

# Flipped Classroom



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## **Introduction**

The Flipped classroom is an innovative pedagogy where lectures are recorded and viewed via technology where lectures are recorded and viewed via technology for homework and students work on assignments and projects during class time by implementing the ideas they learned from their homework. The benefit of the flipped classroom it increases teacher's abilities to differentiate instruction also students can quickly view video and watch another video for extension activities while students struggling with the content can pause and replay videos until they understand the concept. The purpose of this professional development is to help a teacher know how he/she can use the flipped classroom as an effective instructional strategy in K-5 education. By the end of this professional training teachers are going to gain the skills to utilize a variety of technology tools that they could use to teach in the flipped classroom.

## **Needs Assessment**

A need analysis was conducted to determine performance gaps in the use of the flipped classroom for education. Approximately 86 % of survey participants are not comfortable with flipped classroom among 14 % stated that they had used it. Figure 1.1 shows the data collected to justify that a problem exists. It has been determined that optimal performance is that 100 % of participants will know what is flipped classroom and the technology tools used in the flipped classroom. The performance gap suggests that the problem is instructional in nature and can be solved using instruction. Training will be provided in order to increase performance with the use of the flipped classroom. This will give teachers a way to

apply the strategy of flipped classroom to their students. It will also strengthen their knowledge of the flipped classroom and give them a better understanding of the flipped classroom and how to apply this strategy effectively in the classroom.

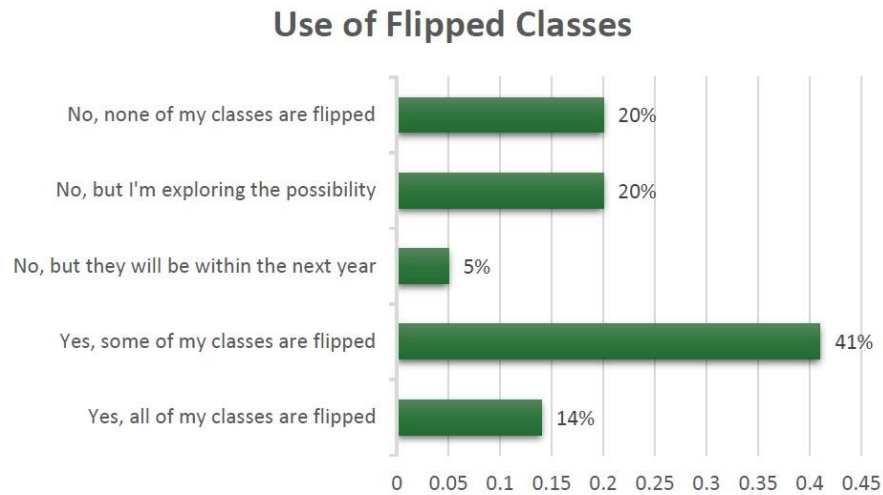


Figure 1.1: Show use of flipped classroom

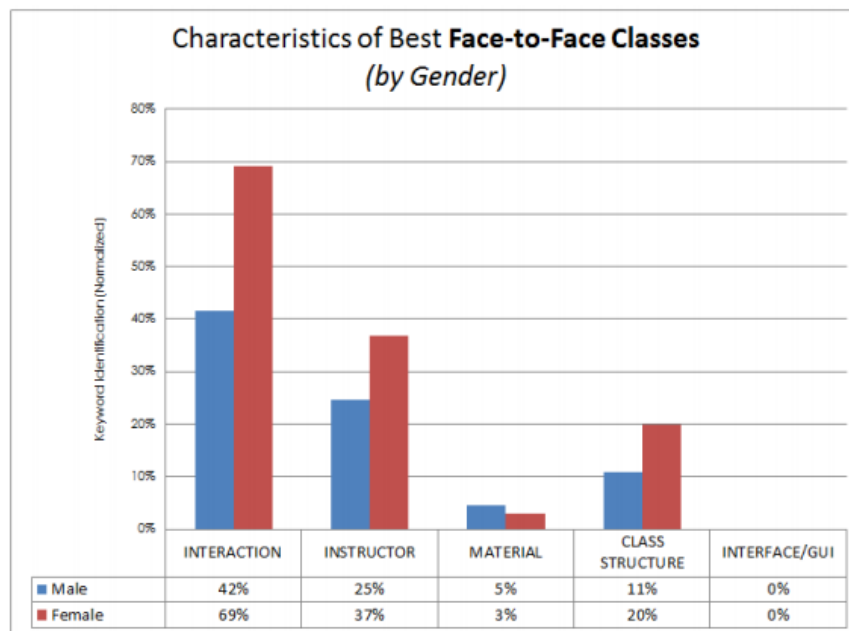


Figure 2: Shows the grade score for face to face classes

## Design and Development of Instruction

This course has been designed to educate teachers in using the flipped classroom in their classroom and provide them with the knowledge and technical skills to help them in their daily professional practice.

