

CONSTITUENT ELEMENTS OF A COMMUNITY OF PRACTICE FOR THE CONSTRUCTION OF AN ONLINE MODULAR COURSE

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ABSTRACT

This article focuses on the characteristics and the organization of communities of practice based on the discussion about the construction and operationalization of these communities in the development of a pedagogical proposal within an update course following modular and institutional patterns. It aims at reflecting on the outline of the creation and evolution of such a proposal, based on the theory of Learning within Communities of Practice and implemented within the Virtual Learning Environment – Moodle.

Key words: Communities of Practice, Organizational Apprenticeship, Online Education

INTRODUCTION

In the implementation of professional practice routines in organizational groups, one of the characteristics which takes place is the availability to self-organize themselves in informal subgroups to implement work activities.

These subgroups are formed based on common interests and affinities, or on the opportunity arisen from work activities created by the organization, which enables them to find out those similarities. Sharing the same objective of exchanging knowledge, the Internet has provided space for groups with common interests, for information exchange and for knowledge production among professionals – the so-called social knowledge networks.

In order to realize which possibilities those experiences and technologies can bring to the organizational learning, I present the proposal of a modular course. This is a semi-presential course – Training in Distance Education (DE) for Traffic Education Programs –, at most carried on in the virtual learning environment Moodle, having as participants the employees of the Traffic Education Office of DETRAN-PE (in which I also take part as an educational advisor), and being carried on in three consecutive modules. The discussion raised in this article is based on data obtained in the first module, which took place in December 2008, and aims at contributing to the outline of the characteristics of elements which constitute a community of practice in a virtual environment and how these can suggest possibilities for proposals in the field of Online Education. I start this article wondering about the participation and the informality within communities of practice, then I analyze some data obtained in a course pilot module to be, finally, able to outline some points concerning the following modules in the research.

1 - DESCRIPTION OF THE FIRST MODULE OF THE COURSE – TRAINING IN DE FOR TRAFFIC EDUCATION PROGRAMS: RETROSPECTIVES AND PLANS

The progressive professional training is one of the necessities pointed out by the groups of participants, whose work essence can be characterized by

its formation, in different sectors of society, through educational campaigns, lectures in organizations, training for teachers and other professionals in the field of Traffic Education.

The main idea of the course project Progressive Education in DE for Traffic Education arose from the necessity of the group to obtain information about Distance Education and get to know other current possibilities to use it in professional activities.

The first module of the course gathered 15 professionals, all of them from the staff of the Traffic Education Office of DETRAN-PE. This is a multidisciplinary group, which comprises psychologists, pedagogues, and professionals from other areas of knowledge toward Education expertise as well as undergraduate students and individuals majored in high school. All of them perform functions related to planning and implementation of Traffic Education programs and projects in the aforementioned organization.

The general objective of this course is forming a community of virtual interaction practice to produce knowledge and use new technologies in the practice of traffic professionals. And the specific objectives of this module were: knowing and using collaborative tools of the virtual environment with educational purposes; reflect and discuss the thematic axes Ethics in Traffic Education, Didactics for Traffic Education, based on works developed by the Traffic Education Office in 2008, and Information and Communication Technologies; and outline a study proposal for the incoming modules.

The course suggests a collaborative learning approach. Its planning was developed according to the necessity shown in the context of procedures by these professionals and was set up through didactic strategies of individual and group studies for the collective construction. The tools used in the online activities were: message, forum, chat and journal of the course. The syllabus of Ethics and Didactics for Traffic Education were relevant for being issues dealt with in courses and lectures performed in 2008 by the educational advisors, as well as for being themes which permeate other subjects related to Traffic Education and professional activities and, in the case of Information and Communication Technologies, meet the expectations of professionals regarding their performance. These were mediated by anchor texts for the discussion in forums and enabled the collective production of syntheses which reflected the

group comprehension and development. It took place in the semi-presential modality, whose most part of activities was carried on online (each module has 15h, which makes whole 45h in the three modules). The average time period each participant took part in the activities daily was 1h.

The evaluation was formative since it permeated all the process of the course throughout the analysis and adjustment of the planning and the material of the course with the group necessities. Also, it was summative concerning the analysis of the accomplished goals; de use of environment tools by the group; the participants' feedback, concerning the methodology used; and the self-evaluation of the individual performance of each participant. The instruments used for those evaluations were participation in forums, chats; delivery of the productions developed in each stage and self-evaluation in journals and a feedback quiz.

2- PARTICIPATION OF MEMBERS IN A COMMUNITY OF PRACTICE

The institutions have already noticed the benefits of communities of practice in the organizational environment and done efforts to make them come true, using technological resources for its creation and development. Many of those companies incentivize their employees to join those communities (GOUVÊA, PARANHOS, MOTTA, 2008).

