Flipped classroom: Rising motivation of new generation or challengeable way of studying on higher education level (case study in Georgia)

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Abstract

Raising motivation of new generation and their constant involvement in the studying process is not an easy task to accomplish by the professors at higher education level. This article deals with one of the active ways of learning - Flipped Classroom that might be solution for overcoming these challenges and studying process might become more enjoyable and productive. At the beginning of the article, the researcher presents introduction and discussion of formation and experience of Flipped Classroom style's model in the universities of Georgia, which is followed by the literature review on flipped classroom in the world for analyzing the essence of the model as well as its main characteristics and benefits for teaching and studying; the main part of the articles refers to presenting the researcher's case study conducted in one of the higher educational institutions, discussing its aims, challenges of Flipped Classroom style, analyzing the questionnaire given to students involved in this process and finally, summarizing it with some recommendations. The researcher finds the Flipped Classroom model to be a highly adaptable teaching method that effectively motivates students, enhances self-study skills, and fosters skill development. However, it's not universally applicable to all classes or subjects.

Keywords: flipped classroom, new generation, motivation, higher education, Georgia

1. Introduction

In response to the challenges of a modern, busy lifestyle and recent disruptions, there has been a shift towards innovative teaching methods, particularly during the pandemic in Georgia and globally. Due to student protests (demonstration against one of the law where mainly students from all universities were involved) that led to missed classes and insufficient preparation time before exams, the researcher sought effective teaching solutions. Despite attempts to make up for missed lessons on Saturdays, low attendance prompted the exploration of new methods. The Flipped Classroom model emerged as a promising solution, addressing both the teacher's needs and students' learning opportunities effectively.

Considering the situation caused by the pandemic, in 2021, Ilia State University invited the professors and teachers of the Technical University of Georgia to participate in the training on the peculiarities of online learning - "Flipped Classroom Model in Online Learning" (Technical University of Georgia, 2021). Moreover, the Center for Personal and Professional Development at Ilia State University offered professors to conduct lessons in the form of "Flipped Classroom" for PhD students as the part of Active Learning (Illianu Personal and Professional Development Center, 2024). The same kind of activities were implemented in Ltd. Sulkhan-Saba University (National Center for Educational Quality Enhancement, 2023). In addition, Batumi State University, the training course for BSU professors was conducted in May, 2023 (BSU, 2023). As for ATSU (Akaki Tsereteli State University), as the researcher found out from the Center for Continuing Education which aims providing and conducting training and courses, it has not planned any activities related to this topic so far, though, course on Artificial Intelligence in Education was successfully conducted in February, 2024 (ATSU, 2024).

As the researcher found out, the history of Flipped Classroom in Georgia has started earlier, in 2017, when the consulting company "Mindworks" had implemented the flipped classroom methodology in the colleges - "Blexi" and "Erkvani", within the framework of the "Millennium Challenge Fund - Georgia" small grant program aimed at improving the educational practices of professional educational institutions. The project lasted for 9 months and 5 teachers of different subjects were involved in it; as the result, for the 2017-2018 school year, they flipped their subjects (Internet Newspaper for teachers, 2017).

2. Literature Review

History of Flipped Classroom model began in the USA in 2007, when two teachers Jonathan Bergmann and Aaron Sams searched to find ways how to give knowledge to students who lived in rural areas and missed lessons for sport activities or some other events. Their goal was to "Reach every student in every class every day" (Bergmann and Sams, 2012) as they called their book which was published later. They stated that not every student came to classes prepared and some missed lessons and could not gain knowledge in traditional classroom style; they considered that "Flipping the classroom establishes a framework that ensures students receive a personalized education tailored to their individual needs" (Bergmann and Sams, 2012:15). Later, they developed and formed it; step by step it got followers in the USA and in other continents, too.

The meaning and essence of the Flipped Classroom Style can be well- presented in such way that highlights it main aims and its form:

"The flipped classroom is a new pedagogical method, which employs asynchronous video lectures and practice problems as homework, and active, group-based problem solving activities in the classroom". (Lundin et al., 2018:2).

The Flipped Classroom model extends beyond merely recording and sending videos to students. It requires constant preparation from the teacher, including understanding and accommodating diverse learning styles and study habits. Effective videos must provide clear, multi-faceted explanations and include supplementary materials to enhance comprehension. Additionally, in-class activities are crucial for assessing student understanding and addressing any gaps in knowledge. Therefore, while video creation is a key component, successful implementation of the Flipped Classroom also involves engaging students in meaningful practice and addressing their individual needs during class time.

