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THE FOCUS GROUP AS A TECHNIQUE FOR UNDERSTANDING THE PERCEPTIONS AND EXPERIENCES OF POSTGRADUATE STUDENTS IN THE USE OF COLLABORATIVE LEARNING NETWORKS IN VIRTUAL ENVIRONMENTS

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Abstract: This work describes the use of the focus group technique, to know the experiences and perceptions of postgraduate students as part of an investigation focused on the study of collaboration networks for learning in virtual environments. The objective was to know if it is possible to generate and manage knowledge through collaboration networks, as well as in what ways these contribute to the construction of learning and under what conditions they are developed. Through a content analysis, it was possible to identify and categorize the positive and negative implications related to cognitive, social, emotional and technological aspects that students experience, in addition to identifying some needs that are had to favor the conditions in learning networks and orienting teachers and educational programs in order to improve the conditions of collaborative networks for learning in virtual environments.

Keywords: Collaborative Learning Networks, Teamwork, Virtual Environments, Focus Group.

INTRODUCTION

The incorporation of technology in the formal educational context has led to the use of collaborative networks as mediated environments, which aim to favor the development of curricular competencies in the participants, collaborating, interacting and sharing experiences and information for the collective construction of knowledge. Collaboration networks in virtual environments seek to enrich, through interaction, new learning in the network of links aimed at the collective construction of knowledge.

This work presents the results of research in a focus group on the use of collaborative networks and their effects on learning, which was carried out with graduate students of the Virtual University System (SUV) of the University of Guadalajara (U de G). In this context of formal and virtual education, networks are seen as environments mediated by technologies that help their participants to develop skills and learn by collaborating by sharing information. The research responds to a need to know the processes, perceptions and positive and negative implications that the use of collaborative networks as environments mediated by technology has for graduate students. The intention of the work is to favor the learning processes and the collective construction of knowledge, by identifying and generating the necessary conditions for the work of this type of networks in the different study programs.

The use of collaborative spaces in virtual education is not easy, and less when it is intended to overcome more than just the exchange of information, since there are a series of implications and conditions that students face in collaboration processes, for network knowledge management. In this sense, the objective of carrying out this research was to know, through the focus group technique, if really, in the case of postgraduate students, is it possible to generate and manage knowledge through collaboration networks? In what way do collaboration networks contribute to the construction of learning and under what conditions do they develop? The foregoing, with the intention of obtaining information that allows orienting the efforts of the SUV teachers themselves and those responsible for educational programs in order to promote and improve the conditions of collaboration networks for learning in virtual environments.

CONTEXTUALIZACIÓN

The Virtual University System (SUV) in its academic model conceives that knowledge management is generated from the integration of learning and knowledge processes that require their own tools for the provision of

knowledge, in a distributed and articulable way. in knowledge networks. From this point of view, knowledge networks are "the result of learning and knowledge management, as well as processes executed on inputs, which refer to knowledge and learning objects, to information collections and digitized objects; through the use of tools with which these inputs are converted into learning content and repositories". The interactions of the communities and the materialization of their knowledge is what allows the knowledge network (Chan 2010, page 75).

In this model, the importance of the student learning collaboratively, fostering networking, which in turn will contribute to forming learning communities whose fundamental principle is the collective construction of knowledge, through interactions with other subjects, is highlighted. The interaction in this scenario occurs from the development of activities or teamwork, with the use of different collaborative tools that help them communicate, socialize and agree on certain issues, resolve doubts, organize work, share information, etc. This way, it is intended that the student learn to build their own meanings through their relationships with others, trusting their own ideas to the extent that they recognize their thought processes and confront them, making decisions and accepting their mistakes.

THEORETICAL FRAMEWORK

Guiter & Pérez Mateo (2013), point out that "collaboration appears when trying to conceptualize the teaching-learning processes in the virtual environment". Along these lines, these authors refer to "collaborative e-learning in a network" recognizing the importance of these processes to function in today's society and defining teamwork as a generic competence (p.12).

For their part, Sloep, & Berlanga (2011), conceive that "learning networks are designed to try to enrich the learning experience in non-formal education contexts and with slight adaptations in the formal education context" (p. 56). These authors coincide in learning networks as environments mediated by technology that help participants to develop competence by collaborating, by sharing information and through interactions, the collective construction of knowledge can be achieved.

