79 - Social Networks as Spaces for the Professional Development of Teachers

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Abstract: The study presented in this paper integrates a research project whose main goal is to explore new approaches to teacher education and professional development that emerge from the Web 2.0 paradigm. In this paper we present three different experiences on the use of social networks for the creation of a virtual community whose main goal is the professional development of teachers. The first experience is a Portuguese project named dajaneladomeujardim – (http://janelajardim.ning.com/). The second example is a north american project created and managed by Steve Hargadon and called Classroom 2.0 (http://www.classroom20.com/). The third project cames from Brasil and is called Eadamazon – Portal de EAD e e-learning da Amazónia (www.eadamazon.com). Lessons learned from the analysis of those projects will be presented and discussed.

Keywords: social network, technologies, Web 2.0, professional development.

INTRODUCTION

In the last few decades, the rise in digital technology influenced in such a significant manner the way people live and relate to each other, that knowing how to use and master those technologies is a sine qua non condition for any responsible citizen of the XXI century.

The advent of ICT's and the Internet favored great changes in educational paradigms, a new global network use philosophy being introduced, known as Web 2.0. This philosophy leads to new paths, diversifying the ways we communicate and interact in the network. In this context, many tools where developed with this goal, as in the case of social networks, which are increasingly used, and with more aims: communicate, relate, share, interact and... learn!

That being so, the Internet, as a connecting network, has become a society development factor, contributing to the rise in creativity, productivity, and to the creating of new knowledge. According to Fernandes & Araujo (online), the economical and socio-cultural ambient of the individual is marked and based mostly in the use of Information and Communication Technologies (ICT's), that, in a way, ensure the diffusion of new information distribution strategies, as the appearance of new communication models, generating a wide group of human behavioral and attitude change possibilities related to education processes.

At the speed in which these mutations occur, we felt the need to develop a reflection about the role these new technological environments may have in the education and formation of adults, more so on the training of teachers. In fact, teachers on duty today have at their disposal a growing offer in training opportunities that only demand having a computer with Internet access and a basic level of ICT knowledge. Accessing online training spaces allows the development of new competences and skills, needed by any XXI century citizen, who will no longer see school as the only space where learning occurs, but also in the new ways to communicate and the virtual communities themselves (Social Web), as alternative models to communicate, share and collaborative knowledge construction (Veen & Vrakking, 2009).

On the other hand, changing an educational system is a task that requires will, motivation and, most importantly, political will. In the European case, especially in Portugal, the Technological Plan – TP appears, as a way to coordinate the policies of the government, to make the economy more competitive, thru the stimulus of creation, diffusion, absorbance and use of knowledge, as an element of change, in order to consolidate Portugal in international and global economies.

The project of certification of Portuguese teachers in ICT competence may be considered one of the biggest challenges of the Technological Plan for education, being the cornerstone on the teacher training strategy, as it aims to improve and innovate pedagogical practices of teachers, using ICT's in their day-to-day classes (Costa et al., 2008). The program delivers, as structuring axes, content and training, as it considers that ICT competence development is directly linked to teaching-learning processes, also ensuring some flexibility,

that, in a way, takes in consideration the pedagogical contexts, and also the different levels of ICT competences the teachers already have.

Costa et. al. (2008:p.16), present three scenarios in respect to teacher's training in ICT's:

- 1. "A" Scenario In respect to the TPE foreseen activities, each teacher gets involved in self and externally provided training;
- 2. **"B" Scenario** The school's directive body, in conjunction with the Training Center, promotes a modular training program;
- 3. "C" Scenario The teacher develops an autonomous training course, beyond the school offering.

Taking as reference the "C" scenario, that emphasizes and values the teacher initiative in individually developing his own training course, we realize that many initiative that explore the potential of social networks to create informal training spaces for teachers, that, by sharing and interacting with colleagues, promote self professional development and theirs, are already in action.

The present article has as main objective to show some on course experiences that display how social networks can function as informal spaces to professional development and to teacher training in ICT's. We believe that an analysis and reflection about these experiences may be an important step in grounding and justifying the project we are implementing in the state teachers network of Maranhão state, Brazil, which advocates the use of a social network as an online space, able to promote the professional training of teachers, and their capacities, in order to integrate ICT's in the curricula of Brazilian schools.

TEACHERS, TECHNOLOGIES AND TRAINING

Use of digital technologies is consolidating and assuming a prominent position, as necessary tool of the contemporary world, contributing to us being informed and in constant communication.

They assume a great importance role in getting all socioeconomic background persons together, allowing for the appearance of information exchange and knowledge sharing spaces. This becomes a challenge for schools, as teaching in the middle of the digital era contributes to create "never before seen opportunities to make teaching a motivating and passionate profession, which makes a difference to the future society. Such opportunities relate with new roles, new content and new methods of teaching and learning" (Veen & Vrakking, 2009, p. 14).

