KNOWLEDGE FACE TO THE TECNOLOGICAL SCENE.STATE FROM THE IMPLEMENTATION EXPERIENCE OF THE SUPERIOR STANDARD COURSE WITH INTERACTIVE MEDIAS, FROM UNIVERSIDADE ESTADUAL DE PONTA GROSSA, PARANA

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ABSTRACT

From an educational aproach, the new tecnologies of comunication and information, specially, the computer and eletronical webs, came in handy to the teacher an interactive, modern, chalenging and inovating enviroment and can turn the teaching-learning process into a dinamic adventure.This is as valid to the presential mediate school for new tecnologies as to Education by Distance, wich has gaining great impulse in this century begining.It is focused in this article to relate our experience while tutor professor during implementation of Superior Standard Course with Interactive Medias, from Universidade estadual de Ponta Grossa, aproaching the question of knowledge face to tecnological scene with enfasis to video conference as a virtual educational tool.
Key word: knowledge; video conference; tutor professor

Introduction

The education mediated by new tecnologies - presented and by distance - intensify with the tecnological revolution that, as mentioned before, is determining a new economicand social order into the most variated fields of human action, essencially in the educational area.

The cientific and tecnological development is creating inside the educators a necessity to adopt school models that respond to the deep changes that the knowledge society from the begining of this new century pass to claim, where the increasing perspective of diversify educational spaces reveals a boundless aprentice.

Reorganize the education into a system based in new tecnologies , where disigned systems and specialized people in aprentice as one thing, put themselves as a fundamental question.

In this context, we objective to relate our experiences while tutor professor during the implantation of Superior Standard Course with Interactive Medias from Universidade Estadual de Ponta Grossa. For all, initially we look to the question of knowledge face to the tecnological scene, the use of video conference as a virtual educational tool.

1 Knowledge Face to the Tecnological Scene

Knowledge is a conquest that can take the man out of his minority condition. The tecnological development pace and the productive reestructure make that knowledge be consider as a fundamental competence to any citizen nowadays.

Knowledge is the information full of subjective aspects, where the interpretation, the context, the meaning, and even the individual own wisdom become one thing. Davenport (1998) assumes that knowledge is the syntax of multiple sources of information.

The contemporary society, in its forms of organization, increases the participation spaces of man, building his own citizeness, knowing his dimension exclusivelly productive, claims new behaviors, more participative and critic, new reallity readings, as to understand himself as a citizen and occupy spaces that historically has been built.

Chleba (2000, p.37) says,

> We are facing a new mecanism of distribution om informative contain, wich puts in one pan the technics of pressed and televisive comunication, the computer animation and the software presenting way in windows standard.

For him, the big challenge is to put together these components to create a new language that can assist the wishes and expectations of people in the utilization of the computer as a vehicle of information distribution and entertainment. This language can make companies achieve markets never thought before in terms of acting, because they will deal with a lot of wishes and tastes that

until now it was unknown.

The idea of comunication is so old as the humanity. But, nowadays, the possibility of image presentation, videos, audio and animations with computers, with surgiment of internet, is radicalizing this idea.

The perspective for this century indicate the educationas base to build ideals of justice, peace, solidarity and fredom. The economic transformations, politics and social for whom the world has been trough are real and unreversable. The humanity has been challenged to witness two important transitions that afects deeply society: the advent of societyof knowledge and the globalization (MORAN et al, 2001).

We live a moment of superation of the catesian paradigm that modeled ocidental society and influenced significantly the rest of the world. Necessarelly compreension is made from the state of knowledge of the actual globalized society, centered in the use and aplication of information, that processes, even more and more,through informatic. The new tecnologies of information has changed stablished ways to be and think, emerging new spaces to Cyberculture. In this new paradigm, the student pass from mere expectador, information receptor to constructor of his knowledge. The professor is not a mere transmissor and pass to be a mediator of the process of his students´ knowledge. In this perspective the educators should find new ways to face the challenges of this paradigm change that focus not only in the teaching, but, mainly, in learnig.So it is necessary to create new learning strategies that create not only the transmission, but the construction of learning.

2 Video conference: a Tool for the Virtual Education

With the development of interactive tecnologies that make possible real time contact among geographic separated places , start to emerge the so called virtual classes. Among the main features of these new classrooms, it can cite the possibility of contact among students from different regions, wich can contribute with a bigger quantity of information, besides to permit the access to a vast professor staff, into a impossible dimension to a single local institution (CRUZ e BARCIA, 1999).

The video conference tecnology permit that two or more people in different places can see and hear one another at the same time, sometimes sharing presentations by the computer or document chamber. It is an audio/video interactive sistem of comunication, having interactivity in real time, "changing the presential classroom into a big place scattered geographically" (CRUZ and BARCIA, 1999, p.21).

