

2

Communities of practice for virtual education



Comunidades de práctica para la educación virtual

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Resumen

Este artículo presenta una revisión de la literatura actual y una reflexión sobre las comunidades de práctica para educación virtual como estrategias que contribuyen a fortalecer los procesos de enseñanza y aprendizaje en educación superior. Las comunidades de práctica abren oportunidades para compartir y gestionar

el conocimiento, potencian el trabajo colaborativo para involucrar de forma activa a los estudiantes en los procesos de aprendizaje. El artículo incluye un modelo de protocolo para crear una comunidad de práctica en entornos virtuales a ser utilizado en la educación superior.

Palabras clave:

Ambientes virtuales, comunidades virtuales de práctica, trabajo colaborativo, movilidad virtual, educación superior, protocolo.



Communities of practice for virtual education

Abstract

This article presents a review of the current literature and a reflection on communities of practice for virtual education as a strategy that contributes to strengthen learning and teaching processes in higher education. The communities of practice open opportunities for sharing and managing knowledge, and

enhancing collaborative work to engage students in the learning process. The article includes a model for the protocol to create a community of practice in virtual environments to be used in higher education.

Keywords:

Virtual environments, virtual communities of practice, collaborative work, higher education, protocol.



Réseaux de collaboration pour l'éducation virtuelle

Résumé

Cet article passe en revue la littérature actuellement disponible concernant l'éducation virtuelle et propose une réflexion sur les réseaux de collaboration et les stratégies contribuant à renforcer les processus d'enseignement et d'apprentissage dans l'éducation supérieure. Les réseaux de collaboration offrent des solutions pour le

partage et le traitement des connaissances, en renforçant le travail collaboratif pour impliquer davantage les étudiants dans leur processus d'apprentissage. L'article propose également un modèle de protocole pour la création de réseaux de collaboration en environnements virtuels pouvant être utilisés dans l'éducation supérieure.

Mots-clés:

Enseignement virtuel, Apprentissage virtuel, Communication en ligne, Compétences éducatives, Natif digital.



As comunidades de prática para educação virtual

Resumo

Este artigo apresenta a revisão da literatura e da reflexão sobre comunidades de prática para a educação virtual como uma estratégia que contribui para fortalecer os processos de ensino e aprendizagem no ensino superior. As comunidades de prática permitem que se gerem oportunidades para o compartilhamento e gerenciamento

de conhecimento, e reforçam o trabalho colaborativo a fim de envolver os alunos no processo de aprendizagem. O artigo inclui um modelo para o protocolo de criação de uma comunidade virtual de prática para ser usado em ambientes de ensino superior.

Palavras-Chave:

Ambientes virtuais, comunidades virtuais de prática, trabalho colaborativo, ensino superior, protocolo.



1. Introducción

There is a remarkable need for organizations and groups of people to work together in various ways to develop and grow in all their dimensions. Communities of practice offer a way to connect individuals in order to share learning, build knowledge, and develop collaborative work. In higher education institutions, especially those which carry out virtual education processes, teaching and learning and collaborative work can be approached through communities of practice (CoP). They open new scopes and change educational practices to engage students in the learning process, taking advantage of the advances in technology that provides the tools to set a community of practice in virtual environments.

In the first section, recent literature about concepts on learning and communities of practice and its elements are considered to introduce and describe the theoretical framework for the fundamentals of CoP as

a pedagogical strategy. The second section reports the educational experiences of at least eight universities and organizations around the world that have used virtual environments for CoP. Some references to the 21st century skills and competences expected in graduates are presented as a background to contextualize the use of CoP in higher education. In the third section, the CoP is set in virtual environments, keeping in mind the need for such a community to achieve the goal of connecting students and teachers in e-learning. Some options are given as the scenery for the development and the meeting of those CoP suggesting the construction of Virtual Communities of Practice (VCoP). In the fourth section, a model of protocol is proposed containing the definition of the VCoP goals, the objectives, and the scope of the virtual community of practice within the learning processes for higher education institutions carrying out virtual programs. Finally, the article leads to a reflection on advantages and disadvantages of building VCoP to achieve the goals of sharing

and managing knowledge, developing collaborative work with students from other countries through networks.

