

Telavi State University Students' Perceptions of The Flipped Classroom.

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Abstract: The purpose of this study was to evaluate a class at Telavi State University, where flipped learning was applied and to examine students' perceptions and feedback towards the flipped classroom.

The introduction of the Flipped Classroom was first implemented in the university study area. "Flipped Classroom VS Traditional classroom" was implemented as part of a pedagogical experiment.

Both quantitative and qualitative methods were based on my research – Likert Scale and open-ended response the questionnaire was included.

The results indicated that most students had positive perceptions towards the use of flipped classroom and most of them would recommend flipped learning for other courses and other students.

The paper presents student feedback on method improvement. Most of them suggested that flipped video provided on the MOODLE-LMS learning portal should become more interaction, the classroom environment should be expanded with learning activities, time constraints removed. Students' schedules and learning needs should have coincided with the learning process.

There has been outlined that flipped learning generated positive impacts for shy and quiet students and full-time students who had more time for learning. However, part-time students faced a challenge in the flipped classroom due to lack of time to participate and become familiar with the content before attending the class.

Keywords: Flipped Classroom; Traditional classroom; MOODLE-LMS, Pedagogical Experiment; Students' perceptions.

Introduction

The 21st century is mentioned as the digital age. In this regard, there were lots of challenges in the educational system.

The current traditional teaching model has already had a negative impact on student learning motivation, leading to demotivation of learning, which will determine if the low level of poor knowledge. The learning environment needs to change from a passive format of teaching to a student-centered active format.

These problems have also occurred in my pedagogical practice. I found the problem to be very significant and requires a thorough study.

Based on acquaintance and review of existing practical models of teaching, study-analysis of scientific-research and pedagogical-methodical literature, I have found a method that is considered to be one of the best solutions to the problem presented in the educational space. This method is known as the name of " The Flipped Classroom" (Bergmann, J., & Sams, A. 2014); (Bergmann, J., & Sams, A. 2012); (Baker, J.W. 2015); (Brown, Becki A., 2016); (Dong, X. N. 2016); (Green, G. 2012); (Hamdan, N., Mason, G., McKnight P.E., McKnight, K., Arfstrom, K. M. 2013); (Johnson, G. B. 2013); (Natalie B. Milman 2012); (Nur Azlina Mohamed Mokmin; Mona Masood Siti Zuraidah Osman 2019); (Sommer, M., & Ritzhaupt, A. 2018); (Strauss, V. 2012); (Zamzami Zainuddin & Mohammad Attaran. 2016).

Teachers are already implementing "The Flipped Classroom" model in Georgia's educational space as well. The implementation of "The Flipped Classroom" method was dedicated to the Mindworks project of the Millennium Challenge Corporation of Georgia funded by Mindworks Company (Chitadze M., 2018).

However, the implementing practice of this method in the teaching process is not very common in the educational system and the results of the research are less present.

After learning about "The Flipped Classroom" method and its implementation practices, I decided to try this method as a student-centered active teaching method in my pedagogical practice.

I thought of researching problem would help me how to solve problems related to low-quality teaching. To determine the effectiveness of the method would conduct me to research it within a pedagogical experiment.

This was the first attempt and the first pedagogical initiative of the teaching system at Telavi State University. Thus, it was associated with high expectations.

I liked and used the idea of Bergmann, J., & Sams, A (Bergmann, J., & Sams, A. 2014) that the purpose of this study was to provide insight into the Flipped Classroom with an emphasis on student perceptions. In General, for educational initiatives to be successful it is helpful if students perceive it as a positive experience in addition to receiving accompanying educational benefits. Determining if students liked or disliked learning in a Flipped Classroom was at the heart of the study since this would determine if the teacher/researcher continued with its application.

Also, it was important to describe an example of an implementation of a Flipped Classroom that focused on aspects that required more than students watching videos and completing the practical assignment. In this study, additional aspects like mastery learning and self-pacing were examined in a Flipped Classroom context.

To focus the study the following research questions were formulated:

1. What are students' perceptions of the Flipped Classroom?
2. Do students perceive that the Flipped Classroom supports their learning?
3. How could the Flipped Classroom be improved?

Methods

To achieve this goal, I researched the method of an empirical-pedagogical experiment within the framework of a small training project: "The Flipped Classroom VS Traditional Classroom".

I selected 10 IT students as the target group. We conducted a research teaching course on designing a database design course "MS Access Technology" on the MOODLE-LMS teaching Support Portal.

I used quantitative and qualitative research methods as a research method - Likert Scale, Survey- Open-ended response questions) (Allen, E. & Seaman, C. 2007); (Zurabashvili, T., 2006); (Tsuladze I., 2008). The study was conducted during one semester – a totally of 15 lessons.

Discussion

The Strategy of "The Flipped Classroom"

The Flipped Classroom is an instructional strategy that can provide educators with a way of minimizing the amount of direct-instruction in their teaching practice while maximizing one-to-one interaction. This strategy leverages technology providing additional supporting instructional material for students that can be accessed online. This frees up classroom time that had previously been used for lecturing.

