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Creating and Reflecting on a Graphic Arts Unit for 8th Grade Computer

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Creating and Reflecting on a Graphic Arts Unit for 8th Grade Computer

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Abstract

This paper deals with the issue of incorporating the teaching and learning of 21st-century skills within a classroom setting. These skills include critical thinking, collaboration, communication, technology integration and more. Although implementing 21st-century learning can be intimidating, it is necessary in the educational and business climate that exists today. Lewis Public Schools currently provides many opportunities to incorporate 21st-century learning and skills. The 8th grade multimedia class is one class where the implementation should be easy and seamless. Unfortunately, the curriculum is not well-laid out and assessments are vague. Using the literature, research, and ISTE standards as a guide, a graphic arts unit has been developed with a clear curriculum map, assessments, and rubrics, all based in the ISTE standards.

Literature Review

Learning in schools today looks much different than it did in years past. Today students not only need to learn content but also a new set of skills, a set of skills that fall under the idea of 21st-century learning. These skills include things such as critical thinking, collaboration, communication, creativity, analyzing, and digital and technology capabilities. There are many different "sets" of 21st-century skills that claim to be the correct "set" but the idea behind 21st-century skills is that it's no longer good enough for students to just have knowledge of a set of facts, instead they need to know how to apply that knowledge in various real-world settings. The application and action of knowledge is what drives the teaching and learning of 21st-century skills. The need for these skills is not actually new, but the sudden emphasis of them as a fundamental part of school learning is new (Silva, 2009). Today's teachers should be fostering the skills through communication and collaboration, integrating technology, and encouraging innovation and creative thinking (Larson & Miller, 2011).

Why has education moved to place such an importance on 21st-century learning? Gretter & Yadav (2016) attribute the gradual shift to the increasing globalization of learning and the world around us. Students now have a variety of avenues for communicating and collaborating, and they no longer have to solve problems theoretically, instead they can take real action through the technology and online resources available to them. It is a reflection of our culture moving toward being less consumers of information and more of a participatory culture - analyzers and creators of information (Gretter & Yadav, 2016). Although some scholars, such as Naomi Dillon (2006) place little emphasis on the importance of technology is teaching 21st-century skills, most scholars and researchers of education agree that technology tools and the use of them is imperative to increasing 21st-century skills. Lotta C. Larson and Teresa Northern Miller (2011) point out that there is a great importance for students to use technology to research, analyze, and communicate. Using technology is the most innovative way for students to share expertise with their fellow learners (Larson & Miller, 2011).

Victor River (2010) agrees with Gretter and Yadav in his article "21st-Century Learning in 2010: A Global Imperative". River points out that through technology our "world" has actually gotten smaller -

we are able to connect to others much more quickly and easily than ever before. The growing connectedness of our world and the ability to collaborate to solve problems is integral to 21st-century learning, and is the reason why it is so important that schools integrate 21st-century skills into their curriculum (River, 2010). The workforce demands that students be able to collaborate and communicate easily, and use critical thinking and technology to complete tasks. Incorporating new and different technology is a major way to increase collaboration and communication, and help students develop problem-solving skills.

The workforce demanding that students have 21st-century skills is one reason that there is such an emphasis on them in education right now. Businesses and employers expect students to be able to succeed immediately in a competitive and complex business world (Dillon, 2006). Naomi Dillon (2006) points out that the habits and traits necessary in life and work today aren't modeled in many American classrooms. Many school districts even ask businesses to audit their schools to see if school is preparing students for the workforce, and one of the major things they look at is if classes and teachers are actually developing and promoting 21st-century skills, not just displaying them (Dillon, 2006).

Many teachers wonder how to actually implement the teaching and learning of 21st-century skills into a classroom. One big question is how do we actually assess the learning in a classroom where the skills being learned are somewhat subjective. These are good questions, and are used by critics of 21st-century learning. There are also arguments that teaching those skills takes away from teaching actual content that students need. Elena Silva (2009) is a proponent for combining content and skills, and points out that they are best learned together according to research (Silva, 2009). Silva (2009) points out the way to actually change the way we're teaching content is to change what and how we're assessing student work, incorporating more technology, measuring not just knowledge, but the ability to think critically, problem-solve, and apply the knowledge. Although it would be a large undertaking, the important of what learning is actually important for students and for their long-term success. One of the problems with changing the way that learning is assessed is that much of existing curriculum decisions are driving by statewide assessments and accountability standards (Walser, 2008). In her article "Teaching 21st-Century

Skills" Nancy Walser (2008) writes about the possibilities of using different types of assessments, including using technology softwares and collaborative groups, and more. Although schools are often tied to traditional assessments, Walser (2008) believes that between the assessment cycles there is time to incorporate more 21st-century learning, but it must be combined with content learning.

One way to combine content and skills is through project-based learning. Project-based learning allows students to lead their own learning, develop planning and organization skills, use collaboration, and encourage problem-solving skills (Bell, 2010). Bell (2010) points out that research shows that project-based learning engages students in real-world tasks, and through through project-based learning students become better researchers and develop higher-order thinking. Engaging students in higher-order thinking may be the opportunity to break through achievement barriers (Sapeter, 2008). Technology is easy to integrate within project-based learning and allows students to enhance their creativity and modes of communication. Within 21st century learning, students are increasing expected to express their understanding and learning in ways that differ from using plain text (Regan, 2008). Students now use images, videos, animation, and other multimedia applications on a regular basis even within core content areas (Regan, 2008). Multimedia tools are exciting for both teachers and students, it is an easy way for teachers for incorporate 21st-century skills, and a fun way for students to demonstrate their learnings. Multimedia tools are engaging and provide alternate means for students to problem-solve, collaborate, and communicate.

Project-based learning and incorporation of more multimedia should not be used just for the sake of using them, they still have to teach students the content and skills. Anna Rosefsky Saavedra and V. Darleen Opfer (2012) make a statement that the reason that students aren't always learning 21st-century skills is that teachers are not teaching them. Saavedra and Opfer (2012) offer nine lessons in teaching teaching the skills: 1) make it relevant 2) teach through the disciplines 3) develop thinking skills 4) encourage learning transfer 5) teach students how to learn 6) address misunderstandings directly 7) treat teamwork like an outcome 8) exploit technology to support learning 9) foster creativity. These lessons provide a clear path for teachers to begin developing activities and assessments that actually teach 21st-

century skills within learning content. Number 8 states that teachers should exploit technology, a belief with which schools seem to agree. Schools have developed technology initiatives, provided more equipment and software and professional development for implementing technology. Technology is a major component of teaching 21st-century skills, but teachers are still learning how to maximize its use (Saavedra & Opfer, 2012).