The aplication of different kinds of midias, as the interacting share of documents, the presentation of graphics, the use of resources of audio/video in real time, make subjects before stressful in the traditional classrooms become more atractive to the students, increasing the motivation of the students in the teaching-learning process.

The video conference is adequated to institutions that wnat to create programs of web formation of teaching and research, and implement teaching

processes by distance for activities of formation and training. The chosen sistem integrates peripheries projected specially to assist the professor in the task of ministrate the class, allowing that way the complete interaction between student-professor.

It´s important to emphasise that the enviroments of suport to education by distance, even offering tools that provide the cooperation and interaction, will not achieve alone that the students construct their knowledge if they don´t have an interdiciplinare team that keep up, students as well as professors. To have rich enviroments in interactive tools is important, but, the most important are the professionals been prepared to use these resourses to promote interactions, cooperation of all envolved people in the teaching and learnig virtual process.

3 The Tutor Professor

The teaching by distance is totally different, in its organization and development, from the same kint of course offered in presencial form. In the teaching by distance, the tecnology is always present and claiming new posture from bolth, professors and students (ALVES and NOVA,2003).

To a course be vehiculated by distance, intermediated by the new tecnologies, it´s necessary to count with a complex organized infra structure (technic, pedagogic and administrative). The teaching by distance claims the formation of a team who will work to develop each course, and stablish the on line nature of the enviroment that will be created (ALVES and NOVA, 2003).

The difference between the instructure and the tutor is institutional, that drives to important pedagogic consequences. The tutor interventions in theaching by distance, defined in a different institutional prospect distinguish in function ofthree dimensions of analysis (LITWIN, 2001): the time, the oportunity, and the risk.

Considering the time dimension, the tutor should have the hability to take advantage of his time, always short, oposite to the instructure, the tutor doesn´t know if the student will attend the next tutorial or if he is going to get in touch to consult him; for this reason they increase the comitment and the risk of his task.

While the oportunity dimension, in a presential situation, the instructure knows the student will come back; in case this element does´t find an answer that satisfy, will ask again to the instructure or to his classmates. By the other hand, the tutor isn´t that sure. He has to offer an especific answer when he has the oportunity to do it, because he doesn´t know if he will have another chance.

And, the risk dimension apears as a consequence to privilege the time dimension and not to take advantage of of oportunities. the risk consists in allow students to follow a parcial compreension, that can convert into a wrong understanding giving no chance for the tutor to have an oportunity to advise him. "The tutor must take advantage of the oportunity to the aproaching of the theme and promote reconstructing processes, starting by stating a contradiction" (LITWIN, 2001, p.102):

In this context, it is possible to redefine the roll of the professor: "more than

teach, it´s a manner of making to learn (...), focusing on the criation, on the manegement and the regulation of learning situations" (PERRENOUD, 2000, p.139).The tutor professoracts as a mediator, simplifier, incentive, knowledge investigator, of it´s own practice and the individual and grupal learning (ALMEIDA, 2001).

The new roll of the tutor professor must be represented to not reproduce in the actual education by distance enviroments traditional concepts of the features of professor/student. The roll of the professor as an information broadcaster changed places to an organize agent, dinamic and a guide to the construction of the student´s knowledge and even for his self - instruction. His importance is potencialized and his social responsabillity increased. " His place to know would be the human knowledge and not the information knowledge" (ALVES and NOVA, 2003, p.19), being comunication more important than information. His function is not to pass contain, but guide the construction of knowledge by the student.

4 State From The Implementation Experience Of The Superior Standard Course With Interactive Medias, From Universidade Estadual De Ponta Grossa, Paraná

To iniciate the work in Superior Normal was, and it´s still being, a great challenge to all of us envolved, not only for the tutor professor, because it´s about a new course, with a totally different logistic froam a regular classroom, an inovative work. We can see that through the visits we had constantly, everybody interested in this new practice. Many questioning appeared: Videoconference, what´s that? Learning Space (enviroment to learn by distance developed by Lotus used by some institutions of superior teaching), what´s that all about? If for us all of this was a new guess how it was to our students/professors,from wich many never saw a computer personally and the miority was apart of the scholar banks for a long time. Suddenly, they saw themselves in front of a computer, receiving a chock of information, using high tecnology. The greatest challenge had been released.

We started than the training, a process of contruction of tecnological competences, looking for enough technical domain to act naturally, fast and apt in the virtual enviroment that would be used, just as social and professional competences, aiming capability to manage teamds and administrate talents, skills to create and keep the focus of a group for the theme, tobe motivating and dedicated.

