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CREATING ENGAGING ONLINE CURRICULUM IN A SECONDARY GRAPHIC DESIGN
CLASS

by
Berea Moss

Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Arts in Digital and Web Design
at
Lindenwood University

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CREATING ENGAGING ONLINE CURRICULUM IN A SECONDARY GRAPHIC DESIGN
CLASS

A Thesis Submitted to the Faculty of the Art and Design Department
in Partial Fulfillment of the Requirements for the
Degree of Master of Arts
at
Lindenwood University

By

Berea Moss

Saint Charles, Missouri

February 2022

ABSTRACT

Title of Thesis: Creating Engaging Online Curriculum In A Secondary Graphic Design Class

Berea Moss, Master of Arts/Digital and Web Design, 2022

Thesis Directed by: Jason Lively, Dean of the School of Art, Media, and Communications

This project focuses on how to improve online learning courses leading to increased student engagement. This project examines a variety of online tools and course structures such as Padlet, introductory videos, and prompt teacher feedback to engage a variety of learners throughout the online course. Prior research conducted on proper online course design was used in the development of an online unit of instruction. The unit created consists of four lessons with an emphasis on proper course layout, student-teacher interactions, and engaging online tools. The project studies the engagement of seventy-eight seventh and eighth grade graphic design students during the online course.

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Introduction

Throughout the past two years, many teachers and students have been thrown into the world of virtual learning, due to the global pandemic of 2020. Districts that already had online learning options in place were ahead of the game, and had an easier transition to virtual learning compared to districts that solely relied on in-person teaching before 2020 (Ashe & Lopez, 2021). Lessons typically taught in person had to be adapted to an online learning format. Due to little to no prep time for those teachers, or lack of professional development in how to conduct a virtual course, many teachers created stagnated lessons with very little personalization or engagement (Arghode et al., 2018).

As teachers become accustomed to providing virtual lessons, either to an entire class or a quarantined individual, it is important that teachers assess what their lessons consist of and how they are presented. Online learning is difficult for many students and can feel more isolating than traditional learning, due to the lack of student-to-student interactions as well as student-teacher interactions (Ashe & Lopez, 2021). When there is a lack of connection or sense of belonging, students tend to lose their sense of security, interest, and focus (Ashe & Lopez, 2021; Fisher et al., 2020). As a result, fewer assignments are finished and submitted, and grades begin to suffer.

In order to help keep students' attention, teachers need to create a safe learning environment where students can have genuine connections to other students and their instructor. Lessons must also be introduced in a compelling manner that holds the students' attention. Districts need to assess their online curriculum to see if their online content provides the best virtual education for their students.

Student engagement in an online course can be difficult for educators to sustain, but with proper course setup and use of resources, teachers can create engaging online courses. The

curriculum developed in this thesis project is suitable for a seventh and eighth grade graphic arts class. The unit created includes four lessons about typography in graphic design. These lessons include videos, examples, rubrics, class discussions, and options for teacher feedback throughout the unit. Research on educational engagement and how to foster it within a virtual art course has been conducted and applied to my curriculum lessons. The curriculum developed is designed inside of Canvas as a model to demonstrate proper course design for teachers.

Literature Review

Online learning can be difficult for students based on their learning styles. There are many types of learners that struggle with the disconnection from the subject, as well as the other students in the online course. This disconnection and disengagement can cause students to fail online classes. There are several ways to alleviate this issue within online courses.

Engagement Strategies

Martin and Bolliger (2018) looked at online teaching strategies and came up with three main types of teaching strategies for engagement: Learner to Learner engagement, Learner to Instructor engagement, and Learner to Content engagement. These three forms of classroom engagement are multi-directional in their movement, and all revolve around meaningful course content. Learner to Learner engagement happens when students interact with their peers, such as icebreaker discussions, working collaboratively using online communication tools, or discussion boards. Students rated discussion boards as one of the least important online teaching strategies unless combined with engaging questions or timely responses to posts (Martin & Bolliger, 2018; Muir et al., 2020). Some instructors have opted to use Twitter as their choice of discussion board for their students, due to the popularity of the app and the engagement it brings to the students. Twitter allows users to share updates in real-time, as well as asynchronously (Luo et al., 2019).