The teaching and learning of 21st-century skills is not new, but it has gained importance and emphasis in recent years. According to Rotherham and Willingham (2010) what is new is that students' future success is dependent on having these skills. If student success is connected to being able to use 21st-century skills, then we as teachers owe it to our students to teach them these skills. We need to develop curriculum that incorporates content and skills, and emphasizes learning as a self-led process where both the content and skills are equally important (Rotherham & Willingham, 2010). The great emphasis and importance of these skills requires that teachers examine their instructional practices, classroom activities, and plans for how learning will look and be assessed in their classroom. It is no longer optional but now required by business that want work-ready students, and by students that want to be highly engaged in their learning.

8th Grade Computer Curriculum in Lewis Public Schools

Lewis Public Schools currently provides students with many opportunities to learn 21st-century skills. One class where it is easy to incorporate 21st-century learning is in the 8th grade Multimedia Class. The class includes units for computer basics, graphic arts, multimedia production, and web design. The course is described in the Lewis Public Schools Course Descriptions Guide:

> "Students use critical thinking, problem solving, and cooperative learning to design and create a variety of multimedia projects. Special areas of emphasis include digital video, digital audio, graphics, and web design. The issues surrounding "digital citizenship" will be addressed throughout this course"

The class is entirely project based and easily aligns with the ideas of collaboration, technology use, communication, creativity, and developing critical thinking skills.

At the district level the 8th grade multimedia class is laid out with basic units (Appendix A) and objectives (Appendix B). Unfortunately, these units are vague and lack a clear curriculum map and there are no defined state standards, the objectives serve as the current standards. There are no district common assessments or rubrics, each middle school computer teacher creates their own plan for the curriculum within the unit guidelines. This can lead to disorganization and lack of purpose within the classroom, and makes it difficult for teachers to collaborate professionally.

I have found the 8th grade multimedia class challenging to plan and teach with very little guidance from the district office. This challenge has led me to create my own specific curriculum map, assessments, and rubrics. One of the units that I would most like to see have a clear curriculum map and district common assessments is the Graphic Arts unit. I have developed a Graphic Arts unit that is mainly photo editing and creation and combination of multimedia. I have chosen to focus on the creation of this unit, assessments, and rubrics, and have reflected on how the unit progressed and the successes and failures involved. I have chosen to base my work on the 2016 ISTE Standards for Students and have mapped the unit with the incorporation of 21st century-learning always in mind.

<u>Instructional Resources</u>

For the Graphic Arts unit I will use a variety or resources and tools. The main software tool that I will use is Photoshop Elements 13. This software is what is provided by Lewis Public Schools and is commonly used across the district. It is also supported by LPS Computer Services so if and when any problems arise it is easy to ask for and receive help on the software. In addition to the software provided by LPS, I also like to expose students to online resources. Photoshop is a great software, but it is very expensive to buy and install on a home computer. One of my goals of the unit is to not only teach the students how to use Photoshop, but how to apply the skills across programs. I use online programs like Pixlr, PicMonkey, and BeFunky that allow students to do similar photo editing skills in a free online environment.

The biggest challenge of teaching the 8th grade multimedia class is that the units are not clearly laid out, as stated above. One of the first resources that I needed to create was an instructional map,

planning out daily what skills would be learned, and which activities would go along with those skills

This map provided a clear plan for daily activities, and also could be used as a common instructional map

across the district in the future.

<u>**Photo Editing Curriculum Map by Day**</u>

Day	Unit	Program	Skills	Activity	ISTE Standards
1	Photo Editing	Photoshop	Intro Photoshop - opening, saving, quick edit, cropping	Work Together	1,2,5
2	Photo Editing	Photoshop	New in Photoshop - enhancement menu, red eye repair, auto enhancements, enhancement menu, crop, zoom, Red-eye, spot healing brush, smudge tool, blur tool, sharpen tool, Dodge tool, sponge tool, burn tool, pattern stamp, clone stamp	Work Together	1,2,5
3	Photo Editing	Photoshop	paint bucket, crop, zoom, Red-eye, spot healing brush, smudge tool, blur tool, sharpen tool, Dodge tool, sponge tool, burn tool, pattern stamp, clone	Work Together	1,2,5
4	Photo Editing	Photoshop	All tools learned	Formative Assessment: A New Me	2,4,5
5	Photo Editing	Photoshop	All tools learned	Formative Assessment: A New Girlfriend	2,4,5
6	Photo Editing	Photoshop	Layering, filters, & effects	Filters Favorites	1,2,3,4
7	Photo Editing	Photoshop	Layering & Selection tools - marquee and quick selection, filters, & effects	Work Together	1,2,3,4
8	Photo Editing	Photoshop	Layering & Selection tools - magic wand/tolerance, combining images	Work Together	1,2,3,4
9	Photo Editing	Photoshop	Magnetic lasso, lasso, paint select, add to and delete from selections, selection brush tool, combining images	Work Together	1,2,3,4
10	Photo Editing	Photoshop	Rotate and transform pictures, Moving and adjusting layers	Formative assessment: Famous Me	3,4,5,6

11	Photo Editing	Photoshop	All tools learned. Take full length pictures.	Summative Assessment: TV Show Me	3,4,5,6
12	Photo Editing	Photoshop	Review tools.	Surf & Turf Assignment	3,4,5,6
13	Photo Editing	Photoshop	Photoshop - opening blank documents - pixels and resolution. Custom shape tool.	Work together. Peer teaching.	1,2,4
14	Photo Editing	Photoshop	Text tool.	Postcard Assignment.	2,4,6,7
15	Photo Editing	Photoshop	Review tools.	Postcard Assignment.	2,4,6,7
16	Photo Editing	Photoshop	Cookie cutter tool, text mask.	Work together.	1,2,3,4
17	Photo Editing	Photoshop	Review tools.	Collage Assignment.	2,4,6,7
18	Photo Editing	Photoshop	Review.	Finish collage assignment.	2,4,6,7
19	Photo Editing	Photoshop	Review	Missing assignments.	
20	Photo Editing	Pixlr	Online photo editing tools.	Pixlr online editing.	
21	Photo Editing	Pixlr	Online photo editing tools.	Pixlr online editing.	
22	Photo Editing	PicMonkey, BeFunky, Pixlr O-Matic.	Fun editing tools.	Online editing tools.	

The other resource that I relied on heavily was the 2016 ISTE Standards for Students. One of my

goals is to teach more 21st-century skills, because these are the skills that students need to be successful

in their future, both in work and life. It is imperative that I base what I do heavily on the ISTE standards,

as they align perfectly with 21st-century learning. In order to align my classroom instruction with the

ISTE standards, I developed and used rubrics based on the standards.

After developing the map, assignments, and rubrics, I taught the unit in my classroom. Throughout the unit I reflected on my teaching, the unit, and how students were responding to the activities within the unit.

