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by

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Abstract

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Keywords: Flipped classroom strategies

In an age where students have unparalleled access to screens, and friendly debates can be settled with a five-second Google search on one's iPhone, a traditional model of education in which the teacher is regarded as the possessor of vast troves of knowledge to be imparted to passive learners will fail to equip students with critical thinking skills necessary to life in the 21st century. Sir Ken Robinson (2012) said as much in a lecture on the impact of technology on education, in which he claimed that it is necessary for schools to keep up with a changing technological landscape. Many educators have sought to accomplish this through the development of blended learning. Blended learning refers to the use of online or digital tools in conjunction with more traditional classroom strategies (Napier, Dekhane and Smith, 2011).

Although blended learning has been the subject of research for more than two decades, the capacity for implementation has been enriched due to the more recent innovation of the "flipped classroom". Conceived by Aaron Sams and Jonathan Bergmann, the flipped classroom model seeks to shift class content outside the classroom, often in the form of lecture videos or readings, and in turn moves writing, projects or practice—activities traditionally assigned as homework—into the classroom (2012). Since 2012, when Sams and Bergmann first published their book *Flip Your Classroom*, the flipped model has gained popularity. Websites like Khan Academy, and YouTube series like John Green's "Crash Course" have proven to be popular tools in classrooms around the world as supplements to course content, and in addition to these, YouTube is home to hundreds of thousands of teacher-made videos. Although lecture videos are often the first aspect of flipped classrooms that teachers and students think of, they only represent the tip of the iceberg; the opportunities to create a successful blended learning environment are more plentiful than ever before.

Problem

Technology and innovation will not reform education on their own, and with so many tools available, an over-reliance on educational technologies may well be a temptation. Technology, like any other teaching tool or pedagogical strategy, functions at best as an extrinsic motivator (Graham, 2003). Moreover, technology cannot replace the relationships that are developed within the context of a live classroom community (Bergmann and Sams, 2014). With this in mind, it is perhaps unsurprising that students may harbor negative attitudes toward flipped classroom strategies before they have even experienced a flipped classroom for themselves.

The researcher is a high school history and English teacher at a small Christian international school in Japan, who recently introduced flipped classroom strategies into his teaching. One potential roadblock the researcher noted at the outset was the past resistance of students to the flipped classroom philosophy: When a colleague attempted to incorporate flipped strategies in her math courses several years ago in the form of assigned lecture videos, she met with heavy resistance from the students. In the Spring of the 2014-2015 school-year, the researcher informally surveyed his Humanities class about the possibility of using lecture videos, and the vast majority indicated that they preferred in-class lecture to watching lecture videos outside of class. At that time, the students had suggested that if a teacher assigned lecture videos, he or she was not really teaching. An informal survey following the first unit of the 2015-2016 school-year revealed that a majority of the students were struggling to focus during classroom lectures and that they were willing to try lecture videos instead, in spite of their reservations.

Research Questions

It was in the reactions of these and other students that the issue at hand was raised: the researcher wished to explore student perceptions regarding flipped strategies, particularly in the humanities classroom context, in order to ascertain how, and under what circumstances, students might be willing to try them. At present, there has not been substantive research into student perceptions of flipped classroom strategies. There have, however, been rich studies done on student perceptions of blended learning in general. As flipped strategies are an application of blended learning, the researcher allowed the general research that has been done to inform his own research on student perceptions of flipped strategies in particular, as he attempted to address this gap in the research. Because the need to innovate and reform the classroom applies to private international schools every bit as much as it does to U.S. public schools, such a study is necessary in order to determine how best to proceed in introducing and sustaining meaningful change in this school setting. The study examined the following questions:

1. What are the benefits of flipped classroom strategies?
2. What are the challenges and issues with flipped classroom strategies?
3. To what extent does personality shape students' perceptions?
4. To what extent does cultural background shape students' perceptions?

Definition of Terms

For the purposes of this study, the following definitions will be used. Unless otherwise noted, the definitions are those of the author:

Bloom's Taxonomy: Bloom's Taxonomy is a classification system used to distinguish different levels of human cognition, i.e. Thinking, learning and understanding (Glossary of Education Reform).

CMS: Course Management Systems. This is the term for any online classroom tool, such as Blackboard, Schoology, Moodle or Google Classroom.

DBQ: Document-Based Question. This is an assessment in which students are presented with a historically significant question, and provided with 10-14 historical documents with which they must support a well-developed and thorough answer to the question at hand.

SNS: Social Networking Sites. These are online sites or applications used primarily for the purposes of socialization and community building, such as Facebook, Twitter, Reddit, Instagram or Tumblr.

TCK: Third Culture Kid. This is the term for children who have spent, or are spending a significant portion of their formative years living in a culture different from their parents' culture.

Literature Review

Benefits and Proven Outcomes of Flipped Classroom Strategies

Much time and energy has been dedicated to outlining the proven benefits of blended learning in general, and flipped classroom strategies in particular. Blended learning takes on the false dichotomy of face-to-face learning *or* online learning and acknowledges that there is a place for both in the modern classroom (Banerjee, 2011). The flexibility afforded in incorporating online tools into a traditional classroom has been reported to encourage students to learn at their own pace, and develop more responsibility for their own learning (Napier, Dekhane and Smith, 2011). The potential for customization and the necessity of responsibility make these strategies valuable for building up lifelong learners. In essence, the access to such a wide variety of tools and resources makes learning how to learn more convenient, and more vital than ever before. Furthermore, due to the pace, and the shift in the use of class-time, teachers are able to more easily monitor student involvement and progress, provide timely feedback, and use class-time for more meaningful interaction and engagement with the students (Yapici and Akbayin, 2012).

