
Flipped classroom and its use in teaching English as a foreign language

La clase invertida y su uso en la enseñanza del inglés como lengua extranjera

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Abstract

The study examines the effectiveness of the flipped classroom teaching strategy in the context of English language classroom. The research is focused on the development of the communicative ability of the students in the foreign language, views of the participants on their experience of flipped classroom, and identification of measures to overcome the issue of low homework completion. The presented data are based on an experiment conducted by the author at the University of Granada (Spain), with a group of undergraduate students attending a compulsory foreign language course. The data were collected using a standardized exam; an observation diary to evaluate the development of the students' communicative ability in the foreign language; a questionnaire; and web-based statistical tools. Results show that the use of flipped classroom strategy had a positive effect on students' foreign language abilities.

Keywords: flipped classroom; English language teaching/learning; blended learning; video lecture; adult learners

Resumen

El estudio examina la efectividad de la estrategia de la clase invertida en el contexto de inglés como lengua extranjera. La investigación se centra en el desarrollo de la habilidad comunicativa de los estudiantes de lengua extranjera, las percepciones de los participantes en relación con la clase invertida y la identificación de medidas para contrarrestar el que no hagan los deberes en casa. Los datos que se presentan están basados en un experimento llevado a cabo por la autora en la Universidad de Granada (España) con dos grupos de estudiantes de grado (experimental y control) que cursaban la materia obligatoria de Inglés como Lengua Extranjera. Los datos se recogieron utilizando los siguientes métodos: un examen estandarizado; un diario de observación con el fin de evaluar el desarrollo de la habilidad comunicativa de los estudiantes en la lengua extranjera; un cuestionario; y herramientas estadísticas en línea. Los resultados demuestran que el uso de la clase invertida tuvo un efecto positivo en las habilidades lingüísticas de los estudiantes.

Palabras clave: clase invertida; enseñanza/aprendizaje del inglés como lengua extranjera; aprendizaje combinado; video conferencia; enseñanza de adultos

Introduction

At present time, effective foreign language teaching is perhaps more important than ever before. Once again in Europe, we are in a period of increased migration, be it due to conflicts and humanitarian crises in countries more or less distant from ours, or due to the open job market that we enjoy as citizens of the European Union. Even if one does not actually move to a different country, most job positions for skilled workers require the applicant to possess at least basic communicative competence in a foreign language. For the majority of people, therefore, learning a second language has become a fact of life. The EU policy continuously reflects and supports this as well – the *Barcelona Objective* aims for each citizen to speak at least two languages besides their L1 (European Union: Commission of The European Communities 2008, European Union: European Parliament 2017) and the member states are invited to “adopt and improve measures aimed at promoting multilingualism and enhancing the quality and efficiency of language learning and teaching, including by teaching at least

two languages in addition to the main language(s) of instruction” (European Union: Council of the European Union, 2014). As our most pressing aim is effective communication, it is the communicative approaches to language learning and teaching that are gaining most support and popularity among students and teachers alike (Hossen, 2008). However, even in a class focused on communication, one cannot completely rid themselves of rules and the theory. A dedicated teacher then faces a dilemma – either the classes focus on theory but the students will have less fluency practice, or they cut down on the time focused on theory, in order to provide opportunities for practice, but the accuracy of the learned language may suffer. In other words, there is seldom time to both cover the theory, ensuring that every student understands it, and provide sufficient time and space for communication (Koosha & Yakhabi, 2013). The Flipped Classroom approach hopes to address the issue, and bring a number of other advantages as well.

Theoretical background

Flipped Classroom is a modern teaching strategy in which the contents of the homework and the lecture (exposition part of the lesson) are exchanged. In other words, flipped. In its presently most accepted form, this is done through the use of videos, in which the theory is covered (alternatively, text resources are sometimes used) and which the students are given before the respective class, to engage with individually (prior to attending the teacher-led class, presumably at home). In theory, Flipped Classroom aims not only to lead to improvement of academic results and practical skills, but simultaneously also supports learner autonomy through giving the student increased responsibility for their own learning process; induces and/or increases the feeling of self-realisation and achievement; and improves the general learner motivation. Owing to these and other advantages, in certain circumstances it has also been observed to save teachers’ time (Bergmann & Sams, 2012).

Flipped Classroom was invented by a duo of innovative high school teachers from Colorado, USA. Originally, Jonathan Bergmann and Aaron Sams were simply attempting to make their chemistry lessons more accessible to all their students, especially aiming for the students with low school attendance rate. Inspired by and drawing from methodologies and projects such as Just in Time Teaching, Mastery Learning, and Khan Academy, they constructed an innovative teaching strategy of their own. Not only did they achieve considerable success in their own classes, the videos they made became quite popular even among people from outside their classroom and school (Bergmann et al., 2012).