Flipped classroom has several benefits on the teaching process and itself the development of the students' knowledge and their skills and here are some of them:

➢ "In the process of teaching, a new flow of information moves from the group space (class) to the individual space (home), and the group space turns into a dynamic learning environment, where the teacher facilitates the process of practical application of the student's knowledge and is focused on his/her high involvement" (Internet newspaper of teachers, 2007).

➢ "Free classroom time for creating meaningful learning situations for in-class interaction between students and teachers (Bergmann, & Sams, 2012). Before you flip, consider this" (*Phi Delta Kappan, 94*(2), 25.).

➢ "Students prefer learning content prior to class and using class time for applied learning, and that students who learned through a flipped classroom approach considered themselves more engaged than students attending traditional courses" (McLaughlin et al., 2014).

➢ "It does not waste time transferring information to students when that information is available to them in books or online" (Mazur, 2009).

➢ "Students take responsibility for their learning and students learn rather than encounter material in class" (The Derek Bok Center for Teaching and Learning, 2024).

To sum up, Flipped Classroom model has positive effect not only on teaching and studying process, but also, it helps them to improve self-studying process, work on themselves, enhances critical thinking skills, in particular -'interpretation', 'analysis', 'inference', 'evaluation', 'explanation' and 'self-regulation' (Ma, 2023); moreover, it increases students' motivation level and creativity (Tsai et.al 2020) as well as students' interaction and active learning (Roach, 2014) and so on. These are the skills students need for their practice and for their life to use their knowledge appropriately; only gaining the knowledge without using it in practice is not enough anymore in this competitive world. Flipped Classroom model is one of the best way to work on improving these above mentioned skills.

3. Materials and Methods

The researcher would like to discuss the case study conducted at Akaki Tsereteli State University in Kutaisi, Georgia. This research was the case study within the students of Akaki Tsereteli State University (Kutaisi, Georgia) where the researcher herself works. The history of Akaki Tsereteli State University started nearly hundred years ago (it was founded in 1933) and now, it is a higher educational institution in Georgia distinguished with its excellent traditions, which have found a decent place in the cultural-intellectual and moral upbringing of generations.

The case study was conducted with the 1st year students of the speciality of English Language and Literature. Teachers teaches them two subjects, the first group - "Communicative Grammar'' and the second group - "Academic Writing''. According to the BA programme, for "Communicative Grammar'' was allocated three hours in a week, two hours for "Academic Writing''.

At first, the teacher introduced the Flipped Classroom model to students and highlighted its benefits, while using a closed social network chatroom for quick communication (as it is adopted by other teachers). During the pilot phase, not all students engaged with the provided videos and materials, as indicated by their lack of preparation for class activities. This was

evident when only a few students demonstrated familiarity with the content. This was easily identified by the teacher after giving them some activities to do at the lesson.

In response, the teacher reiterated the purpose and advantages of the Flipped Classroom approach in subsequent lessons, leading to increased student engagement and motivation. Students began asking questions, showing a higher level of involvement.

Although the case study offers valuable insights into the implementation and reception of the Flipped Classroom model, its findings are specific to this context and cannot be broadly generalized. The research included a questionnaire distributed via Google Forms, with 35 sent out and 28 completed—a relatively positive response with most forms fully filled out. This provided detailed feedback, enriching the study's data.

The researcher used various strategies in the written questionnaire to elicit information form the participants. Its design ensure that participants did not need to take too much time to respond and they found it fairly straightforward to complete. The questionnaire consisted of 7 closed questions, multiple-choiced and 5 open questions and 1 recommendation paragraph.

The aims of the case study were:

✓ To identify the adaptability of the new method by the students;

✓ To identify the acknowledgement of benefits of Flipped Classroom Style by the students;

✓ To identify the usage of Flipped Classroom Style by the students in every day classes.

Though, aims of the case study were achieved and the researcher gained productive and useful information from the respondents, made conclusions and some recommendations based on it, there were **the following limitations** of this study:

❖ The focus of the research was narrow and the study could not go into depth;

❖ More students should be involved in the process;

❖ Every day should be conducted in flipped classroom style and not only few days;

❖ Outcomes of this style of teaching should be evaluated not only through this one questionnaire, but also face-to-face interviews with the students.

4. Results of the case study

The questionnaire of the case study was structured in a logical order with closed and open questions, moreover, there were few but enough questions to gain all the aims of the case study.