The flipped classroom movement has brought these benefits into even sharper focus. By intentionally shifting the lower tiers of Bloom's Taxonomy to outside the classroom, the spotlight is shown instead upon critical thinking skills (Bergmann and Sams, 2014). Students learn according to their readiness, and are not compelled to advance to a more difficult topic until they have demonstrated competency in a prerequisite topic (Plunkett, 2014). As the focus of classroom time shifts away from content, more class-time can then be dedicated to meaningful learning experiences that facilitate this sort of higher-level thinking, such as debates, discussions, simulations, work-shopping and more (Bergmann and Sams, 2014). Instead of feeling like an

end unto itself, content becomes context--preparation to engage with bigger and more significant concepts, themes or questions. Moreover, the shift enables more constructive face-time between students and their teachers, as the teacher is freed up to provide individualized help and guidance in ways that were not possible when a sizeable portion of time and energy were being dedicated to lecturing in front of the class (Bergmann and Sams, 2014; Plunkett, 2014).

Over the course of the past six years, a growing body of research has been, and is being done to demonstrate these much-touted benefits. A 2010 study conducted at the University of California compared student performance in introductory biology classes from 2007, 2008 and 2009, the most recent of those classes having been taught using flipped classroom strategies. The researchers observed a 21% increase in students' scores on the final exam in 2009 (Moravek, Williams, Aguilar-Roca and O'Dowd, 2010). While these results are hampered somewhat by the fact that the use of flipped classroom strategies in the 2009 class was only partial, and the professors still lectured in class as their primary mode of instruction, the results do seem to indicate that shifting even some of the content from inside to outside the classroom can yield positive results. A 2013 survey of flipped classroom research recognizes the shortcoming of this and other similar studies, and poses the question of whether or not similar results might be found across the board in other subjects, and whether the results would hold true or even improve if the course were flipped completely and not just partially (Bishop and Verleger, 2013).

While indeed much of the existing research on flipped classroom strategies has been conducted in math and science classrooms, studies on the benefits of flipped strategies in history and English courses are emerging slowly, but surely. A 2015 study examined the outcomes of flipped classroom strategies in 9th grade history classes in Calgary, AB, in a unit on

immigration. The researchers held their findings up against three key criteria: that teachers are designers of learning, that the work students are asked to undertake is worth their time and attention, and that assessment practices improve student learning and guide teaching. They found that each of these criteria were evident in the flipped lessons on immigration, though the researchers did acknowledge a clear need to strengthen assessment and feedback in the flipped lessons (Mazur, Brown and Jacobsen, 2015). It will be crucial for more teachers of the humanities to further this research in the coming years, to continue to verify these strengths and improve the planning and implementation of flipped strategies.

Challenges of Flipped Classroom Strategies

Of course, no one classroom strategy is a cure-all. A flipped classroom is not without its potential pitfalls. It does mean more work for the teacher, as the teacher must thoughtfully cull and utilize quality resources to supplement the students' learning (Plunkett, 2014). Finding good online resources is essential, as is teaching the students how to locate good online resources on their own. It cannot be taken for granted that students intuitively know how to research and locate good information, so it is incumbent upon the teacher to have a baseline of resources ready, and to actively teach skills of discernment and resiliency to the students as they research. Teachers unwilling or unprepared to provide this scaffolding will likely see flipped strategies fall flat in their classrooms. Flipped strategies can also be more difficult to regulate, as it puts the onus for learning information onto the students (Plunkett, 2014).

Perhaps even more critically than before, teachers must be clear about their learning objectives—students will not be inclined to do the legwork on learning content outside of class if they are unable to see a larger purpose for the information they are pursuing. While some might argue that this potential drawback is no different than a student sitting in a traditional lecture

class and not paying attention to the lecture, the teacher's responsibility to hold the students accountable for their out-of-class learning cannot be denied (Plunkett, 2014).

Of course, the most severe issues with a flipped classroom, and indeed, any kind of blended learning occur when the strategies are carelessly implemented: if class-time is not used well, such strategies can actually detract from class community (Napier, Dekhane and Smith, 2011). While class relationships--between students and their classmates, and students and the teacher--can be deepened through online forums and collaboration, these online interactions must be rooted in a healthy dynamic in the physical classroom, one which is carefully nurtured when the students and their teacher gather together in person. Careless implementation can be the result of a teacher attempting to mask a lack of knowledge or passion for the subject at hand (Karakus and Korkmaz, 2009). This in mind, it is vital that overwhelmed or burned-out teachers do not mistake flipped strategies for a passive approach or an "easy way out", when it is clear that for flipped strategies to be truly effective, the teacher must work just as hard and invest themselves just as much as they would have in a traditional classroom setting, if not more-so.

Moreover, flipped classrooms must not simply carry forward a purely didactic, lecture-based classroom philosophy. If the emphasis is still on content and transmission of information, it makes little difference if the lecture is happening in class or outside of class through videos--at that point, the teacher is merely using technology in the service of poor pedagogy (Hoffman, 2014). Rather, teachers must start with authentic problems or essential questions, and then select or create resources in the service of engaging those questions. Ultimately, teachers must strive to scaffold their instruction--even flipped instruction--so that students can learn how to search for and access information on their own (Hoffman, 2014). If students are not taught how to learn,

the rich stores of information at their fingertips will have all the value of ocean-water to the thirsty sailor stranded at sea.

