Flipping the Graduate Qualitative Research Methods Classroom: Did It Lead to Flipped Learning?

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The flipped, or inverted, classroom has gained popularity in a variety of fields and at a variety of educational levels, from K-12 through higher education. This paper describes the author's positive experience flipping a graduate qualitative research methods classroom. After a review of the current literature on flipped classrooms in higher education, the author discusses his reasons for flipping, the steps he took to create the flipped classroom, and the outcomes of the flipped classroom experience. The author evaluates whether flipped learning occurred according to the four pillars of FLIP (FLN, 2014) and discusses suggestions for both future researchers and future classroom flippers.

In spring 2013, I taught Qualitative Research Methods for the ninth time. I faced a class of 10 doctoral students who had already taken a quantitative methods course and were now in their last semester of coursework prior to taking their preliminary exams and working on their dissertation proposals. It did not go well. I spent most of class time lecturing with very little student engagement. This was very different from prior semesters in which students were more engaged in discussion each class meeting. Now, students asked few questions and added no comments to my descriptions of qualitative methods, research designs, and data analytic techniques. Their work on writing a mini-proposal for a qualitative study was average; I received no spectacular pieces and saw very little student interest in conducting or even reading qualitative research in the future. Only two of the ten are completing qualitative dissertations at this time (typically at least half go on to do qualitative dissertations). After reflecting on the semester (which did not take long), I realized a major overhaul was in order. It was time to explore new options for delivering the course in a way that more explicitly engaged students in "doing qualitative research" rather than just hearing about it from me. I had taught the course the nearly the same way for 9 years and was uncomfortable with the small amount of engagement with research and the large amount of lecture I used.

About this same time (late April 2013), I was hearing a lot about the "flipped classroom," but I had no idea what this meant. After a few Internet searches, I knew I wanted to explore this idea in more depth as it appeared to be just what I wanted in all of my classes, not just the Qualitative Research class. The basic idea of moving lecture to out-of-class work and moving traditional homework activities to the in-class setting was very appealing. I wanted to know more about how to do this, how it worked, if it worked, and what students thought of the flipped environment.

Even in the few short years flipped or inverted classrooms have been studied, there is already a fair amount of literature supporting their use in higher education. Some of the studies are more anecdotal in nature, while other authors performed quasi-experimental studies comparing the flipped classroom to a non-flipped classroom. The fields to which flipped classrooms have been applied are as varied as the reports themselves: mathematics, engineering, economics, history, teaching, statistics, pharmacy, and nursing, to name a few. Flipping the classroom has also received international attention, with studies reported from Germany (Braun, Ritter, & Vasko, 2014), Australia (Butt, 2014), and South Africa (Ivala, Thiart, & Gachago 2013) among others. What follows is a descriptive summary of this literature (based in higher education only) divided into four themes: reasons for flipping, the flipping experience, outcomes of flipping, and lessons learned about flipping.

Similar to the present study, Hoffman (2014) flipped her graduate-level qualitative research methods classroom. Her emphasis was on scaffolding the classroom research project as a culminating assessment in the course, implementing e^3 design and problem-based learning along the way. This is different from the present study, which focuses more on the flipping the class to enhance content delivery. She reported "positive outcomes and lasting impacts" as a result of the flipped environment (p. 58).

Reasons for Flipping the Classroom

The primary reason for flipping the classroom found in the literature is to increase student engagement (Critz & Knight, 2013; Findlay-Thompson & Mombourquette, 2014; Gaughan, 2014; Wilson, 2013) by providing students with more active learning experiences (Butt, 2014; Mason, Shuman, & Cook, 2013; Pierce & Fox, 2012; Tune, Sturek, & Basile, 2013). Other instructors had a concern for students' overall experience in the course (Davies, Dean, & Ball, 2013; Enfield, 2013; Lage, Platt, & Treglia, 2000; Missildine, Fountain, Summers, & Gosselin, 2013; Schwartz, 2014; Talbert, 2014). Gaughan (2014) added

achieving increased in-class time with her world history students to this list. Braun, Ritter, and Vasko (2014) were concerned about students' apparent lack of independent study outside of class time. All of these reasons emphasize improving the student experience in the course in some way.