2. Constructivism and connectivism

The construction of a Community of Practice (CoP) is framed by the educational theory of constructivism. Constructivism assumes that an individual learns in a meaningful context in which he interacts and learns based on his prior knowledge making him understand what he has constructed by himself. Constructivism includes a wide variety of learning theories stated by authors like Dewey, Piaget, Vygotsky, and Ausubel who studied learning, knowledge, and the way this knowledge is constructed by individuals.

Dewey (1916) stated that constructivism depends on "action". It means that knowledge and ideas appear only from a situation in which learners have to take the experiences that are meaningful for them.



Those situations must occur in a social context where learners work together in manipulating materials and, in this way, they form a community of learners who built up their knowledge together.

Constructivism by Piaget (1973) was based on his view of the children's cognitive development with emphasis on the formation of their mental structures. According to this author, the formation of thought is a progressive development which will achieve a certain balance in adulthood and the fundamental foundation of learning, he alleged, was discovery: "To understand is to discover, or reconstruct by rediscovery, and such conditions must be complied with if in the future individuals are to be formed who are capable of production and creativity and not simply repetition" (p. 201). For the children to achieve an understanding of basic phenomena, they have to go through stages in which they agree to ideas that later are distinguished as not truthful, therefore

understanding is built up systematically through active participation.

Piaget's theory can be applied to adult learning since they are in the process of interacting among a group of learners. In an educational situation, learners convey their prior knowledge and have the occasion to share it by collaborating with peers, this constitutes the basis of students' knowledge and learning processes.

Vygotsky's theory (1978) states that knowledge is the result of social interaction as learning is a social and contextual activity. Individuals learn from interacting with others and later establish relationships to what they previously know, believe or think. Vygotsky's zone of proximal development (ZPD) is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under

adult guidance, or in collaboration with more capable peers" (p. 86).

Following Vygotsky in a learning situation, learners start with their previous knowledge and then their learning is extended into "zone of proximal development" through three main elements: strategic instruction, collaborative construction of opportunities, and active participation. The former refers to the tools and strategies used by learners to understand and learn new material or develop skills. The strategic instruction has to do with cognitive and metacognitive strategies; collaborative construction of opportunities has to do with peer learning tasks; and active participation implies learners' engagement in the learning process (Luke, S. 2010).

In this sense and from the view of the constructivist theory, an individual constructs knowledge through the interaction between human beings and the



environment. According to Piaget (1963), the development of this theory has to follow three steps: assimilation, accommodation, and adaptation. When a person learns a new subject, he establishes a relationship to understand it in accordance to his background knowledge (assimilation). This new information modifies the existent knowledge (accommodation), and it is through transformation that this person fits in new information with existing knowledge (adaptation).

It is important to consider other approaches and theories on learning. Ausubel's theory (1983) advocates that an individual learns when there is incorporation of the new knowledge in his cognitive structure based on his prior knowledge. This is called meaningful learning, and it depends on the individual's attitudes, values, and discipline towards the topic of interest. Regarding higher education, the concern must be about what meaningful learning it involves. According to Fiddler and Marienau

(2008) [Meaningful learning] "It involves asking, what do I believe about this? What are other possibilities, other ways of seeing or believing? What have others examined and expressed about this?" (p.78). This implies to know in advance what learners know in order to use it as a reference and make it potentially significant, concerning organization and structure of content and knowledge.

2.1 New learning theories

The previous authors referred to the interaction in learning processes as one of the most important variables in the construction of knowledge in social contexts. As the discussion is focused on virtual environments, interactivity becomes a need among the learners to be able to connect with others, share and construct knowledge by collaborative work. Jovanovic et al. (2012) suggest that interactivity in learning is based on connectivism, and state that students need to be engaged in social networks for

learning from the usual interactions they have nowadays.

Regarding this, Siemens (2005) argues that learning occurs through interactions and connections with various sources of knowledge. In this sense, the digital world will provide the appropriate environment to enrich online environments and foster building of knowledge. Teachers can use media, social networking tools, and 3D interactive technologies to build interactive, dynamic, and realistic scenarios to provide students with opportunities to do collaborative work and interact (Chittaro & Ranon, 2007).

