Implementation of Educational Videos into Flipped Language Classes

Tereza Havránková

University of West Bohemia, Czech Republic

Abstract

Flipped learning is an innovative approach that reverses the instruction of a traditional class. Students in a flipped learning classroom gain knowledge, usually by watching educational videos prior to class, providing more class time for in-depth discussions and activities. The flipped model was initially integrated into science and math classes and earned its fame with educational videos of Khan Academy. Flipped learning has also been adopted by English teachers, and several studies conclude that flipped learning is an effective way of teaching English as a Second Language. This article aims to analyze recent studies that focus on flipped learning in English language classes and discusses the essential features of effective educational videos. The final part is dedicated to a research study conducted at the University of West Bohemia collecting data on students' perceptions of educational videos. The research results will aid the researcher with preparing educational videos for a planned flipped Business Course at the University of West Bohemia, which will take place in the summer term of the academic year 2020/2021.

Keywords: flipped learning, flipped classroom, educational videos, EdPuzzle.

1. Introduction

It is evident that technology has become an integral part of education. The main advantage of involving technology in teaching is the attractiveness and the enormous possibilities it offers. For example, it enables creating activities that are impossible without the use of technology. The format of teaching flipped classroom is not a new pedagogical approach. However, with the use of technology, this teaching format offers different dimensions, such as different class dynamics, feedback, and, above all, it facilitates both teachers' and students' work. Thanks to technology, this model is being used more often because it promises students' higher motivation and knowledge [1].

The flipped classroom teaching model has been used in a variety of disciplines. It was initially used in science and math classes, but this teaching format was also applied to English language classes over time. Bauer-Ramazani & Graney, & Marshall & Sabieh [1] point out that the flipped classroom potential is evident from the number of papers at the TESOL conference (Teaching English to Speakers of Other Languages). In 2013, there were only three papers on the flipped classroom topic, but in 2015 there were 30 papers [1]. Particularly in the English language classroom it is gaining more attention.

2. Flipped Classroom

The flipped classroom teaching methodology is not an entirely new pedagogical approach [2]. The methodology was already described in a book by Walvoord and Andeson in 1998, in 2000 it was known as the inverted classroom, and in 2001 it was known as peer-instruction [3]. Since 2012, the term inverted class has been gradually losing popularity, which was replaced by the term flipped classroom. In 2016 and the first half of 2017, 86 articles with the keyword flipped classroom were published in the ERIC database, but no article with the keyword inverted classroom [4].

The name flipped classroom gained its fame mainly thanks to the chemistry teachers Jonathan Bergman and Aaron Sams of Colorado High School, who began implementing the flipped classroom model in 2007. In the same year, they began creating instructional videos for their students for home preparation [5]. The educators Bergman and Sams define the term flipped classroom as: "... that which is traditionally done in class is now done at home, and that which is traditionally done as homework is now completed in class" [6] (p.13).

Research carried out in the field of flipped classrooms began to appear in 2012. Until 2011, the Web of Science database included only six articles on the flipped classroom topic; in 2012, there were eight articles, and in 2018 there were 548 articles (Web of Science). This method's importance started to be perceived by teachers of other subjects not only by teachers of mathematics and science, and the first research on flipped classroom in English language classes was published on the
Web of Science in 2013. One of the first studies published on the Web of Science is a study by Jennifer Aw-Yong, Neil Anderson, and Philemon Chigeza. In their research, they focus on the application of the flipped classroom in English language classes in the People's Republic of China (Web of Science). In 2017 and 2018, a total of 185 articles were published in the Web of Science database. A total of 13 articles are devoted to the topic of the inverted class in Business English classes. However, some researchers acknowledge that there is very little research on incorporating the inverted class into English language lessons [4], [7].

The results of research on flipped classroom in English language classes most often point out the following advantages and disadvantages:

**Advantages:**
- Elevation of time for discussion and subsequent deepening of knowledge of the subject matter [8], students and the content of the subject matter become the center of the learning process [7], overall improvement in English [8], more frequent presence of students at seminars [4], higher scores in tests [9], technologies and activities enable formative assessment of students [1], better cooperation of students in a class [10]

**Disadvantages:**
- Time-consuming [1], students perceive this model as a more significant burden on home preparation [9].

### 3. Educational Videos

Videos have been used in ESL classes for a long time and have been gaining more and more attention among learners and teachers with the rise of social media and streaming platforms such as Netflix. Kaur [11] (p.33): “Majority of the instructors and learners recognized that among the most commonly used educational technology in most of the classrooms is the video. Videos are seen to have brought stories and meanings alive through sound, action, and visuals.” Kim [12] confirms that videos are good tools which offer students with different learning styles the possibility to enrich their learning experience.