The idea of a "The Flipped Classroom" originated in 2000 in the United States. The founders of "The Flipped Classroom" are professors at Harvard University, Jonathan Bergman and Aron Seams, who invented the term and the first to test this method themselves. (Bergmann, J., & Sams, A. 2014); (Bergmann, J., & Sams, A. 2012); (Bergmann, J. & Sams, A. 2010). The main purpose of "The Flipped Classroom" is interactive learning that aims to make the best use of face-to-face meetings with students.

"The Flipped Classroom" is an innovative model of collaborative and interactive learning. It changes the traditional learning environment. The student will be provided with the new teaching material through the electronic teaching management system prior to the class meeting. He is introduced with small video audio or text recordings. Organizes online discussions. Study material explores at home. Class meetings are a very active part of the learning process that is used for practical exercises.

"The Flipped Classroom" is based on WSQ (Watch, Summarize, and Question) techniques. Watch, Summarize and Ask. It is assumed that the pupil/student is required to submit problematic questions to the teacher.

The teacher controls the students with the help of an electronic learning management system. The teacher controls who has seen the video lesson, who has difficulty over the lesson and etc. All of this is in the process of developing new material for the next lesson. So this individual space is semi-modern.

Working model of pedagogical experiment "The Flipped Classroom VS Traditional Classroom"

The pedagogical experiment was implemented in two stages.

- ✓ Preparation for the experiment;
- ✓ Pedagogical experiment, the realization of research methods. Analyze-summarize research results, conclusions.

Preparation for the experiment

For the selected course “Database Design MS Access Technology” I prepared a video-audio resource in the MS Access iSpring (<https://www.ispring.ru/>). Course uploaded by MOODLE-LMS. Using interactive elements: Interactive Lecture (Lesson); Assignment; Choice; Feedback; Quiz (<https://moodle.org/>).

I presented the course to the students with the special practical format including 8 thematic lessons. Each lesson consists of practical assignments, which are presented in the format of an Interactive Lesson. Each of them is accompanied by an electronic reference text and a guide by me which is made of hypertext technology; Also relevant video-guide resources, small tests. After studying the practical assignment, the student performs a small type of test. If the test fails, the student will be made to repeat the exam.

At the same time, the student does a relevant homework assignment in MS Access, notes issues, asks questions, defines a problem, summarizes the material studied and sends to the teacher it with a practical assignment and an "online text" feedback. To do this, the student uses the Assignment activity. Uses the Choice element to express opinions about the module.

The midterm tests and final exams are holding them in the MOODLE-LMS surroundings. Students take intermediate and final exams in the MOODLE-LMS environment by testing (Quiz) and uploading an Assignment to the student's personal department. Students are provided with teacher feedback. At the end of the teaching course, students will provide feedback (feedback) in the MOODLE-LMS online collaborative environment by the format of the Likert Scale; Survey - Open-ended response questions.

The student is required to complete the course elements and activities within the timeframe specified by the teacher. Otherwise, it will not be possible for him/her to complete the course.

Experiment

I introduced students to the teaching method “The Flipped classroom” of the research. What does it mean and how do they learn?

- ✓ I offered the students MOODLE-LMS e-Learning Support Portal as a realization for the method of The Flipped Classroom, in which students were registered. Introduced the technology of working within the MOODLE-LMS learning environment (See below Figure 1);
- ✓ Based on master the methodology, we have practically simulated “The Flipped Classroom” in the traditional classroom setting above;
- ✓ For the next lesson, students begin learning with the "The Flipped Classroom" method;
- ✓ At the end of the course, students were anonymously interviewed in the MOODLE-LMS environment to evaluate the method used.