As cited by Mendez (2012), Siemens outlines the eight principles of connectivism, which is also called a learning theory for a digital age. These principles are:

- Learning and knowledge rests in diversity of opinions.



- Learning is a process of connecting specialized nodes or information sources.
- Learning may reside in non-human appliances."
- Capacity to know more is more critical than what is currently known".
- Nurturing and maintaining connections is needed to facilitate continual learning.
- Ability to see connections between fields, ideas, and concepts is a core skill.
- Currency (accurate, up-to-date knowledge) is the intent of all connectivist-learning activities.
- Decision-making is itself a learning process. Choosing what to learn and the meaning of incoming information is seen through the lens of a shifting reality. While there is a

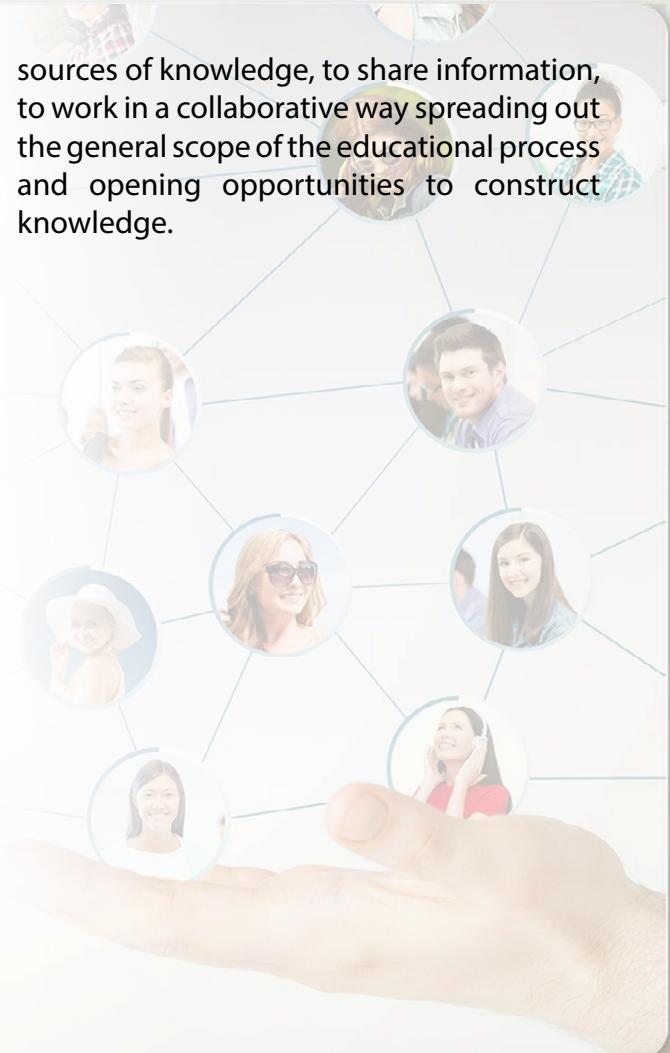
right answer now, it may be wrong tomorrow due to alterations in the information climate affecting the decision (Siemens, 2004)

These principles may explain the way learning is acquired in the current digital society, in which students use personalized, web-based collaborative tools to learn, share, and construct knowledge.

2.2 Communities of practice (CoP)

From the view of constructivism, the learning process is student-centered; knowledge is built from the own learner's experience; beliefs and values possessed by the student are used for interpreting objects and events; and reflection and collaborative work are essential elements of the process. Taking into account the view of connectivism, the interactivity provided by and for CoP is understood through the social networking learners create to get access to

sources of knowledge, to share information, to work in a collaborative way spreading out the general scope of the educational process and opening opportunities to construct knowledge.



Authors like Knowles, Holton, and Swanson (1998), and Squire and Johnson (2000) agree on the benefits of providing students with opportunities to be active learners as learning occurs when they develop critical thinking, learn in social contexts, share goals and interests, and develop cognitive processes. All of this is achieved inside a community that becomes the appropriate space to gain knowledge and interact to fulfill common activities and respond to common interests.