Learner to Instructor engagement occurs when students and instructors interact with one another— for example, instructors sending regular announcements or reminders, providing grading rubrics, and student reflection components. Students in the study rated regular announcements and reminders as the most important strategy, as well as instructors providing grading rubrics for all assignments. The least important strategy in this category was reflection pieces, such as surveys or journals. Students felt that those were unnecessary and didn't drive engagement in the course content (Martin & Bolliger, 2018).

Learner to Content engagement happens when students connect with the content of the course. The most effective strategies teachers used was giving students the opportunity to work with realistic scenarios, such as case studies, presentations, client projects, and research papers. Class discussions that are guided or given parameters by the teacher to deepen a student's understanding of the content were rated as very important and effective as well (Martin & Bolliger, 2018). This constant communication between the student and teacher results in higher interactivity in the course (Mahmood, 2021).

Engagement in Synchronous Classes

Synchronous virtual classes can be very successful and help with student engagement, due to the visible presence of the instructor and peers. This visual helps students feel that they are more connected in the course and makes them aware that someone is watching them in order to hold them accountable for their participation in the class, just as it would be in a traditional classroom setting. In a study by Arghode et al. (2018), the authors found various strategies that assisted in creating an engaging atmosphere in synchronous classes. One strategy a teacher used was leaving time at the beginning of the class for welcoming, motivating, inviting, and focusing their students. This could be done by letting the students each share a quick story or something they did the day

before. Teachers can also play meditation music to get students to quiet down and focus. This class time helped to pull the students into the course and refocus their attention intellectually and emotionally before starting the course content (Arghode et al., 2018). Students have shown great support in starting synchronous classes with short interactive activities at the beginning of each class, such as welcome time, ice breaker activities, or playing music (Arghode et al., 2018). Large synchronous classes struggle more to keep students engaged, due to less one-on-one time with the instructor and increased distractions. Due to larger numbers, instructors may not be able to see when a student becomes distracted as easily as in the classroom. Larger class sizes also limit the ability to do highly interactive activities that might be more doable with smaller class sizes (Arghode et al., 2018; Ashe & Lopez, 2021). Another strategy for engagement in synchronous classes is taking larger lessons and dividing them into smaller sections; students are able to remain more attentive (Mahmood, 2021).

Engagement in Asynchronous Online Classes

Asynchronous courses, or courses with no set meeting times, are the most common virtual courses, especially at the collegiate level (Banyas, 2019). Students in these courses work at their own pace and submit assignments by posted due dates. The student has full flexibility to determine when it is convenient for them to complete the work throughout the week (Banyas, 2019). There are several reasons why students are unable to come to school, such as illness, disability, or environmental situations. Asynchronous learning is a good way for those students to still get an education, even when other issues stand in their way. One drawback to asynchronous learning is the lack of immediate feedback to the students and social interaction with their instructor and peers (Wang & Huang, 2018). There are several tools available to instructors in order to keep students

engaged in an asynchronous class. Such tools include Padlet, podcasts, mobile apps, Instructor Tube, Google Apps, and social media apps, such as Twitter, Facebook, and LinkedIn.

Blended Synchronous Learning

A blended synchronous learning environment (BSLE) is when students occupy a physical classroom space as well as a virtual learning space. It is a way for online students to participate in learning simultaneously to the physical classroom learning (Wang & Huang, 2018). Educators in a BSLE need to consider how they design their lessons to equally benefit both sets of students. Learning activities will need to be designed or adjusted in a way so that both, online and in person students, participate and collaborate with one another without attention being taken away from any certain group (Wang & Huang, 2018). It is important that students in both groups feel safe and comfortable and connected with the instructor and peers. There are several strategies instructors can use in order to keep both groups connected in their learning (see Figure 1). Some strategies include the partnership strategy and using a camera that follows the instructor, instead of a stationary camera.