This article understands the Flipped Classroom teaching/learning strategy as it is described by Bergmann et al. (2012), and thus their book is viewed by the authors as the initial publication on the topic. The authors recognise the fact that similar teaching strategies and methodologies had been proposed and studied before Bergmann and Sams came up with their own system. However, these are not included in the review of the literature.

The first scientific studies of the strategy were published in 2012. Since then, papers have been published on the use of Flipped Classroom across the range of school subjects. Flipped Classroom has also been tested on a number of aspects that do not depend on a particular subject but are applicable across the curriculum, such as the effects of this kind of teaching on students of different age groups, background, or

motivation. In addition, studies have been conducted on the effects of Flipped Classroom on the experience and work of the practicing teacher, the greatest obstacles to its successful implementation, as well as the students' own perception of their experience. Along with the popularity of Flipped Classroom strategy, the number of papers published has been experiencing rapid growth, as may be observed through a superficial search using the search engine Google Scholar: while in 2012 there are only 438 publications listed, currently, this number is nearly 17,000, over fifteen hundred of which are from the year 2018 alone (as of 15 May 2018).

The use of Flipped Classroom for the purpose of language teaching/learning in general, and English language learning/teaching in particular, has also seen its share of research. Researchers Marie Webb and Evelyn Doman (2016) studied the effects of Flipped instruction on the learning outcomes of students in the area of English grammar, as well as their attitudes towards it. The course in which the study was conducted focuses on higher-order thinking skills and normally does not include extensive explicit grammar instructions. The videos used in the research group were followed by a short quiz, and the students were asked to write example sentences (showing their understanding), both of which were graded on. The students were also asked to fill in a survey focusing on their comfort and confidence during the experiment. The results of the grammar use study were statistically significant in favour of the innovative methodology.

A study conducted at a Saudi high school (Al-Harbi & Alshumaimeri, 2016) focused on the use of the strategy for teaching the English Grammar. The researchers worked with two groups of students: research and control. The study conveys the specifics of the Saudi Arabian English language learning context, pointing out in particular the lack of practice opportunities for the students and the widespread foreign language teaching trend, mostly based in lecturing, filling in textbook exercises, and the instructor being the only source of knowledge, resulting in low student motivation. The authors admit their results are not completely clear-cut. The score differences between the pre and post experiment tests in the two groups were not great enough as to be statistically significant. However, the survey of students' opinions on the experience seems highly positive, citing higher motivation and increased practice opportunities as resulting from the use of Flipped strategy, which are factors that certainly do affect language learning and acquirement. Some students also noted that the length of the videos (up to 15 minutes) negatively affected their ability to engage with the it. Despite that, all the students asked considered the videos to be beneficial to their learning and some suggested using the strategy for other subjects as well.

The study conducted by Channy Roth and Suksan Suppasetseree in Thailand (2016) addresses the uses of Flipped Classroom on enhancing the learners' listening skills. In a study conducted with 30 pre-university participants, their conclusion is that "the flipped classroom which used English video and Facebook as medium was an effective method for teaching English to improve listening skills" (p. 260).

The comparison between regular and Flipped classroom (Kang, 2015) zoomed in the learning achievements of students in both grammar and vocabulary. This study also achieved statistically significant result in favour of Flipped strategy and showed students' support of this type of teaching. The authors admitted that the biggest obstacle and disadvantage of the strategy was students not doing assignments.

Low homework completion was noted as a significant obstacle by other researchers as well. Clyde, F. H. and Schiller, N. (2016) listed the issue among the pitfalls of Flipped

strategy, saying “students new to the method may be initially resistant because it requires that they do work at home rather than be first exposed to the subject matter in school” (p. 63). Graham, B. (2013, p. 60), in a survey of students’ views of the strategy, also noted that the participants themselves acknowledged that it is “hard to stay motivated to work every day” and that Flipped Classroom has room for not completing the given assignments without any obvious immediate repercussion as compared to the standard class. Jung, Y. (2015, p. 105), in the study of enhancement of learner autonomy, observes the same issue, admitting “the sustainability of learner autonomy is unclear”. While the results of the study were positive, the author observed the increased workload and need for lengthy preparation on the side of the teacher as one of the most significant obstacles in the implementation of Flipped strategy. Despite these misgivings, a study spotlighting students’ views (Butt, 2014) points out that the participants are generally in favour of the innovative teaching method, especially in larger classroom setting. The author also indicates that “flipped classroom approach could be perceived as a positive approach to the university classroom due to its combination of activity and demonstration” (p. 38). As one of the surveyed students claimed, the home setting for learning may be perceived as an advantage, as he “won’t be embarrassed to ask silly questions.” (p. 40). In the same study, 25% of the students did not find the Flipped strategy to benefit their language learning.

Based on the presented selection of published research, Flipped Classroom seems to be a promising teaching innovation. However, the most positive results come from the surveys of opinions of the participants rather than pretest/posttest results of learning achievement. In the context of language learning, researchers seem to agree that the use of Flipped strategy provides space for more in-class language practice, but again, much of the results achieved are not significantly different from those of typical language class, in which the need for use of learned material has long been recognised as essential. In our study, we attempt to compare two groups of students who experienced nearly identical active-learning in-class instruction, but the research group was also provided with pre-class instructional material.