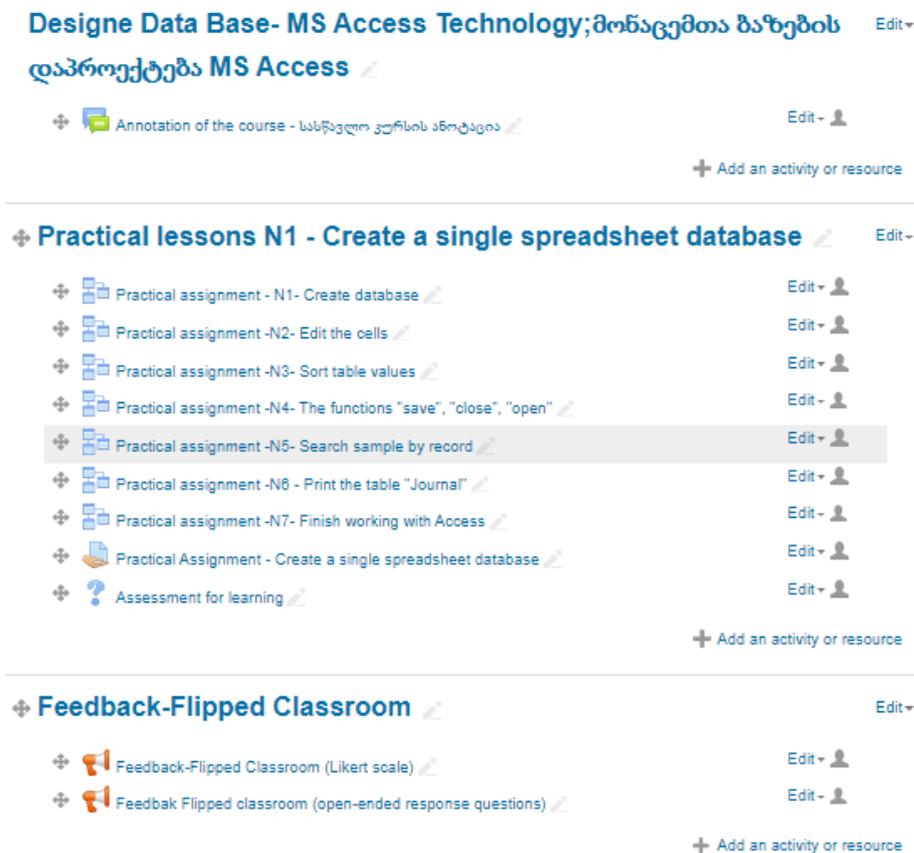


Figure 1 - Screenshot of Moodle lessons

Result

This study investigated student perceptions of the Flipped Classroom. Both quantitative and qualitative analyses were used in the investigation into student perceptions of the Flipped Classroom.

The quantitative data provided an overview of the general opinion of the students surveyed, the qualitative data helped allow each student to address in more detail some of the issues of the Flipped Classroom.

Quantitative Results

The questionnaire was presented of Likert Scale items (Strongly disagree; disagree; neither agree nor disagree; agree; strongly agree) (See below Figure 2). To improve data reliability, items were constructed such that some were positive and others negatively (Johnson, Graham Brent 2013, January).

Six items assessed students' general perceptions of the Flipped Classroom:

1. The Flipped Classroom is more engaging than traditional classroom instruction;
2. I would not recommend the Flipped Classroom to a friend;

3. The Flipped Classroom gives me greater opportunities to communicate with other students;
4. I regularly watch the video assignment;
5. I am more motivated to learn Design Database Technology in the Flipped;
6. The Flipped Classroom has not improved my learning of Design Database Technology.

Feedback-Flipped Classroom (Likert scale)

Overview Edit questions Templates Analysis Show responses

Add question Choose...

1. (Flipped Classroom) The Flipped Classroom is more engaging than traditional classroom instruction.* Edit -

Not selected Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

2. (Flipped Classroom) I would not recommend the Flipped Classroom to a friend.* Edit -

Not selected Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

3. (Flipped Classroom) The Flipped Classroom gives me greater opportunities to communicate with other students* Edit -

Not selected Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

4. (Flipped Classroom) I regularly watch the video assignment* Edit -

Not selected Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

5. (Flipped Classroom) I am more motivated to learn Designe DataBase Technology in the Flipped Classroom* Edit -

Not selected Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

6. (Flipped Classroom) The Flipped Classroom has not improved my learning of Design DataBase Technology* Edit -

Not selected Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

Figure 2 - Screenshot of a Likert scale - Moodle

- ✓ **Item 1 stated:** The Flipped Classroom is more engaging than traditional classroom instruction. The mode (5) scores support an agreement with the statement. (See below Figure 3);

