CHAPTER 11. STUDENT PAIR WORK AS A TOOL TO PROMOTE ACTIVE LEARNING AMONG STUDENTS IN KOSOVO

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Keywords: active learning, Bloom's taxonomy, classroom observation, interactive lecture, pair work, psychology, quasi-experiment, teaching large groups

Introduction

In this chapter, I present the outcomes of a teaching innovation project that was designed for the Cultural Psychology course offered at AAB College in Kosovo. Cultural Psychology is a mandatory course for students in the psychology degree programme and is attended by forty to seventy students. The aims of this course are (1) to introduce students to the main concepts and theories of cultural psychology and their applications and (2) to enhance students' capacity to understand and analyse cultural influences on human behaviour. The course consists of fifteen lectures offered on a weekly basis. My responsibilities for the course were to design and teach the course, including assessing students.

Students usually remain passive in this course, which could be due to the preferred teaching method in our college. Teaching large groups is mainly done using the traditional lecturing format. The instructor is expected to transmit information to students though lectures using PowerPoint slides. Instructors most often use multiple choice or some other form of written tests to assess students. These neither require nor encourage students to become actively involved in the learning process.

To address the challenge of the low level of student activity, I used pair work and asked students to engage with the material presented during the lecture to stimulate their participation and learning. I expected that pair work would have a positive impact on both the quantity and quality of students' participation in the classroom. I also assumed that students engaged in pair work would acquire more knowledge of the course material than students who learnt via the traditional lecturing format. I found that pair work had a positive impact on the quantity of students' participation in the classroom and that students who participated in pair work learnt more than their peers who were exposed to lecturing only. Pair work had a positive, although limited, impact on the quality of students' participation in the classroom because most student questions and comments focused on the clarification, understanding and application of concepts rather than on analysis, synthesis or evaluation.

The teaching challenge

The teaching challenge that prompted me to innovate the course was the lack of active participation among students. Passive student behaviour is often observed in large group settings with traditional lecturing, and is attributed to the many students in the classroom because most students may not have the time or space to express their opinions in such a teaching environment. Another reason for the lack of participation can be students' insufficient engagement with the material and their focus on memorization, which is usually associated with lower-level thinking skills in Bloom's taxonomy (Schreyer Institute for Teaching Excellence 2018).

Addressing this challenge, ideally, would consist both of having fewer students per course and implementing innovative teaching practices so that students could enhance their higher order thinking skills. Very often, however, instructors like me have no control over class size and need to turn to other tools to deal with teaching challenges. Therefore, I used pair work activities to address the lack of active participation in this large group setting, ultimately aiming to prompt students to engage in learning associated with higher-level thinking skills.

Teaching innovation to promote active learning in a large group setting

Passive and active learning describe two perspectives of teaching. Passive learning is associated with traditional lecturing where the teacher is the presenter and the student is the passive recipient of information. Conversely, in active learning the teacher is the supervisor of the teaching process and students learn through reacting and doing (Ramsden 2004). Students do more than just listening: they engage in activities that require higher-order thinking, such as analysis, synthesis and evaluation (Bonwell and Eison 1991).

Extensive evidence points to the need for teaching strategies that promote active learning. Students involved in active learning are better at retaining the material than passive learners (McKeachie 1972). Active learning promotes students' thinking and writing skills and correlates with higher levels of academic achievement. A significant number of students have learning styles other than learning through listening and generally prefer active engagement to being passive recipients (Bonwell and Eison 1991). Therefore, instructors should be knowledgeable about active learning strategies and integrate them into the teaching process.

There are various ways to promote active learning in large group classes with the traditional lecturing format. For instance, Ruhl et al. (1987) showed the benefits of pausing three times for two minutes each during the lecture so that students can clarify notes in pairs to acquire knowledge of the course material. Menges (1988) reported that implementing non-assessed test quizzes immediately after the lecture increased students' retention of the material. Asking students to respond to a question in pairs/groups, or demonstrations of experiments in the laboratory or through videos and implementing pre- and post-test quizzes, have also been found to increase the effectiveness of lectures (Bonwell and Eison 1991).