The first question related to understanding s**tudents' level watching all the videos teacher sent to them;** for this, students were given chance to circle multiple choices, between "yes", "no", "some of them", "all of them'' and "only started to watch but did not watch till the end". The goal of the researcher to give such options to the question to be circled was that she wanted to get in more depth understanding about the amount of videos they watch, not only if they watched them at all. The answers from the students are given in the figure (Figure 1).

Figure 1

Have you watched the videos which teacher sent you (conducting new material)?
28 / 28 correct responses
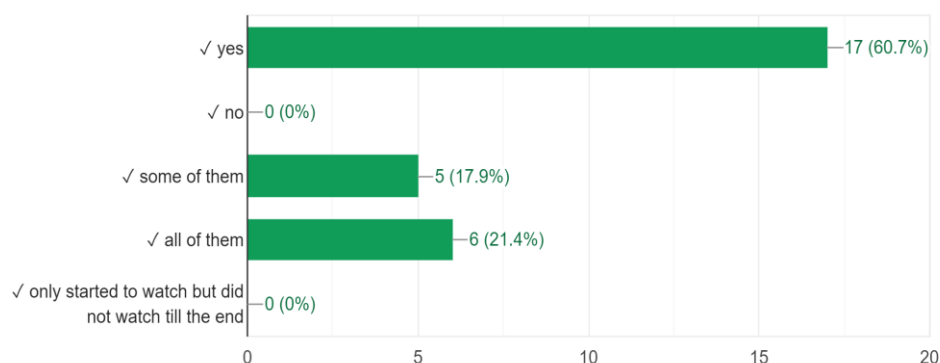
The next question was about **quantity of times they watched the recordings,** as one of the benefit of flipped classroom style contrast to traditional classroom style is that students can watch sent videos as many times as they wish, wherever they want and whenever they want. As the result shows (Figure 2) students tried to get as much opportunities as possible from the videos and nearly half of them (46,4 %) stated that they watched it "more than twice", "twice" - 35.7% and others only "once". These responses were surprisingly positive for the researcher, indicating that students recognized and utilized the flexibility offered by the Flipped Classroom model. Initially, the researcher considered the possibility that students were re-watching the videos due to difficulties in understanding the material. However, subsequent answers from the students dispelled this concern, suggesting that the repeated viewing was more about taking advantage of the model's benefits rather than a sign of confusion.

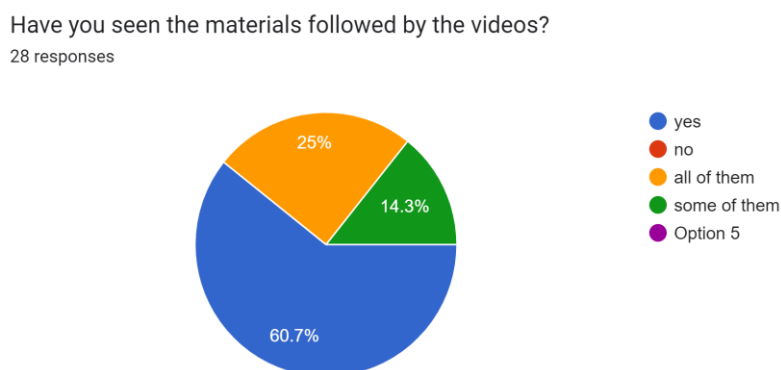Figure 2

How many times have you seen the videos?
28 responses
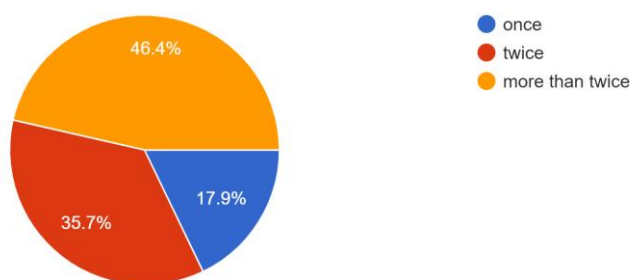
The following question was refereed to **the materials (images, some videos from youtube.com, charts and so on) that teacher used for more clear understanding of the new material for students.** The questionnaire responses revealed that 60.7% of students reported watching the videos. However, only 25% indicated they watched "all of them," while 14.3% watched "some of them." This variability suggests several possibilities: a) the main videos provided sufficient information, leading students to skip supplementary content; b) the

videos may not have been engaging or perceived as helpful; or c) students might have struggled to find time to view them. Unfortunately, these assumptions remain unverified, as the questionnaire did not include follow-up questions to explore these reasons further.