Reflections on the Unit

Week 1

This week was the first week of the Photoshop unit. In the first two days students are introduced to Photoshop - how to open it, how to navigate within the software and how to save their work. Much of the first few days of Photoshop are designed as mostly work together. This allows me to give the students a good base of knowledge about Photoshop before they move on to working on assignments. Photoshop tools are new to the students so they are very intrigued and taken with how they can manipulate a photo, so some freedom is required at times to let the students "play" with the tools and make a mess of the pictures. Some of the impacts that I've seen this week are students taking control of their own learning and trying new things. Students are excited about the program and unit so they want to learn and try to create their own photos. One student, Cole, mentioned that he is excited to put his head on the body of his favorite basketball player. The students' excitement made me also excited about the Photoshop unit. I felt particularly inspired to do more when students were asking for more instruction on certain tools, how to use tools I hadn't taught, and were willing to try new things. I also felt slightly frustrated because students were clicking all over and trying tools without instruction, making it hard for me to teach them the skills I wanted them to have for that day. Students enjoyed viewing each other's work, sharing their ideas for what tools they should use, and some even worked on and added to other's photos. My instructional decision making has been affected by the student's excitement. I have provided opportunities for them to explore and create.

Watching the students create was the most fun part of the week for me, however, looking at their assignments I can tell that more work needs to be done. Garrison and Nathan took the instructions on the assignment to the extreme, using the tools beyond what looks natural. Both students used the smudge tool and dodge tool so much that the faces in the photo look unrealistic. In contrast, Adrian and Kailyn attempted to make the photo look as real as possible. All were using the skills as instructed, but the interpretation of how to use them was different. This really made me think about the rubric, and making

sure that the rubric is clear about what is expected. I want the students to be empowered learners and be in controls of what and how they learn.

Photoshop naturally lends itself to the ISTE standards. As we head into the first few assignments, students will be creating their own edits to photos and controlling their own learning. Digital citizenship is required because some photos will be used from online, so it important that students are using photos that are labeled for reuse with modification. This will be its own mini-lesson within the unit before the first assignment. Students will show innovation by selecting and using the appropriate tools within Photoshop to fulfill the requirements of the assignment. In addition, students will creatively communicate by creating original works and repurposing digital resources into new creations. Although not every assignment hits every ISTE standard, throughout the unit students do demonstrate skills within each standard. One of the things that is difficult this week is reworking a few assignments so that each one is solidly based within the ISTE standards. It isn't difficult to create assignments that clearly demonstrate skills meeting the standards, what is difficult is to create a rubric that accurately assesses student work in the most objective way possible. Students' creative work always lends itself to some subjectivity in grading. How do we define what is "good" when students have different types and styles of creativity? The ISTE standards help to more clearly define what is "good" and help evaluate whether students are showing the required skills. A good rubric can make all the difference in assessing student work.

Assignments, Rubrics, and Examples for Week 1

A NEW ME

1. **Take a picture of yourself in Photobooth. Drag it to your Desktop.**

2. Open your picture in Photoshop.

3. **Crop** your photo so the picture is from your shoulders up and there is

   little background.

4. Use the **red-eye** tool as needed

5. **Auto smart fix** your photo

6. **Enhance** your photos

   - Saturation

   - Hue

7. Change your eye color

8. Change the color of your eyebrows

9. Change the color of your lips

10. Use the **smudge** and **dodge** tool to change your photo

11. Use the **spot healing brush** and **clone stamp** to change your photo

12. Use the **blur** and **sharpen** tools on your picture

13. Save the photo as **NewMe_LastName** to your desktop

14. Turn in the photo to Google Classroom

A New Me Rubric

Guidelines	Points	Comments
Photo is cropped correctly	_____ / 3	
Photo is enhanced and correct features are recolored - eyes, eyebrows, lips	_____ / 5	
Editing tools were used to change the photo	_____ / 3	
Saved and handed in correctly	_____ / 3	

Total Points   _____/ 14

A New Me Example

A New Girlfriend

1. Open the photo "girlfriend"

2. Crop the picture so the girl fills the screen

3. Change the eye color and lip color

4. Use the clone stamp to put flowers on the left side of the picture

5. Use spot healing brush for any blemishes

6. Use the smudge tool to clear the dark areas under the girl's eyes

7. Use the dodge tool to whiten the girl's teeth

8. Sharpen the girl's hands and arms

9. Blur the girl's legs

10. Use the paintbrush to put your initials in the corner of the picture.

11. Save the file to your desktop as: lastnamegirlfriend

RUBRIC

| Assignment: A New Girlfriend				
	Emerging 1	Proficient 3	Advanced 5	Points
Student used a variety of tools to edit the photo, including all tools in the instructions. (Knowledge Construction)	Project demonstrates use of single tool for editing.	Project demonstrates use of 2-4 tools for editing. Picture is good quality and tools are used creatively.	Project demonstrates a variety of tools for editing. Picture is good quality and tools are used creatively. Photo shows an effort at extensive editing.	_____/5
The photo looks natural and attention to detail was used in the selection and editing. (Innovative Design)	Project does not look natural. Selection and editing is sloppy.	Project demonstrates an attempt at careful selection and editing. It looks somewhat natural.	Project demonstrates careful use of selection and editing tools. Attention to detail shows through the use of tools to make the photo appear natural.	_____/5
Picture shows an understanding how editing tools can be used creatively (Creative Communication)	Project is completed with little creativity.	Project shows some creativity.	Photo shows creativity, with editing tools used in ways that enhance the photo unexpectedly.	_____/5
			Total Points	_____/15

A New Girlfriend Example
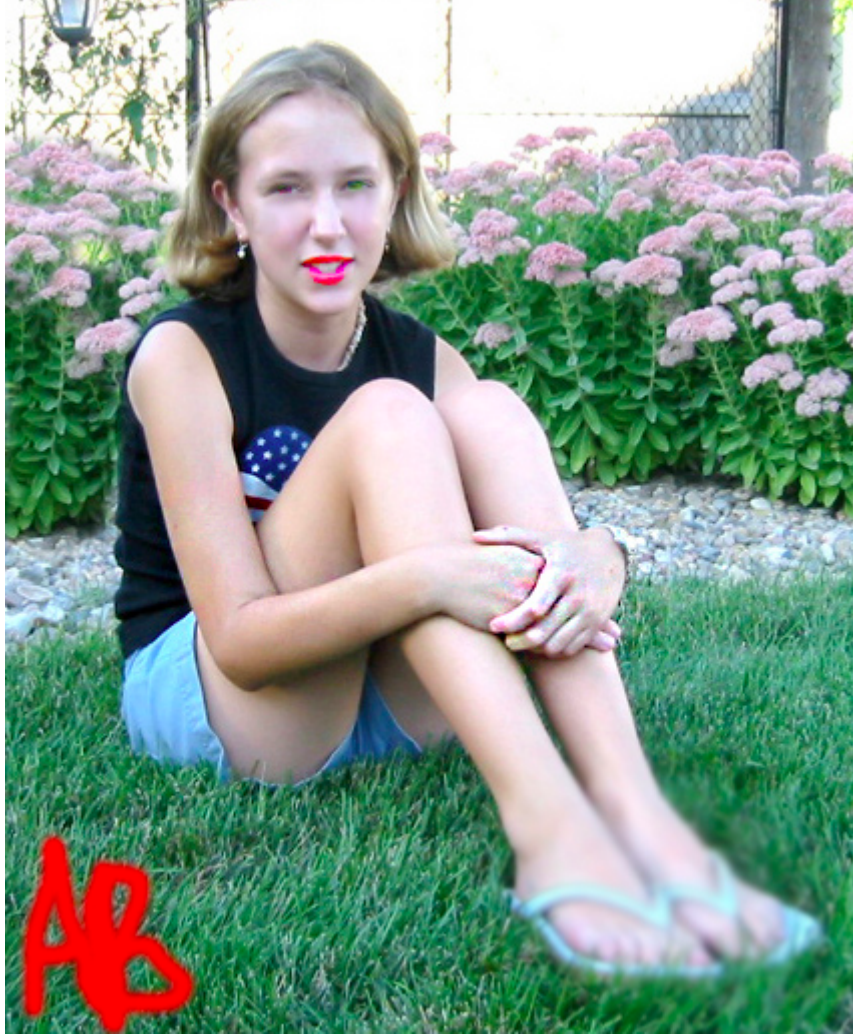
Photo used with permission of school district.

