



The Search for the one Correct Way

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Abstract

Teaching entails a constant search for the one correct way of instruction. When organising courses, it is natural to ask what teaching method is most suitable. Answers have recently been sought to this question in the course Spoken and Written Language, which more than one hundred on-site and distance students attend in the Teacher Education Department of the School of Education at the University of Iceland. Various methods have been tried, and in the autumn 2013 semester, the method was flipped teaching. Many teachers practising today are focused on flipped teaching. Instructors in primary and upper secondary schools have experimented with flipped teaching, and the most reputable universities in the world, such as Harvard, MIT and University of California, Berkeley, now also offer such instruction.

Flipped teaching consists of turning teaching methods upside down. The Spoken and Written Language course was organised using a flipped teaching methodology. Short recordings were uploaded (on Moodle) and group sessions were then organised in which the material covered in the recordings was worked with. Students had a choice of attending workshops either in the classroom or online.

An introduction will be given of the results from actually teaching according to the methodology of flipped teaching, using the experience gained in the course. The main question for which an answer is sought is: Does it work to use flipped teaching in higher education? This article focuses on students' use of the online lectures, how they value this form of teaching and the question as to whether this teaching method was successful in the course.

1 Introduction

Since the late eighteenth century, methods of teaching have to a large extent stayed the same. Still to this day, the teacher is in the foreground standing lecturing in front of a group of differently motivated students. Many different teaching methodologies have been introduced and tried through the years, and they have certainly changed to varying extents the way we teach. However, the teacher is still stuck in the foreground, communicating the material to a group of students, who then assimilate the knowledge to a large extent away from the classroom. But even if the methodological changes have been small, and often it seems the way of organising courses is cemented into the system, the thirst for new ways of communicating knowledge still exists.

A course titled *Spoken and Written Language* is taught in the School of Education at the University of Iceland. More than one hundred on-site and distance students attend the course each autumn term. Through the years, the course has been used to test various teaching formats. In the autumn semester of 2013 another experiment was done in the course. This time the experiment aimed to test the "flipped teaching" method.

This article introduces the results of flipped teaching as a method of instruction, using the experience from the course *Spoken and Written Language*. The main question to answer is: Does flipped teaching work in higher education? This article focuses on students' use of the online lectures, how they value this form of teaching and the question of whether this teaching method was successful in the course.

2 Flipped teaching

Flipped teaching is a method that has caught the interest of many educators of today. The method was mostly developed by Jonathan Bergmann and Aaron Sams (2012) and has been used by educators in all levels of education, from primary schools and upper secondary schools to the most



reputable higher education institutions in the world, such as Harvard, MIT, and University of California, Berkeley.

The method employed by flipped teaching consists of turning teaching upside down. The actual knowledge acquisition by students takes place on their computers at home, using recordings that have been posted online (Bergmann and Sams, 2012; Kettle, 2013). Students sit by the computer, watch and listen to recordings from their teacher. The students then review the material as often as it suits them.

This method of teaching can have a great deal of positive influence. For instance, the method allows students more flexibility in selecting when and where to view the lectures. Classroom time becomes more collaborative, active and engaging compared to the typical in-class lecture. With flipped teaching there is also a shift in the learning culture, as the focus moves to the student away from the lecturing (McDonald and Smith, 2013).

Flipped teaching then requires instructors to possess, as well as pedagogical skills, a great deal of knowledge about information technology. They must communicate effectively as well as having the technical know-how to prepare learning material that strengthens the transference of knowledge.

Andrew Miller (2012), for instance, has addressed how to conduct flipped teaching in his writing. He argues that just because something is recorded, or if one uses recorded material, it does not mean that the students will want to watch. It is still a lecture. The aim is to create recordings that inspire students' curiosity and their interest in assimilating the knowledge presented to them. The material has to be presented in an interesting way. The hand-out material that is then distributed in classes and workshops has to relate to the material presented in the videos. This is the primary challenge when conducting a course with flipped teaching. In the course *Spoken and Written Language*, the challenge was exactly that: creating material that inspired students to review it and prepare before coming to workshops.

3 Spoken and Written Language

The course *Spoken and Written Language* is taught in the first semester of study in the university's education program. The group of students consists of both on-site and distance-learning students. In the course, an emphasis has always been placed on providing on-site and distance students with the same learning material. Both traditional on-site and online teaching methods have been used. To combine these two methods of teaching requires instructors to focus on getting the best from both worlds. One must realise that conducting online teaching is in many ways different from conventional classroom teaching. It requires technical capabilities as well as the ability to organise teaching material in such a way that it is easily accessible through the technology used (Conrad and Donaldson 2011).