Instructors' Experience with Flipping

All studies explored in this review used the "simplistic form" (Hoffman, 2014) of flipping the classroom: video lectures and/or reading outside of class covered the main content, and active and collaborative learning experiences dominated the in-class time. More advanced forms of flipping might include moving beyond pre-recorded lecture to actually curate video content from the Internet, engaging students in online discussion, and providing higher-order forms of learning activities that engage students in critical thinking and discussion during class time. For example, Critz and Knight (2013) included pre-recorded PowerPoint lectures and reading assignments for students to complete outside class, followed by a quiz. In class time was spent on case studies into which major topics were woven. Gaughan (2014) used content-based videos and historical readings to prepare students to engage with primary source material in class through small-group and large-group discussions. According to Gaughan, "the online lectures have provided time in the classroom for a proliferation of discussion-based activities that I would not otherwise have been able to do" (p. 228).

Reported Outcomes of Flipping

In terms of outcomes, studies reported one of two types: either comparisons of the flipped environment to a non-flipped environment or reports of student (and sometimes instructor) satisfaction. Davies, Dean, and Ball (2013) reported comparisons between three information systems classroom environments (traditional, simulation, and flipped) and found the flipped approach to be slightly better (but not statistically so) than the traditional approach, with both approaches superior to a simulation environment. They based their results on a common post-test across all three environments: achievement on this exam was not significantly different. Findlay-Thompson and Mombourquette (2014) did not find any significant grade differences among one flipped and two traditional classrooms of an introductory business course. Similarly, Braun, Ritter, and Vasko (2014) did not find differences in exam performance between semesters taught traditionally and those with flipped content. In contrast, Love, Hodge, Grandgenett, and Swift (2014) found significantly higher test performance for the

students in their flipped linear algebra course; Missildine et al. (2013) saw significantly higher final exam performance in their adult health nursing course; and Talley and Scherer (2013) found significantly higher final grades in the flipped section of their physiological psychology course than they saw the year before when they did not flip the course. Thus, the jury is still out on whether flipping the classroom leads to achievement differences, with mixed results reported in the current literature.

Most studies report some measure of student satisfaction with the flipped learning environment (Critz & Knight, 2013; Enfield, 2013; Findlay-Thompson & Mombourquette, 2014; Gaughan, 2014; Hoffman, 2014; Kim, Kim, Khera, & Getman, 2014; Lage, Platt, & Treglia, 2000; Pierce & Fox, 2012; Strayer, 2012; Vaughan, 2014; Wilson, 2013). Students interviewed for Findlay-Thompson and Mombourquette's (2014) study indicated "the flipped classroom allowed them … to do better on assignments" (p. 67) due to the availability of the instructor during class time (as opposed to the instructor just lecturing). Students reported satisfaction with the out-of-class time commitment necessary to watch videos and read (e.g., Critz & Knight, 2013) and felt that the content was relevant (e.g., Enfield, 2013).

Lessons Learned about Flipping

Lessons learned by current "flippers" are many, with the most predominant being the initial and considerable time investment involved in flipping a classroom (Enfield, 2013), particularly if one is flipping the entire course as opposed to one or two modules (Critz & Knight, 2013). Findlay-Thompson and Mombourquette (2014) encouraged educators to focus on faculty training and student buy-in, both of which they considered essential to the success of the flipped classroom. Kim, Kim, Khera, and Getman (2014) generated nine design principles as a result of their review of three flipped classrooms, found in Table 1.

Context of the Study

I chose to flip my classroom without the benefit of most of this literature – so much of it came out in 2013 and 2014 when I was constructing the flipped environment. My choice was made primarily on the brief descriptions found on websites, a few articles, and conversations with an educational technology faculty member. Ultimately I made the change because I wanted more time with my students and more time for my students to engage in *doing* qualitative research rather than hearing me talk about it. I also hoped it would liven up a sagging teaching practice with which I had become disenchanted.

Table 1
Design Principles for Flipped Classrooms

Design Principle
Provide an opportunity for students to gain first exposure prior to class
Provide an incentive for students to prepare for class
Provide a mechanism to assess student understanding
Provide clear connections between in-class and out-of-class activities
Provide clearly define and well-structured guidance
Provide enough time for students to carry out the assignments
Provide facilitation for building a learning community
Provide prompt/adaptive feedback on individual or group works
Provide technologies familiar and easy to access

*Note. (*Kim, Kim, Khera, & Getman, 2014)

The Qualitative Research Methods course I teach is at the graduate level – the semester in which I flipped the course I worked with four master's-level students and fourteen doctoral-level students. The course meets for 5½ hours every other Tuesday during the spring term (January – May). It is an introductory course, so it includes a broad survey of qualitative research methods. This includes discussions of research paradigms, research purposes, qualitative research methods (including data analysis), and four traditions within qualitative research: case study, ethnography, life history, and phenomenology. Students work on a series of smaller exercises that lead to the development of a small-scale study proposal. Students are typically at different points in their programs, though for the majority of the doctoral students this is their last course.