Week 2

This week students continued to practice and refine their skills on the editing tools in Photoshop. Students also tried the filters and effects out on photos. Students enjoyed the filters and effects. This is the first time that I have done an assignment with the filters and I felt like it went really well. One of the ISTE standards that lines up with the filters tool is being an Innovative Designer. Students can use multiple layers and filters to create something that looks completely new. The assignment allowed students to identify things they like and arrange them in a creative way. I was really impressed when Daniel was finding things he liked and adding filters to them. Allowing students some choice in what they put on the assignment helps them to connect to work and get excited about it. I also really enjoyed seeing Jordan's work because he pays close attention to detail and always strives to do his best.

One thing that I didn't anticipate was how frustrated students would be trying to combine images when we began to use the selection tools. Photoshop is complicated because you have to use several windows and menus all at the same time. This can be difficult for students to navigate and requires more computational thinking than many of them are used to. I expected a few students to have problems with the navigation, but I was surprised that Cole and Lexie also seemed to struggle figuring out how to switch between windows and follow the steps in order. When we began using the selection tools it got even worse. One thing that I think might help is a handout or poster with the selection tool process on it. I've never done that before, I've always just taught the process and practiced it repeatedly. Today as I was teaching I was thinking how nice it would be to have a handout or poster to refer to. This would really scaffold the computational thinking required for combining images.

As I went through the selection tools this week, I made instructional adjustments. In the past I have taught 2-3 selection tools then had students complete an assignment. This time I used two days to teach six selection tools before having students complete an assignment. I did this because of the size of the class and ability level. This class is small with only 24 students. The majority of the students are at a high learning level. I felt that the students could handle the extra instruction time and tools, and that it will translate into a higher-level assignment from them.

This week I was having a lot of students question why they should even learn about Photoshop. Students were struggling to see relevance and purpose behind the lessons. I showed several examples of photos from ads online that were clearly photo-shopped. I discussed with students that learning about these tools is relevant to them because even if they are not going to use Photoshop in their future, they are surrounded by a world where everything they see may not be exactly what it seems. The world is using creative communication through Photoshop and editing to influence you to buy items, dress a certain way, use makeup, hairstyles, and more. It's important for us to be aware of the capabilities of photo editing and Photoshop because then we are able to be more critical of what we see and to evaluate what we're really looking at.

The students completed their first major assignment of combining images. I especially appreciated when Jeana and Matthew asked questions about how to make their images look more natural. It made me realize that I had not done a good job of teaching how to blend between layers use the merge with the edit tools to make a more natural picture. Students also needed a reminder on how to adjust the colors of photos to make them look more natural. One thing that I need to teach is how to cut items and make multiple layers. I will cover this next week and it will hopefully help students to better combine images. I was impressed that every student in the class was able to combine two images with very little help, they knew the combining process. What students really needed help with what the editing and blending to make the pictures look natural. This is where I saw the creative communication really coming out in students, they wanted to communicate with a picture exactly what they had in their mind, and were able to employ multiples tools to do that.

This week I've been really wondering about intrinsic motivation. Many students are able to complete the assignments as "good enough", but how do I motivate students to complete assignments to the best of their ability? How do I motivate students to go beyond the minimum requirements? Is this connected to getting them to see how this could apply to their own lives? Next week I plan to start by looking at some professionally photo-shopped images in an effort to show students how many images around them really are altered in some way.

Assignments, Rubrics, and Examples for Week 2

Photoshop Filters Favorites

1. Take a picture of yourself in Photobooth.

2. Drag it to your desktop.

3. Open the picture in Photoshop.

4. Find 4 pictures of things that you like - food, music, tv shows, sports, etc.

5. Drag those pictures to your desktop.

6. Open the 4 photos in Photoshop.

7. Use the marquee tool to select and add and effect or filter to each photo.

8. Drag the selected area onto the photo of you so you are surrounded by things you like.

9. Layer - Flatten image.

10. Save as a JPG: LASTNAMEfavorites.jpg

11. Hand in to Google classroom.

Photoshop Filters Favorites Rubric

Guidelines	Points	Comments
Marquee tool is used to select and combine photos.	_____ / 3	
Filters are used on 4 "favorites" pictures.	_____ / 3	

Pictures are arranged around photo of self.	_____ / 3	
Saved and handed in correctly	_____ / 3	

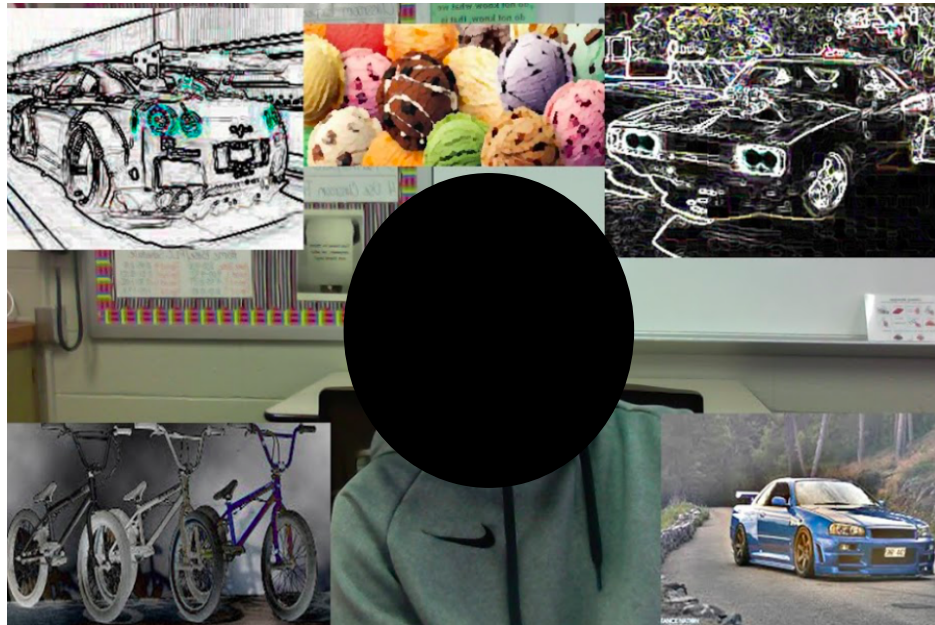**Total Points   _____/ 12**

<u>Photoshop Filters Favorites Example</u>

All images used from Google Images and labeled for reuse with modification.