CoP can be conceptualized and explained from the frame of reference given by Wenger (1998), and Johnson (2001). Both concepts are taken to build the Virtual Community of Practice (VCoP) as a pedagogical strategy that contributes to strengthen learning and teaching processes in e-learning. The former considers the social theory of learning to categorize the community of practice in which the relationships among people during a time and their participation in common activities

for the groups that conform the community are underlined."It is neither a specific, narrowly defined activity or interaction nor a broadly defined aggregate that is abstractly historical and social" (p.124-5). The latter defines a virtual community as: "a group separated by space and time (i.e., geographic location and time zone), using networked technology to collaborate and communicate"(p.51).

Regarding the function of communities of practice (CoP) in the development and transmission of knowledge, Wenger determines the practice itself as the main function through the participation and knowledge construction based on an identity creation and a sense of belonging by means of collaborative and individual actions. That is to say, members interact with each other, share knowledge, and build a sense of belonging within the community. Citing Wenger:

Learning reflects our participation in communities of practice. If learning is a matter of engagement in socially defined practices, the communities that share these practices play an important role in shaping learning. The communities that matter are not always the most easily identifiable because they often remain informal (1996, p. 24).

Lazanas et al. (1998) reference Wenger regarding CoP's functions related to creation, accumulation, and diffusion of knowledge by considering CoP as a connection point to exchange and to interpret information as members of the community have "...a shared understanding, they know what is relevant to communicate and how to present information in useful ways...". In the same work, Lazanas takes CoP as innovative and creative actions in problem solving since they "... can retain knowledge in "living" ways, unlike a database or a manual... CoP preserves the tacit aspects of knowledge that formal systems cannot capture. For this reason, they are ideal for initiating newcomers into a practice" (p.2).



With reference to the quality of knowledge in the sense of updates and advancement, CoP helps to support the leading position “because people invest their professional identities in being part of a dynamic, forward-looking community” (Lazanas et al., 1998, p.2). Another function mentioned by Lazanas based on Wenger’s work is that CoP supports the sense of belonging in a community as:

They provide homes for identities. They are not as temporary as teams, and unlike business units, they are organized around what matters to their members. Identity is important because, in a sea of information, it helps us sort out what we pay attention to, what we participate in, and what we stay away from. (1998, p.2)

For Wenger (1998), there are several activities carried out in the CoP such as problem solving, request for information, seeking experience, coordinating, discussing, mapping knowledge, and doing co-

llaborative work to strengthen learning and teaching processes in e-learning in higher education. All of this is achieved through what Wenger determines as components of CoP: a domain, a community, and a practice.

More specifically, a domain is related to a category of interest and implies commitment to that domain and identity of those members. A community refers to the group built in order to share knowledge and interact with each other. And a practice means having members of the community who are practitioners. In Wenger’s words, members of a community “develop a shared repertoire of resources which can include stories, helpful tools, experiences, stories, ways of handling typical problems, etc.” (1998).

In addition, other authors like Seufert (2000), and Squire and Johnson (2000) focus on learning within a community and divide this process into four phases: (1) content, (2) intention, (3) contracting, and

(4) settlement. All what occurs along those phases, language, practices, customs, and resources develop within a CoP.

Similarly, other authors present the elements that compose the CoP. Johnson (2001) considers members of two categories: “experts and novices”. Experts are those members who have the merit of being intensely experienced through practice and education. Novices are those participants who are new in the field but are joined to the community for their interests. Also, Johnson considers other elements such as “the artifacts, which are the products, technology, media, and processes that are created by its members. Constructivist techniques (e.g., collaboration, facilitation, and ill-structured problems) enable learning to take place in communities of practice” (p. 45-60).

Keeping in mind those statements and considering that the community of practice is thought for virtual education, a virtual community of practice (VCoP) is



a good strategy to strengthen learning, sharing and building knowledge as the actions happening inside that community lead to live experiences together and support members' own learning processes in individual and collaborative work.

2.3 Virtual Communities of Practice

As seen by Johnson (2001), "Virtual communities are networked communities that bridge time zones and geographical locations. Networked technologies, especially the Internet, allow these virtual communities to exist"(p 52). The question emerging here is about the appropriate technology to be used for the VCoP.

