The Matic networks and Research Training-Teachers in higher Agricultural Education

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Abstract

This article describes the social networking Web 2.0themes use to guide the training of researchers-teachers (R-T) in higher agricultural education institutions (HAEI). As central premise is estimated that the use of these networks radically changes the traditional view and the task of training researchers and teachers in different subject are as, particularly in higher agricultural education. Before an idea of the formation of researchers and teachers as an individual action and away from the application context as an actor alone, self-education through social networks means building a training model based R-T collaborative dialogue and democratic knowledge. It also presents a classification of different types of network R-Ton the Internet, identifying different examples of the same. The article concludes with a contribution on the scope and limitations of these research networks for constructive work in the formation of researchers and teachers, exemplifying with a proposal that was presented in Mexico and Colombia during November and December2009. We include some fundamental aspects.

Keywords: Social networks, thematic networks, training of researchers and teachers, higher agricultural education.

Introduction

This article was sent to the magazine The Quality of the UNED in Costa Rica for its possible publication. It is based on the appearance presented at the Meeting of Researchers in eastern State of Mexico (Nov. 26, 2010 at the Postgraduate College of Mexico.) This work is a breakthrough research project 09080124 entitled Mesoamerican Graduate formation, didactic and training of Teachers from DOCINADE in Mexico and Costa Rica, the University Research Program in Agricultural Education Chapingo (UACh), Mexico and one of the Strategic Scheme of the DGIP-UACH 2009-2010.

In the information society the schools is no longer the primary source, and sometimes not even the main, of knowledge. Very few scoops reserved for her. Students are bombarded with different sources and go so far as to produce as a turation of information, not even seek the information, this is the one that search the flexible and attractive formats instead of school.

As a result of this informative multiplication and deeper cultural changes that have to do with the prevalence of "relativism", we also live in a society of knowledge and multiple alignment. There are few things to know of absolute points of view that must assume the future citizens, it is better to learn and live with diversity of perspectives, theories of relativity, the existence of multiple interpretations of any information and to build your own judgment from them.

At the rate of technological change and current scientific, it is difficult to predict how citizens will have to knowing tenor fifteen years to meet existing social demands. What is clear, is that they will still have to learn, because we live in the transition of a new era(Souza, 2004), and we have excess of information since the70sof the twentieth century, up today(first decade of this century),has placed more emphasis on continuous learning society, especially in Latin American countries, including Mexico.

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Actually (and started the second decade of this century) in the context researchers from different countries, especially graduate students are living their research training process, and have ventured into the use of computer and network internet, not just use it as a daily communication tool but as a support and professional education that helps them organize their work. Thus in higher agricultural education institutions (HAEI) have more suitable conditions for the emergence of social networking through virtual communities to expand and interact increasingly in the Internet landscape.

The above project expresses the potential utility of the different types of virtual networks for lifelong learning models Researchers - Teachers. Taking this approach means radically change the traditional vision of how training and professional development of the R-T.

Substantial Changes of Social Networks in the Knowledge Society

To distinguish the concepts of "information society" and the "knowledge society" can be done in different ways to do so colloquial, we need some expert references. Leads us to agree with Castells (2000), stating that the first is imagined as the jumbled sea of information and even contaminated, while the knowledge society are the "pearls" of that great ocean. In other words, the knowledge society is more selective because the information there is being organized, offering advantages for the analysis to the purposes of research and researchers.

One ofthe most spectacular phenomena associated with this set of transformations is the widespread introduction of new technologies of information and communication technologies (ICTs) in all areas. This fact changed the everyday action sin the family and the way of work, play, relates, communicate and learn. The concept of Outcomes frogman innovation not only to reinforce the added value to the relations of production button shorten and make efficient communication processes, but especially in education involves a specific and scanning process to have strong framework in learning under a new educational paradigm: distance or virtual education. The usage of IC Tin education, especially the Internet, just in Latin America and Mexico reach 24 years in 2010. Although changes have been widespread, higher education and general agricultural college have not kept the same rate of transformation than society. In this sense, it is inevitable to think that students who come to this type of educational institutions, get a different perception of reality and bring with them expectations about the type of classroom interaction that possibly do not have much to do with what actually occurs.

In 1986 when for first time appear the Internet in Latin America, including Mexico and with it the strengthening of new information technologies and communication, perhaps it was right to call them new information technology and communication (NITC). But today when there are more new things, we simply call them the technologies of information and communication technologies (ICTs).

The school, specifically from the beginning HAEI are transmitters of knowledge institutions. This clearly defined the role of teachers and students, wondering from where the ways of teaching and learning.
While advances in science and technology have changed much of the world, higher agricultural education, and especially how students learn and teachers teach almost as not changed much. It happens that the teacher monopolize and monopolizing the show by reciting lectures here data and information and try to measure the knowledge of their students through exams. In these cases, students are limited to listening quietly for hours, trying to avoid boredom, to memorize enough topazes the exam and move forward. For a little over twenty years, the advent of ICT is one of the factors contributing to the fall in the bastions mainly because it involves new conceptions of teaching and learning: the emphasis shifts from teaching to learning, hence the roles and responsibilities of students and teachers should be reformulated to make better use of virtual education mode.