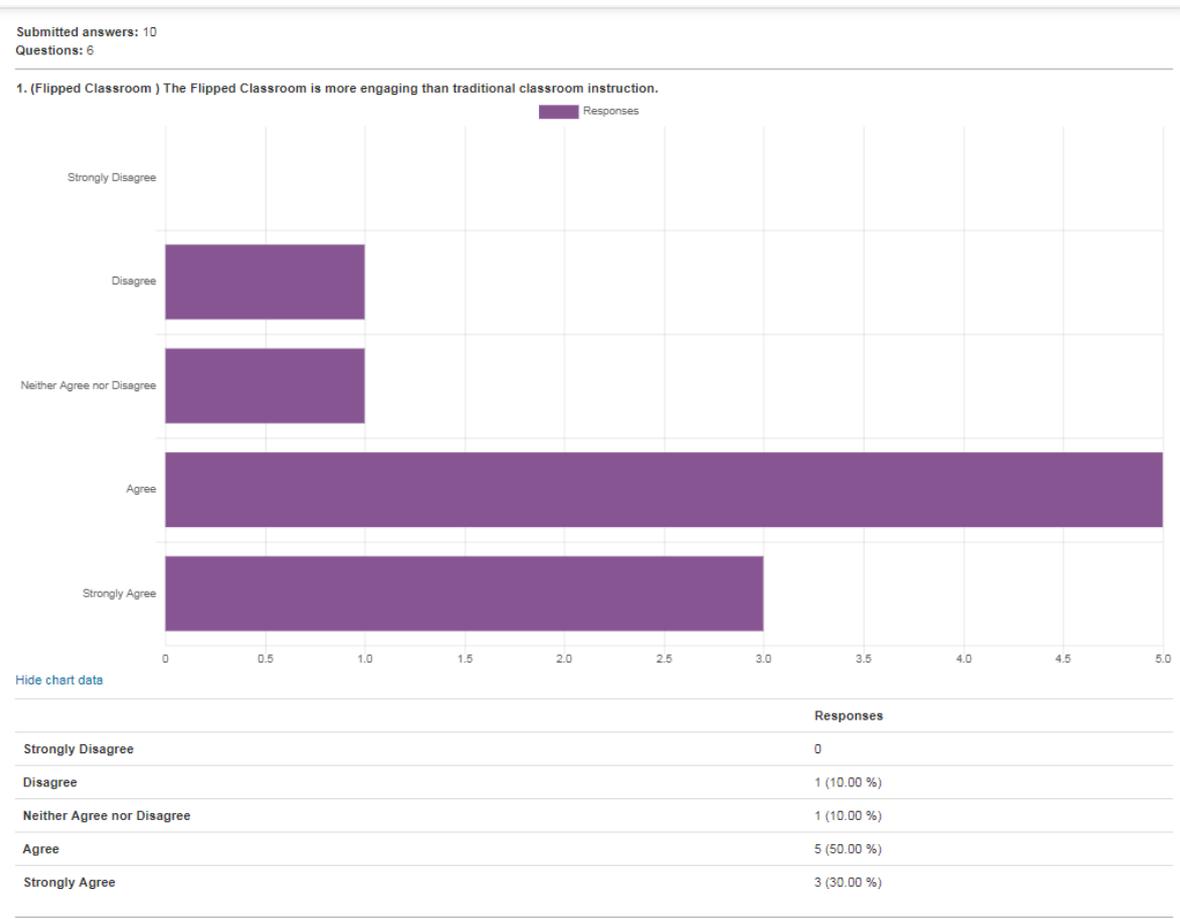


Figure 3 - Likert item 1

✓ **Item 2** elicited the strongest response from students for this theme – The Flipped Classroom. The item stated: I would not recommend the Flipped Classroom to a friend. The mode (4) scores support a disagreement with the statement. (See below Figure 4);

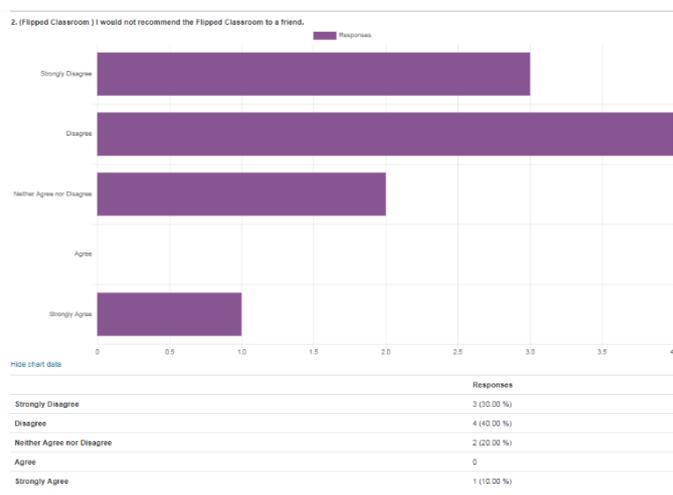


Figure 4 - Likert item 2

Item 3 stated: The Flipped Classroom gives me greater opportunities to communicate with other students. The mode (4) scores support an agreement with the statement. (See below Figure 5).

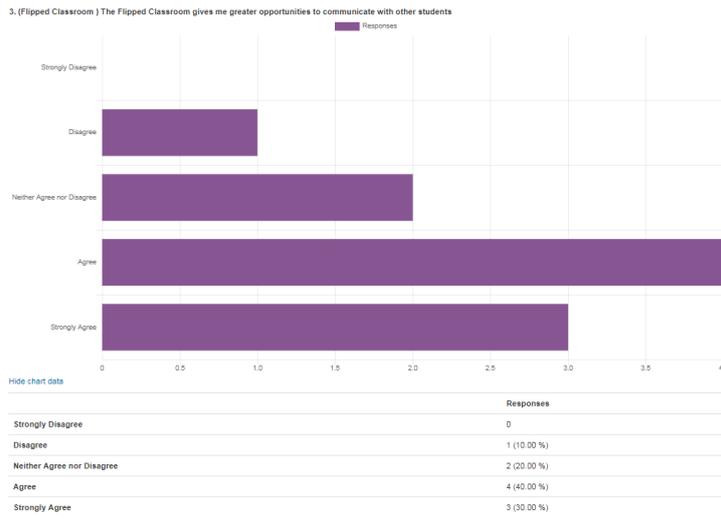


Figure 5 - Likert item 3

Item 4 stated: I regularly watch the video assignment, found that 70% either agreed or strongly agreed that they regularly watched the video assignment. This item had mode (4) scores that showed strong agreement (See below Figure 6).

