When my school issued laptops to each of its students, I pondered ways in which I could create a hybrid classroom, combining aspects of blended and flipped classroom models. In a blended classroom, students interact with tutorial videos independently during class under the guidance of their teacher (Rosen & Beck-Hill, 2012). Conversely, flipped classrooms involve inverting the traditional instructional model by watching online lectures or demonstrations at home and then practicing and discussing the information at school (Tucker, 2012). Rosen and Beck-Hill (2012) found that a “technology-rich learning environment can more effectively promote social-constructivist educational goals, such as higher-order thinking skills, learning motivation, and teamwork, in comparison to traditional settings” and “can play a social role in bridging the achievement gap between students” (p. 227). A potential benefit of flipped classrooms is that teaching students skills outside of class can free up class time for experimentation, collaboration, and exploring big ideas and concept development, in turn promoting the possibility of increased student engagement (Enfield, 2013; Roehl, Reddy, & Shannon, 2013; Tucker, 2012). Combining these two classroom models into a hybridized learning environment, I conducted a qualitative research study that examined the ways in which students interacted with and learned from instructional tutorial videos. This article focuses on the perspectives of six students from my 8th-grade art class, examining their interactions with and reactions to tutorial use both in and out of the classroom.
The Digital Native

Today’s adolescents are enamored with technology. They have grown up with screens in their hands, immersed in visual culture, with easy access to the Internet wherever they go. As Prensky (2010) asserted, “It would be foolish to ignore the medium of video as a powerful learning tool for today’s youth. It is, in fact, mostly how they learn on their own...” (p. 129). The near constant use of technology by young people has caused a fundamental shift in the ways they process new information (Fitton, Ahmedani, Harold, & Shifflet, 2013; Prensky, 2010; Sefton-Green, 2011; Taylor & Carpenter, 2007). Contemporary learners, sometimes referred to as “digital natives,” exhibit preferences for collaborative learning experiences, personally relevant learner-centered instruction, and video rather than written texts (Prensky, 2010). These students analyze information differently than previous generations, shifting their primary literacies from those of letters and numbers to multimodal and visual literacies (Roehl, Reddy, & Shannon, 2013; Taylor & Carpenter, 2007; Unrath & Mudd, 2011). Educators can create curricula that best meet the learning preferences of today’s digital natives by effectively incorporating technology into the classroom. The use of multimodal tutorial videos within a blended or flipped classroom is a means of meeting most learners where they are, incorporating the digital culture that permeates their daily lives through text, imagery, sound, and interactive elements created by the teacher (Freedman & Stuhr, 2004; Roehl et al., 2013; Taylor & Carpenter, 2007; Unrath & Mudd, 2011).

Introducing Tutorials in the Classroom

To investigate the effectiveness of tutorial use within a hybridized classroom, I observed students interacting with tutorial videos during a portraiture unit and conducted a series of recorded interviews about their experiences in the new classroom environment before, during, and after the unit. Students first drew a self-portrait from observation to assess their current ability level prior to explicit instruction in portraiture. Following that exercise, the students learned how to draw individual facial features and facial proportions by viewing five 8- to 12-minute tutorial videos that I created and posted on our classroom YouTube channel (Hopper, 2014). The videos consisted of the same information that would be presented in a live demonstration. Students took notes and practiced along with the videos during class and were assigned two tutorials to watch as homework. I encouraged them to seek additional online sources if they felt they needed to expand on the information in the assigned tutorials. After the students completed their work with the videos, they created a second self-portrait from observation, using the information on facial features and proportions to guide them. The students were allowed to reference the videos throughout the remainder of the unit.

Putting Students in Control

Through the analysis of my field notes and transcribed student interviews, I found that the ability to play, pause, and rewind and rewatch videos during practice provided the students with control over their learning process. The students’ feedback gave insight into their experiences interacting with the online tutorial videos in class and at home.

▶ Play

Watching tutorials independently allowed the students to see, hear, and focus better on the information being presented. Putting on headphones and independently pressing play created a one-on-one environment for the students to learn new content. Frank,13 explained that watching the tutorials on his own “helped because you can’t see the sketchbook as well when the teacher’s doing it in person. When they draw lightly, you’re not going to see it that well when you’re in the back.” Nikki, 13, described the difference between live demonstrations and tutorial videos. “For the whole class it’s different because not all the people are focused, so there could be distractions. When it’s yourself, it’s just you and the video, and there’s no distractions, except for the ones you make yourself.” Michael, 14, remarked, For me it’s easier to watch a video on my own. That way I’m more focused and I’m just paying more attention to that, rather than having the whole class watch. It’s harder to pay

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Screen shot of How to Draw Facial Proportions, which was created for the self-portrait unit.

Michael sketches and takes notes while watching the How to Draw an Eye tutorial.
attention as a group because someone will do something, and I’ll turn to look… and then… I’m not paying attention to the demonstration.

