period of the PBL

-did GO encourage students to do work at home so they accomplished more components of the project on their own time?

Next steps

I would like to use this process and resulting data to influence continuous improvement for my colleagues in their practice and continuous improvement for student learning. First of all, I believe that this study could provide usable results if a future study was organized so more ESL students were available for the study. Additionally, I believe this future study should also compare students based on ESL proficiency levels and reading level tests for GENED students. I would also like to pre-determine student experience levels in art, which could influence their ability to complete work or understand content-area vocabulary. If this study was continued and developed, could see the potential for using GO with all students could become a best practice in our school that all teachers would use in their classrooms. I have learned from this study that vocabulary acquisition might be another area that we need to target so more students master the content-area vocabulary in our courses. GO may not be the tools that initially make significant differences in vocabulary acquisition, but I would like to see if the continued use of GO to monitor progress on PBL projects might eventually lead to a stronger understanding of vocabulary over time. In the future, additional studies might need to occur where the type of GO are varied so that the best option for a GO could be determined. My co-teacher in this study agreed with me about the need for this project to be developed to see if more significant results could be obtained. However, she also has seen the benefit of using GO in the classroom and has renewed her interest in using these tools with her students again. Together we plan to discuss using GO with other teachers as we are working toward a structure of creating student learning objectives in our classes next

year. Personally, I plan to try using GO again with my students on our next project and look forward to more improvements in vocabulary with all students in my classes and a stronger emphasis on monitoring project completion.

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Appendix

Vocabulary Pre-Test

1. What is the name for an arrangement of pictures and text to create a design for business products?

- a) Composition
- b) Layout
- c) Magazines

2. A layout style that is almost completely covered in words is _____.

- a) big type layout
- b) Mondrian layout
- c) copy heavy layout

3. A layout style that uses large letters is _____.

- a) big type layout
- b) rebus layout
- c) copy heavy layout

4. The _____ are the spaces around the edges of a design project.

- a) frames
- b) margins
- c) edges

5. A layout style that does not seem to have any organization is _____.

- a) alphabet layout
- b) Mondrian layout
- c) circus layout

6. What do you call the most noticeable and most important picture or text in your design?

- a) Focal Point
- b) Theme
- c) Headline

7. A layout style that is characterized by a black grid and red, blue, and yellow shapes is _____.

- a) frame layout
- b) silhouette layout
- c) Mondrian layout

8. The style of a letter or alphabet is its _____.

- a) serif
- b) font
- c) size

9. A layout style that uses pictures instead of certain words inside a sentence is _____.

- a) multipanel layout

- b) rebus layout
- c) copy heavy layout

10. What is the name for the spacing between individual letters?

- a) Leading
- b) Geometric spaces
- c) Kerning

11. When you repeat words, shapes, or pictures over and over again in a similar way, you create a _____.

- a) rhythm
- b) pattern
- c) symbol

12. A layout style that uses an image as the most important part of the design is _____.

- a) alphabet layout
- b) frame layout
- c) picture window layout

13. The name of the study of how letters are designed is _____.

- a) Printmaking
- b) Graphic Design
- c) Typography

14. A layout style that has an image or words that trace along the edges of a design is _____.

- a) frame layout
- b) copy-heavy layout
- c) silhouette layout

15. When you cut out part of a design, you _____ the image.

- a) slice
- b) splice
- c) crop

16. A layout style that is divided into smaller, organized pieces is _____.

- a) rebus layout
- b) multipanel layout
- c) frame layout

17. A layout style that uses the "shadow" of an object as a way to organize the design is _____.

- a) rebus layout
- b) picture window layout
- c) circus layout

18. What is the design word used to describe the words in a project?

- a) Copy
- b) Lettering
- c) Format

19. What is the name for the spacing between lines of text?

- a) Leading
- b) Geometric spaces
- c) Kerning

20. A layout style that uses pictures to create the shape of a letter without actually writing the letter is

-
- a) alphabet layout
 - b) big type layout
 - c) silhouette layout

Name: _____ Class: _____ **Graphic Organizer**

Word 1		Word 7	
Definition		Definition	
Sentence using the word:		Sentence using the word:	
Word 2		Word 8	
Definition		Definition	
Sentence using the word:		Sentence using the word:	
Word 3		Word 9	
Definition		Definition	
Sentence using the word:		Sentence using the word:	
Word 4		Word 10	
Definition		Definition	
Sentence using the word:		Sentence using the word:	
Word 5		Word 11	
Definition		Definition	
Sentence using the word:		Sentence using the word:	
Word 6		Word 12	
Definition		Definition	
Sentence using the word:		Sentence using the word:	

In each box, **use 1 vocabulary word** from the back of this paper.