Ben Goldstein wrote an article on the history of videos in ELT where he implies that the very first methodological handbook of using videos in English classes was published in 1983 and videos were then viewed as extension to audio with no added educational value [13]. The same author mentions another methodology handbook for teachers called “Video” (1991) which included a set of activities to help the teachers to work with the videos further in class and enable students to complete activities based on the video that turns them into active viewers. Some excellent examples of using videos to activate students include from TEDed website or Learning-Youtube where teachers can find videos accompanied by questions of tasks for their classes. Another example of an active approach to videos is a book written by Jamie Keddie [13] who created a book for teachers that includes a number of activities on YouTube videos. The objective of all the activities is to trigger and expose students creativity, imagination and storytelling when watching a video.

Apart from the different platforms and methodologies that have been created to help languages teachers work with videos, there are also a number of studies have proven that videos are beneficial tool for language learning. Kim [12] conducted a study involving 86 participants who applied for a listening course at a Korean University. The results of the research indicate that students of the intermediate level of English reached a significantly improved their test scores. Another study that looked at the effectiveness of video vs. written text [14] (p.331) shows that “the use of a video in a classroom enhanced the overall comprehension of the content compared to the use of a reading text.” Moreover, videos can be also an essential instrument for vocabulary building (study) or communication skills (paper). In addition, Kaur [11] in his research paper talks about further use of videos in ELS classroom. The author mentions retention of content, authenticity of learning, contextualization of culture or as a stimulator [11]. The results of the study suggest that videos help students to reach better results in writing tasks after video presentation, videos help students to contextualize matter of learning better, the features of videos (sound, animation) facilitates students to talk about the context better.

Knowing that videos can be beneficial for languages learning is useful, however what types of videos should we use in the language classes? Goldstein [13] mentions the different types that have been used in language learning such as: comedy sketches, new and documentaries, Vox-pops (talking heads) and videos on cultural issues. Teachers can also use videos that can be found on social platforms such as TikTok. Yang (2020) reported results of his study of TikTok videos. The author did a research aiming at 184 Chinese secondary school students and their perception on TikTok videos. The results of the study indicate that significant number of respondents have a positive attitude toward TikTok videos and considers them as a great material for English learning, especially
for improving listening and speaking skills as well as enriching their vocabulary. However, teachers 
should be careful about the type of videos their use for their classes and they should pay attention to 
the English level of students. For example, Kim [11] suggests that “teachers should consider selecting 
suitable videos to satisfy students’ interests and their proficiency level.”

Several studies have also indicated what are some recommendations for teachers who decide 
to create educational video or video activities for their classes. Perhaps one of the largest studies that 
has been done on video creation is a study by Guo [16]. The researchers analyzed 6.9. million video 
watching sessions across four courses on the edX and MOOC platforms. The aim of the study was to 
find what features of educational videos sparkle students’ engagement. The analyzed data show the 
following factors:

- Length max. 6 min.
- Format that is the most engaging is "talking head"
- Videos recorded in informal setting
- Tutorial videos - Khan-Academy style videos
- Speaking rate - instructors should speak faster
- Tutorial videos are preferred over lecture videos

Brame [17] in the study paper extends the findings of Guo [16] and recommends the following features 
of educational videos to support active learning:

- Using guiding questions
- Using interactive features in the video
- Making video a part of a larger homework assignment
- Integrate interactive questions into the video

4. Creation of educational videos using EdPuzzle

Educational videos can be created by using different online tools. One of the most accessible 
and user-friendly tools is Edpuzzle. It is an online learning platform that is designed for creating and 
sharing educational videos. So how does this app work? At first, teachers download either their own 
videos or videos from YouTube or Khan Academy, crop these videos, voice-over, and embed multiple-
choice or open-ended questions. Then teachers share the video with their students using a class code. 
As students watch the videos, they have to watch the entire video, and they cannot skip answering the questions. All the students’ answers and activity in the app are collected. The teacher can check the answers to the embedded questions and the app tracks if the students watch the entire video, how 
many times they watched each part, or when they watched the videos. The collected data helps the 
teacher analyze to what extend the students understood the subject matter. Edpuzzle is an online 
platform, but students can download the Edpuzzle app to their mobile devices. It is an excellent 
instrument for flipped learning as it enables teachers to receive feedback on students’ performance 
and understanding of the subject matter before class.

5. Research

The research for this study was conducted in the summer term of the academic year 
2019/2021. The research aimed to collect and analyze the attitude of university students to 
educational videos. The research results will enable the author of this article to create educational 
videos for a Business English course that she intends to flip in the summer term of the academic year 
2020/2021

5.1. Participants

The research participants were 60 students of the University of West Bohemia, specifically 
students of the Economics Faculty who attended the Business English 1 course. The Business 
English 1 Course is obligatory for all the students whose level of English is B1. As there are noticeable 
differences in English among the students, the instructors sometimes struggle with completing the 
course content while also considering the students' differences. That is why the author of the text
decided to flip the course and allow the students to practice the language in and outside the classroom. Before flipping the course, the researcher intended to pilot the videos for the main research and collect and analyze the data to change or modify the educational videos for the flipped learning research.