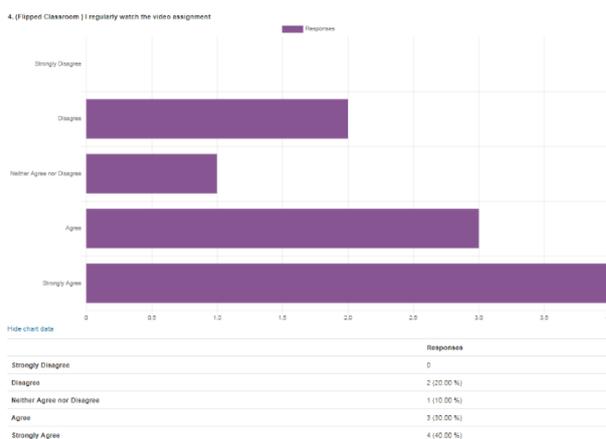


Figure 6 - Likert item 4

Item 5 stated: I am more motivated to learn Design Database technology in the Flipped Classroom. The mode (4) scores support an agreement, confirmed that students agreed with this statement. (See below Figure 7).

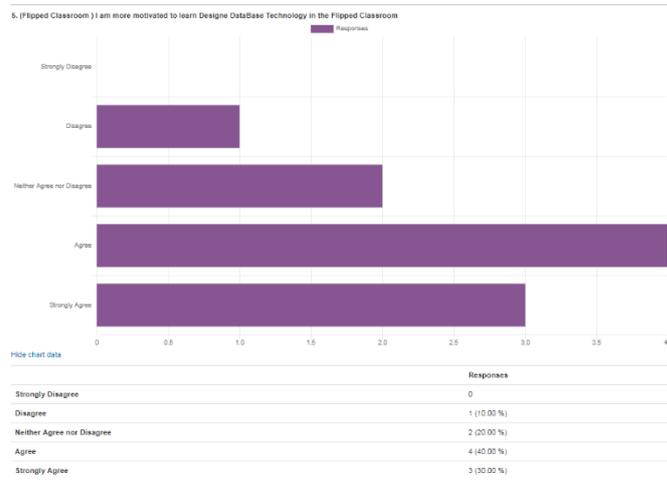


Figure 7 - Likert item 5

While students were somewhat ambivalent about the Flipped Classroom improving motivation their responses indicated that the Flipped Classroom helped improve their learning of Design Database Technology. This item of the Flipped Classroom applications received mixed results from students.

Item 6 stated: The Flipped Classroom has not improved my learning of Design Database Technology. The responses demonstrated that 50% of the students disagreed or strongly disagreed with this statement and only 20% of the students agreed (See below Figure 8). This result supports the assumption that the Flipped Classroom has a positive impact on students' perceptions of learning Design Database Technology.

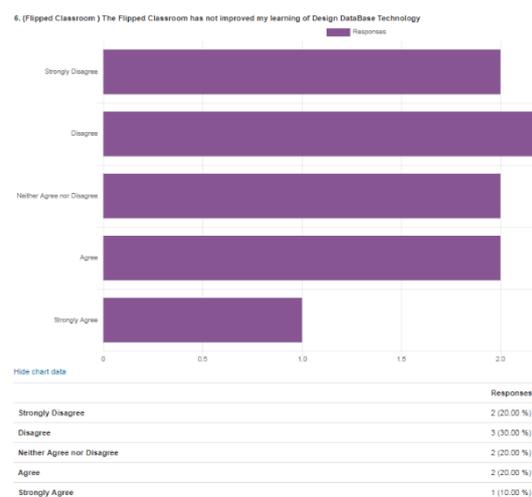


Figure 8 - Likert item 6

General Result – Responses (See below Figure 9)

Feedback-Flipped Classroom (Likert scale)

Overview Edit questions Templates Analysis Show responses

Anonymous entries (10)

Download table data as Comma separated values (.csv) Download

Response number	The Flipped Classroom is more engaging than traditional classroom instruction.	I would not recommend the Flipped Classroom to a friend.	The Flipped Classroom gives me greater opportunities to communicate with other students	I regularly watch the video assignment	I am more motivated to learn Designe DataBase Technology in the Flipped Classroom	The Flipped Classroom has not improved my learning of Design DataBase Technology	
Response number: 1	Agree	Neither Agree nor Disagree	Neither Agree nor Disagree	Disagree	Disagree	Neither Agree nor Disagree	✕
Response number: 2	Strongly Agree	Disagree	Agree	Agree	Agree	Disagree	✕
Response number: 3	Agree	Strongly Disagree	Strongly Agree	Agree	Strongly Agree	Strongly Disagree	✕
Response number: 4	Strongly Agree	Disagree	Strongly Agree	Strongly Agree	Agree	Strongly Agree	✕
Response number: 5	Agree	Strongly Disagree	Strongly Agree	Strongly Agree	Agree	Disagree	✕
Response number: 6	Strongly Agree	Strongly Disagree	Agree	Agree	Agree	Disagree	✕
Response number: 7	Disagree	Neither Agree nor Disagree	Neither Agree nor Disagree	Disagree	Neither Agree nor Disagree	Neither Agree nor Disagree	✕
Response number: 8	Neither Agree nor Disagree	Strongly Agree	Disagree	Neither Agree nor Disagree	Neither Agree nor Disagree	Agree	✕
Response number: 9	Agree	Disagree	Agree	Strongly Agree	Strongly Agree	Agree	✕
Response number: 10	Agree	Disagree	Agree	Strongly Agree	Strongly Agree	Strongly Disagree	✕

