

From personal to social: learning environments that work

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Abstract

VLE (Virtual Learning Environments) are rapidly falling short to meet the demands of a networked society. Web 2.0 and social networks are proving to offer a more personalized, open environment for students to learn formally as they are already doing informally. With the irruption of social media into society, and therefore, education, many voices claimed for the need of new models that demonstrate the transferability and scalability of e-learning. Salmon (2005), Sclater (2008), Atwell (2007) and others coincide in the relevance of PLEs as being useful or indeed central to learning as well as their potential for knowledge development and sharing.

However, how can we, as teachers, enhance the digital skills of our students to promote a more effective, meaningful learning? This article aims to provide some data regarding the strategies for a successful implementation of the use of PLEs with students and to share, at the same time, some examples and evidences of PLE constructions which can be of help both in Higher Education and Secondary Education levels.

Keywords

Personal Learning Environments; social learning; Informal learning; Higher Education; Secondary Education

De personales a sociales: Entornos de aprendizaje que funcionan

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Resumen

Los EVA (Entornos de aprendizaje virtuales) no alcanzan a satisfacer las demandas de una sociedad en red. La Web 2.0 y las redes sociales ofrecen a los estudiantes un entorno personalizado y abierto para que aprendan formalmente como ya lo están haciendo de manera informal. ¿Cómo podemos los profesores mejorar las habilidades digitales de nuestros estudiantes para promover un aprendizaje más efectivo y significativo? Éste artículo persigue mostrar algunas estrategias en la implementaciones del uso de PLE (Entornos Personales de Aprendizaje) con estudiantes, así como compartir algunos ejemplos tanto de Educación Superior como de Educación Secundaria.

Palabras clave

Entornos Personales de Aprendizaje; aprendizaje social; aprendizaje informal; educación superior; educación secundaria.

**That is what learning is. You suddenly understand something you've understood
all your life, but in a new way.**

Doris Lessing

I. Introduction: From standard to personal learning environments

The personalization of the learning process together with the proliferation of learner-centered approaches have caught the interest of post-Deweyan pedagogies (Downes, 2005). The industrial model based on linearity and conformity has clearly been put into question and most educational systems are undergoing reforms to meet the demands of digital society, as it is the case of the Bologna Declaration of the European Space for Higher education, or the Spanish Education Law LOE, Ley Orgánica de Educación (2006).

Within this context, batching mass productions of similar students hardly respond to the need for diversity of talents to solve the current problems faced in the 21st century (Robinson, 2010). Likewise, lifelong learning is essential to keep citizens updates and to be able and prepared to un-learn and re-learn in a world of fast-paced change. Again the same question arises: how are educators supposed to meet the challenge of personalized, rapidly-evolving learning with students?

Learning management systems (LMS) catered for the demand of non-stop learning, escaping time and place boundaries. Yet in the past few years, they have failed to keep up with the reality of a networked society. Some authors (Downes, 2005; Siemens, 2006; Jones 2008) argue that LMS reproduce the traditional teacher or institution-centered closed model, whereby students are simply managed into a standard production system. With the explosion of Web 2.0 technology and social networks, the landscape of internet has changed dramatically. Users have moved to an open platform and are connected by interests, participate in social networks like Facebook, Twitter and Youtube, create communities of practice generating a collective intelligence. The standalone Virtual learning Environment (VLE) is dead, as it requires to be integrated in a collaborative platform (Dan Pontreduct, 2009) This interactive global conversation through social media facilitates informal learning.

Cross (2007) states that 80% of learning takes place informally, while only 20% takes place in formal settings. How can educators harness the potential of this technology for learning, integrating both formal and informal dimensions?

I. Theoretical background

a. Opening up the classroom: The Student's PLE

The concept PLE concept (Personal Learning Environment) escapes the narrowing down to a single definition. However, it is broadly devised as a set of tools selected by the individual to perform different functions. Buchem (2010) presents a collection of definitions by elearning experts like "application, facility, interface, systems, ecosystem etc..." In the following diagram, created by by Joyce Seitzinger (2009) a PLE is depicted as a subset of the PLN (Personal Learning Network), creating the environment to within a network of people, connections and knowledge to learn.