Another teaching strategy that has shown a great response from students is including problem-based learning, where students can use synchronous and asynchronous tools to collaborate with one another (Myers, 2018). Problem-based learning is a great way for students to develop their skills and apply them in real-world contexts. These types of lessons can help to develop problem-solving and critical thinking skills, as well as helping students to become independent in their learning. Using a variety of synchronous and asynchronous tools in a blended learning environment is very cost-effective for school districts, but it can be a lot of work for the instructor (Myers, 2018).

Training should be considered for instructors planning to teach in a blended learning environment. Other challenges with blended learning environments include technical issues, challenges with engaging online students, scheduling, and limited preparation time (Olt, 2018). When these issues arise online, students miss content, feel frustrated, and struggle with participation. As a result, the instructor must go above and beyond to reconnect those students with the class and make them feel a part of the group (Olt, 2018). These challenges can arise in any classroom situation, but when juggling both in-person and virtual environments, it can become overwhelming when issues arise.

Presenting Lessons

When it comes to presenting material online, videos of the teacher giving instructions or demonstrating the assignment is a great way for students to understand the assignment or lecture more fully. Due to student's short attention span, it is recommended that teachers not exceed 15 minutes in their instructional video (Lumpkin, 2021). Instructional videos do not have to be perfect, but need to be clear and communicate information that students may not gather from reading written instruction. Teachers should use diagrams, examples of the assignment, or demonstrate the task in order for the students to understand the assignment better (Lumpkin, 2021). There are several key elements that should be included in each video lecture. The first is to state key learning objectives for the lesson. Second, is to organize the lesson into three sections by telling students what the teacher is going to be telling them, tell them, then go over what you have told them in order for the student to remember and grasp the concepts presented. Third, review key points from previous lessons. Fourth, verbally assess the class through discussion questions to find out what their prior knowledge is on the subject. Fifth, use effective questioning strategies.

Sixth, use real-life examples of storytelling to engage the students. Lastly, provide three take home points to leave students with (Lumpkin, 2021, p. 197).

Ou et al (2019) conducted research on video instruction and found that there are four instructional methods that can be addressed in instructional videos: learning by example, learning by doing, adaptive feedback, and learning through reflection. Teachers can use any one of these methods to evoke learning in their videos. Video instruction does not always have to be at the beginning of the lesson. It can be presented as a preview to the lesson, a demonstration of the lesson, application of the lesson, or as a wrap up or reflection to the lesson (Ou et al., 2019). The researchers concluded from their study that the inclusion of online video instruction is vital to the success of online learning (Ou et al., 2019). It is also vital for the videos and instructions to be clear and not overwhelm the students with too much information at one time. Information must be given gradually (Sharoff, 2019). Providing video instruction is one of many active learning techniques a teacher can integrate in their online courses. Others include: simulations, real-world applications, taking a quiz while watching an instructional video, examining tasks from different viewpoints, and collaborating with other learners (Milman, 2020; Roman et al., 2020).

Safe Learning Environment

Through my own experiences with teaching synchronously, I have found that it is difficult to keep the student's focus when they can see their peers. Students struggle to feel comfortable showing their face on the screens for me or their peers to see. A good quality of synchronous teaching for the art classroom is the ability to check the progress of students' work throughout their creative process. Students were able to hold up their work in progress to the camera for the teacher to provide them feedback in real time, instead of a written message that the student may or may not see. This process for each class was helpful for the teacher to know whether the students

understood the project objectives and instructions, as well as provide the teacher with an understanding as to how quickly they are moving through a lesson. Feedback should be customized for the individual and for the task students are given. If done effectively, it can improve the learning experiences of the students (Li et al., 2020; Wang et al., 2021).

Teaching students asynchronously off and on over the past year and a half, as students become quarantined, has proven to be difficult for middle school aged students. The students become disconnected from the teacher and the class and begin to not complete or turn in assignments. They become less motivated to log into their classes online and procrastinate doing the assignments, which leads to them falling behind when they return to school. That is why it is important for teachers to reach out to students through video, email, and online chats to engage the student in the class and keep communication open (Tanis, 2020).