Starting from the idea that in a context of formal education, such as that of our students, the main training objective is the development of professional competencies that allow the acquisition of the desired graduate profile, the contribution of Koper (2009) is taken up. , who points out that in their endeavor to acquire skills, users of a learning network can, for example (cited in Sloep, & Berlanga: 2011 p. 56)

- To exchange experiences and knowledge with others.

- To work collaboratively on projects (eg, innovation, research, jobs).

- To create working groups, communities, debates and congresses.

- To offer and receive support to / from other users of the learning network (doubts, observations, etc.).

- To assess themselves and others, seek learning resources, create and develop their competency profiles

Under this approach, it is considered that learning networks have the potential to reinforce the social cohesion of the network since they require human interaction. This way, when peers instruct each other, the phenomenon of reciprocal learning occurs: peers learn through discussions, explanations, feedback, and reciprocal learning takes place in small groups. This community growth

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mechanism is important to promote the emergence of social learning in learning networks (Chapman & Ramondt, 2005).

DESCRIPTION OF THE METHODOLOGY

The focus group is characterized by being a discussion group that enables dialogue on a particular issue, lived and shared through common experiences, based on specific stimuli for debate that the participants receive (Pope 2019). Focus groups constitute a relevant information gathering technique in qualitative research processes, because they establish a personal approach, which makes it a useful resource for knowing and interacting with the study subjects.

For this research, the methodological strategy was the focus group. As an instrument, a 4-question guide was used, which the facilitator asked the participants during the 1.5 hour session. In the session it was possible to carry out the interaction with and between the participants through a dialogue and discussion of the subject to know their perceptions, opinions, experiences, experiences, criticism and points of view on the scope and effects of the collaboration networks, through teamwork, in learning.

The objective of the methodology was to respond to a need to know the processes, perceptions and implications that the use of collaborative networks as environments mediated by technology has for students, to promote learning and the collective construction of knowledge.

For the focus group, they invited 10 graduate students randomly, a facilitator, a rapporteur and two observers who recorded the session and took notes on the contributions of the participants. Subsequently, from the set of data and information that was extracted from the recording of the group discussion and based on the narratives of the participants' interventions, a response matrix was made to concentrate the questions that were asked to the informants. The main ideas and contributions of each informant were concentrated in the matrix.

Through a content analysis of the responses to each question, it was possible to identify some constant words, synonyms, as well as repetitive sentences that the informants mentioned and based on this, 4 aspects and their categories on the related positive and negative implications were determined. with cognitive, social, emotional and technological aspects that students experience in collaborative network processes. In each one of the questions, the 4 aspects were codified and categories were listed and then proceeded to interpret and obtain results. Subsequently, the findings, conclusions and recommendations mentioned below were described.

RESULTS

As mentioned before, the results of the focus group have to do with the perceptions and experiences of the participants in relation to the positive and negative implications of collaborative networking, through teamwork. Working and learning in a network implies that there is a willingness for this task on the part of the subjects involved. In the case of our students, being adults with an average age over 35, who work and have different activities and personal commitments and responsibilities, their characteristics and profiles are an important factor for collaboration. It is in this sense that their perception, based on their own experiences and characteristics, makes sense.

Positive Implications
When the students were asked what the positive implications were from teamwork to collaborative network learning, four main aspects were detected to which the answers

QUESTION 1: WHAT ARE THE POSITIVE IMPLICATIONS OF TEAMWORK?			
Cognitive aspect (ACOG) 1.1	**Social Aspect (ASOC) 2.1**	**Affective aspect (AAFE) 3.1**	**Technological Aspects (ATEC) 4.1**
1.1.1INTERDISCIPLINARITY - Knowing opinion from the practice of others. - Perception from the specialty of a topic - Interdisciplinarity of different approaches - Enriching with different disciplines - Diversity of knowledge and discipline of the participants **1.1.2 NEW KNOWLEDGE** - Know new concepts - Learn from another - Promote and generate new knowledge -Mobilize knowledge **1.1.3 MORE QUALITY** - More quality at work - Creativity - Work with quality - Greater learning - Less time	**2.1.1 INTERACTION** - To interact - Work on time - Exchange - Other options for interaction and communication are encouraged **2.1.2 SHARE AND CLARIFY** - Share - Shared the interpretation of the instructions and how to do activities - Make groups to clarify doubts with others - Peer feedback **2.1.3 DIVERSITY** - Diversity of people - Know skills of others - Diversity of ideas **2.1.4 COMMITMENT** - Commitment - Commitment to work	**3.1.1 FRIENDSHIP** - Friendship - Friendship - Relationship development **3.1.2 SUPPORT AND EMPATHY** - Support - Empathy - Listen to others **3.1.3.MOTIVATION** - Will x work - Motivation of colleagues **3.1.4 ACCOMPANIMENT** - Accompaniment - Fellowship - Satisfy the need for accompaniment and live with others	**4.1.1. USE OF NEW TOOLS** - Work with other tools to streamline work - Work off platforms - Complement in person and online