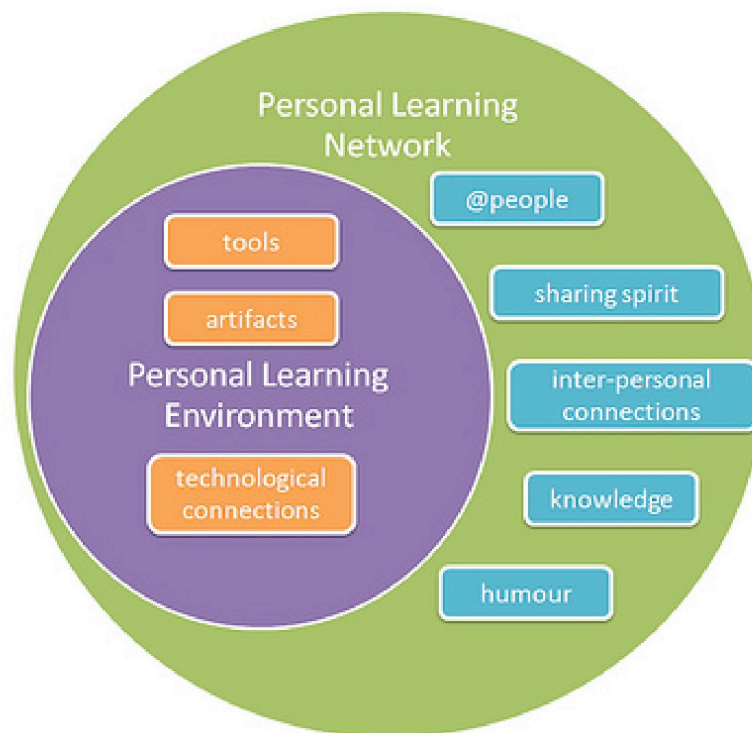


Fig. 1 Visual representation of a PLE, by Joyce Seitzinger

As McLuhan (1964) pointed out "we shape our tools but thereafter, our tools shape us." Clearly, tools create an environment that mediates the learning. In the words of Siemens (2004) "using a structured tool like an LMS drives/dictates the nature of interaction (instructors-learner, learner-learner, learner-content)". On the other hand, Graham Attwell (2010) views PLEs as "spaces in which we interact and communicate, with the ultimate goal of learning and creating a collective know-how.". The medium opens up the possibilities for learning. Personalized tools contribute to develop personalized learning. As teachers, we are helping students build an ecosystem for learning to flourish (Robinson, 2010) and empowering them to set and manage their learning goals.

The VLE can indeed be part of this ecosystem, another resource for students' learning, yet not exclusive. The student's PLE should reflect the interests, needs and personality. The main focus rests on the process rather than on the final product, transforming students into beta-learners, connected with others to share, create re-mix knowledge. See Steve Wheeler's students explain their own PLEs at <http://steve-wheeler.blogspot.com/2010/03/ple-vs-vle.html>

b. Building effective student's PLEs

With the irruption of social media into society, and therefore, education, many voices claimed for the need of new models that demonstrate the transferability and scalability of e-learning. Salmon (2005), Sclater (2008), Atwell (2007) and others coincide in the relevance of PLEs as being useful or indeed central to learning as well as their potential for knowledge development and sharing.

The idea of PLE recognizes that "learning is continuing and seeks to provide tools to support that learning" Atwell (2007) It's important to strengthen the idea that PLEs will change as learners do. By building effective PLEs, students may learn better how to take responsibility or their own learning.

According to Atwell (2007) PLEs provide learners with their own spaces under their own control to develop and share their ideas bringing together sources and contexts for learning hitherto separate. Effective student PLEs need to help learners make connections to what they have learnt or reveal that knowledge that they had prior to what they learn in the present. It is then, when the ability to connect ideas and to scaffolding takes place, therefore when it could be stated that significant learning takes place.