Photoshop Filters Favorites Student Examples

Photoshop: Famous ME

1. Find a picture of a famous person (school appropriate)
2. Select a picture of yourself
3. Use selection tools to combine the two photos – your head and/or face onto the Famous person's body
4. Use the tools to edit the photo and make it look NATURAL
   a. Enhance– select and adjust hue/saturation
   b. Blur tool
   c. Smudge tool
   d. Dodge tool
   e. Spot-healing tool
   f. Clone stamp
5. With the paint tool write the name of the famous person at the bottom.
6. Flatten the layers
7. Save as FamousLASTNAME.jpg
8. Hand in to Google Classroom

Famous Me Rubric

Guidelines	Points	Comments
Photos are free from copyright	_____ / 3	
Selection tool was used to combine photos	_____ / 3	

Editing tools were used to make photo appear natural	_____ / 3	
Name of famous person at bottom of photo	_____ / 3	
Saved and handed in correctly	_____ / 3	

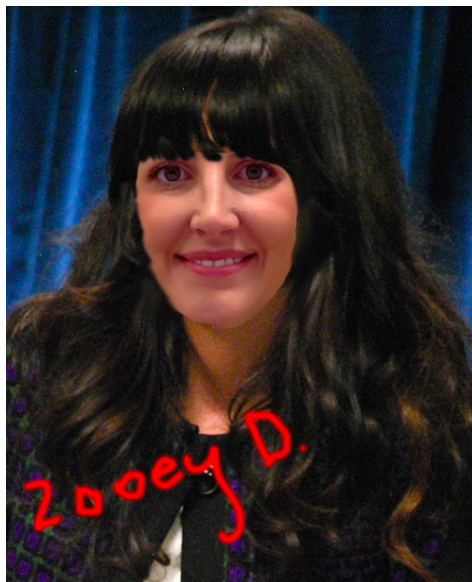**Total Points   _____/ 15**

Famous Me Example

Image used from Google Images and labeled for reuse with modification.

Week 3

This week in Photoshop was FUN! The focus was on mastering the selection and combination tools, and to work on the editing tools to make pictures appear more natural. One thing that I did this week was create a sign (Appendix C) to put on the screen to help students remember the steps of combining images. That seemed to cut down on student frustration of missing a step and then having to try to go back and redo a selection. The biggest thing that students seemed to struggle with was the editing and blending after the photos were combined. I did some re-teaching of the editing tools and some more modeling of how to navigate around the different tools menus and use the tools. I want students to be able to communicate exactly what they would like to show in their image. I also did some re-teaching of how to navigate the layers.

Several students finally grasped the concept of how cool combining photos can be. Cole finished the assigned combination and then went on to combine two photos of his choice. He took his time and was meticulous about his selection and editing, ending up with a combined photo that he was very proud of and liked even more than his assigned work. One student, Alyssa, who has struggled with the concepts of Photoshop and navigating the menus was able to be successful combining images and even said that it was fun. The students' enthusiasm for combining photos was exciting for me.

One we finished combining photos we had a short lesson on where we might see photo combinations in everyday life. To do this we looked at some advertisements that used Photoshop (Appendix D). Two of the examples are so extreme that they are obviously photo-shopped, but the computer cords on the beach COULD actually happen. The students and I talked about how that because something can appear natural or COULD happen, doesn't mean that the photo is real. We have no real way of knowing if that photo is real or not. Several students talked about advertisements and marketing, and how we should be aware that what we're looking at might not be what was actually happening. Students discussed the use of Photoshop in marketing, and how companies could use images to skew consumers' perspectives and the pictures might not even be real. Several students also mentioned how Photoshop might be a great tool for

important events in life such as senior pictures or wedding pictures. I was interested to hear what students thought the most important uses or of Photoshop are. It was great to hear students connect the skills in Photoshop to real life situations.

Although it was a great week in Photoshop, there are things that can be improved. One question that I always have is what to do with students that are absent one or more days. How should I teach them the skills when they return to class? As I was thinking about this problem this week, I realized that the focus of my work is 21st century skills for students, and that these skills might hold the answer. I can videotape myself teaching any time, or I can record a video of my computer as I teach the skills. I could then upload this video to our class blog or classroom platform. Students are so used to using technology it would be easy for them to watch a video either at home, or in class to learn about the skills they missed while they were absent. This would help eliminate students needing individual instruction and allow me to continue with the class even if a student has been absent.

Assignments, Rubrics, and Examples for Week 3

TV Show Me

Directions: Using Photoshop, you will combine a picture of yourself with a picture of the cast from your favorite tv show (or movie).

Guidelines:

1. The Photo you select must be appropriate for school.

Steps for completion:

- Find an appropriate photo(s) from the internet.

- Take a photo of yourself

- Save the photo to the desktop of your computer or your server folder.

- Use the methods you have learned to combine your photos your photo to the famous photo.

- Save the photo as a JPG called LASTNAMEtvshowme

- Hand in your JPG file to Google Classroom

- Hints:

  o Don't forget to duplicate the layers before selecting in the photo
  o Use blur, smudge, and clone stamp to make your photo look natural
  o Use the enhance menu – hue, saturation, and light to make your photo look natural
  o Cut things out and move layers around as needed

Original courtesy of Heather Steiner

Assignment has been modified for use.

RUBRIC

Assignment: TV Show Me

	Emerging 1	Proficient 3	Advanced 5	Points
Student used a variety of tools to create and finish project (Empowered Learning)	Project demonstrates use of single tool for selection and blending.	Project demonstrates a variety of tools for selection and blending. Picture is good quality but does not look natural	Project demonstrates a variety of tools for selection and blending. Picture is good quality and looks natural.	_____/5
Selection of Photos (Digital Citizenship)	The copyright status of photos is unknown.	Student attempted to find the copyright status of photos, but the status of the photos used is unknown.	The photos used are free of copyright and student can verify where the acquired the pictures.	_____/5
Students correctly used the selection tool process (Innovative Design)	Student was not able to combine two photos.	Students was able to partially select and combine and edit two photos.	Student was able to complete select and combine two photos and use editing tools to make the final photo appear natural.	_____/5
Picture shows an understanding of the use of layers, selction tools, and editing tools (Creative Communication)	Final photo shows only an attempt at using layers to combine and edit photos. Final photo does not appear natural.	Final photo shows an understanding of using layers and editing tools to make a combined photo appear natural. Final photo appears somewhat natural.	Final photo shows an understanding of using layers and editing tools to make a combined photo appear natural. The final photo shows attention to detail and effort at editing.	_____/5
			Total Points _____/20	

TV Show Me Example

Image used from Google Images and labeled for reuse with modification.