After completing this course, teachers will be able to:

- Demonstrate an understanding of a flipped classroom
- Explore how to flip a lesson in your classroom.
- Apply how a flipped classroom can serve the course of the study and for the students.
- Compile resources that can be used within a flipped classroom or lesson
- Create a flipped lesson plan.

Module	Title and learning outcome	Objective	Assessment and activities	Instructional materials
1	<p>Introduction to flipped classroom</p> <p>Learning outcome: Learner will be able to apply the concept of the flipped classroom</p>	<p>1- Identify the meaning of flipped classroom</p> <p>2- Define the four pillars of the flipped classroom</p> <p>3- List the advantage of the flipped classroom</p>	<p>Before I start my class, I'm going to start a warm-up for my students for about 5 minutes to answer some questions based on the last topic that I covered for my students. Once the students have done with their warm-up, I'm going to give iPad for my students then I'm going to use near - pods for my teaching, students are more engaged and more motivated in the class and it is going to build up their understanding in their lessons. Then I'm going to give quizzes based on the topic that I teach it to my students</p>	<p><a href="https://youtu.be/OtdKs_LRf0">https://youtu.be/OtdKs_LRf0</a></p> <p><a href="https://www.educationnext.org/the-flipped-classroom/">https://www.educationnext.org/the-flipped-classroom/</a></p> <p><a href="https://youtu.be/eRO6oAEGbSI">https://youtu.be/eRO6oAEGbSI</a></p> <p>(Introduction to the flipped classroom)</p> <p><a href="https://youtu.be/MZyKWHpcwmk">https://youtu.be/MZyKWHpcwmk</a></p> <p>(Benefits of the flipped classroom)</p> <p><a href="https://youtu.be/KaOXUQcBXfY">https://youtu.be/KaOXUQcBXfY</a></p> <p>(Tools used in flipped)</p> <p><a href="https://youtu.be/m_55kgYRjqQ">https://youtu.be/m_55kgYRjqQ</a></p> <p>(how flipped classroom has a</p>

			Discussion: Discuss with your peers about your understanding of flipped classroom. Write at least 2 comments for your peers.	great impact in the educational field).
2	<p>The technology tools used in the flipped classroom</p> <p>learning outcome: The learner will be able to know about the different tools used in the flipped classroom</p>	<p>1-Identify the different tools used in the flipped classroom</p> <p>2-List the technology software used in the flipped classroom</p>	<p>Discussion: Discuss with your peers about the technology tools used in the flipped classroom. Write at least 2 comments for your peers. classroom and each peer are going to comment</p> <p>Activity: Teachers are going to select subject that they teach, and they are going to use screencast for this project after they finish, they are going to have a presentation for their project</p>	<p><a href="https://youtu.be/4PaNp94tV94">https://youtu.be/4PaNp94tV94</a> (Tools used in the flipped classroom)</p> <p><a href="https://www.gettingsmart.com/2013/03/7-essential-tools-for-a-flipped-classroom/">https://www.gettingsmart.com/2013/03/7-essential-tools-for-a-flipped-classroom/</a> (Article about different tools used in the flipped classroom)</p>
3	<p>The effectiveness of flipped classroom in the K-5 education</p> <p>lesson outcome: Learner will be able to know about the effectiveness of the flipped classroom in the K-5 education</p>	<p>1-Identify the effectiveness of flipped classroom in the K-12 education</p> <p>2. list the advantages of the flipped classroom in the K-5education</p>	<p>Discussion: Discuss with your peers the effectiveness of flipped classroom in the K-5 education Write at least 2 comments for your peers.</p>	<p><a href="https://youtu.be/8IHBTp4-7sI">https://youtu.be/8IHBTp4-7sI</a></p> <p><a href="https://blog.heinemann.com/flippedlearning-important-4-20">https://blog.heinemann.com/flippedlearning-important-4-20</a></p>