When students first began watching the tutorials in class, their engagement was clearly visible—the room was silent except for the scratching of pencils on sketchbooks, the clicking of trackpads, and an occasional whisper to a classmate as they compared drawings or asked questions.

➤ *Pause*

According to a study on learning styles and interactive tutorials by Bollinger and Supanakorn (2011), individually controlling the pace of instruction can be beneficial for student learning. Learning at one’s own pace through independently controlled videos proved to be the preferred method of practicing new skills within my classroom. “I think watching the videos on your own are the best because you can watch them at your own pace. So if you don’t quite understand something, you can go over it,” Frank mentioned. Learning new skills was no longer a frantic race to keep up. Demonstrations in video format allowed students to work along with the teacher during class as well as at home. “I actually like tutorials because you can watch it at home… and you can take as much time as you wanted for the video instead of just the one class period,” Nikki explained. Michael agreed:

When I’m home, I’m free of all school, you know. I guess, like, the worriness [sic] of being in school and getting it done on time and stuff…. I just felt chillaxed and not worried about having the bell ring and having to go and do something else. It felt nice to have some time to do it.

Sarah, 14, explained, “I felt like I could take my time with it… I didn’t have a time limit.” Tutorials were also beneficial when students were absent and missed demonstrations. One student was sick during much of the in-class work with the tutorial videos. Because the videos were posted online, she was able to watch them at home rather than miss important live demonstrations. She said, “I felt like I was pretty much right there [caught up with coursework].”

➤ *Rewind and Rewatch*

The repetition of information through individually controlled tutorials benefitted student learning. Participants explained that they preferred to learn and remembered skills best through hands-on learning experiences and repetition. Freddy, 14, described his learning process as such: “I like practicing something. Just because you do it once, it doesn’t mean you’ll get it right away, so you’ll probably have to go over and over and over. That’s what I had to do sometimes.” Many of the students were able to answer their own questions by rewatching confusing sections. Students who were not comfortable asking questions during live demonstrations could replay sections in order to independently answer questions. Samantha, 14, admitted, “If you’re teaching it to the class, I probably wouldn’t raise my hand and say, ‘wait a second, could you rewind it?’” She continued, “If I didn’t like how my drawing looked, I’d be able to watch it again instead of asking you to go over it and then feeling like I’m wasting the whole class’s time. So I’d be able to work on it by myself.” Frank corroborated, “It’s better because you can understand it over and over again instead of asking the teacher three different times if you didn’t understand something.” The ability to independently answer one’s questions allowed students to progress at a pace that best suited their learning needs.

Sometimes students had difficulty remembering information from the videos that they watched at home, but they were not overly concerned about this because, as Nikki related, “You might not remember the details of it, but you could watch it again in the class… you can watch it as many times as you want.” The students felt that they had continual access to information, which seemingly negated their need to recall the entirety of the demonstration. Similarly, in a discussion on informal digital learning, Sefton-Green (2011) stated, “We can no longer expect to ‘know’ everything, even as experts; and learning by rote has become less important than knowing how to find things” (p. 249).
Differentiation

The impact of tutorial videos on student learning was seen most directly in the increase of differentiated instruction that took place during the unit. One of the benefits of a blended model in which tutorials are watched during class is increased one-on-one time with students, where struggling students can receive individualized attention while others work independently (Enfield, 2013; Roehl et al., 2013; Rosen & Beck-Hill, 2012). Typically, differentiation is seen as an action that takes place between teacher and student. Although I worked with many students individually to enrich or remediate their instruction, I noticed that many were able to independently adapt the tutorials to meet their own learning needs.

Students differentiated their own instruction naturally while they interacted with the tutorials. They changed the speed of the instruction to meet their needs, pausing and rewinding, rewatching, and selecting specific information on which to focus. Once the students had watched the assigned tutorials, they appeared comfortable searching out additional sources on their own to elaborate on concepts in the videos, demonstrating a level of independence that is a main goal in many flipped classrooms (Enfield, 2013; Roehl et al., 2013; Tucker, 2012).

In an age when information is at our fingertips, teaching students to find credible sources on their own is an important factor for developing autonomy. Morain and Swarts (2012) stated that students frequently use YouTube as a means of filling gaps in their learning. Giving students the task of finding quality online videos, separating the useful from “what is merely ‘there’” can be a part of the learning process (Prensky, 2010, p. 129). Throughout the unit, many of my students watched additional online tutorials by other artists, seeking multiple solutions to a problem in order to combine or create strategies that worked best for their personal learning needs. Freddy said that when he watched multiple tutorials on the same subject, he would ask himself, “What do they do different or what do they do the same?” Nikki reflected, “They showed me how someone sees it in their own way and how they can be different, and how you could combine the two so that it’s right for you,” while Samantha “watched a couple of other videos to see how differently they did it compared to how you did it [in the assigned tutorials].” Many of my students would watch additional tutorial videos to expand on their knowledge or fact check information.