Surf and Turf

Directions: Using Adobe Photoshop, you will combine a picture of an animal from the ocean and a picture of an animal from the land.

Guidelines:

1. The Photo you select must be appropriate for school.

Steps for completion:

- Find appropriate photos from the internet. You must use one land animal and one water animal.

- Save the photos to the desktop of your computer

- Use one of the methods you have learned to combine your photos.

- Save the photo as LASTNAMESurfTurf– Make sure it is a JPG

- Hand in your JPG file to Google Classroom

- Hints:

    o Don't forget to duplicate the layers before selecting in the photo
    o Use blur, smudge, and clone stamp to make your photo look natural
    o Use the enhance menu – hue, saturation, and light to make your photo look natural
    o Cut things out and move layers around as needed

Original courtesy of Heather Steiner

Assignment has been modified for use.

RUBRIC

Assignment: Surf & Turf

	Emerging 1	Proficient 3	Advanced 5	Points
Student used a variety of tools to create and finish project (Empowered Learning)	Project demonstrates use of single tool for selection and blending.	Project demonstrates a variety of tools for selection and blending. Picture is good quality but does not look natural	Project demonstrates a variety of tools for selection and blending. Picture is good quality and looks natural.	_____/5
Selection of Photos (Digital Citizenship)	The copyright status of photos is unknown.	Student attempted to find the copyright status of photos, but the status of the photos used is unknown.	The photos used are free of copyright and student can verify where the acquired the pictures.	_____/5
Students correctly used the selection tool process (Innovative Design)	Student was not able to combine two photos.	Students was able to partially select and combine and edit two photos.	Student was able to complete select and combine two photos and use editing tools to make the final photo appear natural.	_____/5
Picture shows an understanding of the use of layers, selction tools, and editing tools (Creative Communication)	Final photo shows only an attempt at using layers to combine and edit photos. Final photo does not appear natural.	Final photo shows an understanding of using layers and editing tools to make a combined photo appear natural. Final photo appears somewhat natural.	Final photo shows an understanding of using layers and editing tools to make a combined photo appear natural. The final photo shows attention to detail and effort at editing.	_____/5
			Total Points	_____/20

<u>Surf & Turf Example</u>

All images used from Google Images and labeled for reuse with modification.

<u>Surf & Turf Student Examples</u>

Week 4

This week we added shapes, text, text mask, and cookie cutter to our Photoshop toolbox. One thing that I tried differently this week was peer teaching. On Monday I taught a lesson on shapes and text. On Tuesday I had students collaborate on a short activity and teach each other. One student was assigned as the "teacher" while the other was the student and had to do what the teacher said. After the activity was over the roles switched and they completed the activity again. I really enjoyed this activity because it made both partners work, and students had to teach each other skills. On Monday I had made sure to let students know that on Tuesday they would be the "teacher" so they were focused during work together making sure that they understood the concepts so they could teach it to their peers. While students were teaching each other I observed students who really enjoyed working together and students who were frustrated. As I watched Adrian "teach" Derek how to use the cookie cutter and text, Adrian was being very specific and Derek seemed much more responsive to a one-on-one situation than being taught in a large group. I was impressed by Adrian's ability to give the details about how to use the tools. When we switched roles and Derek became the teacher he struggled more to explain the steps and skills to Adrian. It was interesting to watch Adrian attempt not to interrupt too much and try to do what Derek was telling him, but a few times Adrian would very nicely suggest that he try a different selection or tools first. I actually thought that this helped Derek, he was able to practice using and teaching the tools in front of only one person and not put on the spot in front of the class. It worked well for these two and they were able to get a lot of learning out of the activity. The collaboration and communication was amazing to watch. On the other hand, Lexie and Garrison did not work well together, and spent much of the time arguing about the best way and correct steps for using the tools. I felt like both of their frustration was because neither was really confident about the steps and skills, and so their lack of knowledge became frustration with each other.

I had been worried about how this would go, if students would get frustrated with each other. It actually went really well. Derek and Adrian both said they thought they learned the information better, because instead of just following along and working with me they actually had to tell someone else to do,

which made them do it, say it, explain it, and understand it. When I continue this activity in the future I will be much more cognizant of the pairings, being sure to pair someone who has a good understanding of the skills with someone who still needs more instruction. This time I used elbow partners as a way to introduce and quickly implement the activity.

After learning the custom shape and the text tools, students completed the postcard assignment. This assignment is typically one that students like because they get to pick a vacation destination of their choice and create a postcard about it. Students tend to like exploring different vacation destinations and thinking about what they would choose if they really could visit anywhere they want. This class was no different. One of the things that I like about this assignment is that it can be a little eye-opening for students about different places in the world. This is especially important for the students at my school, who often do not have as many traveling experiences or the exposure to destinations. I like when the curriculum that I'm teaching also allows me to teach other things like what is available in the world and things they could do and see if they work hard, plan, set goals, find resources, and dream big. I would like to explore more opportunities within the curriculum to teach these items and allow students to globally collaborate. Within the Photoshop unit there is opportunity especially while learning the custom shape tool and creating the collage. It would be easy to include a "dream" or "goals" section or instruction in the collage assignment. Outside of the Photoshop unit there is time in the photo and movie units to provide projects that incorporate the world around them and more global exploration.

One thing that I wish I would have done differently is done a better job of scaffolding the postcard assignment. The assignment requires several steps, files, saving and combining multiple images, and lots of layers. Although the most advanced students were able to follow the instructions and steps, many students found the amount of steps overwhelming and difficult. Garrison was one of these students, who ended up turning in only the combined photos and not the actual file with the postcard on it. For most students that were frustrated, they ended up doing only parts of the project and then quitting. Garrison and Cole each did only the photo part of the postcard without the text and then quit. Alyssa was a student that was overwhelmed and frustrated by the instructions that she did not do any of the work and

turned in nothing. One of the major problems with students getting frustrated with the assignment is that then they tend to begin to have behavior issues and distract others. Alyssa was frustrated and didn't want to work, so then she was up wandering around the room, talking loudly to others and disrupting classmates who were working. In the future I would scaffold this assignment into two parts and provide two separate sets of instructions. The first part would be to create the pictures. The second part would be to create a postcard by adding those pictures and text. I think breaking it into two distinct assignments would help students to be less overwhelmed and more likely to successfully complete all parts of the assignment.

The last tools we learned in Photoshop were blank files, custom shapes, and type mask. As we learned the tools I had students tell me when they could use these tools in real life. Students gave examples like greeting cards, invitations and collage photos for frames. I was nice seeing students connect the skills to their own lives.

