

CHAPTER 6. STUDENT PERCEPTION OF ACTIVE LEARNING METHODS IN A POLITICAL SCIENCE COURSE

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Introduction

This scholarship of teaching and learning (SoTL) study reports on a teaching innovation based on active learning methods, which was implemented in a political science course at Masaryk University in Brno. The first-half of the course was based on a teacher-centred approach using traditional lectures, which might, as literature claims, merely lead to surface learning as opposed to deep learning (Biggs and Tang 2011). In order to prevent this, the teaching innovation encouraged students to actively engage with the topics in the second half of the course and aimed to help them understand these topics in depth. I evaluated the outcomes of the teaching innovation based on students' feedback on the seminars, classroom observations, and the analysis of student minute papers. In this chapter, I report on student perceptions of active learning methods and link these to how I could see my students learn using these methods.

Students appreciated the active learning methods that were employed, stating that they achieved a better understanding of the studied themes after the seminars in which they actively worked with a topic. Aside from that, they perceived student to student interaction as more beneficial for their understanding than student to teacher interaction as became evident from the analysis of the minute papers. As their seminar teacher I was very satisfied with the level of student participation in those seminars which were based on well-designed active learning tasks. My observations confirmed that student participation decreased when active learning activities were not planned well.

Description of the teaching challenge, the pedagogic concept applied, and the expected outcomes of the innovation

The main teaching challenge that inspired this innovation consisted of motivating students to engage actively with the topics after they had spent the first half of the course passively listening to lectures. Also, most course participants have not been in the higher education system for a long

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time or might not have come into contact with active learning methods before, as the course was designed for bachelor students. Another challenging aspect was that for most students the course was not held in their native language, but was taught in English instead. This and the comparably large size of the group (twenty-six students) contributed to some students being intimidated and reluctant to actively participate in activities during seminars.

The concepts of active and passive learning distinguish two different ways of how people learn, which significantly influences how well they understand the things they learn, whether they can use the knowledge in other contexts, and how long they will remember the learned material (Hahn 2016). In passive learning approaches, students are perceived as 'empty vessels' that are to be filled with knowledge by their teachers (Herr 2007). The knowledge which is acquired in such a way and in such an environment is usually superficial and will not stay with students for a longer period of time. Moreover, the approach often demotivates students as they are not doing anything else than listening and are not actively involved in the learning process. In this type of learning the teachers and their knowledge instead of the students and their learning that are the focus of the learning process (Hahn 2016).

Contrary to passive learning approaches, active learning methods use in-class discussions, group work, the sharing of experiences, connecting material with practice and other activities which can be applied in larger as well as in smaller groups (Surgenor 2015). The teacher undertakes the role of a coach or instructor who guides and leads the students (McManus 2001). Active learning might include student to teacher interaction but above all it strongly encourages various types of student to student interactions, which were already identified in the literature as being highly beneficial for learning (Hurst et al. 2013). Active learning, also called rich learning, is usually perceived by students as more motivating and leads to in-depth understanding and conceptual understanding (Hahn 2016). Active learning ensures that the acquired knowledge does not remain superficial and short-term and promotes an in-depth understanding of the topics discussed. Due to the rather passive approach taken in the first half I found it important to switch to active learning in the second-half of the course when I began teaching my seminar sessions. I hypothesized that student participation would increase when they would consider active learning methods to be beneficial for their learning and understanding.

Nature of the innovation

The teaching innovation was implemented in a seminar group of twenty-six undergraduate students participating in the mandatory International Security Policy course which is part of the political science degree program 'Security and Strategic Studies' at Masaryk University in Brno. During the first half of the course students were introduced by other professors to different

security policy concepts in a large class setting of around one hundred students in a traditional lecture format (Allain 2017). Subsequently, the students were split into three seminar groups in which the theories were to be illustrated using case studies selected by the respective seminar leaders (including myself).

The implemented innovation consisted of different active learning methods during my seminars, including an icebreaker in the first seminar, various discussion formats such as plenary and group discussions, brainstorming, and the drawing of mind maps, as well as a role play session. The role play session was organized in the form of a mock trial in small groups (of three to six students) and entailed a simulation of a court procedure connected with the seminar topic. Students were assigned to either represent the judge, prosecutor or the defendant who was accused of travelling as a foreign fighter to a different country and later returning to the country of origin and allegedly trying to spread radical ideas. Students received a case study and were then asked to argue their cases based on the assigned roles and simulate the process in court.