5.2. Method

The data was collected from an online questionnaire that was sent to the students at the end of the winter term. The questionnaire contained 15 questions (open-ended, Likert scale questions) and the collected data was analyzed in a descriptive way.

5.3. Videos

The educational videos that were used for the research were videos downloaded from YouTube and videos that were created by the researcher - talking head videos. The videos and embedded questions were focused on grammar, vocabulary and listening comprehension. The students were given in total 8 videos. All the videos were shared gradually over the term by the application EdPuzzle.

6. Results

The first part of the online questionnaire included questions that were to describe the student of the Business English Course. The profile of a typical respondent is a freshman (63.3%), who is between 21 - 25 years old (51.7%), is female (81%, 7), is studies Business and Economics and Management and has been learning English for 0-10 years (50%).

The second part of the questionnaire was devoted to questions/statements focusing on students' view of instructional videos, the length, comprehensibility, content, interpretation, language level, number of questions and overall satisfaction. The results of the questionnaire show that:

‣ 32 students viewed more than 3 videos
‣ 46 students consider the length of the videos reasonable.
‣ 44 students, the videos were understandable.
‣ The content of the videos was interesting for 57 students
‣ For 54 students, the interpretation of the issue was illustrative
‣ For 44 students, the videos were moderately complex in terms of language
‣ 51 students consider 3-5 questions for the video sufficient.
‣ 57 students would choose the same videos for their further study of business English
‣ 42 students claim that the instructional videos helped them prepare for business English seminars 2.
‣ 40 students claim that the instructional videos helped them prepare for the credit and the exam
‣ 47 students claim that the instructional videos helped them prepare for the listening part of the credit test

The second part of the questionnaire was designed to find out students’ perception on the EdPuzzle application. The purpose of these questions was to determine student satisfaction with the use of the EdPuzzle application before the main research. The students’ answers are:

‣ 55 students declare that the EdPuzzle application was comprehensible and easy to use
‣ 24 students sometimes needed someone else's help studying with EdPuzzle

The last part of the questionnaire included open-ended questions. The first question was: What modifications would you make in terms of the educational videos:

‣ Nothing
‣ More illustrative examples of the issue
• Maybe I'd put videos there that would be slower to listen to
• I liked everything as it was
• Maybe I would add the possibility of subtitles in the video, sometimes it was really difficult to understand the topic
• The video should be clearer
• More British English
• Possibility of subtitles
• Nothing
• Moana option caption
• I think the video was sufficient
• I think the videos were similar enough, but the first video was difficult for me, so I think it would be good to add English subtitles.
• Animated videos are fun
• Subtitles, at least English
• Probably nothing
• I would add more “relaxing” videos like “cooperation”
• Nothing, it was nice
• The videos are sufficient, just long
• Sometimes the videos were too long
• I wouldn't change anything
• I enjoyed animated videos

The second open-ended question was: Do you have any suggestions or comments?
• Nothing
• The videos were useful
• I also think that the videos can help students a lot with their preparation for English lessons and can be beneficial for passing the credit and the final exam.
• Thank you for a nice English course
• It was a great practice
• To make videos shorter

7. Discussions and limitations
The students’ answers show that educational videos were beneficial for improving business English and preparing for the final test and the oral exam. On the other hand, the questionnaire results point to the fact that the selected videos should be slower and linguistically simpler. All of the preliminary research videos corresponded to language level B1, but according to some students, these videos should be easier. Some students mentioned that the videos should include English subtitles. Based on these comments, the author of the research will consider using English subtitles for all videos. The author of the research will also consider using animated videos, which one of the students mentioned in one of the answers.

Further research could be narrowed to videos focused on just one English learning area, such as vocabulary, grammar, listening, or writing. It would also be interesting to use different applications to create and share educational videos and compare their features. Another study could involve the perception of high school students or secondary school students to see whether their perception of education videos is different from university students.
The limitation of this study is definitely the number of the respondents and the fact that the study participants were students of Business English and not general English. Also, another limitation is the time frame of one term and the number of educational videos.

8. Conclusions

The flipped classroom has proven to be a valuable approach to ESL classes, and educational videos are an essential part of the methodology. When creating educational videos, teachers should pay attention to the format of video they use, length, and interactivity. Teachers need to bear in mind that students should not be active views to use educational videos effectively. What makes the views active is the interactivity of educational videos, such as embedded questions, the possibility of watching some part receptively, or the possibility of easy sharing of the videos with the teacher. An excellent app for creating and sharing educational videos is the online application EdPuzzle. The author of the article used the app to share videos with her university students and collect information about students’ perceptions of educational videos. The collected data shows that university students find the videos a valuable element of their English classes. The students perceive it as a beneficial tool that can help them prepare for the final exam. The majority of the students also claim that they would appreciate having educational videos in their future English classes. The research data also points out that students feel that the videos should be easier and include subtitles. The research paper aims to pilot educational videos to modify them according to the students’ needs for research, which will take place in the summer term of the academic year 2020/2021. The research objective is to flip a Business Course at the Faculty of Economics at the University of West Bohemia.

References