Student Perceptions

Student perceptions about flipped classroom strategies seem to stem from several different sources: student personality and learning preferences, students' views and expectations regarding various technology tools, and the students' cultural perspectives on the respective roles of teacher and learner. A 2013 study by Bolliger and Erichsen suggests that students' personality types as identified by the Myers-Briggs Type Indicator have an impact on student satisfaction with the use of online tools or strategies in classroom instruction. For instance, extraverts may resist the use of independent online instruction more than introverts due to a basic preference for live interactions over online interactions. Even though the MBTI and other similar tests have well-known limitations, the fact remains that classrooms are filled with a multitude of learners who have diverse personalities and learning preferences, and to simply shift the focus from in-class lectures to out-of-class lectures for the sake of following an educational trend ignores this diversity (Hoffman, 2014).

Students' personal relationships with technology may also shape their expectations of how technology might be used in the classroom, which can also affect perceptions of flipped strategies. Students who use social networking sites (SNS) such as Facebook, Twitter, and Instagram extensively may be able to more intuitively pick up course management systems (CMS), but such ease with technology may in fact color their expectations of the technology they use in class. For instance, students who primarily use Internet tools for social and entertainment purposes may find it difficult to adjust to a setting where they are expected to use Internet tools for educational purposes (Fleck, Beckman, Sterns, Hussey, 2014). Additionally, students less

adept at using technology outside of class may find themselves frustrated with CMS or other online tools, especially if those tools are not as user-friendly as the applications commonly used by the students. Instead of appreciating the convenience of the tools, the students will dread being assigned to use them and regard their use as an exercise in frustration, more than anything else (Fleck, Beckman, Sterns, Hussey, 2014).

Finally, student perceptions may be shaped by their basic views about the respective roles of, and relationships between, teacher and learner. Teaching may be perceived as synonymous with lecture, and indeed at a university level, students may even choose a smaller school environment over a large one because they believe that this will mean receiving direct instruction from their professor rather than from an adjunct or teacher's assistant (Banerjee, 2011). Students seem to crave the opportunity for community inherent within a traditional classroom--community with classmates, community with their teacher--and resist any strategies that they perceive as a threat to this chance for community. Flipped classroom strategies may, on the surface, seem to pose such a threat.

These basic views of the role of teacher and learner may also be shaped by cultural background and upbringing. Students from East Asian countries regard the teacher as being responsible for the transmission of information to students (Borden, 2003). While teachers enjoy a high degree of respect, and even prestige, within this cultural context, a teacher who refuses to tell the students what to think, or who insists that students find answers for themselves, may initially be viewed with mistrust or even scorn. Even in an international school setting, or among Third Culture Kid (TCK) communities, such attitudes about learning may be passed down from parents to children (Borden, 2003). Thus, the students' basic views of teacher and learner may be a significant factor in their perceptions of flipped classroom strategies, positive or negative.

Methods

Participants

The participants in this study were twenty-two eleventh graders at a Christian international school in Japan. The students were a part of the researcher's Humanities class, a two-period blend of U.S. History and American Literature, meeting 3rd and 5th period each day. Six students are Korean (27%), eight students are Japanese (36%), five students are mixed race (23%) and three students are Caucasian (14%). Of this group, six students agreed to be interviewed in greater depth. The researcher selected these students in order to have a representative range of achievement on the DBQ, as well as an accurate sampling of the gender breakdown in the classroom. The researcher has assigned the students pseudonyms for the sake of privacy:

Kirsten is a 17-year old girl from an international home. Her mother is Finnish and her father is Japanese. Kirsten lived in Finland and attended a Finnish public school until 6th grade when her parents decided to move to Japan to be missionaries, at which point she started attending the researcher's school. Although Kirsten speaks Finnish at home, she is fluent in both English and Japanese as well.

Tina is a 16-year old girl from an international home. Her mother is Japanese and her father is American. Previously, Tina had attended a small international school in Tokyo. She transferred to the researcher's school before the start of her sophomore year because she had struggled with the small size of the school she had been attending. Tina is fluent in English and conversational in Japanese.

MinKyung is a 17-year old Korean girl. Previously, MinKyung had attended a small Christian school at which most students were Korean or Japanese. Due to an issue at her old

school, MinKyung transferred to the researcher's school several weeks into her sophomore year, along with a number of other students. Although MinKyung speaks both Korean and Japanese fluently, she still requires support for English and is enrolled in an EAL (English as an additional language) class.

Lisa is a 17-year old Japanese girl. She attended a small international school in Tokyo for a while before spending a year in the U.S., where she attended an American public elementary school. When her family returned to Japan for her 3rd grade year, she began attending the researcher's school. Lisa is fluent in English and Japanese.

Todd is a 16-year old Caucasian, North American boy. Todd's missionary parents moved around a lot while he was young and as a result, he attended a variety of public schools in Ohio and Alabama, along with one year of home-school, before coming to the researcher's school in 6th grade.

Takashi is an 18-year old Japanese boy. He attended a Japanese public middle school, and then lived with a host-family in Georgia, where he spent one year at a private Christian high school. Due to difficulties with both the living arrangements and educational setting, Takashi sought a Christian education in Japan, and through connections he had made in America, found the researcher's school, which he began attending in his 11th grade year. Takashi's family lives in another part of Japan, so he boards with an English-speaking host family. Takashi requires support for English and is currently enrolled in an EAL class.

Research design

By the time he chose to research the students' perceptions on flipped classroom strategies, the researcher had already been using flipped classroom lecture videos for several months. In an informal survey following the first unit of the school-year, many students had

indicated that they would prefer lecture videos to in-class lecture. So, the researcher talked the class through his reasons for making the shift, and began to create short lecture videos in the month of October.