Circle the word in your answer.

DAY	Date	Your GOAL for class today	What did I FINISH today?	What did I LEARN today?
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Teacher Interview

Do students understand how to use the GO?

Do you have time in class to use the GO every day?

Are you doing anything in class that is different than what we discussed?

Were there any issues that happened in class that interrupted students from participating in this study?

What were complications you had using the GO?

Do your students understand how to use the vocabulary from class on the GO or are you guiding their reflections at the end of class?

Is there anything surprising happening during class that you did not expect?

Evidence 10

Polaris Class Descriptions for New Animation and Foundation of Digital Arts classes (intermediate level)

Foundations of Digital Design

One semester, 1/2 credit

Open to students in grades 9 - 12

Prerequisite: Exploring Digital Design

This class provides students with digital design experiences in advanced computer design. Students will develop composition and craftsmanship skills in a variety of illustration and digital photography projects and should have some beginning level design experience using computers. Students will study both fine and graphic arts from historical and contemporary sources as they work to perceive, produce, and reflect on a variety of art styles.

Purchase of a sketchbook and USB flash drive (\$15-20)

Foundations of Animation

One Semester, ½ credit

Open to students in grades 9-12

Prerequisite: Exploring Digital Design or Exploring Art

This visual art class will allow students to perceive, produce, and reflect on animated and still artworks in 2D and 3D animation formats. Drawing is an important element for every project developed in this class, but students will have opportunities to work with both their hands and digital tools. Learning activities include hands-on projects, journaling and sketching, self-assessment and homework.

Students may be required to purchase a sketchbook and USB flash drive (\$15-20).

Educator Standards Board

G. OHIO MASTER TEACHER CANDIDATE RECOMMENDATION FORM

Candidate's Name Melissa Sand License Number OH1370169

The above educator is applying for the Master Teacher designation in your school/district.

A master teacher demonstrates excellence inside and outside of the classroom through consistent leadership and focused collaboration to maximize student learning. A master teacher strives for distinguished teaching and continued professional growth as specified by *The Ohio Standards for the Teaching Profession*.

To be designated as a Master Teacher in Ohio, educators must clearly demonstrate each of the following criteria as described in the *Ohio Standards for the Teaching Profession*.

- A. **Consistent Leadership:** Master Teachers ensure student learning and well-being by participating in decision-making and initiating innovations and improvements for school change. They are leaders who empower and influence others. They engage in a variety of leadership roles and perform thoughtful stewardship responsibilities for the school community and the profession.
- B. **Focused Collaboration:** Master Teachers work with educators, students, families and communities to create relationships; share knowledge, practice and responsibility; communicate effectively and support student learning. They respond to the needs of their colleagues and students immediately and competently.
- C. **Distinguished Teaching: Focus on Students and Environment:** Master Teachers analyze individual and group student development to connect instruction to students' needs, interests and prior knowledge. They strive to create an environment that engages learners in inquiry, promotes high levels of learning for all students and creates a culture of civility and success.
- D. **Distinguished Teaching: Focus on Content, Instruction and Assessment.** Master Teachers have a deep and reflective understanding of the academic content they teach. They use multiple assessments to evaluate student learning and inform instruction. They continually reflect on student outcomes and make decisions to promote high levels of learning for all students.
- E. **Continued Professional Growth:** Master Teachers engage in continuous professional development and reflection. They use multiple resources to shape the focus and goals of their professional development including student learning, assessment data, researched best practices and school and district goals. They evaluate their personal growth, understanding and application of knowledge and develop an appropriate professional plan.

By signing this form, you confirm that, through your knowledge and observation of the candidate's professional practice, the candidate has the potential to obtain the designation.

Signature Elizabeth del Campo Hartman Date 4/29/13
Printed Name Elizabeth del Campo Hartman Title 6-12 Instructional Coach

Educator Standards Board

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Signature [Signature] Date 4/29/13
Printed Name Frank Maja Title Principal