Considering these examples, I decided to engage students in pair work to break up the monotony of traditional lecturing and, thus, to recapture students' attention and increase student participation via active learning. Student pair work has the advantage that it can be implemented in any class size. Since in large lecture rooms it is difficult for students to move around, I asked them to work with a peer sitting next to them during the two four-minute student pair work activities per lecture.

Nilson (2014) outlines many pair work activities, of which I chose to use 'pair and compare' and 'pair, compare and ask'. In 'pair and compare', students pair up and compare lecture notes, filling in what they may have missed. In 'pair, compare and ask', students additionally ask and answer questions about a concept from the lecture notes. Students were instructed to focus on questions about topics or issues that seemed unclear or needed further elaboration. Student pair work also served as a basis for a follow-up plenary discussion.

I implemented student pair work in six lectures. I selected those lectures which introduced the concepts that students generally struggle to understand. While students were discussing in pairs, I monitored some pairs and listened to their discussions. To stimulate the subsequent plenary discussion, I asked students to share their experience, if they thought they had learnt anything new during the discussion, or to raise questions.

All in all, I expected that my teaching innovation would have a positive impact on both the (a) quantity and (b) quality of students' active participation in the classroom, and (c) that the teaching innovation would lead to more learning among students who were exposed to the innovation in comparison with students who learnt via the traditional lecturing format.

Data collection and research methods

I assessed the outcomes of the innovation based on four different types of data. First, an anonymous student questionnaire was administered during the last class of the semester. Items one, two and three of the questionnaire related to the interaction of students in the class and their engagement during the pair work and was used to evaluate my expectations about student activity. Items four, five and six focused on evaluating whether pair work helped students to clarify and understand the concepts covered during the lectures. Item seven asked students if pair work assisted them to get better grades on tests (for the exact questions see table 1). These four items allowed me to evaluate the impact of the innovation on student learning. Responses to each survey question were recorded on a 5-point scale, ranging from 1 (strongly disagree) to 5 (strongly agree). I used descriptive statistics with the help of SPSS 21 to analyse students' responses to the questionnaire.

Table 1. Frequency of student responses to questionnaire items

No.	Question	Strongly disagree	Disagree	Neither disagree nor agree	Agree	Strongly agree	Total Responses
1	I felt engaged during student pair work.	5 (7.93 %)	8 (12.70 %)	7 (11.11%)	24 (38.10 %)	19 (30.16 %)	63 (100 %)
2	Student pair work made the lecture more interactive.	0 (0 %)	8 (12.50 %)	8 (12.50 %)	21 (32.81 %)	27 (42.19 %)	64 (100 %)
3	Student pair work was a waste of time during the lecture.	50 (78.13 %)	7 (10.94 %)	3 (4.69 %)	3 (4.69 %)	1 (1.56 %)	64 (100 %)
4	Student pair work helped me process the content better.	1 (1.56 %)	8 (12.50 %)	10 (15.63 %)	19 (29.69 %)	26 (40.63 %)	64 (100 %)
5	Student pair work helped me clarify the concepts/ideas.	1 (1.56 %)	5 (7.81 %)	9 (14.06 %)	14 (21. 88%)	35 (54.69 %)	64 (100 %)
6	During student pair work we discussed a concept more thoroughly rather than simple description.	1 (1.59 %)	3 (4.76 %)	11 (17.46 %)	20 (31.75 %)	28 (44.44 %)	63 (100 %)
7	Student pair work helped me perform better on the test.	0 (0 %)	5 (7.94 %)	10 (15.87 %)	30 (47.62 %)	18 (28.57 %)	63 (100 %)