Furthermore, Palloff and Pratt (1999) describe the steps to construct virtual communities. According to them, the community's purpose must be set as well as a place to meet. They advocate for the designation of a leader in the group and the distribution of roles to be played in the

community. The authors also mention the importance of defining "a code of conduct". A code of conduct is defined as a set of conventional principles and expectations considered binding on any person who is a member of a particular group, according to Wenger (2001). Establishing and following a code of conduct supports the problem resolution within the group and sets the rules and conditions to follow in the VCoP. Netiquette may be adopted to formalize communication.

Understanding that VCoP is addressed to higher education contexts and that its main purpose will be strengthening learning and teaching processes in virtual education, VCoP must be set in an environment that offers appropriate tools for asynchronous and synchronous communication, as well as a sense of belonging and "presence" to the participants in response to needs and interests of the students.

Indeed, the Internet has impacted all areas in individual's life regarding communication and information, and several tools allowing collaboration and interaction among members of a community can be found easily. In the context of higher education, the setting of a VCoP must offer opportunities to develop cognitive processes, cognitive and communicative competences in the frame of a meaningful and a reflexive learning basis allowing the learner to self-direct and self-manage his own learning process as it is expected interacting with others through the VCoP.

3. Educational Experiences In Vcop In Higher Education

Higher education institutions are expected to respond to the demands and needs of the current globalized world, which requires individuals who are able to manage different skills and develop several competences. According to some reports related to the skills expected from graduates in



the 21st century, authors such as Humburg and Van der Velden (2013) identified trends in higher education graduates. These trends are “professional expertise, flexibility, innovation and knowledge management, mobilization of human resources, international orientation, and entrepreneurship”(p.2).

Similarly, a study made by Gallup (2013) with Microsoft Partners in Learning, found that the 21st century skills are “Collaboration, knowledge construction, skilled communication, real world application, self-regulation, problemsolving, and technology”.

On top of that, higher education institutions are trying to innovate in their models for educating people in order to respond to the current context that implies transformations in the social, economic, and political structures of the world. All of these events pose a challenge to education: training and the development of creativity, the ability to observe, interpret, and analyze the context, the

identification of new solutions to the problems, the needs, and the changing situations in the world.

In addition, higher education institutions look for expanding educational offerings through distance and virtual programs taking advantage of the digital era and technological developments.

3.1 Educational experiences of CoP in virtual environments

Exploring the information on the web, a short description can be presented of those CoPs that use virtual environments and aim to share and manage knowledge as well as to do collaborative work to engage individuals in the learning process and to create collective learning. For the great majority of those CoPs, the main communication tools are the institutions' websites and online platforms which allow them to create their own social networks. All the information regarding these communities is taken from their websites.

Special reference will be made on the VCoP built up for language purposes at the EAN University.

a) Knowledge Management for Development (KM4Dev)

KM4Dev is a global social network of international development practitioners interested in knowledge management for international development (see <http://www.km4dev.org/>). As a setting for its community, they use Ning Mode Media (see www.ning.com). It is supported by a core group with a great number of participants from all over the world. It also uses Wikipedia in order to publish the manuals for the community.



b) DO-IT: disabilities, opportunities, internetworking, and technology from the University of Washington, Seattle, USA.

Practitioners join this CoP for a common goal of academic and career success for everyone having or not disabilities. Members can find case studies, practices, and Q&As regarding accessibility of technology, college, graduate school, and careers for individuals with disabilities (see <http://www.washington.edu/doit/about/community>).

c) Griffith University.

The Griffith University is a public research university in Australia that provides a long list of CoPs in its website, focused on exchanging and sharing knowledge to strengthen learning and teaching processes and to foster practice on several fields (see <https://www.griffith.edu.au>). Those CoPs are managed through websites and the University portal. Some of those CoPs are:

