

Features of the Discussion Method in the Training of Students in the Context of Distance Learning

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Summary

The article considers online discussion as an interactive learning method in the conditions of distance learning. The essence of discussion and the stages of its organization are described. The main objective of discussion in distance learning is defined as the stimulation of interest in learning and the involvement of various viewpoints in an active discussion of the stated problems. The key role in ensuring the efficiency of a discussion is identified. The article develops a model for organizing asynchronous online discussions on the Moodle platform, highlighting the sequence of stages and their content. An experimental study of the use of the discussion method in the training of students in distance learning conditions is carried out. Based on the results of the methodological experiment, conclusions are drawn about student interest in online discussions. The authors conclude that the interest of students of different specialties in asynchronous online discussions varies, and the greatest interest is demonstrated by linguistics students. Nevertheless, the differences in student interest in online discussions by groups (specialties) are more likely attributable to subjective factors, which do not affect the overall picture in a major way.

Keywords:

discussion, online discussion, information and communication technologies, students, Moodle.

1. Introduction

The conditions of the COVID-19 pandemic forced a vast number of people who had no desire to learn and teach online to switch to distance learning [1,2]. Yet the required speed of response to the challenges of our time, general confusion, and the lack of knowledge on the application of technological innovation impeded the quality of this transition [3,4]. One of the most substantial effects of this transition is reduced interest in learning [5-7]. The transition to distance learning forced teachers to hastily create online course assignments, which ultimately do not always provide the desired results [8]. In practice, researchers reported busywork and engagement in learning activities for the sake of engagement [9]. Such actions reduce interest in learning and adversely affect students' academic performance [10,11].

In this connection, it becomes urgent to find adequate requirements for distance learning methods [12], one of which may be the method of discussion used in the online mode.

Literature review

As defined by B.Z. Zeldovich and N.M. Speranskaia [13], a discussion is a group type of interactive learning that involves a collective discussion of a problem, suggestions, ideas, opinions, and a collaborative search for a solution. P.K. Murphy et al. [14] also note that the mechanisms of discussion enable a person to step away from symmetrical thinking and learn to accept others' points of view.

The most common areas of application of the method of discussion are active teaching methods, socio-psychological training, methods of identifying a leader and assessing the competence of a leader, conflict resolution methods, and more [15]. The specific forms and techniques of discussion are decided by the objectives of group work and are typically categorized into case analysis methods and methods of group self-analysis [16]. This particular method of teaching, aimed at the development of critical thinking and communicative abilities, assumes a purposeful and orderly exchange of views [17]. Meanwhile, it is also focused on reconciling opposing viewpoints, and at the heart of a discussion lies a contradiction that reflects the opposing views of the participants on the subject [18].

The primary objective of the method of discussion is to stimulate students' cognitive interest, draw different points of view into an active discussion of the issues raised, and encourage students to understand and embrace different approaches and arguments [19]. S.V. Efimova [20] suggests that the use of the discussion method relies on the ability to clearly and accurately formulate one's opinion and build a system of evidence on the one hand and on the other – on teaching students to think and to give proof that they are right.

The essence of the method of discussion in higher education, as argued by Iu.V. Gushchin [21], is the exchange of opinions on a specific issue between the teacher and students or between students alone. These

opinions may be both personal and supported by the views of authoritative sources. According to J. Cornelius-White [22], an effective discussion assumes a variety of opinions, an opportunity and need to find the most successful solution to the problem posed, and active engagement of respondents. Furthermore, R. Sybing [23] finds that this type of discussion evokes positive emotions in participants. Discussion is an important means of students' learning activities in the educational process. Participation in them teaches students to listen and understand their partner and contributes to the refinement of their own beliefs and the development of a personal view of the surrounding world [24]. Researchers attribute discussion to both learning methods and forms of organization of learning [25] and view discussion as a form of cooperation in which all participants express their views on the problem under debate [26].

The method of discussion can be utilized both at the stage of assimilation of knowledge and during its consolidation and systematization. Aside from that, discussions are used as a method of developing students' mental functions, creative abilities, and personal qualities, as well as a method of stimulating and motivating participants in the learning process [27].

Discussion serves as a sort of reference point for students' subsequent independent work. It acts not only as a means of enhancing the cognitive independence of students, but also provides for the creative application of the acquired knowledge. Interaction in classroom discussions relies on the content-directed self-organization of its participants [28].

L.V. Murzenko [29] proposes four stages in the structure of the organization of discussions: organization of a discussion (announcing the topic, defining the goal, dividing students into groups, choosing a group representative, setting the rules of the discussion), exposition (setting a problem task, describing the problem situation, exchanging views on the problem situation in subgroups, establishing a shared point of view through argumentation), the discussion itself (argumentation by a representative of each subgroup, presentation of ways to resolve the problem situation), and analysis of the discussion (comparing the goals of the discussion with the results and conclusions obtained, evaluating the results, identifying their positive and negative aspects, evaluating students' work, and summarizing the results).