Hanna says, (apud ALVES and NOVA, 2003) every tutor professor should:get to know it´s own pedagogic fundation; to stablish his teaching and learning philosophy; be part ok a working staff with many speciallities; learn more skills to on line teaching; get to know your apprentices; get to know the on line enviroment, learn about tecnology; learn about the tecnological sources, recognize the lack of fisical presense, create multiples working spaces,interaction and socializing; include multiple kinds of interaction; stablish the size of the desired class; create personal on line relationships; develop learning comunities, learn by dialog; be ready to get flexible; define your rule to the on line classes; and make clear youe expectations about the apprentices´ role.

We received a storm of almost infinit informations and instructions. It was PCNs here and there, it was press botton here and there, our image on tv. The totur teachers question themselves constantly about "keep up" with this new project. In a teaching with interactive medias, what would be our role? Would we lose space to the medias?

Into a lot of reasearch, we find the line of Delores (2000, p.190), that resumes the vision we have of tecnology, be be useful, it has to be "domesticated" by men :

> To teach is an art and nothing can substitute the richness of the pedagogic dialog. But, the mediatic revolutionopens to teaching unexplored tracks. The informatic tecnologies multiply by ten the possibilities to chase information and the interactive equipment and multimidia put at service of students an infinite manancial of information : high capability and complex computers; educational programs by cable or satellite; multimidia equipment; interactive sistems of informatin exchange; including e-mail and direct access to eletronic libraries and to data bank; eletronic simulators; virtual 3D reallity sistems.
> With those new tools, the students become investigators. The professors teach the students to avaliate and create, in practice, the information that came to them. This process reveals much closer to real life than traditional methods of knowledge transmission. New relationship start to appear in the classrooms.

This reading came to quiet us a litlle, because, we could check that our course was about something that was already inside a perspective teaching, even being a new proposal.

These paradigms, wich we nedd all the time to brake, became very strong in the role of the tutor professor. It is him between the objective and study of work for students - professors. Together they exercise, all the time, reflexion about practice.

Mauri Collins and Zane Berge (apud PALLOFF e PRATT, 20002) classified the many tasks and claimed roles of the on line professor in four areas: pedagogic, witch is about the foment of a friendly social enviroment, very important to the on line learning, where the professor becomes a facilitator, animator, to motivatestudents to explore deeply the subjects, manager, that refers to the rithm of the course, to the programs, tasks and rules to be able to transmit technical domain of tecnologyto their students, so that they can act as facilitators of the course, and social, wich means educational facilitation, once that the tutor professor is responsable to ease and give space to the personal and social aspects of the on line community.

These elements are the essence to principles needed to build and keep the virtual community. To give a sense of community to the group, the tutor professor will be able to use some strategies, as, for exemple: iniciate their courses by the students presentations, making everybody get to know one another. This way, a trustable and open atmosfere is created, becoming real the fact that the group is made of people, with simulations or projects, creating a team work feeling. Thinking about these and other questions is a challenge cast to students-professors that build in their lives many doubts,doubts thas were more and more annoying.

For the first day of class we utialized a text that said about the the need of changes, of not letting us stopped, accepting things the way they are, it´s necessary to develop skills that many times we don´t know we have so that we can achive success.

Face to this changing context and new demands relating to learn, the changes are not about the adoption of diversified methods, and so to the attitude, to knowledge and to learn, just as a new conception of professor, world and society. This means that the teacher will have different roles to perform, just as to reflect about his practice and during his practice (reflexion in practice and on practice, due to Shon (apud NOVA, 1992, p178), as for the development, of learning and its role as transforming agent of himself and his students.

We start then, to develop the proposals of work that was in the PCNs. The work with the PCN infantile education was of great value, because almost everybody didn´t know the Referential Curricular Nacional Infantile Education, the study was of great importance to everybody, as Prado (1999, p.16)

> the learning of a new education referential envolves changes of mortuality [...] value change, conceptions, ideas and consequently, of attitude is not a mecanic act. It´s a reflective process, depurative, of reconstruction that implics in transformation and to transform means to know.

Though this perspective, we start to show to our students - professors the importance that theu become reflexive professors. Trying to contribute with the challenge to find ways, we ask to start with a diagnostic of the class; what was happening with it, relevant points and other items, already thinking of preparing them to the First Educative Vivency in wich aim was the diagnostic.
Paralelal to all this, we start the work with the PCNs from the first and second cicles. The study was made from their experiences, what succeded in their classes,wich needed to be changed. This working method came to enpower their practices, without their concearn, they were having a reflection of their action, in action.

The objective of this work was to understand the methodoly process, and make a critic analysis of experiences developed under different perspectives. Based in this analysis, we were creating working rules heading them really to the First Educative Vivency.