The organizational framework for the course was predefined by the department and there was no room for me to make adjustments to these framework conditions which related for example to the assessment methods, the structure of the course, and the requirements to pass it. My tasks included selecting the topics and literature for my seminar group and assessing the position papers which contributed towards student grades. Overall, this course already underwent significant changes in the years prior to the introduction of this teaching innovation and became a lot more student-centred than before. It originally consisted only of frontal lectures where students learnt via listening, but later seminars were added where students were expected to learn via discussions. I taught six seminar units during which three different security policy concepts were illustrated based on selected case studies. An overview of the seminars and the employed active learning methods together with the security policy topics and case studies is provided as an analysis of the results in table 3 (see the Findings section).

Data collection and research methods

Minute papers were used as a qualitative instrument to collect feedback from students (Stead 2005). After each seminar students were asked to briefly answer one positively and one negatively formulated question and in the last seminar they were asked to complete at least two out of four questions that referred to all seminars to get a more general idea of what students perceived as successful and where improvement was required. All questions can be found in table 1.

Table 1. Questions used for the minute papers after each seminar

Seminar	Questions
1	What was the most useful learning point from the session? What you did not understand from this session?
2	What was the most useful learning point from the session? What would you like me to stop doing, because it hinders your learning?
3	What did you find most difficult from the session? What would you like to learn more about?
4	What did you find most difficult from the session? What do you do that hinders your learning?
5	What part/content of the class did you find most useful to learn more about the topic? Why?
6	The thing I found most helpful/difficult was... The most useful thing/skill I learned was... The thing that most changed the way I learned was... What made learning most effective for me was...

Source: Moore (2009).

I analysed the minute papers via content analysis (Shannon and Hsieh 2005, Halbmayer and Salat 2011) and an open coding system (Kohlbacher 2006), focusing on the content of the feedback and coding the complete text corpus I had compiled from all minute papers (N=107). In the process of coding I developed eight different coding categories which subsequently served as a basis for the analysis and are further explained in table 2.

Table 2. Coding categories and rules based on responses in student minute papers

Category	Comment type	Description/Examples
1	Positive statement about active learning	Student expressed that he/she liked some of the active learning methods used in the seminar
2	Negative statement about active learning	Student expressed that he/she disliked some of the active learning methods used in the seminar
3	Miscellaneous	Comments on the discussed topics that did not belong to any other categories
4	Understanding	Students stated that they understood the topic

5	No understanding	Students stated that they did not understand the topic
6	Feedback on the position paper	Comments by students on my (negative and positive) feedback about the usefulness of position papers including both positive and negative feedback.*
7	Positive remarks on the teaching style	E.g. 'friendly approach of the tutor, patient – lecture more interesting'
8	Negative remarks on the teaching style	E.g. 'topic too complex' and 'treated too abstractly'

* Students commented on the position papers only at the end of seminar 2 and 6 during which I provided feedback on their position papers.

Aside from reading and evaluating student minute papers, I relied on my own observations of student learning in seminars, which I noted down after each seminar in order to keep an overview of whether the activities were well received or not and what must still be improved.