- The Cultural Diversity and Internationalisation Community of Practice - CD&I community of practice: this CoP works on the diversity of culture and language in classrooms to develop teaching and learning processes (see <https://www.griffith.edu.au/internationalisation/staff-resources/community-of-practice>).
- The Mentoring Community of Practice: this CoP connects practitioners who are interested in sharing knowledge and learning collaboratively about mentoring (see <https://app.secure.griffith.edu.au/03/mgmentoring/cop.php>).
- The Griffith Business School Teaching Community of Practice: this community gathers teachers for professional development and networking opportunities as well as it offers programs for high school students to experience the university before they are admitted (see <https://www.griffith.edu.au/business-government/griffith-business-school/high-school-community-programs>).
- The Scholarship of Learning and Teaching Community of Practice: this CoP relates research to teaching, learning and curriculum practices that involve teachers, practitioners and students (see <https://www.griffith.edu.au/learning-teaching/professional-development/communities-of-practice>)
- The School of Biomolecular and Physical Sciences Community of Practice (SBPSCoP): the SBPSCoP works on collaborative opportunities to develop scientific projects that engage students, teachers and researchers as well (see <https://www.griffith.edu.au/learning-teaching/professional-development/communities-of-practice>).



d) The International Society for Technology in Education - Virtual Environments Network (ISTE)

The ISTE is a VCoP gathering teachers and students to exchange knowledge regarding education. It hosts several activities in synchronous ways related to professional development including a monthly speaker series on ISTE Island in Second Life (see <http://connect.iste.org/communities/community-home?CommunityKey=098d3a54-b647-41f0-9215-01f266642af8>).

e) USC Marshall School of Business

The USC University in South Florida provides its community with an island in Second Life for allowing students and teachers to run their own businesses, manage rental properties, and meet in real-time classroom environments (see <http://secondlife.com/destination/679>)

f) Language learning community - virtual immersion program for learners of Portuguese.

<http://maps.secondlife.com/secondlife/Universidad%20EAN/222/34/0/>
 Universidad EAN in Colombia provides its community with a land in Second Life for students, teachers, and other officers to hold several activities related to learning, leadership, and entertainment among others. There is Language Castle as a scenario for language practice. In 2014, the language learning community offered the first virtual immersion program for learners of Portuguese with the participation of teachers and students from Universidad Católica de Pelotas (UCPel), Brasil and Universidad EAN, Colombia. This event was designed and supported by the Brazilian Professor Roberto Funck and CEDOI (Centro Independiente de Educación Virtual), UCPel and Martha Mendez, Online Modern Language program, Universidad EAN.

g) VIRTANTIS –The Oxford School for English

It is a very creative and successful open community for language learners and teachers in Second Life. It is a non-profit project of the Oxford School for English, located in Germany, which has been actively promoting language learning in Second Life VIRTANTIS since 2006 (see <http://virtlantis.com>)

h) Language Learning Community – UCPel-CEDOI - EAN University

The main objective of this VCoP is to provide a virtual space for the interaction of its members to learn and practice languages (see <http://maps.secondlife.com/secondlife/Zaitsev/31/1/22>). The language learning VCoP had a first meeting in 2013 using the land of Second Life (SL) belonging to the Independent Virtual Teaching Center (CEDOI abbreviation in Spanish). This was possible thanks to the same construction of the



community. In this first meeting, Colombian students from the Online Modern Language program of the EAN University in Colombia, and the International Business students from the Universidad Católica de Pelotas in Brazil, became members of this community in order to interact with native speakers of Spanish and Portuguese respectively. In this learning experience, it was possible to hold a virtual immersion and a virtual exchange in which both Colombian and Brazilian students were able to know not only the aspects of Colombian/Brazilian culture, but also aspects related to entrepreneurship, negotiation, and international business.

Those activities were coordinated by professors from both universities, Brazilian and Colombian research within the VCoP. More information related to this educational experience is found in a research presented at TICAL2014 (see <http://tical2014.redclara.net/doc/ptaciones/Martes/b4/CVoP-TICAL2014.pdf>)

4. Virtual worlds (vw) and social networks

In view of the diverse variety of activities done in CoPs and the communication tools the institutions and organizations use in order to provide the members with a place where they can communicate and interact, Virtual Worlds (VW) are suggested as the environments to be used since they represent real spaces and concrete resources to give a real world value and offer a place for the VCoP.

VWs are computer based, simulated 3D environments that allow users to interact and to socialize with others and lead them to experience the environment. In education, VWs are designed to immerse and engage students in the same way video games do with players. VWs support self-directed learning as well as collaborative group-based learning environments that can be delivered over the Internet thought the VCoP. As Mendez said "...virtual resources are

likely to provoke in individuals sensations of real spaces as a result of an artifact creating a sensitive reality and validation of cognitive structures" (2012, p.4). It is acknowledged that virtual worlds are not simply social space constructions but they represent a series of interactions that humans use at big rate, and are network formations where the learning process is facilitated through the interactions that are created.

