

EMERGENCE OF SUBJECTS IN INTERNET SPACE: Educational proposals aiming at subject centered formation

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The paper presents research results on a discipline organization proposal in Internet groups. The disciplines are organized based on socio-cultural theories with intense investment in language tools. Analysing classroom structures that use dialogical interactions with textual materials, periodical reflections of the participants and that organize all the activities on *education through research* and on written productions, arguments are presented that the emphasis of innovative proposals using Internet resources needs to be on education, being the informatics tools aimed to qualify the proposals and to broaden their possibilities. The challenge is to create room for the self-formation of the participants.

Keywords : authorship; Internet groups; subjects;

The use of informatics tools has become an excellent resource for qualified teachers. Numerous approaches have been created, not always with the previewed learning results. In this paper we argue that *for obtaining effective learning results, more than to value the informatics tools as central element, an epistemological rupture in relationship to traditional ways of understanding learning is required, valuing the participants as subjects and authors of their own formation.*

On the text, after contextualizing an educative proposal in this direction, results of an investigation conducted with classroom groups are presented. In the presentation, while describing the main characteristics of the proposal, initiatives for supporting the emergence of subjects-authors involved in processes of self-formation in Internet space are discussed.

1-The context

The descriptions and analyses here presented refer to graduate and undergraduate disciplines in which an effort of integrating *education through research* with the use of informatics resources was implemented. The proposal is based on socio-cultural and historical theories, implying an active and reflective involvement of the participants in the activities, with an intense investment on talk, reading and writing. One form of involvement consisted of the participants' incursion into themselves, movement produced through the *dialogues with texts*, in which the students are asked to confront their own ideas and theories with those of other subjects. Overcoming ways of reading in which the reader serves only as passage instrument for other's ideas, the dialogues with texts emphasize ways of reading that are interactions with the authors, assuming the students their own voices and authorships. Parallel to this, the participants are requested to involve themselves into an intense process of self-reflection. They are asked to produce reflections on their participation on the proposed activities, on new comprehensions constructed and on the transformations produced along the process. To structure the proposal, Internet groups are organized, representing room for students and teachers sharing experiences, work and reflections, transforming the disciplines into an accompanied productive processes.

As a whole, the process represents an alternative way of organizing disciplines and courses with the use of Internet, emphasizing the problematizing of realities and of practices of the participants, aiming at its comprehension and transformation.

2-New educative alternatives with integration into Internet

The research is continuously used in the activities of the disciplines, representing the main organizing principle of the proposal. From educating through research the students are involved in processes in which they need to change what they believe is certain with the uncertain, to move from absolute truth to methodical doubt. More than to appropriate truth, they need to put themselves on its movement.

The whole process implies an intense involvement with language. Having as background the socio-historical constructivism the students are intensively involved in dialogues and written productions, accepting what is stated by Catalan [1]: *the subjects construct their ideas in social interaction with other's statements; this social form of acting is used by the subjects in their statements as an internal process for constructing knowledge and ideas.*

The organization of classroom work based on research involves an intense reconstructive questioning, critical argumentation and communication of the results for its improvement. The students are challenged to involve themselves in permanent questioning of their knowledge and practices, aiming to qualify them. These questionings conduct to the production of new understandings, more complex comprehensions of knowledge and practice. Questioning of existing truth produces new truth, leads to the construction of new arguments. This may happen through the interaction with colleagues and teachers, as well as through dialogues with authors of books and articles. The research ends with the communication of reconstructed knowledge for critic and evaluation. Communication with critic represents not only a way for qualifying the arguments, but also of constructing arguing competencies. In this process writing is specially emphasized.

To write is assumed as a way of learning. To write is not only to communicate something ready known. It is to reconstruct and to learn from what is produced. This appears in the voice of a participant: *during the course I incorporated writing to my practice, for through it to reflect and to educate.* Writing, therefore, is not only a final step in the process of research, but goes with it all the time. Writing is part of researching in the classroom and in the virtual space of the Internet. Through intense investment in writing the students assume themselves as authors, creators and protagonists. *At the same time that there was an anxiety for fulfilling all the required assignments, there was the pleasure of being author in the process.* This authorship, however, doesn't occur in isolation. Emerges from the critical space of the Internet group. Through mutual critic, each one is challenged to qualify his productions and to assume and defend his arguments.

Another important element in the proposal are the *dialogical readings*. In the words of a student, *in the dialogical readings the students are asked to read the texts and to write down the emerging questions, commentaries and critics while advancing on their reading.* In this the *Word's tool, to control modifications* is used, showing all the interventions in the texts. The products of the dialogues are added to the Internet group for the accompaniment of the teacher and of colleagues.