Flipping the Qualitative Methods Classroom

I spent all of fall 2013 (September – December) on the mechanics of flipping the classroom. This included time for updating and revising notes, translating notes into PowerPoints, then doing voiceovers using VoiceThread (http://www.voicethread.com) to save the final piece. I also created the classroom activities in which students would engage during this time. All of the course material was organized via modules in our learning management system, Canvas. I did look for pre-existing videos online but did not find any to my liking. Admittedly this was not an earnest search, however, and in the future, I plan to continue seeking out other options for students besides my VoiceThreads. The steps I took for each class session included:

(1) Determining the learning outcomes for the session,
(2) Preparing the course notes for the session's topics,
(3) Preparing PowerPoints for the session's topics,
(4) Converting PowerPoints to VoiceThreads for the session's topics (approximately 7-10 minutes each, with two per class session),
(5) Selecting readings for the session's topics,
(6) Creating small-group and large-group activities for the session,
(7) Creating module in Canvas for the session,
(8) Creating individual work for the session, and
(9) Creating a time grid for the session's flow of work.

The out-of-class time commitment switched from reading and writing in prior years to reading and listening to VoiceThreads in the flipped environment. Although I did not poll students on the exact amount of time spent on out-of-class activities, my assumption was that the 7-10 minute VoiceThreads took considerably less time than the writing assignments they replaced, so that in the flipped environment students spent less time on out-of-class activities than before. The readings were the same as in prior years, so this time commitment did not change. The only change was removing the writing assignments and adding the VoiceThreads.

Challenges that arose while creating the flipped classroom were few. I used simple technology that I was comfortable with, so that was not a concern. In the future, I would like to get more "tech-savvy" with the pre-class videos but for now I am happy with them. Early on I was worried about the loss of "my class" (i.e., my lecture time based on my notes) but soon realized that students were getting the same material (my notes converted to VoiceThread) as before, just in a different environment—and a better one—since they now had the opportunity to stop, pause, and rewind the lecture which they cannot do when it is live.

The other main issue that arose while I engaged in flipping the classroom was a renewed focus on learning outcomes. In particular, as I had to think about what students would be doing with their class time, I had to

think about learning outcomes specific to each class session. I had never really done that before. I had always considered the overall course learning outcomes but never what I wanted students to get out of a particular class meeting. Schwartz (2014) argued for this when he indicated "a key to approaching these [in-class] activities is to begin with the end in mind: what should the students ultimately learn about a particular topic during the class period?" (p. 202). While I did not write these down, these daily learning outcomes better positioned me to create the assessments and activities for each meeting. They also led me to reconsider my overall course outcomes: I added two, deleted one, and revised three as a result of this process of considering individual class meeting outcomes.

The Flipped Classroom Experience

In class, we first engaged in discussions about the readings and VoiceThreads, typically lasting 30 – 45 minutes. Then students worked in small groups on an assignment related to that day's topic, followed by some individual writing on the topic. After a dinner break, students engaged in a second small group activity, from which results were reported to the whole class and a discussion ensued. Finally, students worked on individual writing tasks, shared their results with a peer, and then edited their tasks before submitting them to me for comment (see Figure 1).

Challenges that arose during the semester were also few. The first set of VoiceThreads were hard to hear unless the students wore headphones. Otherwise, the VoiceThreads worked well and in an informal assessment of the flipped experience all students reported the VoiceThreads were helpful and a reasonable expectation prior to class (i.e., they were not too long, they helped focus the reading, and they lead to richer class discussion). Two students had issues with the high level of classroom noise while completing individual assessments and felt distracted. This was unexpected. At first I was quite pleased with the noise level because students were talking to each other about their work. But for the next class I will make arrangements for students to bring their headphones to class or move to a different venue while completing the individual assignments if necessary. One student felt rushed to complete the individual assignments, a complaint I did not hear until the end-of-term evaluations. For the next class I will make it clear students can always finish their work at home.

Overall evaluations by students of the flipped classroom were positive (except for the one student who felt rushed). Four students in particular mentioned they wished more classes were structured this way. Students commented that it was nice to have me around to bounce ideas off of instead of listening to a "talking

head" for 5½ hours. They also liked having their peers there for support while working through the concepts in class as opposed to on their own: one student said s/he "didn't feel so isolated." End-of-term evaluations came out the same way: students were very positive and supportive of the flipped classroom and would do it again if they had the chance.