The researcher collected data from his 4th unit, entitled "Civil War and Civil Disobedience". At the time the researcher began collecting the data, the unit was nearly finished. This unit was four weeks in length, and ran through the month of January. One of the essential questions for the unit asked students to consider how to navigate issues upon which historians disagree. The researcher assigned a set of lecture videos to be watched outside of class, providing a brief overview of different perspectives on the cause of the Civil War. In class, the students did several in-class activities to follow up on the videos, including a map-reading activity, a historical simulation, and completing a graphic organizer. The students then wrote a Document Based Question essay (DBQ) engaging with the question of what factors led to the Civil War. The scores from the students' DBQs were compared with the performance of the class from the previous year on the same DBQ, that prior class having been taught with traditional in-class lecture. Following the unit, interviews were conducted with the students regarding the use of lecture videos. Student perceptions and scores were then compared to several factors such as cultural background and Myers-Briggs indexes.

Materials

In order to determine the benefits for students, the researcher used a DBQ essay assignment as the assessment tool. The rubric was built around criteria of prompt, thesis, use of information, organization, introduction and conclusion, and designed on a 5-point scale: a score of 1 representing little achievement; a score of 2 representing below-standard achievement; a score of 3 representing standard achievement; a score of 4 representing above-standard

achievement, and a score of 5 representing superior achievement. The researcher also designed a 20-question interview to be done with a sample of six students whose scores represented a range of performance on the DBQ.

The class materials necessary to prepare the students for the DBQ included ten short teacher-made lecture videos, created in iMovie and posted on YouTube. For each video, a complete transcript of the lecture was provided in the description box on YouTube. Materials also included a map-reading activity, in-class simulation, and graphic organizer, all created by the teacher. The DBQ was taken from The DBQ Project online. Student scores from the previous year, as well as the current year, were compiled by the researcher, and are displayed in the tables in the results section.

Procedures

The first lecture video, which had a run-time of 2 minutes, 43 seconds, summarized the economic argument for the Civil War. The second lecture video was a 2-minute, 53-second summary of the cultural argument for the Civil War. After watching these videos, the students completed an in-class activity in which they viewed a series of maps from the 1800s. The first map displayed the principal roads, rivers and canals in the U.S. in 1840. The second map displayed the telegraph lines in the U.S. in 1846. The third map compared the railroad lines in the U.S. between 1850 and 1861. In desk-groups of three or four, the students then discussed what information each map provided, what dynamics they observed in the maps, what conclusions they could make about America at this time based on the story the maps were telling them, and finally, whether or not they felt the American System had been successful in its purpose, based on their observations.

The students were quick to note the vast difference in infrastructure between the North and the South, citing the density of railroad, telegraph and canal networks in the North, compared to the South. When pressed to consider why this was the case, students wrestled with what they already knew: some suggested that the agrarian economy of the South did not require the extensive infrastructure that the industrial North did. When prompted to think even more basically, several students noted that the fundamental differences in geography--namely, more lakes and rivers in the North--likely made it easier to construct canals, and later, to ship the supplies necessary to build roads, telegraphs, railroads and factories, allowing the North to industrialize more rapidly and develop a regional identity across state lines more easily. In their group discussions, the students all observed that the maps told the story of a connected, urban, industrial North, which would have likely identified as an entire region, and the story of an isolated, agrarian South, which likely would have held fast to state loyalty over regional or national identity. In this way, the students concluded, the American System had fallen short of its goals in spite of the tremendous development of infrastructure across the North.

The third, fourth and fifth lecture videos, with respective run-times of 2:56, 3:12, and 4:15, all unpacked the political argument for the Civil War. Following the viewing of these videos, the students engaged in an in-class simulation of the Compromise of 1850. The issue on the table was this: with California applying for statehood as a free state, what deals could the North and the South make with each other to ensure continued peace? Each student was assigned to a different state, North and South, and presented with a list of personal objectives that would earn them points, as well as outcomes that would lose them points. These ranged from the reversal of the Missouri Compromise of 1820, to the enactment of a stricter fugitive slave law, to the banning of slave trade in Washington D.C. Several students representing border

states were tasked with ensuring that compromise was achieved, their success contingent upon a unanimous final vote. The students spent their 3rd period class-time planning intently and working with other states from their region to create a list of possible demands and sacrifices. When the students returned for their 5th period class-time, they met with the other states to try and negotiate before proposing a compromise at the end of class and voting on the proposal. Unfortunately, much of the momentum had died when the students returned after a period away, and only a handful of students actually gave the simulation their complete participation. In the end, the compromise reached was similar to the actual Compromise of 1850, with the exception of Utah and New Mexico being opened up to popular sovereignty--the right of the population to decide whether a territory would apply for admission as a slave or free state.

Finally, the students reviewed five videos that they had watched in the previous unit while reading *Incidents in the Life of a Slave Girl*, which examined the history of slavery and abolitionism in the United States. The run-times for these videos were 3:01, 3:55, 3:44, 2:54 and 3:15, respectively. Following the viewing of these videos, students worked in pairs to fill out a graphic organizer comparing the support for each of the different perspectives on the war. For this activity, students were free, and in fact encouraged to use online resources in addition to the videos to fill out the chart. Students then had to suggest which perspective(s) seemed most plausible to them and articulate why.

After all of these activities, the students received the prompt and documents for their DBQ. They were provided with four class periods during which time they could read the documents carefully, ask questions of one another and their teacher, and then begin to write. After the researcher had finished grading the DBQs, he approached six students whose scores best represented the range of performance in the class, and with their permission, conducted

semi-structured interviews with each of them, individually, to learn more about their perceptions of teaching and learning, as well as their perceptions of the benefits and challenges of flipped classroom strategies, specifically.