Whem we sugested the diagnostic in their classes them came indagations: how?, when?, which way?, ... We realized then, the need of a project construction. We guided all the work of the project construction to diagnostic, in wich the students - professors researched and came to us to guide the path. There were the necessity then to have many research fo exemple: What is bibliographic reporting?, How to make an abstract?, How to create an interview?, or a quiz?, among others. At this moment we , tutors, need to study and discuss a lot and that way surpass the first barrier.

Accomplished the diagnostic in a municipal school, what would they do with the answers?, how would they create the diagnostic? Our work returned to be headed to the writing productions of the students - professors to determinate the problems made, analysing and discussing the data obtained to then pass to construct an article. at this moment, all the tutorial work were availabled to the writing guide of the article, wich justified the project to the Second Educative Vivency.

In the same way, we, tutors, send the work asking that the students -

professors research, return to class to clear up doubts. Again it was a moment of much study for us.

Still, along with all these new informations of research, projects, articles and other sources, it happened the video conferences, now with terms headed more to the first and second cicles of PCNs.

It´s in relation to these new and difficult conditions of continuated exercises that we can provide reflexive practices, helping students - professors to be aware of them, cecause it´s not enough to know about the problems of life, it´s necessary to think about them and look for solutions face to colective actions.

Perrenoud said (2000, p.190) to face the complexity of the teaching work, it´s not enough only the reflexive practice, just like it´s not enough only experience.

> a limited reflexive practice to the good sense is a personal experience of each one it doesn´t go so far, because the professor needs to know that he can´t create on nothing and his reflexion would be more powerfull the more it ancores in a large human cience culture.

The investigations raised in the First Educative Vivency reflected into a project that made possible the execution of some instructions in the Second Educative Vivency, in wich the students - professors put in practice the studies they made from their diagnostics, just as to elaborate a plan of action, coming back to the field during two weeks.

They returned full of agony, deception, and they put all this frustations into an analytic report, in wich we try to guide each student - professor in pre stablished days and schedule.

According to SA (1998), the tutor professor is responsable to two important functions - the informative, aggravated by the clearing of doubts rased by the students, and the guider, that expresses himself helping in the difficulties and the promotion of studies and self instruction.

Gratuators and graduates live a process of changes that presuppose a new paradigm inthe self pedagocic practice and stablish new relations between teory and practice, among learning, research and teaching and between action and reflexion. The formation process is a collaboration work, inside a reflection enviroment and partnership, where everybody is apprentices. Graduators and graduates dedicate themselves to organize the own knowledge into interaction, due to the stablishment of conections, that are adapted to each situation - problem, in each Educative Vivency, or in each new theme.

We, totor professors, need to assume a construtive practice, and not only talk about it. It´s our task to stablish the "priori", a picture of goals and formation subjects. This picture must be a flexible guide of what intends to develop, to crate situations that will get close to the own formation group dinamic.

Along all this process we must have clear also, with the students - professors the need to always form, an avaliation attitude, reflecting continually about what they already knew of the themes and study, about new descovers, the difficulties we face, the strategies we are putting in practice, the conections stablished.

The opened possibilities to this work certainly will open new researches, new discovers, other constructions, that will rase new problems in the Educative

Vivency that will continue during the course.

> We continue, reopen
> We open big eyes to a sun
> Diferent from the one that wake us
> To the discovers.
> this is the magic of time.
> (Carlos Drummond de Andrade)

Final Considerations

The Interactive tcnologies applyedin the educational process allows to amplify the plurality of approaches, answering different styles of learning and this way supporting the aquisition of knowledge, competence and skills.

We head to a new scene, where courses are offered with mixed formats, presential/on line, focused on the student, having the professor(or professor staff) a new role - be a tutor, project arquitet of teaching and master in the dinamic of this project.

The sharing of resorces with distant comunities, the realization of virtual experiences, when the real are not possible, the possibility to bring to the students the opinions of important specialists through lectures, the aplication of togheter activities like debates and group exercisesand the perspective to bring a new vast learning ways as several medias are only some of the advantages brought by the use of video conference in education.

The resources offered by the new tecnologies can collaborate to self instruction, bring motivation to learn, collaborate to instruction in colaboration, compensate inhibitations.

The professor role must be rethougthwhen faced with the new tecnologies available for the educational envirment. The interactivity that provides a virtual learning enviroment, put the educator in a ripping paradigm position.

The tutor professor task will be to mediate a group of students by distance, through a tecnologic interface.in order to the virtual professor performs well his mediation function, it´s necessary that he has in mind the will to share certain knowledge with his group of students, the goal of his proposal of teach must be focused on the education of this group, on the eficency of the comunication and in the format of a methodology that motivates, encourage and appreciate the knowledge of the team and its relationship during the curse.

Finally we can say that the continue appearing of new tecnologies, the instantaneaty in the information flow, the shock between information sistems and ways of comunication provoke challenges to the human intelligence, rouse new ways of learning and create new spaces to know,to work and to get along.

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