◀ Assessment for learning Jump to... Feedback flipped classroom (Open questions) ▶

Figure 9 - Screenshot of a Likert scale (response) Moodle

Qualitative Results

There were five open-ended qualitative response questions at the end of the Survey. Each of these questions, in addition to the quantitative Likert-scale questions, assessed student perceptions of the Flipped Classroom. (See below Figure 10). Student responses were anonymous.. (Johnson, Graham Brent 2013, January). The questions were as follows:

1. What are the advantages of the Flipped Classroom?
2. What are the disadvantages of the Flipped Classroom?
3. Would the Flipped Classroom be useful for other subjects? Why or why not?
4. What improvements would you recommend to improve learning in the Flipped Classroom?
5. Please state any other comment you wish to make about the Flipped Classroom.

Feedback Flipped classroom (open-ended response questions)

Overview Edit questions Templates Analysis Show responses

Add question Choose...

(Flipped Classroom) What are the advantages of the Flipped Classroom? [Edit](#)

+

(Flipped Classroom) What are the disadvantages of the Flipped Classroom? [Edit](#)

+

(Flipped Classroom) Would the Flipped Classroom be useful for other subjects? Why or why not? [Edit](#)

+

(Flipped Classroom) What improvements would you recommend to improve learning in the Flipped Classroom? [Edit](#)

+

(Flipped Classroom) Please state any other comment you wish to make about the Flipped Classroom [Edit](#)

+

Figure 10: Screenshot of MOODLE - Flipped Classroom - open-ended response questions

1. Advantages of the Flipped Classroom

What are the advantages of the Flipped Classroom?

The vast majority of students surveyed responded that self-pacing was an advantage of the Flipped Classroom. Students mentioned that they liked how they were not rushed in class to move at the pace set by the teacher and that it was a more relaxed environment. In addition, a number of students enjoyed having the ability to move ahead in the course if they found the material easy or if they wanted to be challenged.

For instance, the student pointed out, "The classes of self-pacing and online are great for students with busy timetables, who have to leave the class.

Some students appreciated being able to slow the pace of the course down to take additional time on concepts they struggled with. The first advantage of the Flipped Classroom pointed out that this was being able to work at its own pace and be able to get ahead of the class if I choose to. It decreased the stress of needing to have certain things done by the next class"; "Since the class

was self-paced, it was easier to catch up when students were ill or had other commitments that forced them to miss class"

Other students found that having more time in class to work on problems and activities was also an advantage of the Flipped Classroom. Students liked having the opportunity to do more of their homework in class.

The majority of students like to have questions from the homework and after that, they can ask the teacher during technology class so, if they do not have to sit through the lessons and the teacher has more time for them as an individual student, creativity is more involved.

Ten students should be noted that each student listed at least one advantage of the Flipped Classroom. No students left this portion of the survey blank. (See below Figure 11).