## **Implementation**

This course is given completely online in an asynchronous environment. The learners in this course are going to learn about the flipped classroom, four pillars for the flipped classroom, and advantages of the flipped classroom. This course helps teacher and professional to know how he/she can use the flipped classroom as an effective instructional tool in K-5 education and their great impact that they will face from the flipped classroom each audience should be equipped with a laptop connected to the good internet. All audiences should have basic computer and internet skills before attending this PD. All the learners were classroom teachers (EC, math, ELA, social studies, science). Module I of training, an overview of the flipped classroom was divided into two days and held on Nov 20 and 21 after the learner's finish with the module they will have a discussion on flipped classroom and every two peers should comment on this discussion in order to receive credit in their participation. Module 2 of training covers different tools used in the flipped classroom was divided into two days and held on Nov 22, 23 after the learner's finish with module 2 they are going to build the course and they must use different tools that it is used in the flipped classroom. Module 3 of training covers the effectiveness of flipped classroom in K-5 education was divided into one day and held on Nov 24 after the learner finish with module III they are going to explain their thoughts about the effectiveness of flipped classroom in K-5 education. By the end of these modules' learners are going to have a quiz on flipped classroom after they finish these professional development learners are going to receive a certification upon completion of their professional development. Teachers seemed to be excited and pleased with the flipped classroom training. As I provided examples of how the flipped classroom is implemented into everyday planning and instruction, learners also offered their own examples of how the flipped classroom would best serve each of them. I feel that all learners were successfully able to meet the instructional objectives and performance

tasks.

### **Evaluation**

The asynchronous, multimedia module titled, “flipped classroom” was designed for K-5 teachers with any number of years of teaching experience. The goal of the module was to provide a tutorial for classroom teachers where they could learn how to use the strategy of the flipped classroom and the technology tools used in the flipped classroom. After the module is complete participants will feel confident and be able to use the tool with their own students for instructional purposes. This module was shared with K-5 teachers in public schools as part of a chance to earn Continuing Education Credits (CEUs) for professional development. Additionally, I created and distributed a survey using the flipped classroom for learners to evaluate the focus session of professional development.

[https://docs.google.com/forms/d/1lwCZ13UyHs6CzrPwChB5wLVFewqEiAs8gXaZjaGycPs/viewform?edit\\_requested=true](https://docs.google.com/forms/d/1lwCZ13UyHs6CzrPwChB5wLVFewqEiAs8gXaZjaGycPs/viewform?edit_requested=true). An evaluation was conducted between Nov 24 and Nov 25 receiving 22 learner responses. Overall, the majority of the responders found the training to be effective, felt that they got to experience the important features in Forms Quiz, and indicated they were likely to use Forms Quiz as a data collection tool. I also found it promising that 7 of the 22 learners indicated that they have already used Forms Quiz within just 9 school days of the training. This illustrates that professional development was instrumental in helping teachers with the successful integration of the flipped classroom. Considering instructional implementation and evaluation, I would consider the following recommendations to improve instruction 1) One of the biggest suggested revisions by course classmates included the suggestion of an audio player that allowed the learner to pause or stop audio. This was mentioned by several peers and was included in the module during revision.

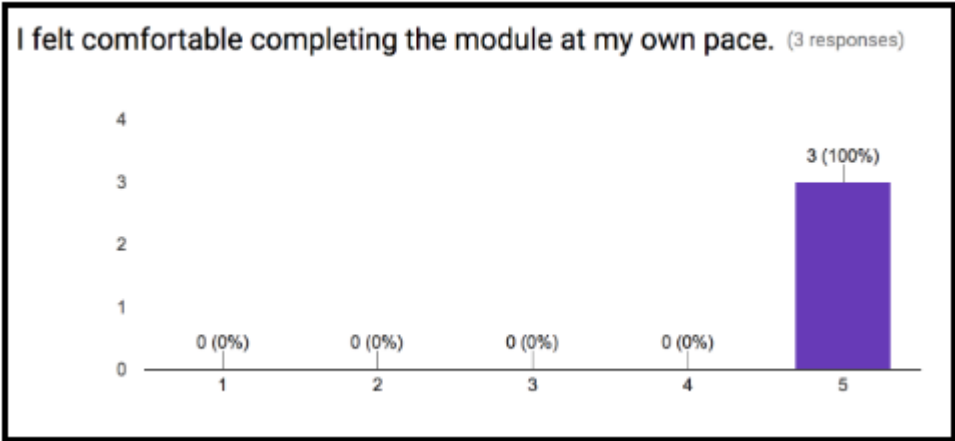
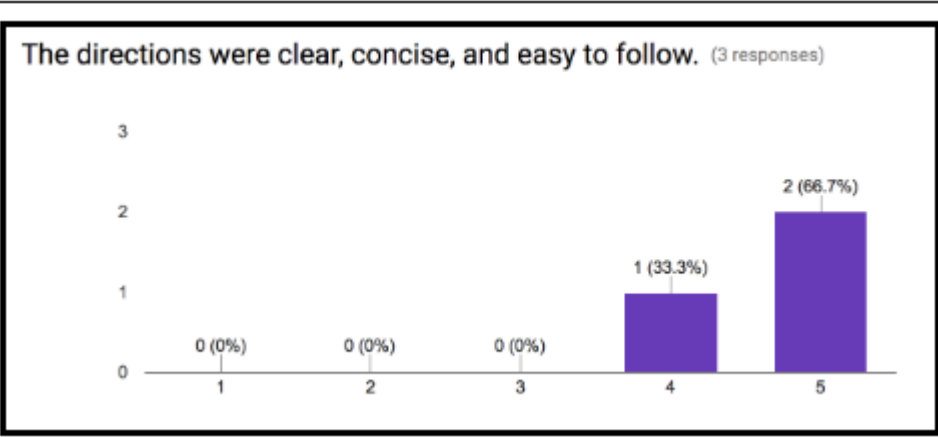
- 2) Other suggestions from the target audience included making the navigation more user-friendly, especially the table of contents. One learner suggested it would be nice to have the table of contents present throughout the module, possibly on the side of the module, to make navigation even easier.
- 3) One of the most positive pieces of feedback from the learners was the suggestion to include this type of instruction in district professional development in the future, and the ability to earn CEUs from learning experiences like this
- 4) It would be good if I provide more training with a high number of teachers in order to provide more data about their familiarity with the flipped classroom.
- 5) Another recommendation would be for the future, following the professional development. I think it would be a good idea to offer mini training sessions, maybe 10-15 minutes during grade level or faculty meetings, or after school so that teachers can continue to familiarize themselves with the technology used in the flipped classroom.
- 6) Finally, I would recommend that a training of this magnitude be held during a teacher workday. While holding so many sessions allowed for more learner participation, it did prevent learners from being able to collaborate with teachers from other grades and departments. A teacher workday would allow for the amount of time the professional development required, while also allowing all participants to interact with the content and one another.