Method

The study was conducted as a part of the course “Idioma Extranjero y su Didáctica: Inglés” (*Foreign Language and its Methodology: English*), at Faculty of Education, University of Granada (Spain). The course is a part of the compulsory curriculum in the Primary Education undergraduate programme. As per the institution regulations, a student may opt out of in person attendance of the classes, choosing instead to study individually towards the final exams covering the whole curriculum. Thus, the students who signed up for the course but did not wish to take part in the experiment were not obligated to do so.

The main objective of the pilot research was to find out whether the Flipped strategy would prove to have a positive effect on students’ foreign language learning achievement and process. The secondary objective was finding out the experience-based opinions of the students on this type of teaching/learning process and how their motivation was affected.

Based on the researchers’ previous work in the area, the rate of the students’ engagement with the passive content – the watching of the video lectures – was expected to be one of the obstacles that an educator wishing to successfully implement this

teaching strategy would be facing. Testing measures to overcome this was another secondary objective of the pilot research.

The participants

The pilot research was conducted with two groups of students (a research group and a control group), the majority having been in the second year of their studies in the above mentioned programme. Altogether, there were approximately 120 students enrolled in the courses where the pilot study was conducted. Approximately 55 students were regularly involved in the study. On average, 50% of the students enrolled in the courses opted out of in-person attendance, or only came for a small number of lessons. The results of these were not considered relevant to the pilot research and their data is not included in the results. The ratio of females and males was approximately 3:2, and was equal in both the groups. The students' age range was significantly more varied. The majority of the attendees was around 20 years old, however, 25% of the students were aged 27 years or more. A small number of students were aged significantly higher than the average being the oldest student 46 years old. According to the students' own claim when questioned on the issue, the vast majority of the students did not speak any language besides Spanish, and were hoping to improve their level of English through taking the class. Spanish language was the native language, or one of the native languages, for all the students involved in the study. There was at least one student, a male, whose second native language was English. There was a small number of students who spoke more than two foreign languages, and a single student who was fluent in five languages. The research group had approximately 30 regular attendees; the control group had approximately 25 regular attendees.

Research methodology

As the objectives of the pilot research were varied, it was necessary to make use of a number of different research methods. The most straightforward research method was implemented for measuring the learning achievement of the participating students, i.e. to observe and measure the possible (expected) differences between their foreign language abilities at the beginning of the experiment and at its end. A standardised test was administered for this purpose: the *Oxford Placement Test I* by Dave Allan (1992). The choice of the exam was in greatest part affected by two factors. On one hand it was the availability of the particular exam which researchers had access to through the University of Granada library.

On the other hand, it was the exam's standardised nature, with an easy to read, numerical result. Researchers felt they were not yet truly qualified to create a testing measure of this kind on their own, and hoped to have as clear a result as possible. The students participating in the study were given the very same exam at the beginning of the study and at its end so that the differences in their scores could be measured. Rather than comparing the total scores of the students and their averages, the values that researchers were truly interested in were the changes in scores of both the individual students and the group averages (the improvement/deterioration rates). The exam consisted of two parts: Grammar, which tested the ability to recognise and use the English grammar from the most basic forms up to the highest level; and the Listening part, which focused on aural recognition of words with similar pronuncia-

tion. In each part, it was possible to score the maximum of 100 points, one point per question, and all the questions were multiple-choice. The results in each part were compared separately, after which an attempt at the interpretation of the final scores was made. Due to time constraints and organizational difficulties of such an event for the number of students involved, the communicative ability of the students was not tested individually through a proper oral exam, and the presented results on the students' communicative skills are based on the researchers' observations and subjective evaluation, as described below.

The second research and data collection method used was observation. Researchers kept an observation diary. This was done for both the research group and the control group. The entries paid attention to a variety of factors, presented below.

One factor regularly observed via the observation diary was the likely student engagement with the video lecture content, based on the participants' in-class activity. These data were compared and contrasted with the statistical information obtained from YouTube Analytics, a built-in statistics data collecting feature of YouTube.com, the platform used to allow the participants access to the video lectures.

Another aspect focused on was the developing motivation of the students in completing the tasks in-class, their activity in-class, and their actual use of the English language during the lessons, partly in connection to their abilities in the foreign language use, partly due to other factors.

In order to learn the students' opinion on the teaching methodology used, the research group participants were requested to fill in an anonymous survey. This took place after approximately two months of their experience with Flipped Classroom.

Procedure

The study was conducted as a part of the above-described course focused on both improvement of foreign language skills, and the ability to potentially pass the knowledge and skill on. The classes were 120 minutes long. They followed a regular structure throughout the length of the study.