Results

Research Question One

The first research question was "What are the benefits of flipped classroom strategies?" From a purely instructional standpoint, the use of lecture videos, as opposed to in-class lecture, freed up class-time in significant ways. Above and beyond the use of in-class activities to build on the material from the lecture videos and prepare the students for the DBQ, the researcher was also able to use class-time to explore a second major essential question on the use of civil disobedience. The instructor had not had the time to address this question the previous year, but this year, was able to provide the students with several in-class readings from Thoreau, Gandhi and Martin Luther King, Jr. Because of the extra in-class time, the students were able to read and discuss these pieces in depth, and develop personal perspectives on the usage of civil disobedience, which they articulated in journal entries, and wrestled with in classroom debates at the end of the unit. While the study of this essential question was largely separate from the question of what caused the Civil War, it added a level of depth to the unit that had been missing the previous year.

In order to determine the benefit of the flipped classroom strategies themselves, the researcher needed to assess the students following the use of lecture videos. The researcher had a DBQ prompt prepared from the previous year, and fortunately, had kept student data on that same DBQ from the previous year. That previous group of students had been instructed with traditional in-class lectures instead of lecture videos. The researcher then compiled the scores by range in order to more efficiently compare the results (Table 1). The researcher also compiled a comparison of the average scores, including mean, median, mode, and range (Table 2). It should be noted that out of both groups of students, two failed to submit their DBQ by the late

assignment deadline (two weeks after the initial due-date). In each case, the students who failed to submit had consistently struggled to submit assignments on time, not only in the researcher's class, but in other classes as well.

Several noteworthy observations can be made based on the comparison in Table 1: Firstly, that no students in the 2016 group scored below a 3, whereas two had scored below a 3 in 2015, and secondly, that six students achieved a score of 4.5 or higher in 2016, compared to only two in 2015. While the mode was the same both years at 4.3 (Table 2), and the median was not significantly different, the mean represents significantly higher achievement on the part of the 2016 group, and the range represents a class much more unified in their performance than the previous class had been.

Table 1: Comparison of DBQ Scores, 2015 vs. 2016

Score Range	2015	2016
4.5-5	2	6
4-4.4	10	10
3.5-3.9	3	1
3-3.4	3	3
2.9 or lower	2	0
Did not submit	2	2
Total students in class	22	22
Avg. G.P.A. across all subjects (11th Grade 1st Semester)	3.4	3.5

Table 2: Comparison of Averages, 2015 vs. 2016

	2015	2016
Mean	3.9	4.2
Median	4.1	4.3
Mode	4.3	4.3
Range	3.1	1.5

In order to examine these numbers more closely, the researcher made use of the school's assessment database to compare a breakdown of specific criteria on the rubric. This comparison was made possible by virtue of the fact that assessments scored using the school's online rubrics are saved in an online database for the purposes of comparison and planning future instruction. The researcher compiled these results in Tables 3 and 4. The stronger performance of the 2016 group becomes even more clear when looking at the comparison of the scores on specific criteria. With the exception of organization, the 2016 group had just as many or more students at or above standard on every other criteria (Table 4). Perhaps the most notable area of improvement came in the criteria regarding the use of information. The researcher informed both groups of students at the outset that they needed to not only select relevant information from the documents provided in arguing their thesis, but also that they needed to support each point with background information from class lectures, to help provide some level of context for the documents.

Three students in the 2015 group really struggled with this, and submitted DBQs with little to no background information, quotations or data from the documents used essentially out of context (Table 3). By contrast, all twenty students in the 2016 group made use of background information at a standard level or better, even though fewer scored in the top-most range for that

criteria (Table 4). All six students interviewed cited the ability to go back and re-watch the videos as they were preparing to write, and even as they were writing, as especially helpful in incorporating background information into their essays. Each student was grateful that the transcript had been posted for each video, as this not only made it easier to follow along the first time, but also simpler to go back and find specific information on subsequent viewings.

Table 3: Breakdown of 2015 DBQ Rubric Data

Criterion	3.5 to 5	Greater than or equal to 3 and less than 3.5	Less than 3	Total	% greater than or equal to 3
Consistently addresses all aspects of the assignment	20	0	0	20	100%
Analysis of documents	20	0	0	20	100%
Use of supporting commentary	16	4	0	20	100%
Thesis Statement	19	1	0	20	100%
Support for Thesis	16	3	1	20	95%
Use of Information from Documents & Outside Sources	15	2	3	20	85%
Organization	17	1	2	20	90%
Introduction	18	1	1	20	95%
Conclusion	17	2	1	20	95%

Table 4: Breakdown of 2016 DBQ Rubric Data

Criterion	3.5 to 5	Greater than or equal to 3 and less than 3.5	Less than 3	Total	% greater than or equal to 3
Consistently addresses all aspects of the assignment	20	0	0	20	100%
Analysis of documents	19	1	0	20	100%
Use of supporting commentary	16	4	0	20	100%
Thesis Statement	19	1	0	20	100%
Support for Thesis	17	3	0	20	100%
Use of Information from Documents & Outside Sources	12	8	0	20	100%
Organization	16	0	4	20	80%
Introduction	20	0	0	20	100%
Conclusion	18	2	0	20	100%

Table 5: Interviewee DBQ scores

Student	Score
Kirsten	4.7
Todd	4.5
Tina	4.4
MinKyung	4.1
Lisa	3.4
Takashi	3.2

MinKyung and Takashi, both of whom are in EAL class, stated that the ability to watch the videos multiple times was a distinct benefit. MinKyung said, “During class, sometimes I can’t concentrate. But with the videos, I can watch it again several times. While I watch, I can take notes, to make sure I remember it.” Takashi commented that it was helpful to be able to “learn from [the videos] any time at home”, and at that, to be able to watch as many times as he wanted. Even students who did not require extra support for English appreciated the flexibility afforded by the lecture videos. Kirsten said she was grateful that she “could choose when to watch”, adding that while many students may not be in the mood to listen to a lecture in class, lecture videos provided some freedom of choice. Todd cited the ability to “do them at your own speed, and knowing the background information before coming into class” as the main benefits.