Analysis and categorization of responses

Table 1. Example of classification by aspect, coding and categorization (Answers to question 1) Own elaboration.

referred; *cognitive, social, affective and technological*, from which the analysis was made:

Cognitive aspect. In relation to this aspect, some answers that can be mentioned are: -*"To know opinion from the practice of others to learn from others" -" Interdisciplinarity of different approaches "-" Know new concepts ", -" Enhance and generate new knowledge "-" Enriching with different disciplines "-, etc.*

At this point, we can talk about two factors to which they refer mainly, the generation of new knowledge and the characteristics of the work that is carried out. Regarding the first, students talk about the knowledge of new concepts that allow broadening their panorama from an interdisciplinary vision, which is achieved by dialoguing with experts in different disciplines, thereby enriching their point of view, they also mentioned that materials and Extra information, even more up-to-date and specialized than the resources provided on the platform, thus promoting the collective construction of knowledge by sharing and exchanging information on various topics and approaches, depending on the discipline, which help them to develop their activities and learn from other points of view. On the other hand, participation in time and form was also recognized for the development of activities, to achieve a higher quality of work and its preparation in less time.

Social aspect. As positive implications in the social aspect, three main elements that are identified in the interventions of the participants are rescued: interaction, diversity and commitment. The students mentioned that: -""Since the activities limit, other options for interaction and communication are encouraged" - "Feedback between colleagues" - "Commitment to work" - "Make groups to clarify doubts with others" - "Development of relationships".

That is, through teamwork, interaction is important for them, since it allows them to share and promote knowledge, clarify doubts about how to carry out activities, share resources to develop activities, receive feedback from their colleagues to know their strengths and weaknesses. , as well as they also identified a key element of collaborative learning, co-responsibility, that is, feeling commitment with their colleagues to work in a timely manner helping them to streamline work, promote diversity of ideas and above all the development of new social skills such as respect for diversity and tolerance.

Affective aspect. Regarding affectivity, the responses of the participants highlighted that teamwork favors the construction of friendship ties, support, empathy and motivation. In addition, given the characteristics of the online modality, the feeling of loneliness and isolation dissipates when working as a team and knowing that someone listens to you and communicates with you, for them it is important to work as a team, since it allows them to cover an affective need that makes them feel accompanied when living with others.

"Accompaniment and motivation of colleagues "-" Satisfy the need for accompaniment and live with others "-" Friendship and companionship "-" Support "-" Empathy "-" Taste for working with others".

Technological aspect. At this point, the participants mentioned the preference and advantages of working off-platform with other tools that facilitate communication more immediately.: -*"Use other tools to speed up the work "-" Working off the platform".*

Some of them shared that during teamwork, through the development of activities, their

colleagues helped them learn to use new tools that allowed them to improve and diversify the development of technological skills. They consider that the platform is limited in terms of the use of communicative and collaborative tools, which is why most prefer to work with other tools to streamline teamwork. They help each other to learn to use technology, which means that they acquire other types of learning in addition to those related to content.

Negative implications

Likewise, regarding these four aspects, it was also recognized ***negative implications of teamwork as a strategy for collaborative network learning,*** as they are: not everyone is involved in the activity to be carried out, the difficulty to coincide in times, the lack of communication, the lack of technological knowledge. However, most of the participants report that they seek to work as a team even when not requested, especially to resolve doubts, share ideas and receive feedback. Although students perceive they have achieved *achievements in content learning, as well as other types of learning;* such as coexistence, social skills such as tolerance and respect and the use of new technological tools, their complicated conditions and lifestyles, manifest difficulties that lead them on many occasions to prefer individual work.