Both the research group and control group followed the same course syllabus. This syllabus was the officially approved document for the course and no changes were made to it by the researchers. It was designed for a 13-lesson course, excluding the introductory and closing sessions, and the topics covered were the following:

1. Phonetics & phonology 1
2. Phonetics & phonology 2
3. Word formation, Grammar 1
4. Grammar 2
5. Vocabulary & semantics 1
6. Vocabulary & semantics 2
7. Communication – writing, Teaching reading & writing
8. Communicative functions & speech acts

9. Communication – speaking, teaching speaking & listening
10. Sociolinguistics
11. CEFR (A1- C2), Assessment
12. Teaching foreign language at primary school 1
13. Teaching foreign language at primary school 2

In the research group, the participants were regularly provided with materials (most frequently video lectures) that covered the theoretical information on topics prescribed by the syllabus. The lessons that followed were then zeroed in on fixation and practice of the aforementioned theoretical information, and the practice of communication in the target foreign language, most often in the verbal-spoken form. Typically, the lesson would start with a review of the theory that the students were expected to have learned individually from the provided materials. Afterwards, tasks concentrated on fixation of the learned theory, further practice, and activities stemming from the higher levels of the revised Bloom's Taxonomy (2001), often requiring creativity, individual thinking and expression of opinion or decision making.

In the control group, the lessons were likewise focused on communication as much as possible. However, this group of students was lectured on theory in-class, during the first part of each new lesson, following the introduction and homework review. The following lesson content was similar to the one used with the research group, albeit usually with a lesser amount of practice due to the time constraints. Just like with research group, the control group lessons also put an emphasis on the practice of communication, self-expression, and creativity.

In both groups the students were expected, and repeatedly reminded, to only use the English language for communication, among themselves and with the teacher.

Research questions

Based on the above described, the research questions were formulated as follows:

- Does the use of Flipped Classroom have a positive effect on students' achievement in a foreign language classroom?
- What strategies are effective in motivating the students to complete the pre-class homework assignment? (research group)
- What is the students' opinion on this kind of teaching? (research group)

Analysis and results

The results presented below were collected by the researchers throughout the duration of the study. Testing by means of the above-mentioned standardized exam was conducted at the beginning and at the end of the study. Observations were noted in a diary for both participating groups after each and every lesson. Online tools were used to collect data for the testing of homework completion measures.

Learning achievement

The scores obtained from the placement tests were compared against each other (listening and grammar). The average improvement and the average loss of points were compared among groups in each category. The interpretation of the total score is represented in figure I. Unfortunately, the number of students whose test results were used was lower than the average number of students attending the classes (some of them only took either the pre or post-test). The drop in the numbers between regular attendees and the usable test results was especially critical in the control group. The tests which were not paired had to be discarded.

Based on the results of the first placement tests, it can be concluded that the students in the control group started the course with a higher average level of English than the students in the research group. The students' uneven starting level of English proficiency was another argument against comparison of the total scores and in support of the comparison of the change in scores between the two exams.

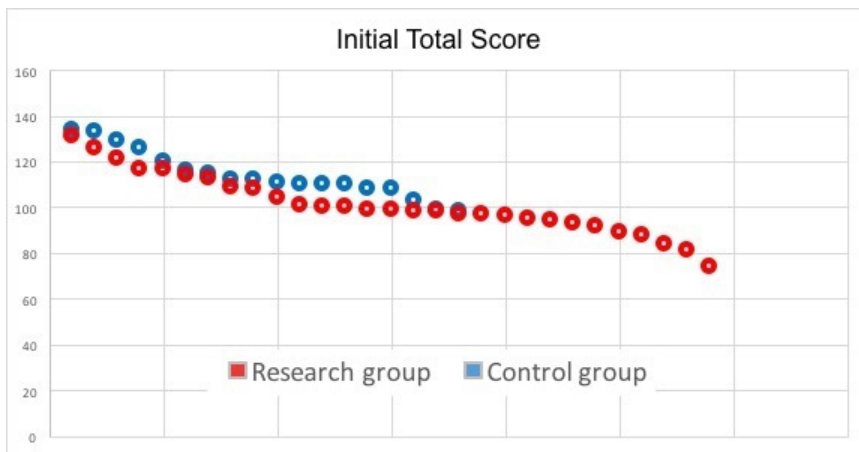


Figure 1. Initial level of proficiency in the English language, group comparison

Listening exam

Out of the 29 exams in the research group, which researchers were able to use in results evaluation, 22 participants manifested improvement on the final exam, compared to the first one. Only 7 students' audial recognition final score was lower than the one from the first exam. The average improvement in the research group was 6.59%, and the range reached from the improvement by 1% to improvement by 23%, the most frequent change being 5-7%. The average decrease in score in the research group was 5.28%. The largest decrease observed was 12%, though 2%, 3%, and 6% decreases were more common.

In the control group, only 18 Listening exams were available for use in the research. 11 exams had to be discarded because students had only taken one. Based on the exams available for comparison, 9 students' listening skills improved, on average by 5.4%. In this group, the score of 7 participants decreased, on average by 7.14%. Two students scored the same on the first and on the final placement test.