In the late 90's of the twentieth century and the development of the Internet, there is the idea of designing a frame work for the creation of education systems developed in the so-called 'information society". In this context, the information technology and educational communication will adapt to the production of tools for the purpose of facilitating the access of citizens to education in the context of technological development of computers and telecommunications. This arises, what can be considered a new educational paradigm, which focuses on education systems from engineering and design information technology learning tools, such as a need to provide realistic solutions, but advanced from the point of view of research. So the challenge of education seems to be how to have a space in technology supported education, to promote the possibilities of new compositions and creations from the present conditions of knowledge replacing the simple reproduction or acquisition of knowledge.

New educational paradigm and meaning of ICTs as social networks

At the rate of technological change and current scientific, it is difficult to predict how citizens will have to knowing tenor fifteen years to meet existing social demands. What is clears, that they will still have to learn, because we live in the era of excess of information from the70sof the twentieth century and since that time, it has put more emphasis on continuous learning society. ICT is the set of resources that are characterized as possible internally develop, use and combine in differently any form of symbolic coding of information. Verbal codes, iconic fixed or moving, the sound, are likely to be employed in computer systems.

Social Networks and Research Training-Teachers

1. Internet social networks as learning communities

In agreement with Area (2004), the phenomenon of social networks or virtual communities is growing in the last five years in parallel with the development of services and tools called Web 2.0. In generic way, we can identify three main types of networks, although the boundary that separates one from another is sometimes fuzzy. Consequently, we can speak of:

- general purpose networks or mass or mega communities (ex, Face book   MySpace, Twitter, as the best known)
- open networks to share music video files are in format, presentation, pictures, ... (ex, YouTube, Slide Share, Snips, Flirck, as the most important).
- Thematic networks and micro communities with a specific interest (ex, Ning, Elgg, GROU.PS, Google Groups, as those with more use).

In particular, the last type of community or thematic networks is not directed to the general public, but in small groups or towns of potential users linked by a thematic affinity: music, sports, cars, sex, religion, literature, etc. In these kinds of networks the most valuable, interesting and useful is not the "quantity" of people united to that network, but the "quality" of participation and communication between the virtual community members. That is, those who make up a small network should be providing information, experiences, comments, files, which are seen as interesting for the rest of the community. If the participation or social communication does not work, the network becomes inoperative and gradually disappear by starvation. Garcia Manzano (2007) cited by area (2004) indicates that "The philosophy of social networks is based on the principle of open and non-hierarchical community, linking users with a common theme or activity and a web platform (social software) that allows users to operate easily and intuitively in what is known as 'area of the 3Cs': content, construction and collaboration. " The reasons or arguments that justify the need to use virtual spaces for collaborative work between epistemic communities or scientific professionals and application of knowledge generation, as is the case of researchers - teachers, are varied, but basically could be synthesized into two:

a) The use of resources provided by the Internet (email, forums, messenger, virtual classroom, file exchange) can extend beyond the physical or personal meeting or communication between each of the subjects overcoming the space and temporal limitations. That is, a network or virtual workspace enables any subject, in our case teacher to know and be in constant contact and communication with other teachers regardless of where you are. Internet resources allow, in this sense, to overcome the narrow circumstances of physical space and time. For example, the fact that we share a common language that enables the virtual communities of researchers - teachers are trained by teachers of many Latin American countries on both sides of the Atlantic Ocean.

b) The other argument is linked with the concept of knowledge management understood as "the set of activities to use, share, develop and manage the knowledge that has an organization and individuals in this work, so that ... are designed to better achieve their objectives ... This working method allows people to learn, have judgment and reinforce their knowledge. In this sense we suggest that a good "knowledge management" will allow more junior members of an organization learn from more experienced persons. Including a little the beginning of Vigostky learning, the zone of proximal development (ZPD). Some professional in the groups, such as the R-T in collaboration with those who share the training process as researchers. It is therefore very important how to shape and rebuild the experience and turn it into a document or other digital object (be it video, multimedia presentation, concept map, or narrative).

