Do Students Listen to Flipped Learning Recordings?

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Abstract

Over the past few years, the ideology of Flipped Learning has gained some popularity as a teaching method, at all levels of education. The interest is rapidly growing and extensive research is being done on how to optimize the use of the Flipped Learning methodology. At all levels of education, the ideology is always used the same: the actual input takes place outside the classroom but the dissemination happens in the classroom.

I will in this article present a survey conducted in the autumn of 2017, during the course Spoken and written language, which was taught according to the Flipped Learning ideology.

The central questions posed was whether the students had listened to the recordings published by the teacher, whether the students took the tests that were designed to encourage listening of the recordings, and whether students found that the tests were a source of motivation to listen to the recordings.

Keywords: Higher Education, Flipped Learning, Videos and recordings

1. Introduction

Teaching consists not only of communicating knowledge to students. It also entails searching for the correct way of conveying that knowledge to students in the most effective, relevant and technically accessible way. When organizing an academic course, it is natural to ask what teaching methods are most suitable for that particular course.

Over the past few years, the ideology of Flipped Learning has gained some popularity as a teaching method, at all levels of education. Interest in teaching with the Flipped Learning method is rapidly expanding, and extensive research is being done on how to optimize using the Flipped Learning methodology in teaching.

On these pages, I will add to this research and present a survey conducted in the autumn of 2017, during the course *Spoken and written language*, which was taught according to the Flipped Learning ideology. The course was attended by 127 on-site and distance students in the Teacher Education Department of the School of Education at the University of Iceland.

The central questions posed asked whether the students had listened to the recordings, whether the students took the tests that were designed to encourage listening, and whether students found that the tests were a source of motivation to listen to the recordings.

2. Flipped learning

There are different ways of using the Flipped Learning methodology, but the ideology is always the same: the actual input to teaching material takes place outside the classroom but the dissemination happens in the classroom. At home students do preparation work for the classroom, which includes watching lecture videos and doing course readings. With these undertakings, they are completing the required preparation work, but then have to arrive in class ready to start solving problems, analyzing text, and/or investigating solutions [1, 2].

This is, of course, not a new teaching method; students have always read the study material at home or focused on the subject outside the classroom to prepare themselves to attend class. But in traditional teaching, the students often had to attend the lectures in order to listen to the teacher

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review what they had read at home and follow up with questions. The Flipped Classroom is, however, a hybrid approach to learning, using technology to move the classroom lecture into "homework" territory while using face-to-face classroom time for interactive learning. This approach in higher education usually involves faculty development of a video-recorded lecture (lecture capture) that is made available to students for viewing outside the classroom [3, 4, 5].

Therefore, video recordings are one of the main features of the Flipped Learning method, as the ideology is taught today [6]. However, the main claim of those opposed to Flipped Learning is that the students do not watch or listen to the recordings. Likewise, it has been argued that the recordings make the same students not read the textbooks.

But in traditional teaching it is not any easier. Teachers rarely rate how well the students have read the subject before they attend lectures. Whether it is watching videos in the Flipped learning methodology or completing a reading in the traditional teaching format, the teacher can, in theory, require that the task be completed but cannot guarantee that it has actually been done. The students always need to be engaged in the process to ensure its completion [7].

Many of those who teach according to the Flipped Learning method have, however, found it instructive to have some information about how many students watch the recordings posted on the internet and how best to encourage students to listen to them. That is exactly what is being looked at in this study.

3. Research

The research was conducted in the course *Spoken and written language* at The University of Iceland. The teaching structure of the course was the Flipped Learning methodology; short recordings were uploaded to the Moodle 3.3 LMS. Then the students took written tests that measured their knowledge of the material - five tests in total.

After the semester, a survey was conducted to analyse the experience of students exposed to the Flipped Learning method. Students were asked if they had listened to the recordings that were put on Moodle, whether they did the tests that were posted and whether the tests had worked as encouragement for listening to the recordings.

4. Method

Questions were sent to 127 students via a survey available on the Moodle platform. The questionnaire was open for 12 days, from $10^{th}-22^{nd}$ November. The survey was anonymous and could not be traced back to participants. A total number of 76 students, 36 on-site and 40 distance students, 15 men and 61 women, responded with a response rate of 59.8% percent. The survey was therefore statistically significant. The data were applied for analysis using PSPP.

Quantitative methods were used in administering the questionnaire, which consisted of 17 multiple-choice questions and one open question in the end, which participants could respond to in detail with unfiltered, unrestricted opinions. For the purpose of this research three central questions were highlighted, as they allowed for the best representative interpretation of the subject analysed:

- Did the students listen to the recordings?
- Did the students take the Moodle tests?
- Did the tests act as encouragement to listen to the recordings?