Methodology

The methodology used for the research of this article and project was action research. By using action research, the author was able to identify the topic of engaging online curriculum as a problem needing to be investigated, then used research to collect data on the topic. The majority of the articles and studies gathered for this research were qualitative. The author looked at articles, journals, online resources, and books relevant to the research topic. Primary and secondary sources were gathered and reviewed to assist the author in the research of the project. Works selected for inclusion in this research paper were determined by their relevance to learner engagement, engaging online instructional design, online instruction strategies, and online graphic design lessons. All resources used were from the past three years, 2018-2021, and were used in order to provide the most up-to-date research for this paper and project. Lindenwood's online library databases, such as *JSTOR* and *EBSCOHost*, were used to find the articles included in this research.

Research was also conducted through the courses the author teaches. The initial research was not conducted on students but was observed through the interactions of the virtual students with the teacher and the coursework. Through experience with taking online courses and teaching online to quarantined middle school students, the author has seen what elements of online learning students struggle with and what elements are successful. Combining these observations with the research conducted has helped to develop a better understanding of the research topic.

Through the research conducted, the author looked at what engagement is and the various types of learner engagement. The engagement focused on for this research was online learning engagement and the best practices for maintaining that engagement. In addition to gaining background knowledge on the topic, the author collected the most relevant and effective instructional strategies and engagement tools for online learning. The instructional strategies used in this project were chosen and evaluated based on their effectiveness and appropriateness for the unit of instruction used in the project.

Other elements collected from the research for this project included how to create effective online course layout and design. These design elements and strategies were used in organizing and designing the unit of instruction for clarity and usability for the online student taking the course. Without these design protocols, students could become confused about what they are to do for an assignment or become overwhelmed by too much information or clutter.

Once research data was collected and analyzed, a plan was developed to address the problem. This plan was then implemented in the curriculum developed in the curriculum project. The curriculum developed was then taught to seventy-one seventh and eighth grade graphic design students. The teacher collected data for overall findings of the project through observations of the students during class and through a student survey completed at the end of the unit of instruction.

The action research approach to collecting data for this project was the most fitting approach for creating a unit of instruction. This research helped to collect the best practices for creating online courses as well as the engaging elements to include in those courses. The research collected is beneficial to online teachers in order to keep their students interested and attentive to online learning. The project developed from this research is innovative in the field because it combines design protocols for online learning, engaging curriculum, and various learning strategies to promote student success in the online environment.

The author of this research and project must address the issue of bias and reflexivity in collecting the research and developing the curriculum for the thesis project. The author has been a middle school art teacher for several years in a small school district where the majority of the students live in low to middle-class socioeconomic households. The author has seen the benefits of teaching online courses, but has also witnessed students struggle with staying attentive and involved in online courses. Through these experiences, the author has found importance in developing an easy guide to designing and creating engaging online courses. The research conducted was analyzed and developed into a unit of instruction without bias.

Findings

This study was conducted by teaching a unit of instruction created from the author's research into best practices for online teaching. The author put the prior research conducted into action by teaching the course over a two-and-a-half-week period and observing the seventy-one students working through the unit. During this course of study, students reacted favorably toward the design layout, animated introduction videos, Padlet discussion, and other factors of the online course. The author observed that students settled in and began to focus once the introductory video started to play. The introductory video that was placed at the beginning of each lesson

within the unit helped to guide the students and became a good indicator that a new activity within the unit was starting. After the first lesson, students began to figure out that the introductory video did not provide all of the information for the assignment but gave an overview of what was about to take place. Students were then able to scroll down to the “Procedures” section and read each step of the assignment followed by clear examples of the project for students to reference.

Setting up a clear and consistent layout for each lesson helped the students navigate through the assignment. Once students saw that the layout of each assignment in Canvas was set up in the same way, students were able to navigate to the sections they needed quicker and easier. When students had questions about a certain part of an assignment, I was able to direct them to a specific section instead of the student needing to read through the entire lesson.

Students engaged in a class discussion through Padlet, a web-based discussion board platform where teachers can post questions and students can respond to the questions and comment on other students’ responses. For the Padlet in this study, the author posted four images with corresponding questions for students to answer. Students were able to respond to the questions as well as their peers. Students were fully engaged in this activity and liked reading each other’s responses and being able to respond to their peer’s comments.