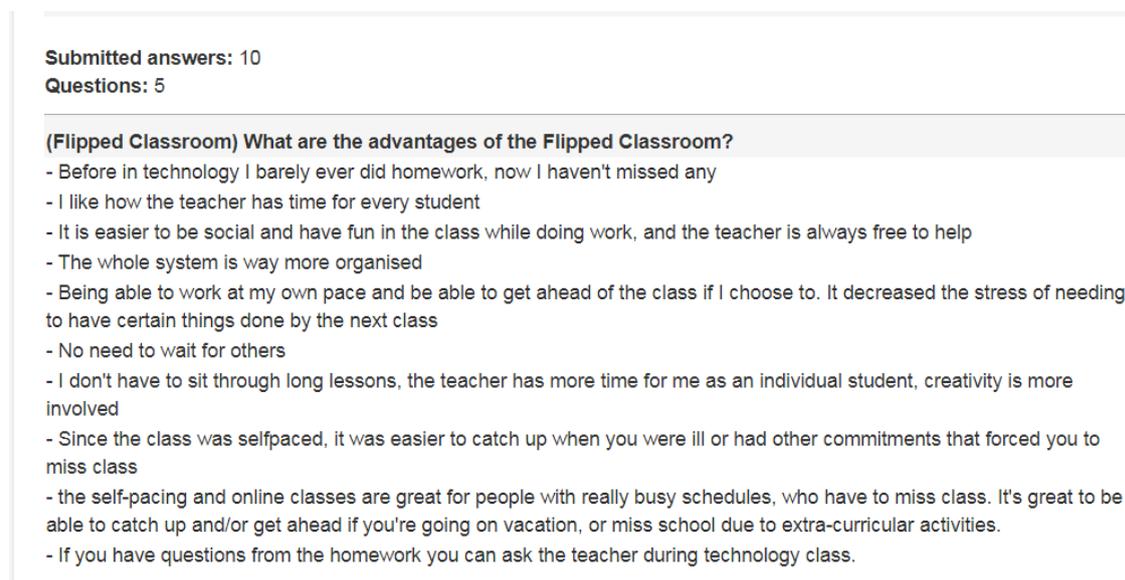


Figure 11: Screenshot of MOODLE (Student response -) Advantages of the Flipped Classroom

2. Disadvantages of the Flipped Classroom

What are the disadvantages of the Flipped Classroom?

While all of the students interviewed rated Advantages of the Flipped Classroom, they also found disadvantages of the Flipped Classroom. The disadvantages were mainly related to problems arising in independent work, motivation to learn. (See below Figure 12).

(Flipped Classroom) What are the disadvantages of the Flipped Classroom?

- Sometimes, I couldn't read the words and see the images in the video really well, teacher couldn't see the actual commitment that the student might have in a "normal" classroom.
- If the video doesn't explain a concept well enough, you will likely get frustrated and give up
- sometimes it is hard to pace yourself and you fall behind without motivation
- Giving students access to internet provides possibility for off-task behavior
- The videos less stimulating than traditional lectures. I find the video very boring
- It's hard to stay on pace, hard to stay motivated to work every day. As an example, in a regular classroom if I don't feel like working I have to suck it up and do the lesson but in flipped class I can just not do it
- If you are a shy student I can see how it would be more difficult to get help from the teacher as many demand it
- Freedom is good but given the chance to redo a test or take it a day later gave me the chance to do that and I took advantage
- Students can become lazy and fall behind
- The disadvantages of the flipped classroom are that if you don't have internet at home its harder to do or if your internet is glitchy.

Figure 12: Screenshot of MOODLE (Student response -) Disadvantages of the Flipped Classroom

3. The Flipped Classroom in Other Subjects

Would the Flipped Classroom be useful for other subjects? Why or why not?

In common, many students were asked if the Flipped Classroom could be useful in subjects than technology.

The majority of students reported that the Flipped Classroom method could be used in other different kinds of subjects.

They expressed their ideas that the Flipped Classroom is for learning method but not necessarily with Social Studies and Foreign Languages.

Some students were quite adamant about the flipped classroom method only used in technology.

According to this, they had varying responses: they would love for most of their classes to be flipped simply for the accessibility and ease. They believe that it would help them with busy lives pass the courses needed to get a University education; The Flipped Classroom gives teachers more opportunities to do hands-on activities in the classroom and that this could lend itself to any discipline. (See below Figure 13).

(Flipped Classroom) Would the Flipped Classroom be useful for other subjects? Why or why not?

- I think it works fantastically in technology, but definitely not foreign languages. I would not be able to get through a course like foreign languages by watching it on video
- The Flipped Classroom is for learning concepts, not necessarily people and dates as in Social Studies
- I think other subjects need lectures, whereas technology needs more one on one time with students
- Yes it would be because it allows you to pace yourself and you can spend more time on subjects that you are unsure about
- I believe that it would help students with busy lives pass the courses needed to get a University education
- It would make sense in science because it is similar to technology in that it has "problems"
- In Science, just like technology, if you were really good at one topic but not in another then you could go fast through one and get more time to finish the others
- I would love for most of my classes to be flipped simply for the accessibility and ease
- The Flipped Classroom gives teachers more opportunities to do hands-on activities in the classroom and that this could lend itself to any discipline
- Yes, I think so, because videos could be a more interesting instead of notes

Figure 13: Screenshot of MOODLE (Student response -) The Flipped Classroom in Other Subjects

4. Flipped Classroom Improvements

What improvements would you recommend to improve learning in the Flipped Classroom?

The fourth open-ended response question asked students what improvements they would recommend for it. The majority of the responses concerned improvements to the amount of in-class activities, assessment strategies of a classroom, and the quality of the lesson videos.

Increasing the amount of in-class activities were the most common suggestion for improvement in this method: group activities, whiteboarding, and games.

Increasing the amount of in-class activities were the most common suggestion for improvement in the Flipped Classroom: collaborative environment, group activities, whiteboarding, and games.

The student pointed out about the assessment that it was to make the unit tests available online or in written format.

Another recommendation was to remove the timer that was on the quizzes. Students felt that the timer added a significant amount of stress.

The last improvement around assessment was to go over the quizzes with the entire class. (See below Figure 14).