5. Results

5.1. Recordings

In the course, ten lecture recordings were put on the web. In the survey it was looked at how many students watched the six recordings that directly connected with their work in writing a final essay, which was handed in at the end of the semester. All of those recordings were about how to write academic text(s).

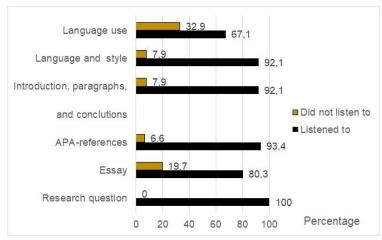


Fig. 1. What lectures did you listen to?

Figure 1 shows that over 90% of students listened to four out of six lectures. The listening ratio was however 80,3% for the lecture about writing academic essays and 67,1% for the lecture about the use of language.

If the results are analysed with regard to age and/or students registered as on-site or distance students, there is no significant difference between the groups, as shown in table 1. Because of how small the age distribution was, two groups were created, a group of those who are 19-25 years old and those who are 26 and older.

Table 1. Is there a difference between age groups and/or distance and on-site students?

	On-site	Distance	19-25	26 > older
	YES	YES	YES	YES
Research question	100%	100%	100%	100%
Essay	77,8%	82,5%	74,4%	87,9%
APA-references	94,4%	92,5%	90,7%	97,0%
Introduction, paragraphs	5			
and conclutions	91,7%	92,5%	90,7%	94,0%
Language and style	86,1%	97,5%	86,0%	100,0%
Language use	63,9%	70,0%	62,8%	72,7%

In table 1 the results are similar to those in figure 1. The number of students listening was high, but one lecture stood out: the lecture about the use of language.

5.2. Participation In The Moodle Tests

Out of the ten lectures that were put online, I only did a Moodle test for five of them: How to make a research question; How to build an essay; How to put in references according to APA; How to make an introduction, paragraph and conclusions; What is proper language, style and the use of language. I asked about the content of the recordings and about comments that the teacher made in the lecture.

Moodle- tests	Percentage	Frequency	
5	90,8%	69 of 76	
4	5,3%	4 of 76	
3	2,6%	2 of 76	
2	0	0	
1	0	0	
None	1,3%	1 of 76	

In table 2 it is shown that just over 90% of the students took all five tests. No difference appeared between age groups or based on whether students were on-site or distance students.

5.3. Were the moodle tests a source of motivation?

As presented in chapter 5.1, 90% of students listened to the recordings in four out of the six lectures. Also, 90% of students did all five Moodle tests, which can be considered quite high. This level of participation raised the question as to whether the Moodle tests were a source of motivation to listen to the corresponding recordings.

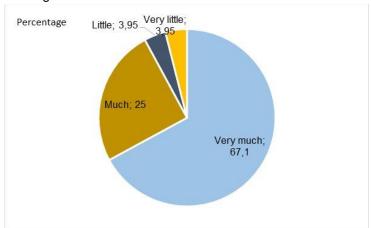


Fig. 2. Were the Moodle tests a source of motivation to listen to the recordings?

Figure shows that 92% of students feel that the Moodle tests delivered high or very high encouragement to listen to the recordings. Only 7.9% of students or six out of 76 feel that the Moodle tests offered little or very little encouragement for listening to the recordings. There is no significant difference between age groups or based on whether students were on-site or distance students.

These results show that there can be an encouraging effect to have students take a test after listening to the Moodle recordings.

6. Conclusion

With a short survey, corroboration has been added to the body of work that supports the Flipped Learning method. The primary question asked whether students listened to the recordings that they had access to in the *Spoken and written language* course. Also, further questions probed whether

students took the tests that were designed to encourage listening and whether students found that the tests were a source of motivation to listen to the recordings.

In all three factors assessed, the results were decisive, and in all cases, no significant differences were observed between age groups or based on whether students were registered on-site or by distance learning. Over 90% of students listened to four of the six lectures that were uploaded, and in the same way 90,8% took all five Moodle tests provided. A full 92% believed that the Moodle tests had been very good or great motivation to listen to the recordings. Only 7,9% of students or six out of 76 students considered that the Moodle test provided little or very little encouragement to listen to the recordings. These results show that being able to take tests after listening to the recordings has an encouraging effect on students.

In the open question comments, where students wrote their comments on various aspects of the course, they expressed satisfaction with the Moodle tests, but also added that they could be more demanding and that there should be more questions. The reason for this could be that the correct answer always followed each question and therefore there was some value to these answers.

This was only a small survey and shows results from only one particular course. The results are, however, decisive and a definite indication that the tests applied after listening to lectures can be an incentive for students to listen to the recordings. Those who doubt the effectiveness of recordings and posit that students do not listen to recordings should consider these findings.

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