Out of the various in-class activities made possible by shifting the content out of the classroom, most of the students cited the graphic organizer and map-reading activities as the most helpful. Takashi commented that the guided and collaborative nature of the map-reading activity made it easier to interpret the maps than if he had tried to do so on his own. Kirsten commented that the map-reading activity helped her to better understand the time period, and what was happening in the U.S., and that as a result, she was able to better understand the prompt for the DBQ. She added that both the map-reading activity and the graphic organizer “asked students to find information, and at least for me, when I find information myself, it’s more likely that I’ll remember it.” In an informal survey, 20 out of the 22 students in the class responded positively to the use of lecture videos, with only two saying that they would strongly prefer to listen to in-class lectures instead.

Research Question Two

The second research question was "What are the challenges and issues with flipped classroom strategies?" While the student feedback was generally positive, four of the six students noted that a potential issue with the use of flipped classroom strategies was that some students may simply choose not to watch the videos. Kirsten observed that for students who are overwhelmed with work from other classes, or extracurricular commitments, the videos may seem like an extra thing, and not a requirement. MinKyung was somewhat more direct, suggesting that classmates may not watch the videos out of laziness. Todd noticed this tendency, too: "Sometimes people won't do them, but I think that's countered back with the fact that if you don't watch them, you'll have a harder time in class." The researcher noted that there were indeed a handful of students who consistently failed to watch the videos in time for the follow-up activities in class, although all of these students eventually watched the videos while working on their DBQs. Thus far, the researcher has not graded the students on whether or not they watch the videos, instead asking students to answer a short question accompanying each set of videos, mostly for their own benefit.

Tina brought up a unique issue with the use of lecture videos, stating that she preferred in-class lectures due to the ability to ask questions in real-time, and also the ability to see the teacher's reactions to the questions being asked: "Maybe the teacher's face can tell us whether it was a good or bad question." There is, indeed, much to be said for the power of nonverbal cues in the classroom, and without the benefit of watching for facial expression and body language in the use of lecture videos, teachers will need to devise new ways of checking for basic understanding, and students will need to devise new ways of getting back on track when they

encounter something in a lecture that they do not understand. Likely, it will be vital for the teacher to teach students how to watch lecture videos effectively.

In addition to the concerns above, the students agreed that the time spent in class needed to be worthwhile in order to ensure that the videos had been effective. Three of the six students were somewhat disappointed with the simulation, and did not find it all that helpful in preparing for the DBQ. Although Tina found it to be interesting, she noted that the simulation itself had fallen flat because "there were some people who just didn't care." Todd said that while he usually found classroom simulations fun and engaging, the simulation in this unit was not quite as useful. Lisa commented that the simulation "wasn't very effective. It didn't go as well as I thought." Buy-in is incredibly important--without it, even carefully-designed lessons may fail to engage.

Todd also felt a need for more specific follow-up on each video, suggesting that a chat or discussion in the comments section of the video might be helpful, but added that for this to be effective, the class needed to be inclined post, and to respond to posts, and that he was not sure this was the case with his own class: "Even on Facebook, if somebody posts a question about homework, nobody else answers unless they are close friends." Lisa felt that even the videos could potentially be difficult to understand without more basic information, and recommended providing an outline or short reading to help give students context before they watched the videos. The question then becomes one of scaffolding--should all students receive the same content, or could there be several levels of complexity while still preparing students to engage with the broader essential questions? The researcher assigned the same videos to all of the students, but perhaps the ideal ought to be to provide options for how students learn the content and background information.

Finally, the use of flipped classroom strategies did not change the fact that two students failed to submit their DBQ altogether, in spite of the fact that they worked on it during class-time and had guidance from the researcher. The challenge of implementing flipped classroom strategies is not simply creating concise and informative videos, or in crafting engaging classroom activities; it also requires the teacher to think of new ways to assist students one-on-one and keep them accountable.

Research Question Three

The third research question was "To what extent does personality shape students' perceptions?" Although students' perceptions on the benefits and challenges of flipped classroom strategies have been addressed in the previous two questions to some extent, the researcher actively sought to ferret out students' perspectives on the respective roles of teacher and student, as well as the best uses of class-time, to come away with a deeper understanding on the students' perceptions toward flipped classroom strategies. The researcher compared the feedback from the students with their Myers-Brigg Indexes, particularly introversion vs. extraversion. The students had taken the Myers-Briggs in their 10th grade year and sent the results to the researcher who then compiled them into a chart (Table 6). Only one student, Takashi, did not have a Myers-Brigg score, as he had come to the researcher's school in 11th grade, and had missed taking the personality test with his classmates the year before.

Table 6: Interviewee Myers-Briggs Types

Student	Myers-Briggs Type
Kirsten	ISFJ
Todd	ENTJ
Tina	ENFP
MinKyung	ESFP
Lisa	ESFJ
Takashi	n/a

Interestingly, introversion and extraversion did not seem to dictate the students' views on the use of flipped classroom strategies. Kirsten, an introvert, stated that for her, the ideal use of class-time involved "taking what you learned and doing something with it", and said that the teacher's responsibility in all of this should be to "teach so that the students can take the information outside of the classroom setting and use the information in their lives." In order to do this, she felt that students should come to class with a willing attitude to learn and acquire information for themselves. While such a preference for independent learning might be expected of an introvert, Todd, who tested as an extravert, echoed Kirsten's sentiments, describing his ideal class as "putting into action what we learned--seeing how it works in the real world, doing things with what we learned."