Students found that rewatching the videos while working on their second self-portrait was helpful; however, some had difficulty applying the techniques from the videos to their portraits, which occasionally resulted in a formulaic portrait with little likeness to the artist. Although skillful at rendering features, Nikki had some difficulty adapting the instruction from the videos to create a likeness of herself the second time around. She reflected that the video was “not the personal way everyone’s face is, so then you kind of have to change it. But sometimes it’s kind of hard to change it because you don’t really know how things are supposed to differ, or change to make it look like your own face.”

In instances such as Nikki’s, differentiation was key. Closing the computer was often the first step. I worked with her individually to help her apply the drawing techniques to her own features, using the mirror as a reference. We would point out angles, curves, and relationships between facial landmarks. While others worked independently with videos, I was able to work one-on-one with struggling students to break their reliance on mimicry and focus on application. Much like students copying from a teacher example during class, adolescents may be inclined to mimic exemplars from tutorial videos if explicit guidance is not provided.

A Tool, Not a Solution

Technology is not the end-all solution to our educational dilemmas, despite the positive effects tutorials had on student learning in my classroom. Technology in the classroom is best seen as a tool: one small piece of a larger learner-centered pedagogical practice. It is evident that tutorials cannot replace quality teaching. My students needed explicit instruction on how to watch and interact with tutorials, as well as high expectations for their notes and sketches they created while watching. The necessity for modeling and providing high expectations demonstrates that students still need the guidance of a teacher in the classroom. For example,
Frank and Freddy both initially exhibited concerns about flipped lessons because they wanted to be sure that I would still be available to help them and answer questions during class. Technology, such as tutorial videos, acts as a tool that can extend the reach of the teacher and help students take control of their learning by serving as a resource for finding and sharing useful information.

Creating Tutorials for the Classroom

Art educators are in an ideal position to embrace the technology-laden, visual culture of digital natives.

Creating Tutorials for the Classroom

Art educators can create and share a wealth of information on art techniques, processes, and concepts through the use of online tutorial videos. By posting videos online, educators have the capability to share their skills not only in the classroom, but also with a global audience. Prensky (2010) explained that YouTube was not created as a one-way communicative device; it was designed for users to post questions and ideas and receive feedback and responses from others. YouTube users of many ages and nationalities frequently send me comments and e-mails seeking constructive criticism or further advice on techniques, tools, and processes. In addition, some students may find their teacher’s Internet presence exciting, which can lead to further engagement with demonstrations.

Conclusion

By listening to my students talk about their experiences with tutorials, I discovered that the ability to independently control the pace of instruction was beneficial for learning. Students were able to see, hear, and focus better on the demonstration when it was presented in a video format. They felt less rushed when they knew videos were accessible at school and at home. Those who missed class demonstrations could easily get back on track without having to use class time to catch up. Additionally, students who were uncomfortable asking questions in front of the class had time to talk with me individually or answer questions themselves through repetition with the videos. The tutorials provided an initial hook to engage students in learning by incorporating an online platform with which many adolescents are familiar. However, as Nikki’s learning suggests, tutorials may lead students to imitation rather than application of skills. It is important for the teacher to strike a balance between generalized digital instruction and individualized attention by varying methods of presentation.

Learning styles, knowledge bases, creativity, and global economics have fundamentally changed due to advances in technology within the last decade (Sefton-Green, 2011). The field of education has been slow to embrace these changes. There is a significant gap between the curriculum presented to students and what they interact with independently on a daily basis (Delacruz, 2009; Fitton et al., 2013; Freedman & Stuhr, 2004; Sefton-Green, 2011; Unrath & Mudd, 2011). Art educators are in an ideal position

Basic studio set up for filming a drawing tutorial using a GoPro camera and studio lights clamped to a simple PVC pipe structure.

Table 1. Tips for creating quality tutorial videos:

- Practice before filming to work out any kinks.
- Make sure the subject is always in the frame! Block your area off with tape or pencil lines to keep the action in the right place.
- Provide a sturdy base for your camera to avoid wobbles or unwanted noises.
- Light your subject evenly to reduce shadows and increase clarity.
- Avoid unnecessary background noises.
- Use an outline or script to stay focused.
- Inject confidence and enthusiasm into your voice to engage the viewer.
- Include a variety of modalities: visuals, written annotations, and voice-overs.
- Be concise. Speed up or remove unnecessary elements during editing.

For a more extensive look at assessing online instructional videos, see Morain and Swarts (2012).
to embrace the technology-laden, visual culture of digital natives. Incorporating digital and social media into art curricula can engage and help meet the learning styles of contemporary students.

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**References**


Enfield, J. (2013). Looking at the impact of the flipped classroom model of instruction on undergraduate multimedia students at CSUN. *TechTrends: Linking Research & Practice To Improve Learning, 57*(6), 14-27.


**Endnotes**

1 Pseudonyms are used throughout.

2 All images used with permission.