

CHAPTER 1. USING CUT-UPS AND TOPIC MAPS IN SEMIOTIC ANALYSIS SEMINARS TO ENHANCE STUDENT PARTICIPATION, INTEREST AND KNOWLEDGE

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Keywords: active learning, cut-up cards, group work, media studies, quasi-experiment, semiotic analysis, topic map

Introduction

This chapter discusses the outcomes of the teaching innovation I introduced while leading seminar sessions in semiotic analysis of media content in the Fall 2017 semester. These semiotic analysis sessions combine two methods of teaching: lecturing and group presentations with discussion. At the beginning of each seminar, we review key concepts that are covered in the obligatory readings. Then, two or three groups of students present how they applied the concept under consideration to the analysis of some media content. After each presentation, a short plenary discussion follows among seminar group members in which participation is particularly rare. The innovation was designed to improve on this shortcoming.

Participation in seminars means that students interact, respond or comment (Abebe and Deneke 2015: 75)—when this is done reluctantly or not at all, the level of student participation is low. Active classroom participation plays an important role in knowledge acquisition (Murray and Lang 1997), which is why participation is a mandatory part of these seminar sessions. Students' active involvement in negotiating the shared meanings of media content during the post-presentation plenary discussions should enhance their understanding of key concepts and ability to use them correctly.

The reasons for low student activity during these seminar sessions are threefold. First, students tend to perceive semiotic analysis as contradictory to practical skills development which they expect to find in the curriculum. They do so even though the processes of meaning making, which semiotics try to explicate, are constitutive parts of media content production, and therefore, have practical applications.

Second, as Perkins (2006) noted, some parts of knowledge can be especially troublesome and attempts to adopt it can give rise to experiences of alienation or anxiety. Semiotics is a specialized field of knowledge and uses a conceptual apparatus that is rooted in structuralism, and as such, it is not relatable to the knowledge that first-year students learnt in high school (see Bignell 2001; Chandler 2007; Fiske and Hartley 1978).

Third, the context in which the learning process takes place additionally and significantly strengthens this kind of experience (Kahn 2014: 1008). While in high school students were required to

listen and memorize, in our seminars first-year university students are expected to participate and contribute their own thoughts on abstract matters using sophisticated terminology in front of people they are not familiar with.

Hence, I introduced an innovation that transforms the above context in order to enhance students' active participation, increase their interest in the course and improve their acquisition of key concepts. My innovation focused on the use of small group work during which students worked with cut-ups, and they concluded the exercise with a debriefing that utilized concept maps. Outcomes of the innovation were evaluated with a minute paper and a set of survey questions. Results show that, when compared to lecturing, activities in small working groups enhanced knowledge acquisition, but the innovation did not bring about an increase in participation and interest.

Institutional context

Seminar sessions on the semiotic analysis of media content are part of the mandatory course, Introduction to Media and Communication Studies in the undergraduate program of Media Studies and Journalism. This is a course primarily designed for first year students. During six mandatory seminar sessions, which follow six weeks of lectures, students are expected to practice components of the semiotic analysis of media content. Rather than providing comprehensive insight, the seminars aim at familiarizing students with the sign-like nature of mass communication and demonstrating how its latent meaning can be reconstructed with the help of basic semiotic concepts. Lectures are taught by a senior professor and seminars are led by less experienced instructors and doctoral students.

Students enrolled in the course are divided into six seminar groups taught by three seminar leaders (two groups for each leader). In fall 2017, my two seminar groups had nineteen and twenty two students, respectively, most of whom were taking this seminar in the first semester of their university career. As there is no explicit teaching philosophy in the Department of Media Studies and Journalism at the Faculty of Social Sciences, the actual approach to teaching varies from course to course and instructor to instructor. Nonetheless, lectures tend to be based mainly on frontal teaching, while seminar sessions support the active participation of students usually in form of group presentations. In this particular course, my control over teaching content and method was greatly constrained because each seminar group is expected to follow the same structure and content to assure that demands on all students are equal.

Theoretical background of the innovation

To improve active student participation, I decided to change my general approach to teaching by shifting my focus from teaching to learning so that the emphasis was on the student as an active learner. Students learn both passively and actively. Passive learning takes place when students

take on the role of 'receptacles of knowledge'; i.e. they do not directly participate in the learning process (Ryan and Martens 1989: 20, in Bonwell and Eison 1991: 18). Active learning means engaging students in activities that include higher order thinking tasks, stress on student's values and attitudes, and skills development rather than on knowledge transmission (Bonwell and Eison 1991: 19). It 'requires students to do meaningful learning activities and think about what they are doing' (Prince 2004: 1).

Considerable support exists for the benefits of active learning. Existing studies conclude that active learning leads to better student attitudes as well as improvements in students' thinking and writing. Introducing activity into lectures can significantly improve the recall of information (Prince 2004: 2-3). Active learning can also improve student engagement (Barkley 2010: 3-8). Thus, if the students' low level of activity is to be overcome, some changes in the seminars' workflow need to be adopted, namely, students should be more closely involved in activities that relate to what they are doing in the seminar so their participation increases.

