

Activity, Knowledgeability and Participation Patterns in an Online Course

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Abstract

Online learning is growing in all levels of education. Research indicates that student activity influences both learning and course satisfaction. This study examines how different combinations of student activity and knowledgeability influence the outcome of an Open University online course. The study suggests that both active and passive students, as well as students with different levels of knowledgeability in the content matter of the course, may have positive effects on online learning. The study presents four different student types on the basis of their activity and knowledgeability. Recognizing these student types and the participation patterns connected to them, may help course instructors to better understand the social dynamics within a group and to improve the outcomes of online courses.

1. Introduction

Online learning is growing prolifically in all levels of education. Understanding group dynamics and individual participation patterns in online courses may help instructors to structure and steer the courses more efficiently, and thus enhance learning.

The background of this ongoing study is the simple notion made when instructing online courses for several years: students with wide background knowledge in the content matter of the course, and writing excellent course assignments, are not necessarily active in course discussions. And students, who are average or even below average in writing course assignments, may be very active in course discussions, and even become central figures in online discussions.

The research questions of this study are: What roles in an online course interaction do the different types of students have? How do activity and passivity in an online course relate to knowledgeability? And how do different combinations of activity/passivity/knowledgeability function in online discussions?

This study presents a typification of online course students according to their activity/passivity and knowledgeability. This typification is used when analyzing student participation patterns in online courses.

2. Research on Participation Activity

Research on student participation patterns has emphasized participation activity. Research indicates that student-student interaction is essential for online learning – more so than student-instructor interaction e.g. [3], [9], [2], [4]. The interactions among students play a crucial part in the formation of a learning community through which knowledge is imparted and meaning is co-created [5]. In order to emerge and exist, a learning community naturally demands student activity.

Roles that students adopt or are given also affect the participation levels and patterns [6], [7]. It is typical for research on online course participation to emphasize the positive effects of discussion activity, and to regard passivity as problematic for the success of an online course.

The structure of online course, and the function the participation activity has on a given course, naturally affects the importance given to group participation. And there inarguably is much evidence on the importance of social interaction in online learning.

3. Research Design

The data of this ongoing research consists of the discussions, peer reviews and assignments of 17 online courses given at the Open University of Jyväskylä, Finland on methodology and research methods of social sciences. The courses took six weeks and included three written assignments, peer reviews and asynchronous discussions. All students were required to give peer reviews of 3-5 assignments. After each assignment students had five days for discussions on the given methodological issue and/or method. The teacher's role in the courses was that of an instructor and facilitator.

The 17 courses being analyzed took place in 2011-2015. The total number of students attending the courses is 584. All the students were adults, mostly over 30 years, working and with families. The great majority of students worked as unqualified social workers in Finland, and their studies aimed at a qualification for professional social work. This meant that their studies had a particular purpose and

that they were highly motivated to complete their studies. Most students also had some knowledge of the content matter of the courses from their previous studies.

In this study student activity/passivity was measured by the number, the frequency and the length of the posts a student has sent to the discussion group. There are a number of personal circumstances and factors that can contribute to a lack of participation in a course (family issues, job responsibilities etc) [1]. this study does, however, not deal with these personal factors, but focuses on the social dynamics of the learning community in an online course.

The content of the messages was being analyzed using qualitative content analysis.

The student knowledgeability was measured by the grade of course assignments and student's previous studies/experience in the content matter of the course.

The framework that is the basis for the analysis of the four possible student types is presented in Figure 1.

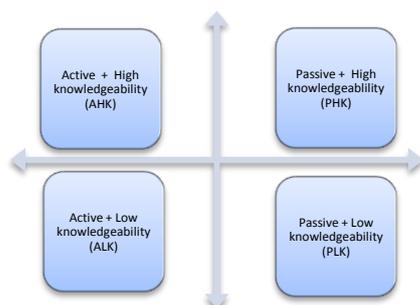


Figure 1. Four student types based on activity and knowledgeability

Active and highly knowledgeable student (AHK) produces high quality assignments and is also active in discussions. Because of his/her knowledge and expertise in the content matter, he/she is quick to comment, often writing long, well-thought and in-depth posts.

Passive and highly knowledgeable student (PHK) is capable of producing high quality assignments but is passive on discussions and peer reviews. Posts are relevant to the content matter, but short and basic.

Active student with low level of knowledgeability (ALK) produces average or below average assignments. He/she is active in discussions, posting often, but his/her posts lack the depth and creativity of the knowledgeable students.

Passive student with low level of knowledgeability (PLK) produces assignments of average or below average standard. He/she is passive and participates the minimum required in

discussions, writing short comments that typically rephrase or agree on other's comments.

4. Preliminary Results

The preliminary results of this study indicate that both passivity and activity in participation, as well as both the high and low level of knowledgeability may have positive effects on the success of an online course. All student types par one (the passive + low knowledgeability type) have something valuable to offer to an online course.

The PHK student, although passive in discussions, brings excellent assignments to the group and produces. And due to his/her passivity in discussion, gives room to others to discuss the content matter in question. His/her role is, thus, to provide high standard material for the more active group members to discuss and work on. In collaborative assignments he/she offers the group valuable input to work on.

The ALK student, although not capable of offering much insight into the content matter, often has the role of "the social engine of the group", encouraging and helping others, lifting the spirits of others, fostering a sense of community, and also presenting valuable layman viewpoints, examples and questions to the discussion. Her/his contribution to collaborative assignments may be problematic, as besides being active he/she often is also very productive, and because of his/her low knowledgeability, his/her input to the assignment may be considered of too low standard.

The AHK student's activity can cause problems to the interaction of the online group. He/she has the skills and knowledge to excel in discussions, and because of his/her activity, is eager to do so. This may passivate others, and make them feel inferior. There may not be much left for others to say after an AHK student has presented his/her analysis of the issue in hand. The AHK student is, however, also often very good (and willing) at explaining the more complicated issues in the course content to others, and has the potential of becoming a mentor to other students, and the right hand of the instructor in course discussions. It is important to strengthen the mentor role of the AHK student, as he/she does have the potential of becoming too dominant in the group.

The PLK students are the "invisible" ones, students, who offer very little to the course, and whose absence in discussion groups go more or less unnoticed. Their input to the learning community is small and they are often freeriders in collaborative assignments. They usually do pass the course, and appear to be satisfied with below average grades.

5. Conclusions

It is highly plausible that social communication is an essential factor in educational activity and that student activity plays a role both in learning and in course satisfaction in online education. If everybody is passive, a course will be a failure, as there is not a chance for a learning community to emerge. An active learning community provides an excellent base for learning and knowledge formation. Activity of individual students can, however, also be counterproductive, and passivity, on the other hand, may give room for the activity of others.

Recognizing different student types and the participation patterns connected to them may help course instructors to better understand the social dynamics within a group and to improve the outcomes of online courses. The better the course instructor knows the students, their participation patterns and level of knowledgeability, the better he/she can steer them as a group towards the formation of a dynamic learning community.

From the viewpoint of learning community, the most crucial student types are the AHK and ALK students. Their actions are the key to a successful online course experience. But their actions may also be counter-productive, or even conflicting with the formation of a good learning community. Therefore student-specific instructions may sometimes be needed, e.g. when strengthening the mentor role of an AHK student and preventing him/her from becoming too dominant in the group. Course instructor may also use his/her knowledge of the students and their activity/knowledgeability types to his advantage when forming groups/teams for e.g. collaborative assignments.

6. References

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