According to Ferreira (online), it is important to note that the use of technologies in a teaching context won't resolve all educational problems, but its use in a responsible way, with clearly defined objectives, is related with "the human and professional competence of the one who will intermediate the teaching and learning process: the teacher". So, that implies the construction of a new identity to the teacher, who, in face of technologies, must be prepared to act, in this new scenario: a teacher that can reframe learning and stimulate the collective production, in an autonomous and organized way, through digital networks.

According to Moura (2003), the scenario for change and teacher training must take into account the following criteria:

- 1. Take a position regarding information, selecting it;
- 2. Integrate diversified technological resources;
- 3. Adapt to the new characteristics of the school (active, participative and free);
- 4. Understand learning is not conclusive;
- 5. Comprehend school as a re-maker of critics.

These criteria may be considered as good practices that must be followed by all in the educational scene, both at national and international level. Because of this, the continuous training of teachers is a theme that assumes great relevance in public educational policies, that mobilize authorities to search alternatives and ways to qualify teachers that aim the concept improvement, the teaching and learning processes operationalization, since initial training only represents a phase, that anticipates the beginning of the teacher's professional actuation, them being – initial and continuous training – "nuclear components of professional development and curricular practices innovation" (Simão *et al.*, 2009, p. 64)

These authors also emphasize that the European Commission has given special attention to teacher training as a way to fulfill the strategic objectives of the Education and Training for 2010, which aims to put Europe in the knowledge based economy route, making it more competitive in a global level (Antunes, 2007).

In this context, which is understandable, there are numerous efforts to consolidate a teacher training policy that must include a series of competences that not only take in to account the teaching methods, but which is also filled with training courses that allow the teachers to explore the opportunities delivered by

technologies, making them a resource to come up with individualized ways to learn, enabling the development of attitudes on investigation, deepening and reflection on developed work (Simão et. al., 2009)

The success of that training can only be exacted thru the commitment of educational managers and the school itself, in the sense of given the necessary conditions for its operation, searching responses to the problems felt in the school day-to-day, as with the need to get external support through interaction with other professionals, making teacher become active agents in their training process.

It is in this context that Costa *et. al.* (2008) underline that teacher training in ICT's will be more effective if it was given more training time followed by continuous accompaniment, thus reducing anxiety levels and teacher's fear of the new. To the authors, that accompaniment would be of great value, because, more than encouraging teachers, would make for experience changing moments, in the use of those technologies in an educational context.

So, what is expected from teacher training is, on a first level, that it tries to familiarize teachers with the technologies and, starting from there, a training program can be launched that can fulfill their necessities. Allied with the already mentioned factors, it is indispensable for "teachers can count on a support structure that is available at all times, beyond training sessions and formal moments" (Costa *et. al.*, 2008, p.45). In a way, this contributes to ensure them because "the fact that they are more comfortable in the experiences they do with their students if they know they can have help when they need it" (idem).

We realize there is much to be done for ICT training to satisfy teacher's demands in the matter of disseminating a participating pedagogy, because, according to Ponte (2000, p. 67) "without a great dissemination of ICT in the places where people live and work, it will never be possible that these are used in a fluent and natural way. It's a resource managing and educational policy problem, where almost everything is to be done yet."

It is indispensable to make ICT a part of the teacher's life, aiming his involvement in "the student's learning, with the colleagues and other people of the society in general, so as to stop being the one that teaches, to become, mostly, the one that (co)learns and promotes learning" (Ponte, 2000, p. 89).

So, it would be interesting to create a space to live and share experiences, where teachers of the Portuguese speaking community could trade information, contributing to the construction of a training plan that goes in the direction of their wills and needs.

VIRTUAL SOCIAL NETWORKS

Virtual social networks have their concept based on participation and collaboration. Franco (2008), in his studies, says that networks are multiple paths, that have as a main characteristic the inexistence of a hierarchy, and that are constituted by various nodes or connections, favoring that communication flows in all directions.

Nowadays, networks have become keen environments to multiple informal learning, giving in, in some way, to the lifestyles of the people in this new model, that search the most diversified ways to communicate and share with a wide and culturally diversified universe.

Networks have taken a proportion never before seen, because some of them were conceived as relationship spaces, others as a way to store mp3 music, as a photo album. Orkut, MySpace and Facebook, as an example. But, with the passing of time, they assumed a quite different configuration from their main goal, incorporating some tools that contributed to increase interaction between people, as are forums, chats, news lists, among others. Ning, example giving, started as a Web services platform, but, more precisely in the beginning of 2007, it got a new configuration, allowing users to create their own personalized networks.

They reunite people interested in various themes. Some simply search for entertainment, other search for places to end doubts, share knowledge, others are moved by a common cause, and others search them to, through collaboration and interaction, build know-how and be the main character in their formative course.