Figure 3

Have you seen the materials followed by the videos?
28 responses

- yes
- no
- all of them
- some of them
- Option 5

However, the researcher asked the following question about **the usefulness of the additional material** and all of them agreed about their benefits, though the researcher has not asked open question what they mean in that (see Figure 4).
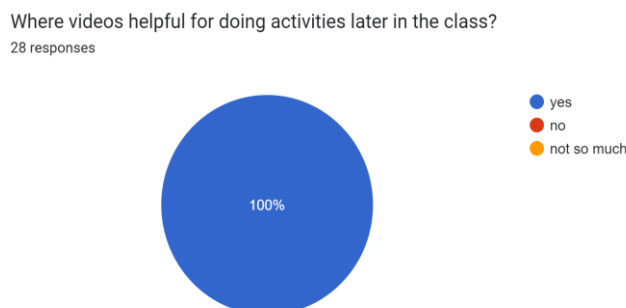
Figure 4

Did additional materials helped you understand the videos?
28 responses

- yes
- no
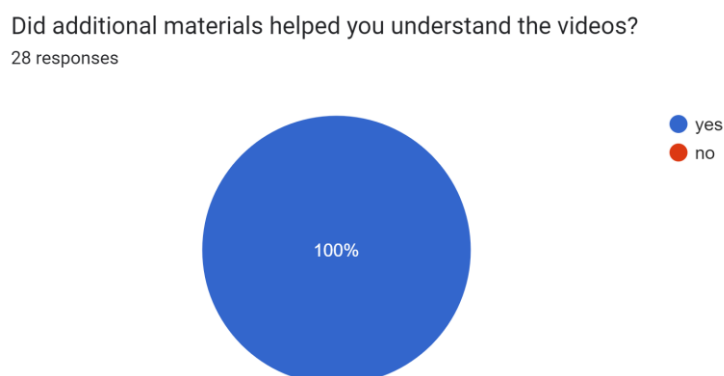
As for the question **- "Where anything confusing or unclear in the videos and you needed another explanation from the teacher?"**Most students (22 out of 28) reported that the material was clear. Additionally, some students indicated that they sought clarification from the teacher when needed, or that the teacher provided further explanations after class activities. Only one student cited shyness as a barrier, while another mentioned that understanding improved after engaging in activities. Here are some of the students' comments:

- "Once I could't figure out issue and i needed to ask a teacher for explanation";
- "No, but I can asked teacher for explanation";
- "Sometimes it is because it is difficult only by listening, but after doing the tasks it becomes easier to understand";
- "The teacher always explains to us";

● "Sometimes, I found parts of the videos unclear and needed more explanation from the teacher";
● "Were...but i was shy to ask".

As the result of effective and productive Flipped Classroom style, all the students highlighted that **the videos were useful to do the class activities afterwards** (See Figure 5).

Figure 5

Where videos helpful for doing activities later in the class?
28 responses

100%

● yes
● no
● not so much

To analyze the benefits of the Flipped Classroom style, the researcher asked - **"What did you like in flipped classroom?"** Fifteen out of 28 students appreciated the ability to watch the videos multiple times, which contrasts with the traditional classroom model where direct interaction with the teacher might be limited by time constraints or student shyness. The flexibility to revisit recorded material allows students to clarify and reinforce their understanding through repeated viewing. Some students found the new teaching method more engaging and enjoyable, while others valued the development of their independent learning skills. Here are some comments from the students:

➢ "It was comfortable, because in videos explanation was good and we had opportunity to watch many times" (more than 15 students)
➢ "I liked when we were reading homework together".
➢ "I like that it is a different style of learning process and more interesting" (5 students)
➢ "Developing independent learning skills" (4 students)
➢ "Class time is dedicated to interactive activities, providing more opportunities for students to ask questions".
➢ "It's very comfortable since we can watch videos when and where we want".

As for **the drawback of the Flipped Classroom style,** despite the positive aspects of the Flipped Classroom model, students still expressed a preference for face-to-face communication. Many students are get use to traditional teaching methods where direct, in-person explanations feel more comfortable and less challenging. Some students noted that they would have preferred real-time explanations while watching the recorded videos rather than addressing questions afterward. Additionally, note-taking during video viewing was sometimes found to be uncomfortable or inefficient.