In the dialogues with texts room is created for students to assume themselves as interlocutors in a dialogical process in which each one is authorized to manifest his own voice. The underlying principle to the dialogues with texts is to put into action the knowledge and theories of readers. This brings up room for consciousness in relationship to students' own ideas and theories and, at the same time, to guide its reconstruction. In their testimonies the participants emphasize the importance of having been challenged to assume themselves as subjects, authors and builders of their own theories in the solution of problems they come up with. One of the challenges are the dialogic readings. A participant student declares that this produced a disequilibrium in her thinking, having to become author and actor of her own ideas. From this the students also show that the habit of dialoguing with the texts developed a more critical view in all they read. They perceive important aspects in the texts they read, they are able to confront arguments that differ from their own ideas. In this they understand that occurred an intense personal grow.

The organization of disciplines in Internet groups has as an integrating element the students' reflections. They constitute an interactive space among students, being also a way of becoming conscious of the learning that goes on, and of assuming it. The reflections represent a mapping of the learning, a way of following the learning process while it goes on. They serve also for overcoming the anxieties and the

panic in relationship to the amount of work to be done, helping the students in a better organization, specially through interaction with colleagues with similar problems. They help to become conscious about what is happening to each one in terms of learning, a way to express the advances and transformations while they occur. In the combination with the other elements of the proposal, the involvement in the reflections direct to an irreversible process, as mentioned by a student, understanding the reflections as an individual evaluative practice in search for new knowledge.

The weakly reflections, produced in *Word* documents and made available in specific folders, represent a way of approximation, of sharing of students' feelings, as well as knowledge and productions. They represent an important catalyst of a diversity of learning. With the reflections a net of feelings is produced along the process, a net in which are manifested dialectics between fear and courage, insecurity and a strenght to overcome difficulties, anxiety in relation to the new and satisfaction from what has already been fulfilled. The reflections exert an importante function. They require leaving secure positions, allowing everyone to assume himself in a process of doubts and reconstructions, without a clearly defined end point.

In synthesis, a proposal organized on *education through research*, using writing in the whole process, with intense dialogues with present as well as absent subjects, besides continuous reflections along the process, show growing possibilites for all the involved, through initiatives in which all may assume themselves as subjects and authors of their constructions.

3-To move with truth

In the discipline organization here presented there is a disruption from an absolute epistemology, accepting that truth and knowledge are socially produced. This implies an intense interaction among participants, having the Internet a central role. From this co-authorships are established, integrating participants in reconstructive processes, always challenged by others' voices. In these processes the virtual groups represent a tool capable of valuing the differences and of contributing to personal grow for all. They help to broaden the friendships, to deepen the discussions on problems and to have all participants involved in cooperative investigations.

The virtual space is perceived by participants as an innovative opportunity for learning, charged with feelings and interests. The comprehension and use of technology related to the use of Internet groups represent a route of incertainties that need to be overcome. Internet tools are unknown to a large part of the students at the beginning of the experience, making that for some their appropriation becomes a savage constructivism, since there is no provision in the disciplines for learning to use these tools. But all survive with good learning.

Analyses of participants' reflections allow to state that the use of Internet groups produces diverse contradictory feelings, starting with resistance permeated with fear in exploring these resources. While the experience advances these conflicts are overcome and positive feelings and encouragement in exploring the possibilities of those tools emerge. It is also perceived that, when the problems of technology are solved, self-esteem and self-confidence rise up, beeing the new ways for qualifying learning gradually valued.

From a set of virtual as well as face to face opportunities a relational paradigm is installed, assuming learning as procedures for searching knowledge, leaving to the teacher the role of mediation. The learning climate is transformed from the students' need to be permanently in contact with the group, reading and writing their productions.

In this process an intense personal involvement is required from everyone in the sense of questioning ideas and reconstructing them. It's not an empty interactivity, but brings up interactions that create a reconstructive space for the participants. In this sense it is necessary to emphasize that participants' knowledge are the departing point for the investigations, with confrontation with colleagues or external authors' ideas. In knowing more from what is already known, the participants are transformed from objects to subjects of the pedagogical relationships, being considered authonomous subjects, capable of

questioning, arguing and producing on themselves. Learning becomes do be understood as to reconstruct previously constructed knowledge, an endless movement of production of new meaning.

The involvement in the proposal helps the participants to become conscious that they are learners in the world, that they are involved in a learning process never ended. The obtained products are never entirely ready, but the process consists much more of putting oneself in the movements of truth than to reach a final truth. In the same process the students perceive that their certainties are no more than uncertainties. By their involvement in research they change their truths for doubts, understanding what Bernardo [2] states: *thinking is not a thing, but movement. Truth is not still, waiting to be found; all truth is moving truth and to us belongs only to move with it.*

In assuming themselves as center of the process, the students' learning becomes more significant. To connect new knowledge to what is already known, to reconstruct and to broaden meanings, to be intensely implicated in work, represent forms to make the activities ever more meaningful and pleasurable. *The readings, the papers, the texts that I write, my reflections, all transforms me a little. The net is moving.* In these movements the participants are permanently establishing new equilibria as a function of occurred transformations. New disequilibria are constantly produced to reach new equilibria. To grow is a movement of questioning, with production of answers, new knowledge, overcoming always what is already known.