This software allows people to group and organize around a defined theme, forming all kinds of community as: interests' community, interests' objectives oriented community, learning community and practice community (Henri & Pudelko, 2003).

Many professionals see them as a democratic space, and, because they are without a hierarchy, it seems to us that they create some kind of encouraging in participating and showing their anxieties.

SOCIAL NETWORKS FOR ICT TRAINING OF TEACHERS

As previously stated, networks can be a mean of expression and communication for professionals in any area. In education, they are becoming accepted by a major group of teachers' communities. Surely, there are those resistant to change, who prefer the "traditional" way to communicate and build knowledge.

But this reality has become modified. There are a lot of teachers that search for them to enhance knowledge and, mostly, to acquire competences in digital literacy.

And it is on this aspect that we present some networks, namely: dajaneladomeujardim, classroom2.0 and eadamazônia.

"dajaneladomeujardim"social network (http://janelajardim.ning.com/), was conceived in the Ning tool, it is active since October 2007 and has 612 members. This network is a part in a doctorate investigation from University of Minho – Braga – Portugal, and has the objective of providing a space to show the work of the children in kindergarten, share knowledge, mainly with teachers and others interested in the field. More than that, it has the objective of allowing the professional development for teachers in this level of schooling. (see image 1)



Image 1: Layout for the "da janela do meu jardim" webpage

Presently, the network shows 63 discussion topics in the forum, ranging themes related to child education methodologies referring all knowledge area, and also digital technologies, which constitutes, in our opinion, a plus, because it can contribute to digital inclusion and literacy development in the network members.

It also has 75 links to other sites. Something we feel is extremely important is the way it got the parents involved, by offering them a space so they could post the activities they develop. That space goes from a home meal recipe blog to those that discuss security of children in the Internet. Beyond that, it also has a space named "window to grow reading" with 6 links to other sites, and 74 videos.

We can say it is a network which is growing exponentially and that it gains more users every day. We say this based in statistical data provided by an application used by the network creator called RevolverMap, which showed us, in the day of our research, that the network, by that time, had 3070 visitors.

"Classroom 2.0" social network (http://www.classroom20.com) created by Steve Hargadon in the United States. Presently with 51.203 members, it's a network meant for people interested in the Web 2.0 tool that have as an objective to share and build knowledge in the technologies area. According with the author of the network, it's a space meant for educators to have the opportunity of being part of a digital dialogue, in order for them to acquire competences and skills in the handling of Web 2.0 tools and in that way have a personalized learning.

It's quite a big network, with 596 discussion groups, 7.314 forum topics, that also offers a language filter, which leads us to believe it's the most advanced model from Ning, "Ning Pro".



Image 2: "Classroom 2.0" social network webpage layout

The main page presents a profusion of links that point to other sites that work directly with other tools applied in an educational context, which can be searched by tool type, by subject or also by tags.

According to information collected in the environment itself, the network was nominated for three Edublog 2010 awards: "Best Educational Webinar Series", "Best Educational Use of a Social Network", and "Best Use of a PLN". That shows that the network is really being effective and, most importantly, is being recognized as a multiple-learning providing environment.

With all the tools available, we believe that this social network could be helpful in aiding teachers find new ways to integrate digital technologies and, in that way, develop more innovative classes, approaching school and the world as experienced by young people, which is filled with technological resources.

Eadamazon – Amazonia portal for OSL and e-learning (http://www.eadamazon.com). This portal is meant to divulge Amazonia's Of Site Learning and e-learning initiatives. From observation and analysis of the portal we realize that, more than courses, tutorials, videos, lectures, e-books, job announces and links to other sites connected with the theme, it is a space where people who take an interest on the matter can interact, sharing their professional and personal experiences.

Based on the studies of Grande (2003, p.19), and from the contents and proposal that it shows, it seems to us that it is a "vertical" portal, since it is specialized on only one theme, responding to the interests of a specific group.



Image 3: Eadamazon social network webpage layout

We can also classify it as an educational portal, since it presents communication tools that enable cooperative learning between its members, significantly contributing for the teacher to draw its own formative journey.

CONCLUSION

The social network concept has today a new meaning, since the appearing of the Internet and, mostly, since the Web 2.0 applications generation. When we talk, today, of social network, we think of relationship sites, that are not well regarded by parents or teachers that, thus, ignore many of the educational potential of these environments

This is an additional reason to show how social networks can be spaces where knowledge is built by sharing and interaction between its members. In the three examples given, the social software was used constructively and in a teacher's professional development logic; in the first case, parents participation was always encouraged and that was, without a doubt, one of the factors to justify the success that the experience keeps through the almost three years it is working. The presented examples show that many teachers, citizens of the XXI century, seek informal spaces for their professional development that transcend the walls of their school, community or geographical region; that, in those environments, they can personalize their formative journey according with their time and professional interests; that there are strategies that assure the permanence of the virtual community members, even if they know they are not getting any type of certification for the training they receive.