The dual challenge and success of the *Spoken and Written Language* course has been the open access to all new technology that is available and looking for ways to combine on-site and distance teaching. Flipped teaching is great tool in achieving the goal of making both methods of learning equal. In the autumn semester of 2013 the course was changed by using short recordings, uploaded on Moodle, in the spirit of the flipped teaching method. Group sessions were then organised in which the material covered in the recordings was worked with. Students had a choice of attending class or workshops either in the classroom or online. In this regard, it did not matter whether students had registered as on-site or distance students. After the autumn semester of 2013, a short research project was carried out to find out if flipped teaching worked in higher education.

4 Research

The specifics of the research are described below.

One-hundred seven students completed the course *Spoken and Written Language*. Recordings were prepared using the eMission software, which tracks how many students listened to each recording.



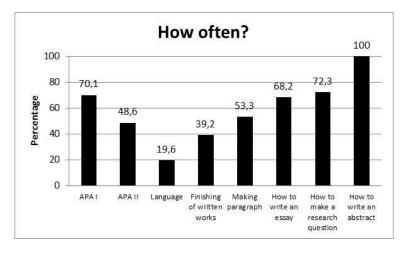


Fig. 1: How often did students listen and watch?

Average use of recordings varied a bit according to the subject discussed, from 100% down to a little less than 20%.

It is clear that interest in a lecture on the APA system greatly diminishes after first listening to the recording, from 70% down to just over 48%. Only a fifth of students listen to a recording on language use and a little less than 40% listen to instructions on the finishing of written works.

There is greater interest when it comes to instruction in composing paragraphs, structuring essays, and writing research questions. All students open a recording on how to write a letter to their teacher. This is perhaps not surprising, as this was the first subject of the course.

In spite of the fact that students' use of recordings could be more substantial, a survey that measures students' attitude towards the course arrangement reveals that they were very pleased. The response rate in that survey was 61.1%.

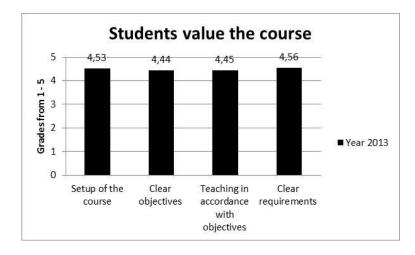


Fig. 2: How did the students value the course?

Grades for all elements are almost as high as they can be, the highest grade being 4.56 out of 5.0. The overall grade awarded to the course *Spoken and Written Language* was 8.16 out of 10.

5 Discussion

After the course, students were asked to answer questions as part of a qualitative research study. All the students felt that the flipped teaching method was a success in the course. There was no difference in opinion between on-site and distance students. All participants answered that they felt the structure of flipped teaching was convenient for them and they would not have preferred to have





the course taught in the conventional format, i.e., having lectures in a classroom or listening to lectures at their full length (2 x 45min) on Moodle.

The students felt that the recordings, as conducted, were the right choice and that they prepared students well for the projects carried out in the workshops. In addition, it was revealed that students who participated in the workshops were very active in that work. The same can be said about students who chose to finish their project on Moodle. Generally, all the students were willing to participate more and were better prepared to conduct projects.

These results show that students in the course felt that the flipped teaching method was convenient for them. They felt the organisation of the course was good and that they benefitted from being able to choose for themselves when they study and how quickly they go through the teaching material. This therefore supports the theory that flipped teaching can belong in higher education where there are great demands for individual learning.

The course *Spoken and Written Language* will be taught again next autumn. Although the results from the flipped teaching method used last autumn were resoundingly good there is always the possibility of improving the teaching methods. Bergmann and Sams (2012) suggest in their analysis that there should be should be a listening requirement, i.e., students must demonstrate that they have listened to the course. This is one aspect of flipped teaching that has not been tried in the course *Spoken and Written Language*.

Next autumn, an experiment will be carried out in the course, which will require students to show that they listened to the recordings before they participate in workshops. A way of verifying this might be to require students to answer one question from the teacher that related to the recording before being allowed to attend each workshop. This will be an experiment about developing and trying methods within flipped teaching. For instructors, the question will always be, "In what other ways can we develop flipped teaching to improve the method of transferring knowledge?". However, I feel that the question of whether flipped teaching belongs in higher education has been answered.

Sources

- [1] Bergmann, J. and Sams, A. (2012). Flip your Classroom. Reach Every Student in Every Class Every Day. Eugene, Or.: International Society for Technology in Education.
- [2] Conrad, R. M. and Donaldson, J. A. (2011). Engaging the Online Learner. Activities and Resources for Creative Instruction. San Francisco, Jossey-Bass, A Wiley Imprint.
- [3] Kettle, M. (2013). Flipped physics. Physics Education 48(5). 593-596.
- [4] McDonald, K. and Smith, C. M. (2013). The Flipped Classroom for Professional Development: Part I. Benefits and Strategies. The Journal of Continuing Education in Nursing. Vol 44, No 10, pages 437-438.
- [5] Miller, A. (2012). Five Best Practices for the Flipped Classroom. Edutopia.