Tina, who tested as an extravert, felt that the best class-time was highly interactive, citing demonstrations and activities in Psychology class as good examples. She also referred to lessons from early in the school-year in which the researcher had dressed up as historical figures and taught in various characters as examples of interactive teaching, saying she felt that particular

interactive aspect was missing from the fourth unit. Although Tina stated that she did not generally enjoy classroom lectures, she felt that a teacher's creativity and humor could make them come alive in interesting and engaging ways that might be more difficult to accomplish with lecture videos. MinKyung, who also tested as an extravert, shared Tina's enthusiasm for interactive uses of class-time, but said that she ultimately preferred receiving lecture through videos outside of class so that in-class time could be spent collaborating, working on projects or discussions in groups. Todd mentioned that it was helpful to be able to ask the researcher for help during the class work-time that had been set aside for the DBQ, and that he found this to be a more valuable use of class-time than listening to lecture.

Research Question Four

The fourth and final research question was "To what extent does cultural background shape students' perceptions?" Cultural background, and particularly educational background seemed to have a somewhat stronger correlation with the students' perspectives on learning than personality types did. Each of the students had either grown up in an international home, attended an international school, or lived somewhere other than Japan before coming to the researcher's school. The students who had only attended international schools or other western-style systems all expressed a preference for engaging learning activities over listening to classroom lecture.

Notably, the only two students who identified listening to lecture and taking notes as their ideal use of class time, Lisa and Takashi, were also the only students interviewed who had attended Japanese public schools for any length of time. Both Lisa and Takashi indicated that the teacher's main responsibility ought to be to help the students understand information, and the student's main responsibility ought to be to obediently listen and respect the teacher's authority.

Yet, in spite of this perspective, and in spite of their preference for in-class lecture over the videos, both students also said they found the lecture videos to be helpful.

Discussion

Overview of the Study

This study set out to examine both the benefits and challenges of using flipped classroom strategies and in particular, sought to determine students' perceptions toward the use of flipped classroom strategies in a humanities classroom. The researcher utilized flipped strategies primarily in the form of short lecture videos to prepare students to write a DBQ essay on the causes of the Civil War. The researcher compared this data with data from the previous year, and followed up the assessment with interviews with a sample of six students who had performed at various levels on the DBQ. This feedback was then compared to several other factors such as cultural background and personality type.

Summary of Findings

The researcher found the results of the study to be consistent with earlier literature. Indeed, the researcher found that with more class-time available, it was possible to not only deepen students' understanding of the various perspectives on the causes of the Civil War, but to also engage with another essential question entirely through readings, discussions and debates revolving around the concept of civil disobedience. This involved not an increase, but in fact a decrease in the amount of historical content students were asked to take in, as the researcher found himself becoming more selective with the information students would need in order to wrestle with these broader questions. The emphasis had genuinely shifted from content to

concepts and understandings, and this shift was reflected in the use of class-time and the nature of the activities designed.

Moreover, the performance of the 2016 group on the DBQ was consistent with the benefits outlined in the literature. Although the difference in class averages between 2015 and 2016 cannot be attributed entirely to the use of flipped classroom strategies for reasons that shall be outlined in the final section, it was significant that every student performed at a standard level or higher on the rubric line regarding the use of information. Each of the six students interviewed stated that they appreciated the ability to re-watch the videos and re-read the transcripts while they were writing and several even specifically stated that this ability helped them to incorporate background information in a way that they would not have been able to otherwise.

Recommendations

Based on the assessment data, as well as the responses from the student interviews, the researcher would recommend the use of flipped classroom strategies in the humanities classroom. This recommendation comes with several suggestions in particular: first, the researcher strongly recommends that any teacher looking to make this shift has a clear idea in mind of why they want to make the shift, and that they can articulate their reasons clearly to the students. The researcher was impressed with the fact that the students interviewed had a fairly strong understanding of the philosophy behind the use of flipped classroom strategies, even though it had been months since the researcher introduced lecture videos to the class and explained his reasons for making the shift.

Secondly, the researcher cautions that the purpose in flipping the classroom is about emphasizing understanding and application of concepts and themes, over the mere acquisition of

information. If the use of lecture videos is designed to free up class-time to fit in more content, or cover more of the textbook than would have previously been possible, the students are apt to feel overwhelmed and perhaps feel as though the work they are assigned to do both inside and outside of class is purposeless.

Thirdly, the researcher recommends that the videos be kept relatively short--2 minutes to 5 minutes, approximately. The students appreciated that the videos were bite-sized, easy to digest. This will likely mean an adjustment in the way teachers prepare their lectures. The researcher noticed, and trimmed out a great deal of extraneous detail from his lecture notes as he prepared the videos. For example, the researcher made the difficult decision not to lecture on any of the Civil War battles this year as they did not fit with the bigger questions in the unit.

Fourthly, the researcher recommends providing a transcript along with the video. This was not a hassle for the researcher as he had already prepared scripts for his lectures in the past, finding it easier to write his ideas out rather than speak extemporaneously. The students responded very well and indeed nearly every student in the class specifically cited the transcripts as having helped them digest or follow the information.

Finally, the researcher recommends the design and use of in-class activities that bring students into contact with one another and with the teacher. While there is a place for independent work--something two of the students interviewed openly acknowledged as the goal of classroom learning--the communal nature of the classroom is designed for collaborative, interactive and relationship-building activities.

For any researchers hoping to conduct further research into the use of (or student perceptions toward) flipped classroom strategies in the humanities classroom, the researcher recommends planning out the study ahead of time before actually implementing flipped

classroom strategies. The researcher will dive into the limitations of this study in the next section, but believes it would be worthwhile to collect data in a more intentional manner instead of using data that had already been collected. The researcher also recommends interviewing and testing student perceptions before the implementation of flipped classroom strategies to construct a more substantive comparison.