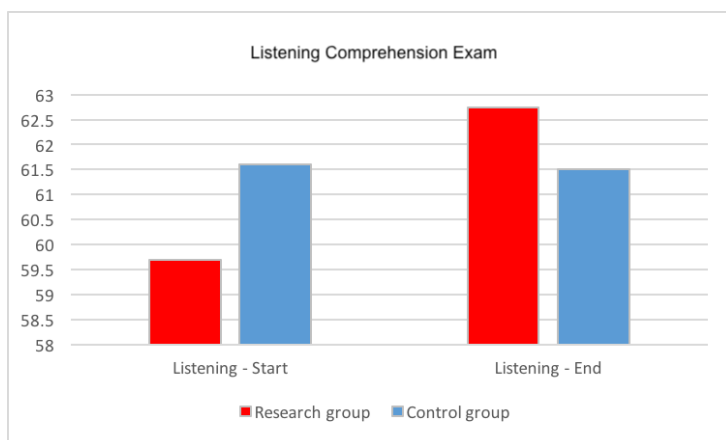


Figure 2. Listening comprehension exam, comparison of the initial and the final level of the research group and the control group

Grammar exam

22 students from the research group did both the entry and the final grammar exam, and so these were available to be taken into account for the average score calculation. Of these, 15 students' score showed improvement in the use of grammar, on average by 7%. Four students improved by 10% or more, 6 others by at least 6%. The top improvement in this group was by 17%. The score of 7 students decreased, on average by 3%. Five of these had a decrease of 3% or less, the greatest decrease discovered is 9%.

In the control group, only 12 students' exams could be compared and thus the differences between scores reviewed. Of these, seven students' accuracy in the use of grammar improved, on average by 2.85%. Most students' improvement was close to the average. Four students score decreased, by 2%, 6%, 4%, and 1%, respectively (average of 3.25%). One student's score remained the same.

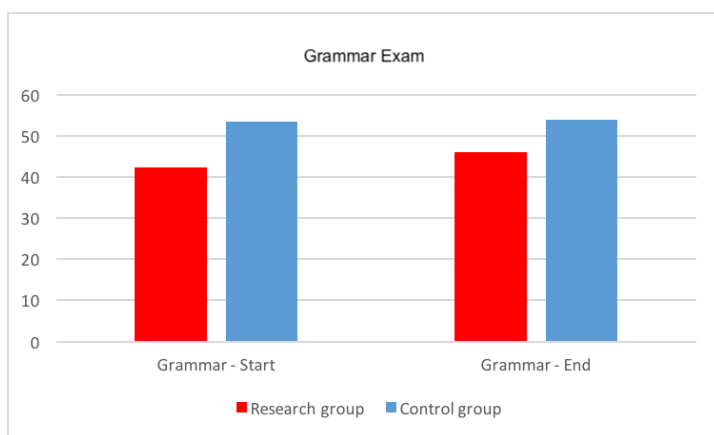


Figure 3. Results of the exam of the competence in the use of English grammar, comparison of the initial and the final level of the research group and the control group

Learning achievement observations

The information presented in the following sub-chapter is taken from the observation diary kept by researchers during the study.

To begin with, the students in both groups were observed to be unaccustomed to a learner centred approach, and some did not initially respond positively to the expectation of their activity during the majority of the class time. Only a small number of students (2-3 in each group) would be active during the initial lessons. This factor, however, improved with time. Two months into the course, approximately two thirds of the students were actively participating in the in-class activities.

The control group was observed to have a higher average level of English language proficiency. Approximately one third of the students were able to communicate in the language with reasonable fluency at the beginning of the course, albeit with certain accuracy issues. In contrast, in the research group approximately one third of the students appeared to have started the course with a very low level of fluency or accuracy in the English language. The participants' fluency in speech was observed to have improved significantly throughout the duration of the course. This was apparent especially in the research group, after the students accepted that they are expected to try and express themselves in the English language, even if such undertaking was at times slow or not grammatically accurate.

The accuracy of certain parts of pronunciation of students in both groups seemed to have improved as well. The pronunciation of the /h/ sound was noted to have improved significantly, and the /ð/ sound, initially tricky for some, showed improvement as well. The pronunciation of the "s" in initial position, (/s/), was problematic throughout the course, with the majority of the students failing to refrain from using the /es/ pronunciation instead, in an example of apparent negative transfer. Likewise, the correct pronunciation of English vowels was only learned with difficulty, with at least 50% of the students continuing to use their native (Spanish) pronunciation in the English language, until the end of the course.

It was noted, through comparison of both the submitted work and that completed in class and retained by the participants, that the students' writing abilities improved in both grammatical accuracy and fluency. While the former factor only showed a slight improvement, the latter improved more significantly, especially in the research group. This may have been caused by the fact that the research group engaged in more written tasks during the lessons, thus receiving more practice, owing to the greater amount of time available. Also notably, less assistance was required by the students from the teacher during the in-class writing tasks towards the end of the course.