Technical issues, such as internet problems in rural or mountainous areas, also posed challenges for some students. For others, the familiarity and comfort of traditional classroom settings made the transition to new methods feel daunting or less effective. This indicates that while the Flipped Classroom model has its benefits, there are still significant barriers and preferences for traditional teaching methods that need to be addressed.

Here are some following answers to this question:

➢ "I like face to face communication so I didn't like to get information by online videos".
➢ "Technical problems, such as video playback issues or difficulties accessing online platforms, can disrupt the learning process" .
➢ "Everything is good, but it's a bit difficult because it's new"
➢ "Occasionally, I didn't like not having immediate help or explanations during the video-watching".
➢ "Some students won't be motivated to watch the videos, and efforts to check they do can lead to cheating. But that happens in classrooms anyway with traditional style homework. So personally, I don't think this is quite as bad a downside".

On the question - **"Do you prefer to work in Flipped Classroom style or traditional style when teacher conducts lessons and you are given homework at home?''**6 students out of 28 students prefer flipped classroom style, whereas 8 students stated that both of them and others - prefer traditional style, having lessons face to face.

For the researcher it was interesting to find out, what students think about **using Flipped Classroom Style in every lesson and in every subject.** 10 students out of 28 stated that it can be done, 8 stated that it cannot and others empathize that some subjects need face-to-face communication and more clear explanation.

On the question - **"To your mind, can flipped classroom improve your way of studying and in which way?"**Several students recognized key benefits of the Flipped Classroom model, including:

1. **Time Efficiency**: The ability to manage their own learning pace and review materials as needed.
2. **Flexible Access**: The convenience of watching videos multiple times, from anywhere, at any time.
3. **In-Class Activities**: More opportunities to engage in activities and practical exercises during class time.
4. **Enhanced Self-Study**: Improved self-studying habits and personal responsibility for learning.
5. **Critical Thinking**: Development of critical thinking and problem-solving skills through more interactive and applied learning.
6. **Deeper Understanding**: Increased time to absorb and understand new material.

At the end of the questionnaire, the following **recommendation** was given to the teacher and asked to continue sending the recorded videos:

➢ "Clearly communicate the flipped classroom model and its expectations to your students ,including the course materials they need to complete outside of class and in class activities they can expect".
➢ "Try incorporating interactive elements and providing straightforward instructions to enhance the learning experience".
➢ "More communication, activities and also brain exercises to analyze all the issues"
➢ "Make sure the videos are easy to understand, and encourage students to watch them before class. This will help everyone get the most out of the flipped classroom approach".

To summarize, the researcher found that while students generally responded positively to the Flipped Classroom model and were actively engaged, there is a need to enhance their motivation and provide clearer explanations of the benefits of this teaching approach. The feedback from students highlighted areas for improvement. The teacher acknowledged these comments and began considering strategies to address the challenges and further enhance the effectiveness of the Flipped Classroom model for future use.

5. Conclusion

According to the case study process and questionnaire, the researcher concluded the following effects of Flipped Classroom Style **on teacher:**

Positive Effects:

1. **Increased Focus on Individual Needs:** The teacher has more time to address students' specific needs and provide personalized support.
2. **More Practical Exercises:** There is more opportunity to conduct hands-on activities during class time.
3. **Easier Identification of Challenges:** The teacher can more readily identify and address students' difficulties.
4. **Reduced Concern About Absences:** The model alleviates concerns related to student absences or lateness, as core content is covered through videos.

Challenges to Address:

1. **Technology Proficiency:** The teacher must be proficient in using modern technologies and techniques to effectively implement the model.
2. **Recording New Material:** There is a need to create and record instructional videos for new material.
3. **Supplementary Resources:** The teacher needs to find and provide additional resources, such as videos and books, to support learning.
4. **Lesson Planning:** More time must be dedicated to planning engaging and interactive activities for in-class sessions.
5. **Clear Explanations:** The teacher must ensure that lessons are clearly explained and be prepared to address any misunderstandings or confusion.
6. **Potential for Re-explanation:** There may be instances where the teacher needs to revisit and re-explain the material to clarify any issues.

Followings are the effects of the Flipped Classroom Model **on Students:**

Positive Effects:

1. **Enhanced Skills:** Students improve self-studying skills, critical thinking, and other competencies essential for future and professional development.
2. **Collaborative Practice:** Students have more opportunities to engage in practical exercises with peers, and can seek additional explanations from the teacher if needed.
3. **Reduced Absenteeism Concerns:** There is less worry about missing or being late to lessons, as core material is covered through videos.
4. **Flexible Learning:** Students can watch the recorded lessons anytime, anywhere, and as many times as they wish, providing flexibility in their learning process.