Limitations of the Study

This study was limited in several significant ways. Its value as a quantitative study was limited by the fact that the researcher was using assessment data that had already been compiled without an experimental structure in mind at the time that the units and lessons were planned. Thus, the superior student performance on the DBQ shown by the 2016 group cannot be firmly attributed to the use of flipped classroom strategies, as there were far too many unknown or uncontrolled variables. Class dynamics, and performance on DBQs in previous years of school, among other things, may have contributed to the difference in the averages between the two groups.

Another limitation came in the fact that the researcher had already introduced flipped classroom strategies early on in the year with the students' blessing. While past groups had expressed resistance to the very idea of watching assigned lecture videos instead of listening to in-class lectures, the class involved in this study was not only open to the idea, a majority had specifically expressed dissatisfaction with in-class lectures in classroom feedback, as well as a desire to find an alternative. The researcher's questions had been shaped by those earlier attitudes, and it is uncertain whether the attitudes have changed or are changing on a school-wide scale, or if this particular class represents an anomaly.

References

Banerjee, G. (2011). Blended Environments: Learning Effectiveness and Student Satisfaction at a Small College in Transition. *Journal of Asynchronous Learning Networks, 15,* 8-19.

Bergmann, J. & Sams, A. (2012). *Flip Your Classroom: Reach Every Student in Every Class Every Day* (1st ed.) International Society for Technology in Education.

Bergmann, J. & Sams, A. (2014). *Flipped Learning: Gateway to Student Engagement* (1st ed.) International Society for Technology in Education.

Bishop, J. & Verleger, M. (2013). The Flipped Classroom: A Survey of the Research. *The American Society for Engineering Education.*

Bolliger, D., & Erichsen, E. (2013). Student Satisfaction with Blended and Online Courses Based on Personality Type. *Canadian Journal of Learning and Technology,* 39, 1-23.

Borden, J. (2003). *Confucius Meets Piaget: An Educational Perspective on Ethnic Korean Children and Their Parents* (2nd ed.) Seoul: Seoul Foreign School.

Fleck, B., Beckman, L., Sterns, J., Hussey, H. (2014). *YouTube in the Classroom: Helpful Tips and Student Perceptions. The Journal of Effective Teaching*, 14, 21-37.

Graham, D. (2003). Motivation and Learning. In *Teaching redemptively: Bringing grace and truth into your classroom*. Colorado Springs, CO: Purposeful Design Publications.

Hoffmann, E. (2014). Beyond the Flipped Classroom: Redesigning A Research Methods Course for e3 Instruction. *Contemporary Issues in Education Research, 7,* 51-62.

Korkmaz, O., & Karakus, U. (2009). The Impact of Blended Learning Model on Student Attitudes Toward Geography Course and Their Critical Thinking Disposition and Levels. *The Turkish Online Journal of Educational Technology*, 8, 51-63.

Mazur, A., Brown, B., & Jacobsen, M. (2015). Learning Designs Using Flipped Classroom Instruction. *Canadian Journal of Learning and Technology*, 41, 1-26.

Moravek, M., Williams, A., Aguilar-Roca, N., & O'Dowd, D. (2010). Learn Before Lecture: A Strategy that Improves Learning Outcomes in a Large Introductory Biology Class. *Life Sciences Education*, 9, 473-481.

Napier, N., Dekhane, S., & Smith, S. (2011). Transitioning To Blended Learning: Understanding Student And Faculty Perceptions. *Journal of Asynchronous Learning Networks, 15,* 20-32.

Plunkett, K. (2014). *The Flipped Classroom-A Teacher's Complete Guide: Theory, Implementation, and Advice* (1st ed.) JIBB Publishing.

Robinson, K. (2012). *How is Technology Transforming Education?* Sir Ken Robinson Video Series from Adobe Education.

Yapici, I. & Akbayin, H. (2012). High School Students' Views on Blended Learning. *Turkish Online Journal of Distance Education*, 13, 125-139.

Appendix

Interview Questions (These questions provided the basis for semi-structured interviews with the students; in each case, the researcher asked additional follow-up questions as needed)

1. How many years have you been at [our school]?
2. What sort of school were you in before coming to [our school]?
3. What language do you speak in at home?
4. What brought you to [our school]?
5. Which do you tend to enjoy more: classes in the maths and sciences, or classes in the humanities (History, English)? Why?
6. Do you consider yourself to be a visual learner, kinesthetic learner, tactile learner, auditory learner, or some combination of the above?
7. Finish this statement: the ideal class period is spent _____.
8. How do you feel about classroom lecture?
9. What should the teacher's primary responsibility be?
10. What should the student's primary responsibility be?
11. In your perspective, what are the advantages (if any) of teachers "flipping" instruction through lecture videos or readings?
12. In your perspective, what are the disadvantages (if any) of teachers "flipping" instruction through lecture videos or readings?
13. Overall, how did you feel about preparing for a DBQ through lecture videos?

14. Did you tend to watch the videos, read the transcript, or both?
15. Was your performance on the Civil War DBQ better or worse than you expected?
16. Did you re-watch (or re-read) any of the lecture videos as you were preparing or even during the process of writing the DBQ?
17. What in-class activity was most helpful in preparing for the DBQ? (examples include the map-reading activity, filling out the graphic organizer, simulating the Compromise of 1850, and being able to ask Mr. Gibson questions while writing the DBQ in class).
18. Which of the following two options do you prefer: listening to in-class lecture or watching lecture videos on your own time?
19. Which of the following two options do you prefer: watching teacher-made lecture videos or watching lecture videos made by an outside source (e.g. Kahn Academy or John Green)?
20. Complete the following statement: flipped classroom strategies would be more effective IF...