A somewhat different sequence of stages is offered by V.V. Vasilkova [30]: the informational-preparatory stage, at which personal argumentation is presented and alternative suggestions and evaluated; the situational-discussion stage, involving preparation for discussion and the discussion itself; and the statement-interpretative stage, during which conclusions are formulated, the assimilation of learning material is tested, and the results of the discussion are analyzed.

Discussions as a way to express one's opinion and offer arguments for it are extremely beneficial for improving interest in learning [31]. To add to this point, interest can be considered a decisive determinant in students' training (both in person and online) and their performance, since students who show a high level of interest put in more effort and work harder on academic tasks than students with lower interest levels. A lack of interest in learning can compromise the educational process. Therefore, it is essential to find effective ways to improve learning in the conditions of distance learning.

A number of studies [32-34] point to the possibility of holding classroom discussions remotely using ICTs [35]. Furthermore, S.L. Baglione and M. Nastanski [36] emphasize a number of advantages of online discussions over traditional ones. Among these benefits is the organization of anchored discussions, which involve the discussion of an online document with an opportunity to highlight and comment on different sections. This format ensures a greater focus on the analyzed content and raises the number of reads and citations, which gives more structure to the conduct of discussion. In addition, S.L. Baglione and M. Nastanski [37] demonstrate that this type of discussion evokes positive emotions in the participants and increases their interest in discussions.

A study by L.S. Hemphill and H.H. Hemphill [38] highlights that asynchronous structured discussions focused on the development of critical thinking as well as the acquisition of argumentation skills are the most effective. Thus, to provide for the organization of an effective asynchronous online discussion, it is necessary to develop a methodological model of the organization of asynchronous online discussion including a description of its stages and a detailed specification of their content.

Despite the relevance of the online format of discussions, the theoretical and methodological aspects of its application are not sufficiently developed in pedagogical studies. For this reason, the practice of online discussions in higher education is marked by the haphazard organization of classroom discussions, which reduces student interest in this learning method.

In connection with the above, the purpose of the present study is to analyze the peculiarities of the method of discussion in the training of students in the conditions of distance learning.

Research objectives:

- develop a model for asynchronous online discussion on the Moodle platform providing a sequence of stages and their content;
- to conduct an experimental study of the use of the method of discussion as part of distance learning and to draw conclusions about students' interest in online discussions based on the results of the methodological experiment.

2. Methods

An experimental study of the organization and conduct of asynchronous online discussion with students of different specialties was carried out based on the departments of Philology, Economics, and Psychology faculties.

The empirical method chosen for the study of the organization and conduct of asynchronous online discussion in distance learning is a methodological experiment, which includes the following elements: modeling of learning; active influence of the researcher on the course of the experiment during its implementation; analysis and interpretation of the results of the study.

The preparation and organization of a methodological experiment involve the formulation of the research hypothesis. Our hypothesis is the assumption that the interest of students of different specialties in asynchronous online discussions during distance learning will vary, with the greatest interest shown by students of the linguistic field of study.

Participants in the pedagogical experiment were 102 second-year students (three experimental groups (EGs), 34 students each).

Special attention must be paid to control in the experiment, which involves qualitative observation of the experiment and directly affects its effectiveness. Based on the context of our study, the object of control is the interest of students of different majors in online discussions in the distance learning mode.

To compare the interest of students from different majors in online discussions during distance learning, after the online discussions, the faculty holding them administered an anonymous survey. Respondents in the three EGs (students) were asked the question "Do you find online discussions interesting and useful?" with three answer options: "yes" (2 points), "not fully" (1 point), and "no" (0 points).

To determine the most preferable specialty for online discussions with future professionals, the survey results were processed with the Kruskal-Wallis H test, followed by a posteriori (pairwise) comparison using the Mann-Whitney U-test.

The formulated statistical hypotheses are as follows:

H0: there are no statistically significant differences in the level of interest in online discussions between the studied groups.

H1: there are statistically significant differences between the studied groups in the level of interest in online discussions.

H2: statistically significant differences in the level of interest in online discussions exist in a pairwise comparison of the groups studied.

3. Results

A model for organizing asynchronous online discussion on the Moodle platform is presented in Table 1.

Table 1. The model for asynchronous online discussion

Stage	Stage content
Preparatory	Registration of the teacher as a course creator on the Moodle platform; converting learning materials into the e-format, selecting relevant audio and video materials, compiling a list of web links to additional sources on the topic of discussion; posting e-learning materials on Moodle.
Introductory organizational	Introducing students to the possibilities of online services and motivating them to use them; dividing the EG into groups of four and splitting them in pairs within each group; familiarizing students with the sets of study materials; forming a problem question or situation; creating a case for discussion and providing it to the participants on the Moodle platform.
Discussion	Deepening knowledge on the topic by searching for additional information on the case on the Internet; compiling a list of references on the topic and posting a link to it on the group page; holding online debates between pairs defending their positions "for" and "against" within each group on the Moodle platform (a separate chat room is needed for each group); switching between "for" and "against" positions; repeating the debate procedure; preparing a plan for a group presentation and submitting it.
Final	Presentation of the results and discussion; analysis of the efficiency of group work and debriefing.