The characteristics and lifestyles of our students, adults, working people, with many family commitments, married people, etc., prevent them from working in the time, form and quality necessary in team activities, mainly due to their work and personal occupations. Although they recognize the advantages and benefits of collaborative networks, they consider that it is necessary to promote better conditions for teamwork, such as lengthening the times of activities on the platform, for a better quality of collaborative work.

They also commented that some have difficulties with the use and knowledge of collaborative tools, which hinders their performance and quality of activities. Given this, it was identified the need to improve and diversify the tools for teamwork, the spaces for interaction and communication in the courses, as well as to promote strategies for a rapprochement between them and a better accompaniment that achieves better meaningful learning and development of professional skills.

From the results of the research we can highlight that, most of the students recognize that working in collaborative networks through teamwork, has implications and positive effects not only on learning for the acquisition of knowledge, but also on the development of certain social, emotional and technological competencies, skills, values and attitudes that were made known and developed from the use of collaborative networks. In fact, the majority commented that they work as a team during the courses even if they are not asked. They consider that collaborative networks help them learn more and better.

Discussion

Through the experience and apperception recovered in the focus group, he managed to confirm the positive implications that our students had according to Koper (2009) on teamwork as users of a learning network (Citado en: Sloep, & Berlanga: 2011 p. 56)

- To exchange experiences and knowledge with others

- To work collaboratively on projects (eg, innovation, research, jobs).

- To create working groups, communities

- To offer and receive support to / from other users of the learning network (doubts, observations, etc.)

- To assess themselves and others, seek learning resources, create and develop their competency profiles

Only a minority consider that they learn the same with individual and team work and do not have to deal with time pressure and expect others to participate in a timely manner.

Although there is the perception and experience that collaborative networks can generate the construction of learning. However, the students affirmed that the main motivation to collaborate in a network and work as a team is due to a great need to have contact and approach with their classmates, in order to counteract the feeling of isolation and loneliness that they may feel. , due to the characteristics of the virtual modality.

Among the main conditions found for collaborative network learning, through teamwork, are mainly the time factor, in relation to the duration of the activities and the participant's time disposition.

As mentioned by Sloep and Berlanga Heerlen (2011), technology-mediated networks favor the achievement of competencies by collaborating by sharing information. In the focus group, one of the most highlighted aspects was sharing. However, as already mentioned, sharing does not necessarily imply collaborative learning, it is necessary to measure or evaluate learning in order to verify the above. It is also important to point out as something important that for the work of collaborative learning networks in virtual environments, the use of various technological tools is necessary, specifying that ignorance about the use of these makes work difficult.

CONCLUSIONS

As it was mentioned at the beginning of this article, it was assumed that learning online occurs in the network of links aimed at the collective construction of knowledge and that students' perceptions are based on learning experiences. The results show, based on the students' perception, that through collaborative networks and teamwork, interaction, information sharing, interdisciplinarity, commitment, motivation, feedback, among other aspects, the collective construction of knowledge. In terms of process, we can affirm that the positive implications of teamwork make it possible for us to generate and manage knowledge through collaboration networks, in addition to generating an approach that inhibits the students' feeling of loneliness. However, it is necessary to delve into the second part of the proposed objective: in what ways or to what extent these networks contribute to the construction of learning, since the work fails to measure the quality or quantity of learning, that is, what leads us to reflect Yes, is technology-mediated instruction sufficient for collaborative learning? What other conditions are necessary?

Regarding the identification of needs to promote and improve the conditions of collaboration networks for learning in virtual environments, when analyzing the information of the focus group, some needs are detected, such as the following: adequate use and diversification of technological tools To work with others, promote efficient communication between all participants in the process, implement strategies to promote responsibility and commitment of all those involved, allow enough time for these types of activities. Finally, attitude is essential.

RECOMMENDATIONS

One of the recommendations made is the analysis of the instructional design of the courses in which these students participate, since, as Begoña Gros (2011) mentions, the design of activities and communication problems make collaboration more complex.

A question that we can ask ourselves is what the people who carry out the instructional design, as well as the teachers, are understanding by collaborative learning. And in the light of the theoretical references and of the institutional educational model itself, to be able to make an analysis and draw conclusions.

Another line of study could go through the analysis of the learning achieved, recognized beyond the perception of those who participate in the educational process, but in the evaluation of its impact in the various areas of performance of their lives.

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