Second, I asked a colleague to visit one lecture and complete an observation protocol. My colleague attended the fifth teaching innovation lecture. The protocol included questions related to the instructor's and students' activities during the class, and thus provided me with additional information to evaluate student participation.[1]

As the third source of data, I recorded students' questions and comments following the pair work immediately after each of the five lectures[2]. I categorized the students' questions and comments based on Bloom's taxonomy, which classifies learning into six levels of difficulty: (1) knowledge, (2) comprehension, (3) application, (4) analysis, (5) synthesis and (6) evaluation. Levels one, two and three are associated with lower-order thinking skills and levels four, five and six with higher-order thinking skills (Schreyer Institute for Teaching Excellence 2018). For instance, student questions like 'what is' or 'can you recall' would be categorized as the knowledge level and 'how can we apply this concept in a particular situation' as the application level. Table 2 provides the rubrics for categorizing students' questions and comments.

Table 2. Coding student questions/comments based on Bloom's taxonomy

Levels	Domains	Type of questions
1	Knowledge	Questions to clarify facts from the lecture, terminology or definitions of concepts, like 'what is', 'can you recall'.
2	Comprehension	Questions to understand facts, terms or basic concepts, like 'explain', 'demonstrate'.
3	Application	Questions about the situations when acquired knowledge can be applied, like 'apply', 'make use of'.
4	Analysis	Questions about motives or causes behind particular ideas, like 'what is the function of', 'what ideas justify'.
5	Synthesis	Discussion about how a concept can be applied to situations different from the cases introduced by the teacher.
6	Evaluation	Critical evaluation of concepts and their applications.

Lastly, I compared the final grades of two groups of students: students engaged in pair work during the lecture (the treatment group) and students solely listening to the lecture (the control

1 The observation protocol was provided by the organizers of the teacher development course I was taking, within which framework this study was completed.

2 I did not code students' questions/discussions for the first teaching innovation class because I was preoccupied with the implementation of the teaching innovation. I recorded the data from the second to the sixth teaching innovation sessions.

group). A parallel section of the same course served as the control group. As opposed to the sixty to seventy regular attendees of the lectures in the treatment group, forty to forty-five students attended the classes in the control group[3]. Both groups were exposed to the same material, learning topics and assessment processes, but the teaching innovation was implemented only in the treatment group. In each group, grades represented student achievement in terms of gaining knowledge of concepts introduced during the course. The final grade consisted of four elements: mid-semester and end-of-semester tests, which included multiple choice and a few open-ended questions (thirty-five per cent each); a 700-word essay on an issue of cultural psychology chosen by the student (twenty per cent); and class attendance (ten per cent). Grades in Kosovo are measured on a 5 (worst) to 10 (best) scale.

Findings

First, I analysed items one, two and three in the students' questionnaire, the tally of student questions and comments that I recorded, and data from the observation protocol to see if the teaching innovation had a positive impact on the extent of students' active participation in the classroom. Most students (sixty-eight per cent) either agreed or strongly agreed with the statement that they felt engaged during the pair work. Similarly, seventy-five per cent said that pair work made the lecture more interactive. Furthermore, the overwhelming majority (eighty-nine per cent) disagreed that pair work was a waste of time. Thus, students considered pair work both engaging and beneficial to increasing classroom interactions.

Counting the frequencies of questions and comments from my recordings revealed that students posed ten questions and initiated four discussions during the plenary debriefing. This roughly equals one question or comment after each instance of pair work. While this is a rather modest number of student contributions, it is fair to assume that some of their questions had been answered and confusion had been cleared up during the preceding pair work. In addition, students need time and practice to get accustomed to speaking up in front of the whole class.

Observations of the pair discussion are encouraging: the class observer using the observation protocol gave the highest possible score to the question whether students interacted with ease during the pair work and marked the level of student engagement in the pair work 'medium'. Hence, the teaching innovation positively contributed to the quantity of students' active participation in the classroom.