Fig. 2 Scaffolding <http://flickr.com/photos/biwook/390088839>

Effective student's PLEs are personal, and evolve at the student's pace. Critically, "PLEs can bridge the walled gardens of the educational institutions with the worlds outside. In so doing learners can develop the judgements and skills or literacy necessary for using new technologies in a rapidly changing society" (Atwell 2007)

But, how to build effective student's PLEs? The premise should be easy: if you build it, they won't come, therefore it is necessary that students see the need to build and shape and custom fit their own personal environments. Regarding the use of tools, it's important to enable the user's choice of them. However, as Vande Stevens (2009) recalls "we should be modeling how we network in order to show students how they can do the same in order to become productive knowledge workers".

III. The Study

a. Objectives

This research attempts to explore the role of PLE (personal learning environment) for students, in secondary and higher education contexts, as means to use technology to pursue the control over one's learning, both formally and informally. The connection of a PLE with social networks of similar interests expands the learning possibilities, enriching the interaction between open communities globally, creating PLN (personal learning networks) to contribute to personal and collective learning.

b. Participants This research was carried out through the academic year 2009-2010, with 10 Secondary School students belonging to the IES Castelló d' Empúries (Girona, Spain) and 10 students of the School of Education of the Universitat Rovira i Virgili (Tarragona, Spain).

c. Methodology

This research was based on a case study methodology, which is mainly focused on the study of the singularity and complexity of an individual case, with the aim of understanding the activity that is being developed. Case studies, on the other hand, are designed to bring out the details from the viewpoint of the participants by using multiple sources of data. Yin (1993) has identified some specific types of case studies: exploratory, explanatory, and descriptive. Exploratory cases are sometimes considered as a prelude to social research, and these may be used for doing causal investigations. Due to its nature, this research should be considered under a more descriptive typology. Case studies are multi-perspectival analyses. This means that the researcher considers not just the voice and perspective of the actors, but also of the relevant groups of actors and the interaction between them. This one aspect is a salient point in the characteristic that case studies possess. They give a voice to the powerless and voiceless. (Feagin, Orum, & Sjoberg, 1991). The case that was selected was made up of different representations of what students considered to be

representative of a personal learning environment that works.

d. The process

As it was stated before the main objective of this research was to determine which strategies prove successful for the implementation of student PLEs. In order to do that, students were introduced all throughout the course to the use of different 2.0 web-based tools and were encouraged by their teachers to reflect upon the way in which they could be useful to construct their PLE. Amongst the recommendations that could be given to students or teachers who wish to set up a PLE and taking into account many proposals out of our own PLEs, we created an open list which far from being exhaustive only tried to provide a departing point:

- Create a twitter account
- Start your own blog
- Subscribe via RSS to other blogs
- Use social bookmarking services
- Add your lifestreaming
- Share your links
- Comment to other people's blogposts
- Follow interesting people
- Start a wiki
- Ask as much as answer
- Share in the net as often as it takes.
- Publish a video
- Resolve to write, to share, to comment
- Try new tools before deciding whether or not useful.

The following list includes some of the tools to resort to:

- Symbaloo.com
- Flavours.me
- Gettwapps
- Netvibes.com
- Reader.google.com
- Twitter.com
- Facebook.com
- Wordpress.com
- Del.icio.us
- Diigo.com
- Flickr
- Youtube.

After the different tools had been introduced to them and once they were familiar with most of them, they were asked to undergo a reflective phase in order to make them aware of the tools and the relevance that they could have in order to construct their own PLEs. Some of the questions they were posed during this phase were based on Sue Waters (2019) hints on how to get started in the construction of a PLE and included:

What is the most important thing you learned from your PLE?

Select your tools according to their importance.

How would you represent your PLE?

Finally, it was this question the one which we wanted to focus on, since it would include different representations directly drawn by students which revealed the usefulness and relevance and showed, at the same time, personal differences.