After realizing that students needed more scaffolding for the postcard assignment, I did a better job of preparing students for the My Story Collage assignment. For the collage students used blank files, custom shapes and type mask. I gave the students the assignment in two parts - first find the photos, customize them, and create the collage. Second, merge all layers and add the type/text mask. Breaking up the assignment led to less frustration and more success.

As we wrap up the Photoshop part of the unit one of my goals will be to make sure that students are connecting the skills to where they can use in their own life, either now or in the future. We wrapped up with a discussion about where they can use Photoshop skills, and how Photoshop skills are 21st century skills, not just being able to use them but also being able to recognize when the items they're looking at or using have been photo-shopped. We also talked about how with smartphone technology and more apps, photo editing is now a skill we use in our everyday lives, when we send a picture on Snapchat or Instagram. It's almost an assumption now that almost everyone knows the basics of photo editing, filters, and combining photos. Photoshop is just one way to do that, and helps gives students a background on what types of skills their apps are based on, and what they might be capable of doing.

Assignments, Rubrics, and Examples for Week 4

Photoshop - Postcard

Directions: Using Photoshop, you will add your picture to a photo of a vacation destination (example – beach, Eiffel Tower, Disney World with Mickey, Rollercoaster)

Guidelines:

1. The Photos you select must be appropriate for school.

2. You must be able to see your face clearly in the photos.

3. The final photo size should be 10" x 10"

Steps for completion:

● Find two appropriate photos from the internet.

● Save the photos to the desktop of your computer.

● Take a photo of yourself to use in the travel photos, or use a photo already taken.

● Use on of the methods you have learned to transfer your photo to the travel photos. **MAKE IT LOOK REALISTIC AND MAKE IT INTERESTING!**

● **Save both of your travel photos as JPEGs**

● Open a blank 10x10 page in Photoshop

● Add your two travel photos onto the blank page

  o Hints: Open your photo, duplicate the layer, select the duplicated layer and drag it onto your blank page

● Research a little bit about the vacation destination – use text to write a note to a friend on the postcard. Your postcard MUST contain **TWO facts** about the destination – show me that you actually did research.
  o Hint – Use custom shapes on your blank page to create "text boxes"

● BE SURE TO COMPLETE THE TRAVEL PHOTOS FIRST, THEN CREATE THE BLANK PAGE (postcard)

Original courtesy of Heather Steiner

Assignment has been modified for use.

RUBRIC				
Assignment: Travel Postcard				
	Emerging 1	**Proficient 3**	**Advanced 5**	**Points**
Two photos are combined (Empowered Learning)	Project demonstrates use of single tool for selection and blending.	Project demonstrates a variety of tools for selection and blending. Pictures are good quality but does not look natural	Project demonstrates a variety of tools for selection and blending. 2 pictures are good quality and look natural.	_____/5
Shape and text are used to design the postcard (Empowered learning)	No shapes or text are used.	Project demonstrates an attempt to use shapes and text.	Shapes and text are used to design and enhance the postcard.	_____/5
Selection of Photos (Digital Citizenship)	The copyright status of photos is unknown.	Student attempted to find the copyright status of photos, but the status of the photos used is unknown.	The photos used are free of copyright and student can verify where the acquired the pictures.	_____/5
Postcard shows research and knowledge on location selection. (Knowledge Construction)	No facts about the location are included.	Student included one research fact about the location.	Student included 2 or more research facts about the location.	_____/5
A variety of photos and text were used (Computational Thinking)	Postcard is unorganized and does not show an understanding of how to combine multiple layers and skills.	Postcard is organized, missing only one or two features, and shows a basic understanding of combining layers and skills.	Postcard is well-organized, includes all features, and shows a good understanding of how to combine layers and skills.	_____/5
Students shared their postcard (Global Collaboration)	Postcard was not shared.		Postcard was shared in a portfolio for viewing by others.	_____/5
			Total Points	_____/30

Photoshop Postcard Example

All images used from Google Images and labeled for reuse with modification.

My Story Collage

Directions: Using Photoshop, you will create a collage that tells your story.

Guidelines:

1. The photos you select must be appropriate for school.
2. The photos should tell your story – likes – music, food, hobbies, sports, friends, family, activities
3. You must use 20 photos.

Steps for completion:

- Create a new folder on your desktop called "Collage"

- Find 20 appropriate photos from the internet.

- Drag/Save the photos to the folder on your desktop.

- Take a photo of yourself.

- Open Photoshop – create a blank document 20x20, resolution 72

- Create a collage of your photos.

- Cut photos into different shapes, use the cookie cutter tools, feathering and other tools we've learned.

- Edit photos as needed.

- Cut your name into your collage – Use Text/Type Mask

- Save the collage as lastnamystory – save as a JPEG

- Hand in your JPG file to Google Classroom

Original courtesy of Heather Steiner

Assignment has been modified for use.

RUBRIC

Assignment: My Story Collage	Emerging 1	Proficient 3	Advanced 5	Points
Student used cookie cutter to create 20 shapes, including a picture of yourself (Empowered Learning)	Project demonstrates use of cookie cutter tool.	Project demonstrates use of a few (2-5) of cookie cutter tools. Pictures are good quality.	Project demonstrates a variety (5+) of cookie cutter tools for selection and blending. Pictures are good quality.	_____/5
Feather, filters, and other editing tools are used (Empowered learning)	No feather, filters, or editing tools are used.	Project demonstrates an attempt to use feather, filters and editing tools.	Feathers, filters, and editing tools are used to design and enhance the collage.	_____/5
Selection of Photos (Digital Citizenship)	The copyright status of photos is unknown.	Student attempted to find the copyright status of photos, but the status of the photos used is unknown.	The photos used are free of copyright and student can verify where the acquired the pictures.	_____/5
Type/Text Mask is used for name (Empowered learning)	Type/text mask is not used.	Student attempted to use Type/Text mask.	Type/text mask was successfully used to add the student's name.	_____/5
Photos were arranged creatively and show individuality (Creative Communication)	Collage is unorganized and does not show an understanding of how to combine multiple layers and skills.	Collage is organized and creative, missing only one or two features, and shows a basic understanding of combining layers and skills.	Collage is well-organized, creative, includes all features, and shows a good understanding of how to combine layers and skills.	_____/5
Collage is shared for others to view (Global Collaboration)	Collage was not shared.		Collage was shared in a portfolio for viewing by others.	_____/5
			Total Points	_____/30

My Story Collage Example

All images used from Google Images and labeled for reuse with modification.