Second, the expectation that my teaching innovation would have a positive impact on the quality of students' active participation received mixed support. Regarding students' self-assessment, most students (seventy per cent) responded with either 'agree' or 'strongly agree' when asked if pair work helped them process the content better, and seventy-seven per cent said that pair

3 The difference in attendance between the treatment and control groups was due to differences in enrolment: 118 students enrolled in the treatment group and 82 in the control group.

work helped them to clarify the concepts discussed earlier during the lecture. Finally, seventy-six per cent indicated that they had discussed a concept with their peer more thoroughly than merely describing it. Thus, while students believed that pair work assisted with their learning, this involved the use of lower-order thinking skills such as knowledge and comprehension, with only some indication that learning may have occurred at higher levels.

The analysis of students' questions and comments during the plenary debriefing tells a similar story. Most questions and comments (sixty-four per cent) fit levels one and two of Bloom's taxonomy, and seven per cent of questions or comments are at the application level. Typical questions at these three levels were 'what is the difference between the concept of secure and ambivalent attachment' or 'can you explain a bit more the object permanence concept'.

Certain discussions about particular concepts and theories in the post-pair work plenary discussion signalled thinking at the higher levels of Bloom's taxonomy: twenty-nine per cent of discussion contributions were at either level four, i.e. analysis, or level five, i.e. new ways that a particular concept can be applied. To illustrate, students during a class session about culture and emotions discussed whether patriotism and its emotional aspects (e.g. pride, shame) are the same across several cultures, and then compared those other cultures to Kosovo. All in all, although there was some indication of higher-order thinking among students, most questions and comments focused on the first three levels of Bloom's taxonomy.

Third, I expected that students who were exposed to the innovation would learn more than students who only listened to lectures. The majority of students (seventy-six per cent) responded with either 'agree' or 'strongly agree' to the last item in the survey, that is, if pair work helped them to obtain a better grade on the test. Comparing the grades of students who engaged in pair work (i.e., the treatment group, N=55, M=8.00) with those who did not (i.e., the control group, N=36, M=7.10) revealed a grade difference between the two groups. A grade of eight indicates a very good grasp of the course material compared to a grade seven, which indicates a good grasp of the material. This evidence shows that students exposed to the teaching innovation learnt more about the course material than students who learnt via traditional lecturing.

Conclusion and suggestions for improvement

As part of my teaching innovation in the Cultural Psychology course, I implemented pair work among students in six out of fifteen lectures. The aim of this activity was to increase both the quantity and quality of students' participation in the classroom and to boost their knowledge of the course material. I found that the teaching innovation had a positive impact on the quantity of students' active participation in the classroom and knowledge of the course concepts. I also found that the innovation had a positive but limited impact on the quality of students' participation in the classroom: most student questions and comments focused on knowledge, comprehension and application and there were only a few attempts by the students at analysis and syn-

thesis of the various concepts, activities which are associated with higher-order thinking skills.
Although these results demonstrate the benefits of pair work activities in a large group setting, the implementation of the innovation can be improved. For instance, extending student pair work activity from five to ten minutes can provide more space for students to ask and answer questions and engage in discussions. As a consequence, student comments and questions in the plenary debriefing may take place at higher levels of Bloom's taxonomy. Another way to improve pair work is by preparing a set of questions for students to address during pair work sessions. Well-prepared questions by the instructor can perhaps stimulate higher-order thinking during pair interactions.
It is also important for me to be more patient and wait until a student poses a question or initiates a discussion during the debriefing. My initial assumption was that the students had already formulated questions or comments while working in pairs and would be ready to share them. When no question or comment was forthcoming I often intervened quickly and asked a question myself. However, whenever I managed to keep silent until a student volunteered to contribute, I noticed that there was more interaction.
All in all, I plan not only to keep this innovation in my future courses but would like to experiment with the impact on classroom activity and student learning of extending the length of time of the pair work, preparing questions for pair discussions and giving more time to students to take initiative in plenary sessions.

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