> Here lies the essence and value of innovation projects: how to accomplish not only plan and implement a project, but how to reconstruct in a report that experience to help innovate their own practice

Therefore, the virtual spaces of social networks are also called learning communities that we understand them as a particular type of social group or virtual community characterized as "groups of people (researchers, teachers, professionals, students, people with common interests...) that interact through the network, continuously to exchange information, ideas and experiences in order to ensure the personal and professional development of members who compose it"(Rubio, 2005, pg. 76).In this sense Woodcock(cited by DeBenito, 1999) notes that the collaborative work across the network has two basic and interrelated components: the technological and human. The technology components made up of: communications systems such as telephone, email, video conferencing, among others, shared spaces where two or more people can work on the same document simultaneously(ex: shared whiteboard) where information can be shared store, access, modify and manipulate information; possibility of joint activities(such as brainstorming, voting, among the most common). The human component would consist of: the way people organize their work and communicate, the group management, design-related aspects of group work and group dynamics, how people collaborate. It is also necessary to note that each virtual community, in this case teachers can communicate and interact with different types of technological resources among which distribution lists, discussion forums, chats, e-mail, file transfer, wikis, journals /blogs /journals, and collaborative virtual spaces(ex:BSCW, Moodle).

Definitely, according to area (2004) and as Ovelar and Benito (2005) pointed: "The interest of social networks is that through a few rules you create meaningful communication systems that can create or contribute to learning communities, both in a public web site and with groups working online or in person. This facilitates the generation of knowledge, collaborative learning and collective decision making. The use of such software includes project work within formal educational programs, exchange of ideas between open communities (RT) or the development of knowledge management systems in the corporate field. "

Use of Thematic Networks on Research Training-Teachers. The Proposal of the Redpieas.

As we say in the different parts of this paper, the implementation of social issues, such as the support of research training teachers, recorded different levels of progress, as the implications and commitments of those involved both team of teachers and students themselves participate in the doctoral program.

The objective of the Doctorate of Science in Higher Agricultural Education (DSHAE), initially proposed under the collaboration agreement between Chapingo and the American Institute for Cooperation on Agriculture (AICA) is to train senior researchers for the design and implementation of individual research projects in a collective way to order the strengthen sustainable development in communities across the field of agriculture or public and private spaces where they develop as teachers and researchers (Victorino, 2008).

The DSHAE has eight generations in its recent development since 2000 and score until May 2010 with a thematic network of researchers and the Academic Consolidated. The initiative comes from researchers, PhD students and faculty of Science in Agricultural Education of the Autonomous University of Mexico Chapingo. Doctoral program belonging to the National Register of Postgraduate Quality (NRPQ) CONACYT since 2004.

The REDPEPIEAS is a horizontal organization of new management for the training of senior researchers through conducting research in the area of higher agricultural education (AHAE). This organization aims to be a group with high level of collaboration aimed at producing knowledge, develop and strengthen research in this field of knowledge and to promote disclosure, dissemination and use reciprocal with other agencies and institutions involved in the education sector.

Mission

Contribute to the production of knowledge, research training, development and consolidation of research in HAE, encouraging disclosure, dissemination. Use and linking of different forms with the institutions of HAE.

Vision

It is a reference group in the field of research in HAE related to the training of researchers and policy promotion, financing and management of educational research in institutions of formal and informal HAE.

The REDPEPIEAS seeks to develop methodologies and tools for the development of states of knowledge, promoting training and professional development of its members, increase production in your area of interest and promote partnerships with all levels and areas of work.

The structure

The REDIPEPIEAS intends to work through horizontal communication, where the Assembly is the highest level of government and permanent organ of decision of its members, both on-campus and in the distance or virtual. The modality will offer to have a regular annual meeting to follow up its work program, as well as assess their progress and results. In the virtual, assemblies and meetings are conducted through its electronic platform, promoting synchronous and asynchronous communication.

According on its design, sourceand method of operation, the relationship of thisREDIPEPIEASa Doctor ateof Science in Higher Agricultural Education in the University of Chapingo the MEAPE, the PUIEAS with members of the faculties ofagricultural sciencesin public universities autonomous in Guanajuato, Morelos, Guerrero, CESAEGRO, State of Mexico, among others,will steadily and social commitment.

We can say generally that despite the teacher or the teaching staff of this third generation had a lot of availability for using the platform, the student community did not show support and interest for various reasons to make strong the participation in our community learning.

Conclusions

Writing a paper on the construction of social networks and participation in them of stakeholders as graduate students or recent formation process of R-T is, indeed, interesting. As Any new project, especially of universal character must be based or rather must document their experiences in the heat of broader changes that are related to information and communication processes in a society stuck in the globalization and internationalization of knowledge of different academic areas. Both the network of networks such as the Internet,and resources involved in Web 2.0, are consider them as an opportunity to expand in cyberspace than they are collective practices of self RTs already exist in reality for some years . Therefore, we understand collaboration as a more complex phenomenon that application of a technique or strategy work. A social network R-T involves a change of professional culture, that in accordance with Marrero (1995) is simply to develop the principle of democratization of the school since it involves betting on a model of education committed to values such as interdependence, solidarity, self-organizational and personal emancipation.

The example discussed in our emerging experience, is an emergent action that indicates that social networks oriented towards the formation of learning communities and teaching far from diminishing their participation, says that in the near future networks will flourish and orientation no doubt, to a consolidation in open transition of the traditional society of education and information to a true knowledge society, whose natural setting must be the university.

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