But what defines and determines the effective participation of an individual in a community of practice? Does the membership involve a determined practice, which is characterized by a central action, or can it be understood as every and any practice carried on in a community?

Wenger, McDermott, and Snyder (2002, p 4, my translation) define Communities of Practice as “groups of people who share a concern, a set of problems about a theme, and who deepen their knowledge and experience in this field, interacting in the basis of the process.” The place they occupy need not to be the same, their meetings happen for the value of their intentions and they are motivated and modified by the limits of what they can learn together.

According to Wenger (1999) apud Kimieck (2002, p 40), there are different levels of participation in a community of practice:

- **Nuclear group** – a small group in which passion and commitment stimulates the community;
- **Complete bond** – members are recognized as apprentices and define the community;
- **Peripheral participation** – people who belong to the community but have less commitment and authority, perhaps due to the fact they are newcomers or they don't have commitment to the task;
- **Transactional participation** – people from outside of the community who interact with the community occasionally to receive or provide a service without becoming a member of the community;
- **Passive access** – a large number of people who have access to the goods produced by the community, with its publications, its website, and its tools.

Thus, the central action refers to the common interest or objective of the community, and the participation of its members performed in a different way, being each one of them necessary to the establishment of the group.

Wenger, McDermott, and Snyder (2002, p 232) also describe the concept of Communities of Practice as having emerged from the discussions about teaching and learning in formal teaching institutions. However, research produced by them stemmed from the analysis of informal groups, or groups of practice which didn't have their curricular towards a specific focus or systematized as a form to accomplish their practices. Their research regarding Situated Learning and Legitimate Peripheral Participation enable an analysis of learning in terms of social structures.

Lave and Wenger (1991, p. 92) make explicit, in the analysis of the five social groups investigated, that in these communities of practice teaching is not looked upon carefully, but learning, the fundamental phenomenon. The relations established between the peers, without an asymmetry towards the teacher-student, favor the information exchange and the learning efficacy. The required skills to show the person was a member of this group were learned through the participation, exchange among more experienced members and living in the learning context. From this perspective, the focus of learning would be in the structure of community learning resources, favoring the decentralization of knowledge exchange relations among the members of the community.

Here, I question whether the directivity established by the course design, and the consequent process, influences a more committed participation

of group members. Would the participation limits be related to the formality established with the course and to the hierarchicalized relations?

3 – INFORMAL ASPECTS OF COMMUNITIES OF PRACTICE

Macedo (1999) mentions the benefits informal networks could bring to organizations, how they could bring unpredictable solutions in formal organizations to problems generated nowadays, and points to the necessity to do an interconnection between formal and informal structures.

How is it possible to make the employees more committed? Would the informality be, as in virtual communities, the most fruitful aspect to a community?

Wenger, McDermott, and Snyder (2002, p 1-4) reports how informal groups in organizations become Clubs which take the form of Communities of Practice. In the experiences with these groups some information was spread among professionals, and from those constructions they could solve problems and produce knowledge which will apply to the organizational social context.

How to experience those elements in an online course? Is it possible to establish, in a didactic proposal of a course sketch and its implementation, a level of motivation and participation that meets the reality of informal networks? Or does the attainment of a proposal generate the perception of how our ways of thinking and doing are related to the traditional paradigms, linear and hierarchized, being reflected on these drawings?

Lave e Wenger (1990) apud Baranauskas (2007, p 77, my translation) have the perspective that:

“ the social context is really influent, once they conceive learning as a process in which the subject builds up an identity, being part or joining a community of practice. According to this view, apprentices won't receive oblivious, objective knowledge; rather than that, they will learn how to be members of a community in which the knowledge is situated. In this sense of community, relations are changed and every participant is a learner to some extent.”

Taking into account those aspects in the outline of a didactic design as well, for an online community of practice, some factors could be considered: the characteristics of a social group, a common group objective to accomplish the organizational objectives, the context of performance, and especially if the structure of the built virtual environment favors the establishment of social relations of confidence to accomplish the learning goals and the non-hierarchized information exchange among peers to build knowledge.

Lemos (2000, 87 - 97) described the first groups which concretized the creation of virtual communities, many of them already considered the development of an alternative technology, democratic and simple. The virtual learning environments have a physical and technological developmental infrastructure nowadays which enables the concretization of experiences of building knowledge in the virtual reality, the creation and evolution of learning communities, and the dialogue among participants. Many virtual communities stem from informal contexts, but aim at producing and spreading specific knowledge. Establishing the interconnection among the type of interactions accomplished in those spaces to formalize the educational experiences has been a challenge.

In order to do that, it is required to adopt a concept for Online Education which privileges the exchange among participants. Valente and Silva (2006, p. 518 –519, my translation) names this type of approach “virtual get together”. This “comprises the constant accompanying and assistance of the apprentice as means to understand who s/he is or what s/he does, to be able to propose challenges and help him/her to give meaning to what s/he is doing”. The adoption of didactic strategies with these principles can allow the development of an education more towards the context of these professionals, the reflection of their practice and the possibility to apply them in their context of performance.