Challenges and Areas of Discomfort:

1. **Comfort with Traditional Methods:** Some students feel more comfortable with traditional classroom settings, where they are accustomed to being passive listeners and doing more homework at home.
2. **Lack of Face-to-Face Interaction:** Students miss direct, face-to-face communication with the teacher for immediate explanations and feedback on new material.
3. **Increased Self-Study Effort:** The model requires students to take on more responsibility for their self-studying and skill development, which can be challenging for some.

To sum up, the case study conducted by the researcher indicates that the Flipped Classroom model offers more advantages than disadvantages for both students and teachers. However, it may not be suitable for every subject or lesson. The researcher acknowledges that while some subjects might be well-suited to the Flipped Classroom approach, this case study alone cannot determine its applicability across all areas. Further discussion and analysis are needed to assess the model's effectiveness and suitability for various subjects and teaching contexts.

References

Akaki Tsereteli State University (ATSU), 2024. *"Call for training: Universal methods of teaching".* Available: https://atsu.edu.ge/ge/office/16/news/1584-utsqveti-ganatlebis-tsentri-atskhadebs-registratsias-upaso-treningkurze

Batumi Shota Rustaveli State University (BSU), 2023. *"The training course for BSU professors is conducted on the flipped classroom model."* Available: https://bsu.ge/sub-27/page/18751/index.html

Bergmann, J., and Sams, A., (2012). *"Flip your classroom".* International Society for Technology in Education, USA, ISBN: 978-1-56484-315-9.

Illianu Personal and Professional Development Center. (2024). *"Active Learning, Flipped Classroom for PhD students".* Available: https://ppdc.iliauni.edu.ge/trening/treningebi-doqtorantebisthvis-amobrunebuli-saklaso-othakhi/

Internet Newspaper for teachers. (2017). *"Flipped classroom – distance learning or optimization of face-to-face meetings?"* Available: https://mastsavlebeli.ge/?p=15292

Lundin M., Bergviken Rensfeldt A. et al, (2018). *"Higher education dominance and siloed knowledge: a systematic review of flipped classroom research".* International Journal of Educational Technology in Higher Education. Available: https://doi.org/10.1186/s41239-018-0101-6

Ma Y. (2023). *"Exploration of flipped classroom approach to enhance critical thinking skills".* Volume 9, Issue 11, e20895. Available: Exploration of flipped classroom approach to enhance critical thinking skills - ScienceDirect

Mazur E. (2009). *"Farewell, Lecture?"* citied in The Derek Bok Center for Teaching and Learning, 2024. "Flipped Classroom". Available: https://bokcenter.harvard.edu/flipped-classrooms

McLaughlin, J. E., Roth, M. T., Glatt, D. M., Gharkholonarehe, N., Davidson, C. A., Griffin, L. M., …Mumper, R. J. (2014). *"The flipped classroom: a course redesign to foster learning and engagement in a health professions school".* Academic Medicine, 89(2), pp. 236–243.

National Center for Educational Quality Enhancement. (2023). *"The conclusion of the accreditation expert group about educational program of BA Tourism".* Available: https://eqe.ge/media/23147/Report.pdf

Roach T. (2014). *"Student perceptions toward flipped learning: new methods to increase interaction and active learning in economics"* - Int. Rev. Econ. Educ., 17, pp. 74-84. Available: Student perceptions toward flipped learning: New methods to increase interaction and active learning in economics - ScienceDirect

Technical University of Georgia. (2021). *"Call for the training about the peculiarities of online learning in training - a flipped classroom model for participating in online learning".* Available: https://gtu.ge/Archive/18436/

The Derek Bok Center for Teaching and Learning. (2024). *"Flipped Classroom".* Available: https://bokcenter.harvard.edu/flipped-classrooms

Tsai M.N., Liao Y.F., ChangY.L., Chen H.C. (2020). *"A brainstorming flipped classroom approach for improving students' learning performance, motivation, teacher-student interaction and creativity in a civics education class".* Think. Skills Creativity., 38 (2020) Article 100747. Available: A brainstorming flipped classroom approach for improving students' learning performance, motivation, teacher-student interaction and creativity in a civics education class - ScienceDirect