The distribution of responses from the anonymous survey (in percentage points) based on the results of the online discussions is given in Table 2.

Table 2. Student interest in online discussions in the three EGs, %

Group	N	Yes	Not fully	No
EG1 (linguists)	34	73.5	17.6	5.9
EG2 (economists)	34	58.8	29.4	11.8
EG3 (psychologists)	34	64.7	23.5	11.8
Mean	34	65.7	23.5	9.8

Statistical analysis of differences in the interest of students of different specialties in online discussions in the three EGs is presented in Tables 3 and 4.

Table 3. Student interest in online discussions in the three EGs, in points

Group	N	Interest, points	H-test
EG1 (linguists)	34	57	55.24
EG2 (economists)	34	48	

EG3 (psychologists)	34	52	
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The data in Table 3 indicate statistical significance of differences in the level of interest in online discussions between the students of the three EGs ($H = 55.246$ with $H_{cr} = 47.6$, $p < 0.01$). This indicates that there is a variation in interest in online discussions among students from different areas of study.

To test the hypothesis suggesting statistically significant differences in the level of students' interest in online discussions in a pairwise comparison of the groups studied, the survey results were processed using the Mann-Whitney test.

Table 4 presents a pairwise comparison of survey results across the three EGs.

Table 4. Pairwise comparison of the level of interest in the three EGs

Group	N	Interest, points	U-test
EG1 (linguists)	34	57	21.46
EG2 (economists)	34	48	
EG1 (linguists)	34	57	54.31
EG3 (psychologists)	34	52	
EG2 (economists)	34	48	76.22
EG3 (psychologists)	34	52	

Table 4 reports statistical significance in the level of interest in online discussions among students in the three EGs in a pairwise comparison ($U_{1-2} = 21.46$, $U_{1-3} = 54.31$, and $U_{2-3} = 76.22$ with $U_{cr} = 269$, $p < 0.01$). This indicates that the interest in online discussions of students in each of the three EGs differs from that of students in the other two groups.

4. Discussion

The conducted study demonstrates certain patterns in the responses of students of different specialties (in the percentage and in terms of the disciplines of the specialties in which asynchronous online discussions were held) (Table 2).

As follows from Table 2, the interest of students in different specialties in online discussions as part of distance learning is generally high (65.7% on average), which testifies to the great benefit of this method of teaching the material remotely. Another advantage also identified by S.L. Baglione and M. Nastanski [36] is the greater efficiency of chat discussions since in chat debates students have more time to analyze the stated problem and refer to third-party online sources. Furthermore, students are given the chance to circumvent the psychological barrier of fear of public speaking [34], which enables participants in the discussion to express themselves without psychological discomfort.

Useful and enlightening for teachers were the responses of students who were not fully satisfied with the online discussions (23.5%). Their recommendations and advice on

how to improve online discussions allowed for appropriate adjustments in teaching methods.

Reports of disinterest (9.8%), in our view, are attributable to a general lack of desire to learn or to other extraneous reasons. As a rule, each academic group has students who generally have no interest in learning. That said, the online format of discussions greatly simplified the assessment of each participant's personal contribution to group work, as also found by B. Vijayavalsalan [33], because log files allow recording the number and duration of each student's engagements.

The observed differences in student interest in online discussions by groups (specialties) are more likely to relate to subjective factors that do not significantly affect the overall picture. Examining student interest in online discussions by discipline, we note that such discussions are the most interesting to linguistics students (73.5%). Online discussions in the studied language are closely intertwined with students' communicative training, which seems to be the reason behind higher student interest. Same as across all specialties, those linguistics students who were not satisfied with the online discussions held contributed with their comments, suggestions, and recommendations to appropriate changes both in the structure of online discussions and their content.

5. Conclusion

Online discussion is one of the most valuable methods of the interactive approach in distance learning. It is expedient, particularly for the actualization of knowledge, and serves as an important means of students' learning activity in distance learning. Online discussion is of great value for education and upbringing, as it greatly contributes to the development of critical thinking and gives an opportunity to decide on one's own position, fosters the skills of asserting one's opinion, and contributes to deeper knowledge and understanding of the problem under discussion.

The experimental findings indicate that the interest of students of various specialties in asynchronous online discussions as part of distance learning varies, and linguistics students show the greatest enthusiasm for it. Nevertheless, the differences in student interest in online discussions by groups (specialties) are more likely to relate to subjective factors that do not significantly affect the overall picture.

The issue under discussion is promising since the development of modern society calls for new approaches and the choice of active and efficient teaching methods, discussion being one of them.

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