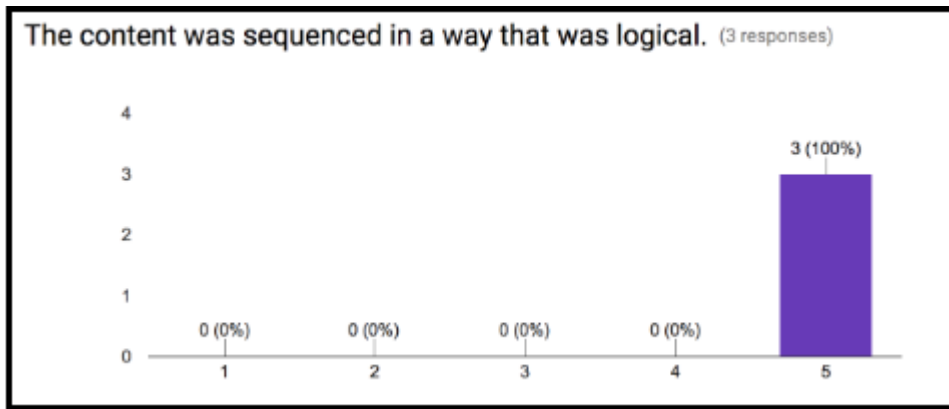
#### **Appendix A: Teachers Participating in Forms Quiz Training**



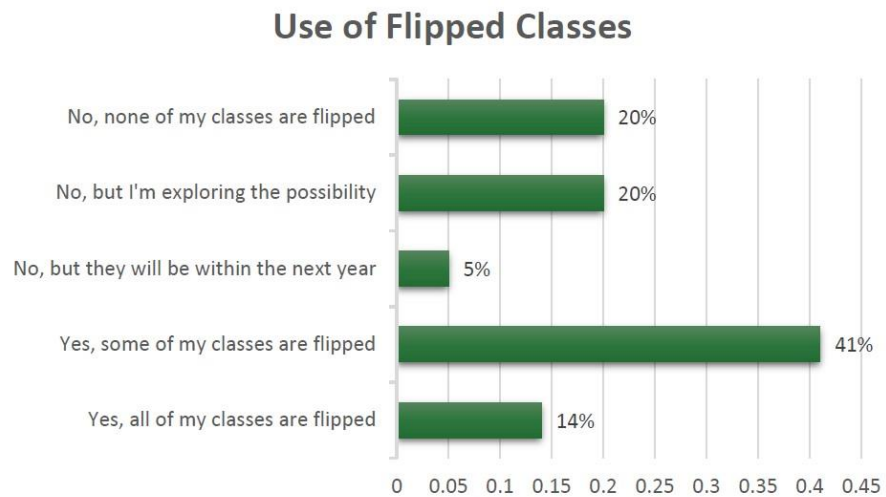


**Appendix B: Course Evaluation**





**Appendix C: Percentage of teachers who are familiar with the flipped classroom**



**Appendix D: Students score in traditional classroom**