Analysis of Whether Flipped Learning Occurred

In Spring 2014, while my first flipped classroom was in progress, the Flipped Learning Network (FLN) generated the following formal definition of *flipped learning* and indicated that "flipping a class can, but does not necessarily, lead to Flipped Learning" (FLN, 2014):

> Flipped Learning is a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter (p. 1).

In essence, flipped *learning* takes the flipping experience beyond the mechanics of flipping. It describes the outcomes of flipping in terms of student engagement and learning. Thus it is not enough to go through the mechanical motions of flipping one's classroom: attention must be paid to the outcomes of this flipping. In the following paragraphs I will evaluate, post hoc, whether I engaged my students in flipped learning as a result of flipping the classroom by exploring each of the four pillars and the associated indicators (see the Appendix for a summary of these).

Flexible Environment

As part of the flexible learning environment, I definitely believe I established spaces and time frames that allowed students to interact, but I did not explicitly provide time for them to reflect on their learning. By circulating during group and individual work times I continually observed and monitored students. Adjustments were made as necessary. I did not provide students with different ways to learn content: everyone had to read the same material and watch the same VoiceThreads and complete the same assessments. I also did not provide students with different ways to demonstrate mastery: everyone had the same final product required of them.

Learning Culture

As a result of flipping, students definitely completed activities without me being central. Whether

Figure 1
Time grid comparison from 2013 (non-flipped course) to 2014 (flipped course)

Time Block	2013	2014
4:15 – 4:30	Discussion on pre-read article	Discussion of videos/readings using NoteApp
4:30 – 4:45		
4:45 – 5:00	Lecture	
5:00 – 5:15		
5:15 – 5:30		
5:30 – 5:45		Group work on activity related to purposes
5:45 – 6:00		
6:00 – 6:15		Individual Writing – purpose statements
6:15 – 6:30	Dinner	Dinner
6:30 – 6:45		
6:45 – 7:00		
7:00 – 7:15	Lecture	Group activity on case study design with large group report out
7:15 – 7:30		
7:30 – 7:45		
7:45 – 8:00		
8:00 – 8:15		Break
8:15 – 8:30	Break	Individual writing – Maxwell 2.1
8:30 – 8:45	Lecture	
8:45 – 9:00		
9:00 – 9:15	Peer discussions of writing done for homework	Pair share of individual writing with revisions
9:15 – 9:30		
9:30 – 9:45	Final Thoughts	Reflection and Class Evaluations

or not they were meaningful is more difficult to assess. I believe the activities I have chosen are meaningful, and students generally find them helpful for applying the content, so I would say they completed "meaningful

activities" as required by this pillar. Still, I feel the need to revisit the activities to make sure they are achieving their goals. I do not scaffold these activities, however, and I realized early on this was a challenge. After a

general class discussion of the content students move directly into the assessments; there is no time for them to practice the content first. One of the activities I have added for the next class is a whole class discussion in which we practice applying the concepts together before moving into small groups to complete the assessments.

Intentional Content

I would definitely say that I prioritized concepts used in direct instruction, and as a result I created relevant VoiceThreads for them to view on their own. I did not differentiate content, however. Everyone viewed the same material and read the same books. In the future, one student characteristic to consider is their prior experience with qualitative research methods. I assume none when I prepare and teach the course, but this is not an assumption I have ever checked. This would let me know how much differentiation is necessary in future classes.

Professional educator. One of the best experiences I had flipping the classroom was my ability to be accessible to all students during class time; thus, I did make myself available to all students for individual, small group, and class feedback in real time. Several students commented on this feature of the flipped classroom as one of the best. I did conduct observations during class time, but the data used for future instruction was mostly along the timing aspect: changing what I do when for next year in order to add or modify work done in class. Most of my observations fueled further reflection on class and how I might make it better the next time. I collaborated with a technology expert while developing the course, but outside of that I did not collaborate with other educators. I would say that the entire experience flipping the classroom is evidence that I take responsibility for transforming my practice.

Discussion

Overall, I consider the flipped classroom experience a success. I was very pleased with the outcome, particularly because the students were pleased with it as well. I have work to do to improve upon last year's success, but that is always the case with teaching. I did not fully achieve flipped learning, however, and some of the work I have to do involves coming closer to a flipped learning environment next year. I need to differentiate and scaffold instruction for sure, and if possible provide alternate means for students to demonstrate mastery of the material.