Based on the researcher's written observations, the students showing the poorest performance improved more than those with an average starting position, especially in the research group.

Homework completion control measures

In the research group, five different control measures were tested for their effectiveness in ensuring that students completed the homework, with varied success. Their success was observed and measured via the observation diary and the youtube.com viewer statistics feature.

The first measure used was verbally informing the students that there was an assignment due the next class (literally, the teacher telling the students “You have homework for the next class”), as well as its nature (“Your task is to watch the video, [etc.]”). The rationale behind this measure was the expectation that, all the students being adults, their own sense of responsibility should be relied on. While reasonably effective with the first two video lectures, the success rate of this measure fell drastically (by more than 50%) afterwards.

The second control method tested was verbally notifying the participants that the above-mentioned viewer statistics of the video lectures will be reviewed. Researchers expected that the knowledge of a control measure existing would motivate students to higher engagement with the material. The effectiveness of the measure proved dubious. On one hand, it did not have the effect of motivating the participants to engage with the material in the intended manner, which would be well in advance of the class, with sufficient time to re-watch the material for improved understanding, or contacting the researcher with potential questions. On the other hand, the viewer rates greatly increased in the span of the ultimate 30 minutes before the beginning of the class this measure was tested for, to reach nearly the full number of its participants.

The third control measure tested was the attachment of an assignment to the video, in order to ensure that every participant who wished to submit the assignment was forced to engage with the provided material. This measure was found to be very effective. Based on the assignments submitted, it can be stated with reasonable certainty that less than 15% of the students failed to complete the task. Even the majority of the students who did not regularly attend the lessons (and therefore did not regularly watch the videos) engaged with the material as well and submitted their work. However, a number of disadvantages to this method were identified, which make it significantly impractical for regular use. It contradicts one of the basic principles of the teaching strategy trialed, since the aim is to have the students fulfill the practical tasks in-class. Also, this method places further burden on the shoulders of the teacher in terms of preparation for class and its follow up.

An alternative to this measure was tested, which used an online opinion survey, announced within the corresponding video. The number of submitted surveys correlated with the video viewer statistics for that particular week. The survey asked the students to disclose their experience-based opinions on the Flipped Classroom teaching strategy as a whole, as well as its certain highlighted features. This measure showed a similar level of success to the previous one described, but likewise was found to be impractical for regular use.

The fifth method tested was the use of an online quiz, to be completed upon watching the video lecture. The result of this measure was more positive than the former two described above, but less encouraging than the two latter ones. However, the researchers would recommend it as the most practical one of those tested, due to the ease of its use.

Students' opinions

The survey of students' opinions asked the respondents to share their experience-based opinion on Flipped Classroom in general, as well as give their insight into a number of specific related issues. The survey was conducted with the students in the research group, since only these could give experience-based answer to the majority

of the questions asked. Of the approximately 30 participants who regularly attended the class, 27 filled in the questionnaire. For a copy of the questionnaire, see Appendix 1.

A clear majority (70.4%) of the students felt that Flipped Classroom was preferable to the traditional video-less lesson (Question 4). Additionally, almost 60% found the videos helpful for the class (Question 5), and 44.4% actually saw them as an asset for learning the English language in general (Question 5).

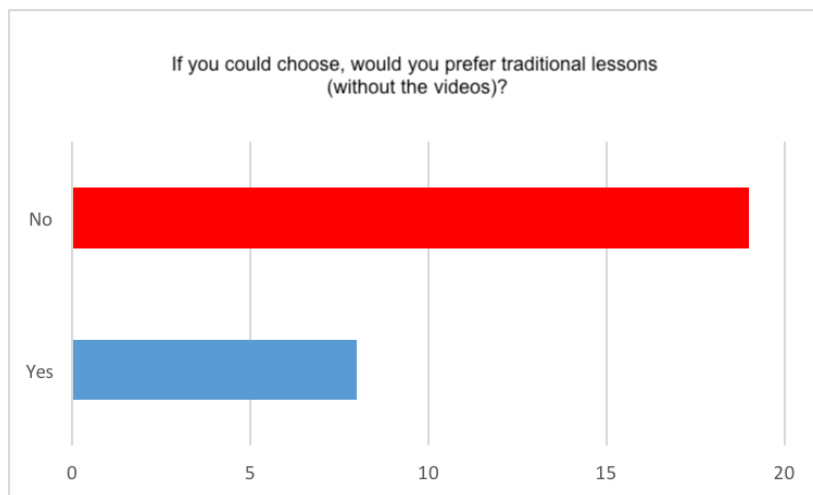


Figure 4. Students' preferences - traditional or flipped classes

When asked about the ideal video format (Question 6), 16 students (59.3%) expressed their satisfaction with the format used during the study, which was a narrated presentation. Additional 7 students stated that they would find it even more helpful if the teacher's face was also visible in the video (recording of the teacher's face embedded into the narrated PowerPoint).