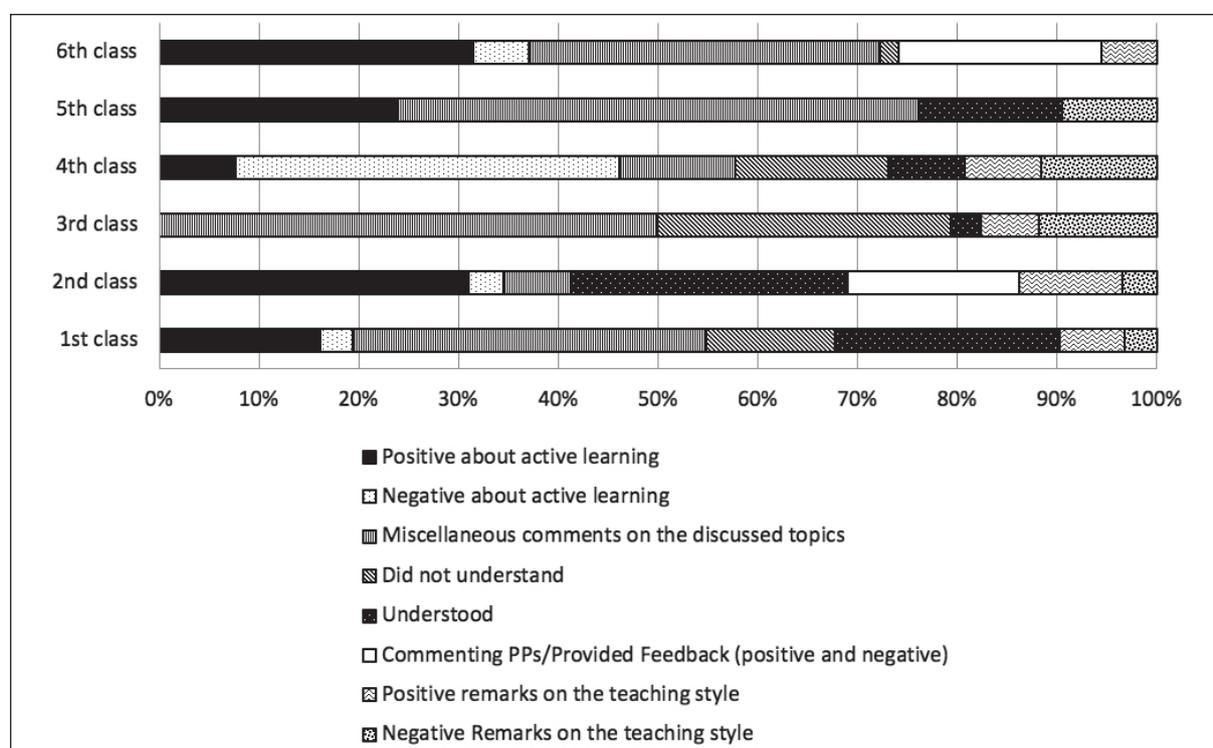
Findings

The evaluation of student minute papers for the individual seminars (see figure 1) showed that in all but the third and fourth seminars the number of positive comments on the active learning methods significantly outweighed the number of negative comments (categories one and two). Seminars one, two, five and six also received low amounts of negative comments on the employed teaching style (categories seven and eight) and students often expressed having understood the topic well (category four). Additionally, student to student interaction in these seminars was perceived to be more helpful than the student to teacher communication in seminar three. Students' low appreciation for seminars three and four was likely due to the learning method or the imperfect design and implementation of the learning activity. The third seminar, which received more negative than positive comments on the learning method, was held by a guest lecturer who heavily focused on teacher to student interaction instead of encouraging student to student interaction. No active learning task was part of this seminar, and in their minute papers many students expressed confusion about the topic (category five). The learning method in the fourth seminar, which also had a higher number of negative than positive statements on the learning methods, was probably evaluated less favourably by students because the time allocated for group work was insufficient and because the assigned reading was too complex. For the fifth seminar, student perceptions of the learning method and of the teaching style differed, as the students were satisfied with the teaching method but raised a comparatively high

amount of negative comments on the teaching style. A student commented ‘...too much information that was not presented interestingly’, which was consistent with my own observation of having made a mistake when preparing the lesson based on a book on the topic.

Student views on the position papers and on the feedback they had received from me were mainly positive. In their minute papers students stated that writing the position paper helped them to understand the topic. One student wrote that ‘writing papers was fun and an effective way for me to learn’ and another student liked the model of having a seminar on a topic, writing a position class paper, and having another seminar on the topic.

Figure 1. Analysis of the minute papers written after each seminar



Students not only perceived the various active learning methods as useful for their learning, but their positive evaluation of these methods translated into a good level of participation in the individual seminars. All students participated in the group discussions and other active learning methods with the exception of seminars three and four, which were either not based on active learning or the active learning exercise was not designed well. Detailed information on the connections between the active learning methods, student perceptions of these methods, and my observations of student activity are presented in table 3. The study thus confirmed the expectation raised at the beginning of the course when students considered active learning methods beneficial for their learning and understanding, and their participation in seminars was noticeably higher than in seminars where students did not appreciate the learning method.

Table 3: Overview of case studies, seminar topics, active learning methods, student perceptions and my observations

Seminar number and case study	Seminar topic	Active learning methods used	Students comments and/or reactions in minute papers	Observations on student learning
1 Foreign Fighters Introduction	International Security Policy Law	Group discussion based on two prompting questions and a summary of discussion results in class	Many positive student reactions concerning the active method, few critics on the icebreaker	Students engaged well in icebreaker and group activity; took longer than expected
2 Foreign Fighters Discussion	International Security Policy Law	Mock trial – Students taking on different roles based on a case study	Many positive comments made by students, the mock trial praised as an interesting experience	All groups actively working; even if not at the same pace
3 Security Policy of Israel Introduction	International Security Policy Actors	Frontal lecturing by a guest lecturer; only teacher-student interaction	Students frequently expressed confusion about the topic	Only a few students actively involved, mostly teacher-student interaction
4 Security Policy of Israel Discussion	International Security Policy Actors	Reading a text during the seminar and discussing it in smaller groups	Critique of group work based on text reading	Students got stuck in group work but asking individual students for their opinions worked well

5 German Foreign and Security Policy Introduction	International Security Policy Development	Brainstorming and the drawing of mind maps, both in small groups	Students said the topic was not presented interestingly, however, both parts of the group work were evaluated positively	All students were actively involved, students were discussing and going through their notes in groups
6 German Foreign and Security Policy Discussion	International Security Policy Development	Discussing the topic in class with all students	Positive overall evaluation of the seminar and the active methods by students	Most students were engaged in the discussion and were bringing up their own questions as well

Limitations and suggestions for future improvement

Although the above results of the study are encouraging, it is important to also take into account the study's limitations. First, due to the relative shortness the study could not address the long-term effects of the active learning methods. Second, other factors for which this study does not control may have influenced the achieved results, such as differing complexity of the selected topics, or personal factors etc. Third, in this paper I explored and confirmed the relationship between the use of active learning methods and student understanding based on somewhat sporadic student self-assessment input. In future analyses, students should be specifically asked about their understanding after every seminar in order to ensure that the data collected will be sufficient.