- (Flipped Classroom) What improvements would you recommend to improve learning in the Flipped Classroom?**
- In the videos include more interactivity to make them more engaging
 - Little bit more switching between Flipped Classroom and 'normal' classroom so that that the teacher can see how far every student actually is
 - go over the quizzes with the entire class
 - I would just work on the entertainment of the videos and small classrooms, only one teacher to help more 10 students???
 - Increasing the amount of in-class activities: group activities, whiteboarding, and games benefit student learning.
 - A computer in class for every student
 - Increasing the amount of in-class activities: I liked the collaborative environment that whiteboards fostered and that because it is so easy to erase a response, when compared with traditional paperpencil assignment, they were more likely to take risks.
 - Unit review videos be created that provide a summary of the topics completed in a unit
 - To remove the timer that was on the quizzes, that the timer added a significant amount of stress
 - the unit tests available online or in written format, so that students could demonstrate their understanding in the way that best fit their learning needs.

Figure 14: Screenshot of MOODLE (Student response -) Flipped Classroom Improvements

5. Other Comments

Please state any other comment you wish to make about the Flipped Classroom.

The last question about other comments was provided to give students the opportunity to define additional feedback about the Flipped Classroom. Eight of the ten students (80%) used this question to provide positive feedback about their experience in the Flipped Classroom. Two of the ten students (20%) surveyed responded that they were not in favor of the Flipped Classroom. (See below Figure 15).

- (Flipped Classroom) Please state any other comment you wish to make about the Flipped Classroom**
- I really enjoyed the opportunity to take part in this experience
 - I think it is a very innovative and successful program overall. Like anything that is still in its early stages, there is some work to be done, but I think the Flipped Classroom has the potential to change the way technology is taught
 - The teacher is very experienced in running the flipped classroom. I find his methods very effective and efficient. Please continue this course, as it's very helpful and easy for students to learn in this matter
 - It is probably the greatest way of learning, besides hands on training that I ever had.
 - The Flipped Classroom is not my favourite way of learning, but it was a good experience
 - The teacher did a fabulous job teaching flipped classroom style and I've never been as successful as I've been this year in technology if it wasn't for the teacher's helpfulness, patience, video-audio tutorials, one-on-one help etc.
 - I love the laid back atmosphere
 - I really liked it, way less boring than in a normal class, you have to pay more attention and you have to work more for yourself
 - I think the teaching was fantastic and I love the flipped classroom
 - It is an interesting program with great ideas however I prefer the traditional way of learning

Figure 15: Screenshot of MOODLE (Student response -) Other Comments

Summary

Based on the analysis of the research results, I confirm that “The Flipped Classroom” method has been found successfully.

The analysis of the questioned results confirmed the positive attitude of the students towards the flipped classroom. 80% percent of students positively assessed the flipped classroom method, but they also pointed to the disadvantages of the method. They made recommendations to improve the implementation of the method. Based on the analysis of quantitative and qualitative research data, the following important findings have been outlined.

1. The data showed students' perceptions of their engagement, communication, and understanding all increased as a result of the Flipped Classroom.
2. Student Recommendations Increased: Expanding classroom learning through technology and interactive activities; Students reported that they benefitted from being able to learn at a time that suited their schedule and their learning needs.
3. Drawbacks of “he Flipped Classroom” method: The risk of losing motivation in working independently; the opportunity; expected student laziness; no time limit, no internet connection available.

Conclusion

The summary of the research concludes that 80% percent of students positively assessed the flipped classroom method, but they also pointed to the disadvantages of the method. They made recommendations to improve the implementation of the method. Based on the analysis of quantitative and qualitative research data, the following important findings have been outlined.

1. The major finding of this study was that students simply enjoyed learning in a Flipped classroom. Both the qualitative and quantitative data and teachers' observations supported this. The data showed students' perceptions of their engagement, communication, and understanding all increased as a result of the Flipped Classroom.
2. Student Recommendations Increased: Expanding classroom learning through technology and interactive activities; Students reported that they benefitted from being able to learn at a time that suited their schedule and their learning needs.
3. Drawbacks of “he Flipped Classroom” method: The risk of losing motivation in working independently; the opportunity; expected student laziness; no time limit, no internet connection available.
4. Flipped Classroom was indeed an innovate approach in teaching. Educators who use the Flipped Classroom can create an environment for instruction that is more flexible than traditional classroom settings. Based on the introduction of the method of “The Flipped

Classroom” the passive form of teaching has changed to an active one, resulting in increased engagement in learning, motivation for learning, interactive communication, student-teacher communication, technological skills, and quality of student learning.

If students had difficulty learning the inverted classroom method at the beginning of the experiment, all students were actively involved by the end of the experiment. It was reflected in the quality of the assignments, their learning outcomes.

The study was conducted for the first time in a small target group setting in the university study area. I think I will continue to use the method in more depth to generalize research and results. Practices may be adjusted for the following semesters. Then the method will become part of the teaching culture.

Acknowledgments

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