The teacher provided clear and prompt feedback to students on their assignments as they were submitted on Canvas. Most students responded well to this by revisiting their project within the following day or two, making any adjustments that needed to be made, and resubmitting for a higher grade. A few students received comments and suggestions from the teacher but opted not to make any adjustments to their work and keep the grade they earned on the assignment. I feel that more students went back and made adjustments to their projects because the feedback was

given within 48 hours after the due date. Their assignment was still fresh in their minds, and it was easier to go back and correct those mistakes at that time instead of a week or two later.

The original unit created prior to this study was set up to only provide students with the essential directions, requirements, and one or two project examples for the assignment given. This new unit of instruction add engagement elements such as, introduction videos, class discussion through Padlet, detailed grading rubrics, and additional project examples. The unit of instruction created was successful in increasing engagement in the content and providing a clearly organized unit. As students progressed through the assignments, I had to make some minor adjustments to clarify a few areas where students had questions. One of those adjustments was adding an example of a detailed animation storyboard so students who had never seen one had a reference throughout the assignment. Another adjustment that was made was adding in more detailed grading rubrics, which outlined levels of completion or mastering of the objectives for the lesson.

The use of action research for this study fits the purpose and goals of the study. Using action research for this study helped to provide more evidence for engaging elements and characteristics that should be present in online learning environments. These findings help to advance this field further by providing more insight into how online courses should be designed or organized.

Conclusions

As virtual learning continues to evolve and expand into more districts, teachers need to be trained on best practices in not only teaching online classes but also best practices in organizing virtual lessons. After conducting this study, I feel that districts that are offering their own virtual curriculum should look into creating a standard layout for all online curriculum for

every teacher to use. Allowing each teacher to create their own style and layout can cause students to become confused when working on assignments from one class to another. If the format or layout of each lesson is similar then students know what to expect and can navigate through lessons with ease.

Some students struggle with staying connected and attentive in virtual classes due to the lack of a physical presence around their peers and instructor. It is important that virtual teachers establish a safe learning environment that is inviting and engaging. Since there are different types of learners, there needs to be a variety of ways in which instructions are given within the virtual course. Some of the elements that were successful in this study include introductory or guided practice videos, clear written directions, project examples, and detailed rubrics.

The majority of the studies for engagement in online learning environments previously conducted were aimed toward university students. This study gives some insight into characteristics of online learning layouts and elements that worked well for students in junior high. Students at the junior high level need just as much structure and consistency in their learning, if not more than university students due to the maturity level and attention span of that age. Further research needs to be conducted on best practices in online learning for elementary and junior high school aged students to further assess their learning needs and teaching strategies that will hold their attention in the online environment.

This study was conducted with one unit of instruction that has now been tested and modified for future sections of the seventh and eighth grade graphic design course. The favorable results of this study will lead me to redesign every unit and lesson to this layout design so that each unit is consistent throughout the courses that I teach. The engaging elements added, such as

the introductory videos will be added to other units to catch the student's attention and continue to keep the consistent flow throughout the course.

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Appendix

Figure 1

Table 1: Principles and strategies for pedagogical design

<i>Principles</i>	<i>Strategies</i>
• Equivalent experiences	1. Using two-way interactive video conferencing 2. The instructor regularly monitoring the participation and engagement of online students 3. Group activities involving both classroom and online students 4. Redesigning certain learning activities
• Reciprocal engagement	5. Online students contributing to class activities and group activities 6. Using the partnership strategy to facilitate communication between the online students and the instructor
• Teaching presence	7. Getting ready 10 minutes before the lesson starts 8. A camera following and focusing on the instructor 9. Sharing the instructor's screen with the online students 10. The instructor regularly checking and addressing questions

Table 2: Principles and strategies for social design

<i>Principles</i>	<i>Strategies</i>
• Safe and comfortable environment	1. Keeping the environment closed 2. Online students attending the session at homes or workplaces 3. Being able to view the teacher and the whole class
• Smooth interaction	4. Keeping contact using backchannel communication 5. Classroom partners being agents of online students
• Social presence	6. Keeping cameras on 7. Regularly interacting with the online students

Figure 1. Strategies for Blended Learning Environments (Wang & Huang, 2018)