Additionally, other data might be used as indicators for student understanding, such as the results from small quizzes or students' summaries of the main lessons learnt from each seminar (Briggs 2014). Student position papers could have been a natural choice in this particular context except that they were written after the first of the two seminars addressing a topic, and thus could not provide a full representation of student learning on the topic. Not surprisingly, when I analysed the position papers no correlation could be established between the learning methods and student performance. It is unclear whether the results are due to a lack of impact of active learning methods or the partial exposure of students to a topic. The data collection methods suggested above could remedy this situation.

In order to help students improve their learning in the future, seminars will continue to be based on student to student interaction. Although the innovation was largely successful, it did not function entirely as planned. Improvement is needed for the role play session which was evalu-

ated very positively by the students despite all working groups getting stuck at a certain point. This could be avoided in the future by providing more specific and more extensive instructions to students. Another active learning method that left me and the students a little frustrated took place during the fourth seminar when students were assigned to read a text and discuss it in small groups. The selected text was too long and complex and the groups were not able to finish the task in time. When this became evident, I interrupted the group work with a video I had prepared, which was appreciated by the students and helped ending the seminar in time. In the future I will select shorter texts for active tasks during seminars to avoid problems such as described above. This teaching innovation convinced me that if the activities are planned well and properly integrated into the seminar, they can lead towards improved student understanding.

References

- Allain, R. (2017) 'The traditional lecture is dead. I would know – I am a professor', *Wired*, available at <https://www.wired.com/2017/05/the-mechanical-universe/>, accessed 26 January 2018.
- Biggs, J. and Tang, C. (2011) *Teaching for quality learning at university*, 4th edition, Berkshire, UK and New York, US: Society for Research into Higher Education & Open University Press.
- Briggs, S. (2014) '21 ways to check for student understanding', *informedED*, available at <https://www.opencolleges.edu.au/informed/features/21-ways-to-check-for-student-understanding/>, accessed 26 November 2018.
- Hahn, B. (2016) 'How people learn: active vs passive learning', *The Learning Hub*, available at <https://learninghub.openlearning.com/2016/01/08/how-people-learn-active-vs-passive-learning/>, accessed 26 November 2018.
- Halbmayer, E. and Salat, J. (2011) 'Offenes kodieren [Open Coding]', *Qualitative methoden der kultur- und sozialanthropologie* [Qualitative methods for cultural and social anthropology], available at <https://www.univie.ac.at/ksa/elearning/cp/qualitative/qualitative-119.html>, accessed 27 November 2018.
- Herr, N. (2007) 'Passive vs. active learning', *Internet Resources to accompany 'The Sourcebook for teaching science'*, available at <http://www.csun.edu/science/ref/pedagogy/active-passive/active-passive-learning.html>, accessed 26 November 2018.
- Hurst, B., Wallace, R. and Nixon, S.B. (2013) 'The impact of social interaction on student learning', *Reading Horizons* 52:4, pp. 375-398.
- Kohlbacher, F. (2006) 'The use of content analysis in qualitative content analysis in case study research', *Forum: Qualitative Social Research* 7:1, available at <http://www.qualitative-research.net/index.php/fqs/article/view/75/153>, accessed 27 November 2018.
- McManus, D.A. (2001) 'The two paradigms of education and peer review of teaching', *Journal of Geoscience Education* 49:5, pp. 423-434.

Moore, I. (2009) 'A guide to practice: evaluating your teaching innovation', *University of Birmingham*, available at <https://www.birmingham.ac.uk/Documents/college-eps/college/stem/evaluating-your-teaching-innovation.pdf>, accessed 31 January 2019.

Shannon, S.E. and Hsieh, H. (2005) 'Three approaches to qualitative content analysis', *Qualitative Health Research* 15:9, pp. 1277-1288.

Stead, D.R. (2005) 'A review of the one-minute paper', *Active Learning in Higher Education* 6:2, pp. 118-131.

Surgenor, P. (2010) 'Teaching toolkit: large and small group teaching', *University College Dublin Teaching and Learning*, available at <https://www.ucd.ie/t4cms/UCDTLT0021.pdf>, accessed 28 November 2018.



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