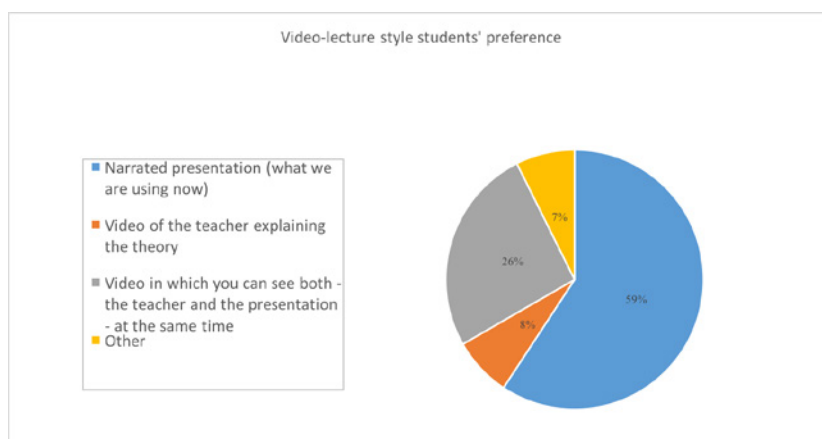


Figure 5. The best video format, students' view

As the most motivating factor for actually watching the video (Question 12), most students chose the option "being told that video includes information crucial for class," with the option "homework for which video-watching is necessary," following closely. Finally, when asked about their preference between texts and videos (Question 7), more than half of the students (55.6%) stated that they found the combination of both to be most useful, the rest being equally distributed in favour of each of the two mediums.

Discussion

The need for language teaching and learning with the primary aim of improving and training communication skills of the learners is self-evident. A variety of approaches to this issue are being tested and reviewed by educators all over the world every day. One common issue a majority of (not just language) teachers are facing is the insufficient amount of the available time to teach their students the theoretical aspects of their respective subjects, and at the same time provide sufficient space for effective practice. This is particularly crucial in language learning. Flipped Classroom strategy attempts to address this issue and further support creation of a learner-centred teaching/learning environment, hopefully letting the students improve their practical skills, in this case in the English language.

Based on the results of the grammatical exam used during the study, the use of Flipped Classroom strategy seems to have had positive impact on the participants' skills in the accurate use of English grammar. On average, the students taught using the experimental strategy showed improvement, and their average achievement was higher than the improvement of the students in the control group. These results correspond with the findings of other researchers investigating the uses of Flipped Classroom for teaching grammar (Al-Harbi & Alshumaimeri, 2016; Webb & Doman, 2016; Kang 2015). Likewise, the listening comprehension of the students involved in the experiment seemed to have benefited: on average they improved more than their peers in the control group, and there was significantly a higher number of students showing better results in the experimental group compared to the control group. Again, this result seems to be supported in another research (Roth, 2016).

As expected prior to the experiment, the homework completion factor had a significant impact on the successful implementation of the researched teaching strategy. Flipped Classroom can only function if the students fulfill their task and engage with the theoretical materials prior to the class responsibly enough to come to the in-person session prepared. As other studies also found out (Kang, 2015; Herreid & Schiller, 2013), the difficulty then lies in ensuring that they in fact do so, and not only during the initial stage, but throughout the course, which may prove difficult (Han, 2015; Johnson, 2013). The experience-based opinions of the participating students, largely favourable in their evaluation of the innovative teaching strategy, are likewise reflected in other studies (Butt, 2014; Johnson, 2013).

Despite the claim of some previously published papers (Jensen et al., 2015), that the success of Flipped Classroom may be more due to the active approach to learning, rather than to the homework/lecture exchange, the experience in this research seems to disagree. The activities used during the lessons in both groups were almost always identical, and equally active in nature. Certain tasks in fact actually seemed more effective when used in the control group, owing to the fact that a number of members

of the research group were clearly struggling to complete them. The research group achieved higher score improvement. On the other hand, researchers admit that a part of the positive results associated with the use of the Flipped Classroom strategy may simply stem from the greater exposure time to the material studied in the experimental group.

Conclusions

The study fulfilled its objectives via the following measures: through the observation diary and comparison of the results of the standardized exam before and after the experiment, we saw the effects of the strategy in a language classroom, thus satisfying our first objective. The secondary objectives were likewise fulfilled: the survey of opinions gave us insight into the students' view of the experimental strategy, their satisfaction with their experience, their motivation for homework completion, as well as the identification of the issues they saw as problematic; through practical testing of five selected measures focused on homework completion, we did manage to evaluate each of them and select the one we see as most effective. Likewise, the research questions were answered. The first research question focused on whether the use of Flipped Classroom does have a positive effect on students' achievement in a foreign language classroom. The data derived from the implemented test scores imply that Flipped Classroom teaching strategy does have a potential for language learning and teaching. The research group reached greater improvement in test scores, and thus seems to have benefited more. According to the results of the second placement test, the research group improved enough to accomplish the final level of the control group, despite having started with lower level of ability in the English language. The control group, which had started with higher scores, only made minimal general improvement in comparison.