My Story Collage Student Example

Week 5

Week 5 of the Graphic Arts unit is not actually a full week of learning, and there are no formal assessments during these few days. This week students and I explored the online Pixlr, PicMonkey, and BeFunky tools. The goals of the last few days is to let students explore and design, be creative, and become global collaborators by using tools that are available anytime anywhere. Although I gave a brief overview of each website and the tools available on them, I mostly let students lead their own learning. I gave only instructions such as "you must edit 3 pictures in each program, and use at least 3 tools on each edit." Students enjoyed this because they felt empowered to try new things and use the tools that most interested them, instead of ones that I mandated that they use. This is where I can really see the students using the skills that are based in the ISTE standards. I saw Lexie trying new tools that I would not have otherwise taught. I saw Cole figuring out how Pixlr works by constructing knowledge that he had already learned in Photoshop. Garrison attempted to use computational thinking to combine photos in different ways, and Adrian was very interested in how could immediately share your work using many different avenues - Instagram, Facebook, Online portfolio, Tumblr, and more. These last few days are the most fun for me because I become only a coach and reference as students guide their own learning. The creativity and innovation that students use are amazing to see.

Conclusion

Graphic arts is a major unit of the LPS curriculum for the 8th grade multimedia class. LPS does not provide clear guidance and common assessments for this class. That has allowed me to develop my own unit map, assessments, and rubrics that are based on ISTE standards and 21st-century learning. As I have developed and taught this unit, I realized that the ISTE standard and 21st-century skills are essentially the same, and that incorporating them is not difficult.

While easy to incorporate, having students understand and see the value of them was sometimes a challenge. I used rubrics that gave credit for skills viewed within a student's work. The rubrics were somewhat vague because the point of the skills is that students can use their own minds to interpret, create, communicate, and collaborate. Students in school today have been conditioned to adhere strictly to

a rubric, to very closely watch guidelines, and to meet a minimum set of criteria in order to achieve a certain grade. The vagueness of the rubrics allowed students to go beyond the "minimum" requirements, as there were sometimes not hard and fast criteria for student work. Instead students were able to use their own interpretation, expand what they created, and evaluate their own work. Some students flourished in this environment, but for some this caused a considerable amount of discomfort. It took lots of teaching and encouragement to settle students to the idea that their work was their own, and that if they used their own creativity and problem-solving skills, that they would be able to create something worthy of a "good" grade.

The 8th grade multimedia class very easily lends itself to the standards and skills, but all classes should be weaving in 21st-century learning. As educators we owe it to our students to give them not only knowledge, but experiences in authentically applying that knowledge, and preparation for continued education and ready-for-work. In the past 15 years there has been an emphasis on standardized assessments and students making adequate yearly progress. This emphasis led to a heavy teaching of content and less teaching of the skills to apply that content. In the past few years a gradual shift has begun toward incorporating more 21st-century skills including collaboration, communication, critical thinking, and technology skills. It is my belief that as we near the end of a decade and head into a new decade of education, the importance of 21st-century learning and skills will continue to increase. I am excited to have begun to already teach 21st-century skills through the ISTE standards, and to have created a comprehensive Graphic Arts unit that teaching both content and skills.

Appendix A

Units

Computer basics, Digital Citizenship

A.   System Basics
- Vocabulary / Terms
  - Jump drive / flash drive
  - Memory
  - Processor
  - Window
  - Desktop
  - Quit vs. "Docking"
  - Browser

B.   File Management
- Local vs. Server
- Save / Save As
- File names / Extensions

C.   Career Awareness

Graphic Arts (Images, editing of images)

A.   Import images
- Copyright awareness

B.   Edit Images
- Crop / Resize
- Enhance / Filters / Effects
- Layers
- Combine / Blend
- Change Colors
- Add Text

C.   Create Graphics
- Drawing tools
- Background

D.   Create Animation

E.   Save Images

F.   Digital Citizenship Connections

Resources

·   Hardware:

§ digital still camera (5)

§ scanner (optional)

·   Software:

§ iPhoto

§ Photoshop Elements

§ Web Resources

Multimedia Production (audio/video)

A.   Project Planning

·   Storyboard

·   Script

·   File Management

B.   Capture Video / Audio

·   Identify devices

C.   Import Video / Audio

D.   Edit Video / Audio
·   Volume Levels
·   Crop
·   Effects
·   Transitions
·   Timing
·   Titles
E.   Save Video / Audio
F.   Publish / Share Video / Audio
G.   Digital Citizenship Connections
Resources
·   Hardware:
§ digital video camera (2)
§ microphones (optional)
·   Software:
§ Inspiration
§ iMovie
§ Photoshop Elements
§ iTunes
§ Garageband
§ Web Resources
Web Design
A.   Web Design Basics
              o   History of the Web / Web Design
              o   HTML Basics
B.   Project Planning & Management
              o   Asset Management (organization of media / resources)
              o   Copyright Awareness
C.   Create a basic webpage
              o   Basic HTML coding (heading, etc.)
              o   Background / Font Colors
              o   Alignment
              o   Hyperlinks
              o   Images & other media
              o   Tables
D.   Proofing / Troubleshooting
E.   Save / Publish sites
F.   Digital Citizenship Connections
Resources
·   Software:
§ TextWrangler
§ Browser (Firefox / Safari / Chrome)

Appendix B

	Computer Basics	Graphic Arts (Images)	Multimedia (Audio / Video)	Web Design (Publish)
1. Creativity and Innovation				
a. Apply existing knowledge to generate new ideas, products and processes.	x	x	x	x
b. Create original work as a means of personal or group expression.	x	x	x	x
2. Communication and Collaboration				
a. Collaborate with peers and experts to investigate problems, issues and develop solutions.	x	x	x	x
b. Interact, collaborate and publish with peers, experts and others employing a variety of digital environments, media, and technical writing to produce original works.	x	x	x	x
c. Communicate information and ideas effectively to multiple audiences using a variety of media and formats.	x	x	x	x
3. Research and Information Fluency				
a. Use Internet browsers, various search engines, bookmarking features, and advanced search techniques to gather information.	x	x	x	x
b. Evaluate and select information sources and digital tools based on appropriateness to specific tasks.	x	x	x	x
4. Critical thinking, problem solving				

and decision making				
a. Plan and manage time and activities to develop a solution or complete a project.	x	x	x	x
b. Transfer current knowledge to learning newly encountered technologies.	x	x	x	x
c. Evaluate and revise work for improvement	x	x	x	x
5. Digital Citizenship				
a. Understand Copyright laws, fair use, and creative commons and model legal and ethical use of information.	x	x	x	x
b. Practice and model appropriate and safe online behavior, personal security, digital identity, etiquette, and acceptable use.	x	x	x	x
c. Understand the negative impact of inappropriate online use.	x	x	x	x
6 Technology Operations and Concepts				
a. Implement file management strategies.	x	x	x	x
b. Use audio, video, pictures, movie maker programs, electronic documents, and other files to create and publish electronic products to communicate with various audiences.	x	x	x	x
c. Select and use tools and applications effectively and productively.	x	x	x	x

Appendix C

<u>Steps for Combining Images</u>

1.   Duplicate your background layer

2.   Use a selection tool to select an area

of the picture

3.   Use Select - Inverse to invert your

selection

4.   Push Delete on your keyboard

5.   Drag the layer with the selection onto

your other image

Appendix D

All images used from Google Images and labeled for reuse with modification.

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