IV. Results

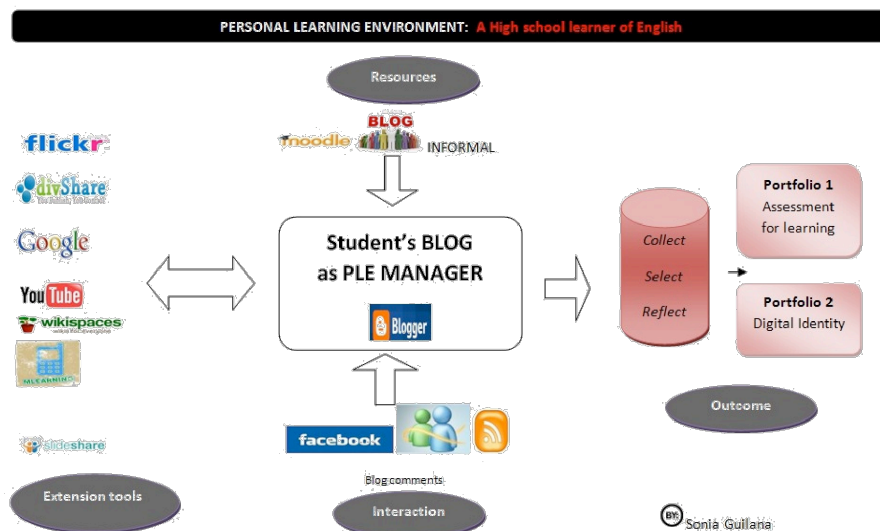
a. Examples of students' PLEs

When considering student's PLEs and their effectiveness in providing significative learning, it is important to take into account that **it is not the provision of features but their uptake and use what really determines their educational value** (Coates, James & Baldwin, 2005).

Although it is quite often to find good examples and representations of teachers' PLEs, it is much more difficult to find the same number of examples when considering students and the way in which they manage their learning process through them. . In this sense, social media become powerful tools of diffusion and it is easy to find evidence of that in the great range of teacher's PLEs which can be found online. All of them are represented very differently by their creators but that are surely effective for every one of them.

We would like to point out different examples of representations of student's PLEs. It is important to evidence that in all cases students make a reflection upon their own learning process and become aware of their needs.

In Secondary Education, students' PLE often revolve around blogs. As Stephen Downes (2005) puts it, "Blogging is very different from traditionally assigned learning content. It is much less formal. It is written from a personal point of view, in a personal voice. Students' blog posts are often about something from their own range of interests, rather than on a course topic or assigned project. More importantly, what happens when students blog, and read reach others' blogs, is that a network of interactions forms-much like a social network, and much like Wenger's community of practice." It is connected to the class VLE moodle, a list of resources, the teacher's blog, and other classmates' blogs by RSS. It usually displays a personalized interface and a wide variety of widgets, connected to other social networks like facebook, youtube, slideshare etc, along with new tools that keep enriching the web 2.0 panorama, setting up an environment for learning to take place. The outcomes of this PLE are **eportfolios**. One of the eportfolios pursues assessment for learning, by collecting, reflecting and selecting the tasks and projects that best fit the learning goals. Another resulting portfolio is the inclusion of the most significant items of learning into the learner's digital identity space, be it a website, a profile on the networks, another blog etc.



V. Discussion

One of the tasks as teachers in the digital age consists of helping students set up a personalized learning environment to promote social, life-long learning on an open platform, the web. As far as the tools are concerned, Siemens sensibly points out that "The complex process of teaching and learning requires complex, multi-faceted models of implementation. As it is made clear by the author, "one tool will not meet all needs in all contexts." (Siemens, 2006) The wide range of tools

so far available and the new ones constantly irrupting demand a revision of the PLE toolset. Each tool may provide new affordances for learning and both teachers and students must be courageous, willing to experiment with change, share and discuss the new possibilities with their networks. In this sense, the Horizon Mobile Report 2011, points out mobile technologies as having a significant impact on education within the next year or two. Thus, mobile PLEs need to be seriously considered as the coming learning environments. Learning on the go has just begun.

However, reflection on the process is key since it will cater for true knowledge acquisition and significative learning. "As millions of people create, view, and tag content, rich folksonomies are created dynamically, providing future pathways to and connections between content that will benefit future learners. As more and more people engage in such activities, the network effect will grow increasingly powerful and far-reaching in its implications for teaching and learning." (John Mott, 2010) Ultimately, the internet of people does not call for passengers, but crew (McLuhan, 1963); that is, for active participants who contribute to the creation of a global community of practice, learning together for common benefit.

**To learn is to practice and reflect,
Stephen Downes, 2008**

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