Unfortunately, there was not enough space to do an oral exam, which would test the change in communicative ability in the English language of the involved students (understood as the ability to interact with others, using the English language efficiently, with acceptable pronunciation, not necessarily complicated but nevertheless correct grammar, a certain level of intercultural communication skill, and the ability to make fluent use of even limited vocabulary range). However, the data noted in the observation diary was quite promising. The answer to the first research question seems to be an affirmative one - the use of Flipped Classroom does indeed seem to have a positive effect on students' achievement in a foreign language classroom.

The second research question asked what teaching strategies are effective in motivating students to complete the pre-class homework assignment. As expected prior to the experiment, the homework completion factor had a significant impact on the successful implementation of the researched teaching strategy. Where motivation for learning success is not innate, "homework culture" may need to be cultivated, probably mostly through the persistence of the teacher and practice. Verbal reminders of homework assignment existing, and of the fact of viewer statistics being followed by the teacher had a significant but very short-term effect. Attaching a written, submission-requiring, assignment to the video lecture was considered to be the most effective homework completion measure; but it was also found to only be practical for one-time use, and worked against the purpose of Flipped Classroom strategy. The same issues are associated with the use of a questionnaire (effective, but single use). The implementation of a short online quiz was found to be the most convenient measure, and

thus the answer to the research question, through its combining of the necessity of watching the video lecture on one hand, and the ease of creation and use on the other hand. Perhaps a long-term solution is a combination of different measures: regular reminders, active motivation, and ensuring that the students really need the contents of videos for the class itself, as well as specific tasks attached to the passive content, seem to be the long-term solutions. The final research question was concerned with what was the students' opinion on this type of teaching. The participating students generally expressed favourable views of their learning experience with the Flipped Classroom strategy. The majority of the students claimed they preferred the Flipped Classroom to traditional teaching approaches. The participants especially pointed out the effectiveness and practicality of the use of videos in language skills improvement.

Flipped Classroom teaching strategy is not very easy to implement effectively. It counts on increased investment on the part of the teacher, and greater learner autonomy and responsibility for one's own learning on the part of the student. The struggle is real, but so appears to be the success, which makes the effort worth it. Hopefully, we will see more of it in the future of Flipped Classroom in foreign language teaching. Much still remains to be researched.

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Appendix 1

1. The classes are (select all that apply):

- Interesting;
- Boring;
- I like them;
- I do not like them;
- Most of the time I do not understand what the teacher says;
- Easy;
- Hard;
- A lot of work;
- Other (explain)

2. How interesting do you find the classes?

- (1-10; 1="They are not interesting at all", 10="They are very interesting")

3. How much, in your opinion, do the classes help you improve your level of the English language?

- (1-10; 1="They do not help me at all"; 10="They help me very much")

4. If given choice, would you prefer standard classes (without the video lectures)?

- Yes/No

5. In your opinion, the videos are (select all that are true for you):

- I do not watch them;
- They make sense;
- They are too long;
- They are easy (to understand);
- They are difficult (to understand);
- They do not interest me at all;
- They are extra homework and I do not like that;
- They are extra homework without completion control and I do not do extra homework;
- I like them;
- I do not like them;
- They are interesting;
- They are boring;
- They help me improve my English;
- They help me prepare for classes;
- They do not help me at all;
- They are chaotic

6. Which type of the video lectures is best for you?

- A narrated presentation (like the ones we are using now);
- A video capturing the teacher explaining the theory;
- A video in which you can see both the teacher and the presentation at the same time;
- A different type (explain)

7. Which (type of material) do you prefer: the videos or the texts (transcriptions)?

- The videos; - The texts; - I do not use either; - Both at the same time

8. Do you print out the transcriptions (texts of the videos)?

- Yes/No

9. Typically, when do you watch the videos?

- The day they are published;
- Friday or Saturday;
- The day before the class (= Sunday);
- On Monday (the day of the class) just before the class;
- I watch them more than once (on different days);
- I do not watch them

10. So far we have had 7 video lectures: how many of those have you opened?

- None; - 1; - 2-3; - 4-6; - All

11. So far we have had 7 video lectures: how many of those have you watched in their full length?

- None; - 1; - 2-3; - 4-6; - All

12. What motivates/would motivate you to watch the video lectures? Put your answers in order: from the most motivating on the top to the least motivating on the bottom.

- The teacher asking if I watched the video;
- The teacher saying that the video includes important information that I am going to use during the next class;
- Having a compulsory assignment which cannot be completed without watching the video;
- If there is no control;
- An online quiz on the topic of the video - with multiple choice questions;
- An online quiz on the topic of the video in which you have to write the answers;
- Something else (explain).