It is important to mention that possibilities for synchronous communication and interaction using a Virtual World (VW) allow collaborative learning and provide the students with rich scenarios and places associated to different virtual environments that support learning and collaborative work. This will support the VCoP in higher education as learners can find a detailed overview of the tasks, the learning goals, and the corresponding material ready to be used as an input in each of the meetings they have within the VCoP.



4.1 Virtual World Platforms

There are several well-known platforms that provide VW spaces, such as:

- **Second life:** this VW was created by Linden Lab in San Francisco, CA. It is a free 3D virtual world where users can socialize, connect, and create using free voice and text chat by means of representations of themselves called avatars. Avatars can build virtual objects and meet other residents, socialize, participate in individual and group activities, and can make and trade virtual property and services among them. Second Life (SL) can recreate spaces and environments for training, can generate opportunities for people to interact, react, and make decisions without affecting a real situation that in normal conditions cannot be done (see <http://secondlife.com/>).

- **AvayaLive Engage:** it offers a cloud based immersive space that is great for training, collaboration, or business. This VW holds engaging experiences, 3D audio and real immersion. AvayaLive Engage is provided by an American multinational technology company located in Santa Clara, California, specialized in multi-channel business communication solutions for customer and team engagement (see <https://engage.avayalive.com/Engage/>)

- **Kaneva, LLC:** a VW hosted by an Atlanta-based company which offers a 3D Virtual World that supports 2D web browsing, social networking and shared media (see <http://www.kaneva.com/>)

4.2 Social Networking Sites

- **LinkedIn:** business-oriented social networking service, mainly used for interactions and relationships related only to business. The basic functionality of LinkedIn allows users to create profiles

and to connect to each other in an online social network which may represent real-world professional relationships (see <https://www.linkedin.com/>).

- **Facebook:** it is the most popular online social networking based in California. It is a platform to build social networks or social relations among people who share similar interests, activities, backgrounds or real-life connections. It is well-known that users can create a profile, add other users, exchange messages, post status updates and photos, share videos and receive notifications of others' updates. Besides this, users may join common-interest user groups, organized by workplace, school or college among others (see <https://www.facebook.com/>).

- **Ning:** it is a platform to create own social networks, and it offers tools and expertise for the user to publish and connect with a community (see www.ning.com).



5. Virtual community of practice, general issues, scope, goals, and objectives

In recent times, the use of VCoP supported by online networks has gained some attention in higher education. Examples regarding universities and organizations which use Virtual Worlds as a tool for interaction, engagement, and learning support were given before.

Authors like Hamid, Chang and Kurnia (2009) state that online social networks involve a group of people using social technologies to communicate and interact, and this is a good way to engage students and expand learning. In the same way, the use of VW for educational purposes in which educators and students find three-dimensional representations of learners and objects as in real life, provides opportunities for interaction, immersion, and the sense of presence.

With the proliferation of VCoP due to the converging technologies of tele-communications and computing, it is necessary to consider the creation of a protocol as a guideline for constructing a VCoP. Based on the common elements found in the literature review, the author of this article adapts and suggests a protocol model including an example.

5.1 Mission and Scope of the VCoP

The VCoP's main mission is to connect individuals in order to share learning, build knowledge, and develop collaborative work through the use of a Virtual World or a Social Networking site. It will provide teachers, students, and other professionals with opportunities to establish professional and academic relationships among members with the same interests in language, education, communication, entrepreneurship, and communication fields.

5.2 Goal

This VCoP aims to use virtual education as a strategy that contributes to strengthen learning and teaching processes in higher education. It focuses on sharing knowledge and best practices, exercising language with native speakers and doing research jointly.

5.3 Objectives

- To gather researchers together to explore, work on, and share knowledge regarding languages, business, entrepreneurship, and communication issues.
- To develop networks with international teachers in order to share knowledge, teaching strategies and tools, and best practices, to design or evaluate methodologies related to virtual education.
- To provide students with interaction opportunities on web-based collaborative



- workspaces with international students and native speakers of other languages.
- To hold and offer conferences, on-line forums, workshops, and seminars based on virtual worlds or social networking sites.
- To develop networks for research, linking at least five other communities of practice where members of a group use and share information through communications tools.