Although our seminars already contained elements that required active student involvement, namely group presentations, it occurred quite often that non-presenting students stayed passive. In order to resolve this teaching challenge, I used cut-ups in a small working group environment (Exley and Dennick 2004: 63-64). Groups of five students were given a set of cards that contained key concepts for the session and were asked to arrange these according to the content of the mandatory reading for the session. When the cards were sorted, each group member was asked to pick a card with a concept and try to explain the concept in no more than three sentences to the other group members. Students thus negotiated the meaning of key concepts with their peers in a more intimate, and therefore, less stressful environment.

Additionally, as a debriefing method I used topic maps (Exley and Dennick 2004: 58). In practice it meant that students were to add suitable cut-up cards voluntarily to the concept map on the board and explain the concept listed on the added card. This form of debriefing not only allowed for further discussions but also helped verify if students understood concepts correctly.

Thus, compared to those who continued to learn about semiotic analysis according to the old seminar format, I expected that students who participated in the innovation would

H1: assess their participation as reaching a higher level; H2: declare increased interest in the semiotic analysis of media content; and H3: learn more.

Methods

Teaching two seminar groups allowed for a quasi-experimental design where one group was used as a treatment group and another as a control group. In the control group, instead of group work, I started the session with a mini-lecture to recapitulate key concepts for the session. In addition, I used a flipped pre-post design: I implemented the innovation in the first seminar session of the treatment group because I found it crucial to get students interested in the subject before they

formed their attitude toward it. Thus, the seminar session with the original design followed the actual innovation (see table 1 for the research design). This unusual setup allowed me to compare not only the performance of the control and treatment groups but also how each group performed across the two types of teaching methods.

Table 1. Quasi-experimental and flipped pre-post design used to test the impact of the innovation

	Treatment group	Control group
Seminar session 1	innovation	no innovation
Seminar session 2	no innovation	no innovation

To test the impact of the innovation I used two types of measures. First, at the end of each seminar session students filled out a minute paper to indicate their level of knowledge acquisition. On each occasion, the questions concerned a concept introduced during that seminar session: after the first seminar students had to list three types of signs by Pierce (2 points) and explain one of them in two sentences (3 points), while at the end of the second session they had to name two types of structural relations between signs (2 points) and also explain both in two sentences (3 points). Answers were scored on a scale, with values from 1 (lowest) to 5 (highest).

Second, in order to have a more comprehensive idea of the innovation's impact I asked students to answer three survey questions indicating if and how strongly they agree with the statements that (1) the method of teaching supported their active participation in the seminar; (2) the seminar session raised their interest in semiotic analysis of media content; and (3) the teaching method helped to enhance their understanding of the subject matter. Each of their responses was recorded on a 5-point scale (1=strongly disagree; 2=disagree; 3=neither agree nor disagree; 4=agree; 5=strongly agree).

Since I asked students to sign their papers, I could use paired t-tests when comparing one group's performance over two seminar sessions. When I compared the two groups' performance during the same seminar session I used independent samples t-tests. The quantitative data was augmented with information coming from the end of semester evaluations.

Findings

Not all students enrolled in the course participated in the innovation. There were seventeen students in the treatment group (which decreased to sixteen by the second session) and twentyone in the control group (nineteen in the second session). No support was found for H1. Members of the treatment group who participated in the innovated session and students of the control group who were not exposed to the innovation evaluated the impact of their respective learning

activities on their participation level similarly, resulting in no statistically significant differences in the mean scores between them (see table 2).

Table 2. Differences in mean scores between the treatment and control groups in the first seminar session: survey questions

	Treatment Group			Control Group			Difference of Means	t-test	df	p-value	Sig.
	N	Mean	SD	N	Mean	SD					
Participation	17	4.35	0.606	21	4.29	0.463	0.067	0.388	36	0.701	No
Knowledge acquisition	17	4.24	0.664	21	3.52	0.928	0.711	2.655	36	0.012	Yes
Interest	17	3.71	0.849	21	3.76	1.044	0.56	0.178	36	0.859	No

Tests: Independent samples t-test with equal variances

Likewise, difference within the treatment group between the seminar with the innovation (mean=4.31, SD=0.602) and the one without (mean=4.06, SD=0.772) was not found ($p=0.0333$; $df=15$). However, there was significant difference between the control group's first and second seminars: students in the control group evaluated the level of their participation in the first seminar as significantly stronger (mean_{s1}=4.31, SD_{s1}=0.47 cf. mean_{s2}=3.58, SD_{s1}=1.07) ($p=0.005$, $df=18$). This may be due to differences in content between the first and second seminar. The general practice is that in the first session the seminar leader is supposed to practice the analysis with the whole group. In the second seminar, two or three group presentations take up most of the time. Thus, it is possible that students who did not present during the second seminar felt uninvolved in the activity.