One of the participating students compares her mind with a vulcano *in which the ideas are almost erupting.* The multiplicity of information and new ideas help to reorganize the existing ideas, *giving a new meaning to everyone's truth.* For another participant the new learning *produces a revolution in my way of being.* The involvement is such that he doesn't want to stop. While one activity is under way, another is waiting, and plus another is in preparation. The process may be described as *walkers in search of knowledge, a process that requires to live with chaos, with multiple windows of learning simultaneously open, trips with no maps, in which the participants need to assume their own direction.* The learning path needs to be made while walking.

4-Subjects in self-formation

Along the process, historical subjects emerge, students assuming their own formation and personal and professional advances are produced. The participants state recurrently that in the process they pass from objects to subjects, becoming subjects of their own formation history, assuming themselves as the center of the process. The students emerge as persons with ideas and points of view, capable of manifesting and contesting them. This subjects' emergence is based on the development of a ever more deep capacity for producing critiques. To be able to critic and to receive critiques is a mark of professional competence, of the capacity of growing in self-esteem and confidence from the critiques, of reconstructing and qualifying knowledge and practices from this process.

The emergence of historical subjects is also related to the possibilities of students *to work in an autonomous way, to go further than the teachers suggest and to create and to plan their own materials.* The process requires from students an intense involvement, with investment of their responsibility and personal effort, assuming themselves as centers of the learning process. In the voice of a participant, *one of the most significant advances of the course is the fact that each student feels the responsibility of his learning and that there are no ready answers, that they need to be found through students' involvement.* Therefore, the construction of autonomous and creative subjects is not based in absorbing and storing knowledge, but in the competence of being able to operate with knowledge, *in doing and redoing permanently the relationship with society and nature, using knowledge as instrument of innovation* [3].

The students describe the challenge that represented a classroom organization in which they were asked to become subjects of their own formation, challenging them to get the answers to the questions they bring in, without waiting answers from the others. These types of challenges make the students to become involved in an *irreversible reflective process*, integrating them in a continuous educating process, having always as background their own interest and motivation for advancing. For a great number of the students the experience represented a rupture point, producing a new student. The participants dis-

covered abilities and potentials that they didn't imagine they possessed, emerging from the set of activities a subject capable of manifesting and contesting his own arguments and points of view. The students emphasize the constructive character of the proposal, leaving behind the idea of accommodated students to give place to dynamic beings, capable of interpreting, of dialoguing and of interacting, aiming at transforming reality and at transforming themselves. In this a personal as well as a professional grow is reached, improving the quality of students' work and of the participation in the context in which they operate.

The participants of this type of proposal perceive themselves in continuous renewal while reading, producing texts and reflecting with others, perceiving themselves as beings in permanent transformation and being able to see ever farther. This type of involvement conducts to intellectual and cultural improvement of all the involved in the process, *allowing a spiral learning, in which the involved discover, rediscover, construct, reconstruct, learn and teach.*

The practice of dialogue in the virtual Internet groups gives opportunities for individual and group contributions, representing an integration of talents in which it is necessary to share ideas and to reach consensus, even though never final. In these space the participants feel secure to experiment and to try new ideas, feeling as subjects and authors in the contexts and social discourses in which they involve themselves.

The proposal or disciplines' organization in Internet here presented implies for the students insecure and uncertain moments, because founded on another epistemological understanding of learning. In overcoming empiricism and in assuming a constructivist approach to learning and teaching, there occurs a disruption with students' previous experience, that is understood only along the time. One basic idea that is overcome is the understanding that knowledge needs to be transmitted by teachers and absorbed by the students. When new approaches, even using intensively the Internet, do not overcome these understandings of learning and teaching, the results probably will not satisfy students, as well as teachers.

Therefore it is important that the new proposals, with use of informatics tools, be able to overcome simple activism and that the participants be challenged to assume themselves as historical subjects. The proposals need to overcome simplified constructivist models, reaching true constructions by the participants. We defend the integration of these tools by way of social-cultural-historical theories.

In the proposal supported in this text, the informatics' resources show themselves in their potential in transforming the linearity of traditional teaching, passing from mere teaching to an education centered in the learners. It is important that the approach constitutes itself not in teaching done by the use of informatics and Internet, but in a more qualified education by the wise use of these resources. If the educative processes are not questioned in their epistemological basis, the informatics tools may only add a very little. New educative alternatives, organized by intense use of informatics, and based on qualified educational theories may give emergence to a creative and qualified space in which the participants may become actors and authors in continuous reconstructions of their knowledge, becoming subjects of their own formation.

References

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