Other objectives can be added once the virtual community of practice gets a consolidated point by the participation, the leadership, and the commitment of the community members.

5.4 Community Membership

The target community membership of this VCoP is students, teachers, and researchers in the fields of languages, business, entrepreneurship, communication,

and education. This will be addressed to national and international institutions willing to develop collaborative work in those areas.

5.5 Community Meeting Place

Virtual worlds platforms like Second Life or social networking sites like Facebook or Ning can be used as tools to support the community's purpose. VCoP's leader and members may agree on the virtual space to meet in order to develop the community activities.

5.6 Community Roles

What may be also taken as a key issue to determine the VCoP roles based on the contribution members do by appointing staff to be in charge of the main roles: sponsor, leader, instructional designer and administrator. Once this contribution is done, other roles will be defined to determine individual, group leaders, and so on.

5.7 Resources

Besides the virtual space decided as the meeting point, even if it is a VW like Second life or a Social Networking Site like Ning, the human resources to undertake this VCoP are extremely important. A support team is necessary in order to provide the infrastructure, the procedural guidelines, and the technical and users support within the community.



6. Conclusions

Considering the theories of learning that advocate learning in a meaningful context in which individuals interact and learn, recognizing the profiles that a professional may have for the globalized world, building a virtual community of practice in higher education will foster the development and transmission of knowledge through interactions and collaborative work among teachers and students, that is to say among members of the community.

Learners and teachers can have the "sense" of being in places they otherwise would not be and will have the opportunity to enhance communicative, social, and cognitive competencies by solving problems, playing roles, and doing collaborative work.

A virtual environment offers learners and teachers a great variety of options to experience learning, to share knowledge, and to interact with other people from

different cultures as well. They interact with environment, people, objects, and places. In the current massively multi-user environments, people interact in the same space at the same time, and in different contexts as in real life and in real world.

One of the powerful motivators for learning is the informal social interactions, since most people are involved in these groups and socialize in terms of establishing relationships and building communities which offer them practice, sharing, creation and management of knowledge. A virtual world like Second Life will provide the community members with the sense of being present in the group and the possibility to interact with them. The same is thought for the teachers who work in virtual environments. Being in contact, developing collaborative work, and sharing and creating knowledge with partners will support their needs of getting professional and personal development, even more when they interact with students in a global world.

Nowadays, using virtual reality, virtual worlds, and the latest technological tools to enhance education has become a challenge to universities considering the fact that new strategies to facilitate learning must be created.

Teachers and institutions must innovate in their teaching processes in order to respond to the population needs. Technologies bring new network structures facilitating new connections among people and also innovation in teaching and learning processes is part of higher education institution roles in the global world.

Second Life or a social networking site are the options to provide students and teachers with those virtual spaces to create and share knowledge through the building of a community which offers creativity, interaction, imagination, and immersion to practice and work collaboratively.



Creating a VCoP and using VW or social networking as the main tools for interacting within the community, brings many benefits as they foster a sense of community with peers even if they are in a foreign country; they support individual knowledge and skills through several activities that are carried out in virtual academic exchanges, working jointly for both teachers and students, also providing a challenge and an opportunity to plan actions, design strategies, train others, solve problems, and fulfill tasks and activities to meet the community goals.

In conclusion, to have members of a VCoP supported by virtual worlds is a rich opportunity that higher education institutions need to take for their virtual programs. The members of a VCoP who are from other countries have different backgrounds, experiences, and skills but the same interests in sharing their knowledge. They are willing to practice what they know, they are eager to meet peers to discuss common topics of interests. All of these offer new insights into

professional and personal issues as well as a possibility to apply professional skills and knowledge acquired in education.

Video

Para complementar el tema haga clic aquí:

Virtual communities and social media | Jim Rawson | TEDxAugusta
<https://www.youtube.com/watch?v=5txst5mOywM>

Para complementar el tema haga clic aquí:

Creating virtual communities of practice for learning technology in higher education: issues, challenges and experiences
<http://core.ac.uk/download/files/5/14200.pdf>



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