This study adds to the current literature on flipped classrooms in two ways. First, this is one of the first graduate classroom flips to be reported in the literature. Hoffman's (2014) study was also set in a graduate-level qualitative research methods course. Some have questioned whether flipping is appropriate for all levels

of students (e.g., Schwartz, 2014), but this has been primarily at the undergraduate level. The current study provides support for flipping at the graduate level, even in an introductory course.

Second, this is the first time flipped learning (FLN, 2014) has been assessed in a flipped classroom. The literature is still mixed on whether post-secondary students see achievement gains as a result of flipping, but this outcome is not the only one to assess. A more subjective understanding of student learning can be assessed using the FLN's (2014) four pillars as a guide.

Suggestions for Future "Flippers"

I offer two important suggestions for future classroom "flippers." First, be prepared for a heavy workload prior to the course. Creating and curating video content, creating the online course elements, preparing for classroom interaction, and preparing assessments all take time, as they do in any course. In a course I am currently teaching, I did not complete all of the "flipping" prior to its start in August. Thus, I have run against time demands to flip classes the week they are held, which gives students little time to prepare. I had more success in the courses I have fully flipped from the outset. This allowed me to focus more on in-class interactions and assessment rather than the technical details of creating the online content. I would encourage faculty to have the entire course flipped prior to it starting (or the entire class session if only flipping part of a course).

Second, based on FLN's (2014) guidelines, flipping is more than creating the environment. Constant attention to individual students and their experience in the flipped environment is essential. In my classroom, some students felt rushed or distracted; I wish I had known this sooner so I could alter the environment for them. I did not differentiate instruction or provide alternate means of assessment for students, and this may have limited the learning that ultimately took place. I would encourage faculty to be prepared to attend to individual students as well as the whole group during class meetings.

Suggestions for Future Research

I will first echo Butt's (2014) recommendation that future research explore the attainment of learning outcomes in the flipped environment. Most research, including the present study, has focused on the process of flipping and the satisfaction of faculty and students with the flipped environment. Any new pedagogical technique should be evaluated for the learning outcomes that are achieved as a result of the technique, and flipping the classroom is no exception. In the case of the present study, this was the first time I flipped a

classroom (which I believe is also true for many of the studies reported in the literature), so it seemed valuable to first assess the general success of the flipped environment before getting more specific and evaluating learning outcomes.

I would also encourage future researchers to explore the FLN's (2014) guidelines to provide empirical support for them at the post-secondary level. For example, I question whether differentiation is necessary in an introductory course where no student has had formal exposure to the content before. At the advanced level, however, differentiation becomes key as students enter the course with a variety of content-related experiences and backgrounds.

I also encourage teacher-researchers continue to report their experiences flipping the classroom environment so that others may learn more about this technique. Various researchers in a variety of countries have contributed to the literature, and we need more. Teacher-research, or classroom action research, is essential for the continued evaluation and success of the flipping movement. We need to understand how best to construct the flipped learning environment, how our students experience this environment, how faculty experience this environment, and how achievement is impacted by this environment.

Conclusion

Flipping the graduate qualitative research methods classroom was a moderate success for me, as it has been for many in higher education. Continued research is necessary in order to understand the learning that actually occurs as a result of this new pedagogical technique, as the research is conflicted on whether any achievement gains result from flipping the classroom. Flipped learning needs to be evaluated in addition to quantitative achievement scores. Students are still the core of the classroom, and ensuring they have a positive, engaged learning experience is at the heart of any instructional technique. Through future research and reflection, I hope other teacher-researchers are able to add to this literature so that we may better understand the process and results of flipping the classroom.

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Appendix
The Four Pillars of F-L-I-P^{TM} (Flipped Learning Network, 2014)

Pillar	Indicators
Flexible Environment	• Spaces and time frames for students to interact and reflect on their learning • Continually observe and monitor students to make adjustments as appropriate • Provide students with different ways to learn content and demonstrate mastery
Learning Culture	• Opportunities to engage in meaningful activities without teacher being central • Activities scaffolded and accessible to all students through differentiation and feedback
Intentional Content	• Prioritize concepts used in direct instruction for students to access on their own • Relevant content created or curated • Content differentiated so it is accessible and relevant to all students
Professional Educator	• Teacher is available to all students for individual, small group and class feedback in real time • Ongoing formative assessments conducted during class time through observation and recording data to inform future instruction • Teacher collaborates and reflects with other educators and takes responsibility for transforming practice