We believe that social networks can be an enabling space to the sharing of multiple educational experiences and a space that favors the interaction between teachers that can, that way, learn from one another. Being part and communicating in these spaces can be an additional enhancer so digital technologies become part of the teacher's day-to-day in the classroom.

The teacher's participation on collaborative social networks may help the professional on identifying the weak and strong spots of his practice, develop a taste for learning how to learn, as well as sharing knowledge and contribute with learning to the whole community, in a communal constructivism perspective as recommended by Holmes *et. al.* (2001).

REFERENCES

Antunes, F. (2007). Das políticas europeias às políticas nacionais: educação e professores em transição – dúvidas, incógnitas e princípios comuns. *In J. C. Morgado & I. Reis (Orgs.), Formação e Desenvolvimento Profissional Docente: Perspectivas Europeias* (pp. 13-27). Braga: CIEd, Universidade do Minho.

Costa, F. A., Rodrigues, A., Peralta, M. H., Cruz, E., Reis, O., Ramos, J. L.; Sebastião, L., Maio, V., Dias, P., Gomes, M. J., Osório, A. J. Ramos, A., Valente, L. (2008). Competências TIC: Estudo de Implementação Vol. 1. Disponível em: http://www.escola.gov.pt/docs/CompetenciasTIC-EstudoImplementacaoVolI.pdf. Acedido em: 20/04/09.

Fernandes, J. R., & Araújo, J. F. S. de (*online*). *Uma Experiência na formação de professores nas TIC*. Disponível em: http://www.nonio.uminho.pt/challenges/05comunicacoes/Tema7/03JoseFernandes.pdf. Acedido em: 20/04/09

Ferreira, M. H. M.(online). A tecnologia educacional e suas repercussões para a "formação" e "prática" docente. In *Revista Electrónica Trabalho e Educação em Perspectiva* – n° 2. Disponível em http://www.fae.ufmg.br/cadernotextos/backup/artigos/caderno_2/a_tecnologia_educaciona_e_suas_repercussoes_para_ a forma%E7%E3o e pratica docente.pdf. Acedido em 20/04/09.

Franco, A. (2008). Escola de Redes: Novas visões sobre a sociedade, o desenvolvimento, a internet, a política e o mundo globalizado. Curitiba: Escola-de-Redes.

Grande, E. (2003). *Perguntas mais frequentes*. Disponível em:http://bredam.com.br/suporte/bibliot/pdfs/perguntas frequentes.pdf.Acedido em: 12/12/10.

Grilo, R. (online) *Plano Tecnológico*. Disponível em: http://www.crie.min-edu.pt/files/@crie/1223032863_04_c _SACAUSEF_IV_ 25a28.pdf. Acedido em: 20/04/09.

Henri, F. & Pudelko, B. (2003). Understanding and analyzing activity and learning in virtual communities. *Journal of Computer Assisted Learning*, 19 (4), 474-487.

Holmes B., Tangney B., Fitzgibbon, A., Savage, T., & Mehan, S. (2001). Communal Constructivism: Students constructing learning *for* as well as *with* others. In *Society for IT in Education (SITE) 2001 conference proceedings*. Disponível em: https://www.cs.tcd.ie/publications/tech-reports/reports.01/TCD-CS-2001-04.pdf. Acedido em: 20/10/2009.

Moura, L. do R. (2003). *Intimidades em Ambientes Virtuais: Um Estudo das Relações Hedonistas em Espaço de Interação Incorpórea*. Dissertação de Mestrado em Ciências Sociais, Universidade Federal do Rio Grande do Norte. Disponível em: http://www.slideshare.net/liarosamoura/tecnologia-educacional. Acedido em: 20/04/09.

Plano Tecnológico da Educação (2007). Portugal: Ministério da Educação. Disponível em: http://www.escola.gov.pt/docs/pte_RCM_n137_2007_DRn180_200709 18.pdf . Acedido em: 12/12/2008.

Ponte, J. P. da (2000). Tecnologias de informação e comunicação na formação de professores: Que desafíos? *Revista Ibero Americana*. Disponível em: http://www.rieoei.org/rie24a03.htm. Acedido em:24/04/09.

Simão, A. M. V., Flores, M. A., Morgado, J. C., Forte, A. M., & Almeida, T. F. de (2009). Formação de professores em contextos colaborativos. Um projecto de Investigação em curso. *Sísifo, Revista de Ciências e Educação*, 08, 61-74. Disponível em: http://sisifo.fpce.ul.pt/pdfs/S8_PTG_VeigaSimãoetal(5).pdf. Acedido em: 04/05/2009.

Veen, W.; Vrakking, B. (2009). Homo Zappiens: Educando na era digital. Porto Alegre: Artmed.