The findings are very similar for H2, which predicted students who participated in the innovation would declare stronger interest in the semiotic analysis of media content after the first seminar compared to those who received the traditional instruction. There were no statistically significant differences in the reported levels of interest either between the treatment and control groups (table 2), or between the treatment group's first (mean=3.63, SD=0.806) and second sessions (mean=3.56, SD=0.814) ($p=0.774$, $df=15$). These results confirm that participation and interest, as assumed in the literature (see e.g. Astin 1999; Flowerday and Shell 2015), are related: without perceiving an increase in one's participation, one's interest is unlikely to grow either.

More importantly, the findings show that the innovation did have a positive effect on knowledge acquisition, confirming hypothesis 3. First, students who were exposed to the innovation were convinced that the methods used in the first seminar helped them to enhance their understanding of the studied concepts more than students in the control group (see table 2).

Second, the minute papers administered at the end of each session—which are more objective measures of actual knowledge acquisition—show (table 3) that, after the first seminar session, members of the treatment group performed better than members of the control group at a statistically significant level. The size of the impact of the innovation on knowledge acquisition is medium (0.5). Furthermore, as expected, if the innovation was responsible for the above difference, during the second session when neither group was exposed to the innovation members of the treatment group achieved slightly better results, but the difference between the two groups' performance was much smaller and not significant. Hence, activities that were part of the innovation turned out to be more effective for the recapitulation of the assigned concepts than the mini lecture: students learning through small group work with cut-ups and concepts maps learned more than their peers who followed the original session design.

Table 3. Differences in mean scores between the treatment and control groups: concept acquisition minute paper

	Treatment Group			Control Group			Difference of Means	t-test	df	p-value	Sig.
	N	Mean	SD	N	Mean	SD					
After the first seminar	17	4.76	0.664	21	2.62	2.269	2.146	4.121	36	0.000	Yes
After the second seminar	16	4.44	0.814	19	4.00	1.247	0.438	1.203	33	0.238	No

Tests: Independent samples t-test with unequal variances for the first seminar and with equal variances for the second seminar.

The positive impact of the innovation is further supported by qualitative data. In the end of semester student evaluations, three students in the treatment group decided to include verbal evaluation.¹ All three students not only found it important to refer to the innovation, but also left positive feedback about the innovated seminar.

Conclusion

This chapter discussed the outcomes of a teaching innovation which addressed the problem of low levels of student participation in semiotic analysis seminars. The innovation involved students in activities in small working group activities to address the teaching challenges. I have

¹ Compared to just one in the control group.

found that although student interest and participation did not increase, the innovation resulted in greater knowledge development. Thus, the logic that more participation leads to more interest which then results in knowledge enhancement did not work in my case: with the innovation I achieved a higher level of knowledge acquisition without increased participation or increased interest. Partly, this could be because I had to rely on student self-assessment when evaluating the level of participation. Next time, I would use a different and possibly more objective measure like classroom observation by a colleague.

Partly, the academic disposition of students may also be responsible for the results. In addition to the Media and Journalism program, each student is registered in another study program. If their other program is, for example, Human Resources, International Relations or Environmental Studies, probably they find little reason to get deeply involved in the semiotic analysis of media content. In the end, the students may not have enough understanding of the importance of the field's practical applications.

Third, interest and knowledge may not be as closely related as the literature claims. Results suggest that active learning exercises may achieve greater knowledge acquisition without positively increasing student interest. The activities that I implemented seemed to work better at increasing students' attention to and comprehension of class content than for inspiring their imagination. The innovation probably worked so well in terms of enhancing concept acquisition because even students who had not completed the required reading could acquire the knowledge therein from their peers or look up the concepts when working with the cut-up cards. This, together with debriefing via concept maps, could also facilitate the elimination of possible confusion or misunderstandings of those concepts.

Nonetheless, while the teaching challenges that prompted this innovation—the low level of student participation and lack of interest in the semiotic analysis of media content—were not resolved, the ultimate goal—greater learning—was achieved. In the long term, this may not be enough, and students' overall course performance will only increase if they are more interested and more active—and they perceive themselves as such. This requires me to rethink whether cut-ups and concept maps together with small group work are the best choices to these ends, or if they should be replaced and/or augmented with other activities.

Alternatively, if we disregard the question whether the simple comparison of means with a t-statistic is an appropriate way to account for such a multidimensionally conditioned process as learning, the episodic nature of the innovation may account for the lower reliability and validity of the results. To overcome this deficiency in validity, in future the innovation should be implemented in a more systematic way, ideally in each seminar session for the treatment group. Such a solution would not only allow for observing the continuous impact of the innovation but would also enable me to introduce much more relevant measures, including regular homework results, final tests and final paper results, and course evaluations.

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