4 – POSSIBILITIES IN THE “CONSTITUTION” OF A COMMUNITY OF PRACTICE IN THE VIRTUAL LEARNING ENVIRONMENT MOODLE

Present elements in the community of practice may enable the analysis of the group participation in the implementation of the course. At the beginning, I highlight some of these elements:

The common objective, the initiative and interest in its creation are the most relevant points which define a community. These were also perceived throughout the first module, in the forum participations and in the participants' final report, describing the opportunity brought by this experience: "of sharing such a challenging knowledge (...), in short, for making us more integrated towards a broader objective, i.e. the learning process." (feedback message sent by a participant). In order to get more involved, the participants should be aware of and try to pursue this common objective.

Strategies used for promoting resources from the community social organization to gather groups: in the planning of the first course module – Training in DE for Traffic Education –, I advised the participants to form subgroups, as to have a more intensive participation in the forums, in a way the speech wouldn't be centered only in a few members of the larger group, allowing a broader use of the tools by everybody. However, some participants contributed in an individualized manner, not interacting with other participants. I also observed that, even with a proposal that stemmed from the employees' interests, with a methodology whose foundation was the meaning within the professional peers, the motivation to take part in the activities didn't occur spontaneously, but following the activities planned for the course.

It's necessary to get to know the group and notice that its social organization of practices are also reflected in the virtual environment and, in this sense, the pedagogue – organizer of the environment structure – needs to implement strategies to prevent those relations from interfering in the individual and group participation.

Yet concerning these strategies, there is the **reflex of the relationship among peers in the community and the non-hierarchy in the relation teacher-student.**

"As I have already taken distance courses, I used to bring my impressions from those experiences. When a virtual learning environment was mentioned, it reminded me of past experiences quickly. However, I could notice that, differently from the courses I have experienced, here the teaching seems to have a more horizontal tendency, with teachers playing the role of learning facilitators, i.e., facilitators of the knowledge exchange among students. I found it interesting."

[Message sent by a participant in the forum – “Descobertas” (“Discoveries”)].

CONCLUSIONS

In order to enable the creation of communities of practice in organizational environments, it was noticed that, besides the motivation to create a virtual community of practice, some implementation is made necessary to stimulate a greater commitment and make the meaning of ‘learning’ evident to each one of the participants.

The challenge would be thinking about a course design which enables the organization of a Community of Practice in the virtual environment. By using the available technological resource tools – in this case the Moodle learning environment –, it is possible to suggest a pedagogical proposal which not only emphasizes the planning of instructional strategies but also the social group’s aspects.

Therefore, it is sought to understand the pedagogical proposal design as being situated within the community of practice. In this sense, it would allow, thus, the involvement of all participants, making them move from a peripheral position to a more active one, pursuing their learning.

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¹ Advisor: Sérgio Abranches Paulino (UFPE).

REFERENCES

BARANAUSKAS, C. Design para Aprendizado no Contexto de Trabalho. In: VALENTE, MAZZONE, BARANAUSKAS. Aprendizagem na Era das Tecnologias Digitais. (orgs). São Paulo: CoErtex: FAPESP, 2007.

GOUVÊA, Maria Teresa Andrade de; PARANHOS, Cláudia; MOTTA, Cláudia Lage Rabello da. Promovendo o Aprendizado Organizacional por Meio das Comunidades de Prática. B. Téc. Senac: a R. Educ. Prof., Rio de Janeiro, v. 34, n.3, set/dez. 2008.

KIMIECK, Jorge Luiz. Consolidação de Comunidades de Prática: Um Estudo de Caso no Proinfo. Dissertação (mestrado). Centro Federal de Educação Tecnológica do Paraná. Curitiba, 2002.

LAVE, Jean; WENGER, Etienne. Situated learning: legitimate peripheral participation. Cambridge University Press, 1991.

LEMOES, André. Cibercultura, Tecnologia e Vida Social na Cultura Contemporânea. Porto alegre: Sulina, 2002.

MACEDO, Tânia Marta Barbosa. Redes Informais nas Organizações: a Co-gestão do Conhecimento. Resumo de monografia. INT/UFRJ/IBICT. Rio de Janeiro. 1999.

VALENTE, José Armando e SILVA, Tânia Maria Tavares Gomes. A Capacitação de Servidores do Estado Via Cursos Online. In: SILVA, M (Org). Educação On Line. São Paulo: Edições Loyola, 2006.

WENGER, Etienne; MCDERMOTT, Richard; & SNYDER, William M. Cultivating communities of practice : a guide to managing knowledge. Boston, Mass. : Harvard Business School, 2002.