# Chapter 56

# Virtual Learning Communities:
## Interaction in Blended Learning Using Web 2.0 Tools

**Patrícia Brandalise Scherer Bassani**
*Feevale University, Brazil*

## ABSTRACT

*This chapter presents a reflection on the use of social software tools to enhance the interaction between students, allowing the development of virtual learning communities in blended learning settings. The discussion about education in Web 2.0, learning through communities, personal learning environments, and social software tools are the basic concepts of this reflection. The results show the importance of five strategies to promote blended learning based on virtual learning communities. They are: the use of a pedagogical approach based on cooperation; the focus on the selection of learning spaces that promote the interaction between students; the mixing of oriented collaborative activities in the VLE and the promotion of the use of social software, articulating prescriptive learning systems and emergent learning networks; the use of Web 2.0 tools in a PLE perspective; and the use of folksonomies to follow up the contents students produce on the Web.*

## INTRODUCTION

Shared systems in the Web that are characterized by the possibility of participation and intervention of different subjects are the base of Web 2.0. Web 2.0 is "the Web as platform" (O'Reilly, 2007) and includes a broad range of Web technologies, services, and tools.

According to Dabbagh and Reo (2011), social software is a subset of Web 2.0. Social software "describes the advent of a new wave of tools that support social interaction and collaboration in education" (Dabbagh & Reo, 2011, p. 20).

McLoughlin and Lee (2011, p. 44) state that "social software tools such as blogs, wikis, social networking sites, media sharing applications, and social bookmarking utilities are also pedagogical tools that stem from their affordances of sharing, communication, and information discovery."

In this study, we understand that the use of social software in education allows the formation of Virtual Learning Communities (VLC) and this can enhance the teaching and learning processes in blended learning settings. According to Paloff and Pratt (2002), VLC are the settings in which online learning takes place.

For the purposes of the current discussion, we understand that a blended learning approach combines prescriptive learning systems characterized by the use of Virtual Learning Environments (VLE) and emergent learning networks which focus in the use of Web 2.0 tools, especially social software (Williams, Karousou, and Mackness, 2011).

Recent studies point out that the traditional VLE promote an isolated experience from the world, because they tend to restrict the access of the students to the contents developed for a specific course, and concentrate the interactions only among the participants (Mota, 2009; Downes, 2007, 2012). Thus, the exclusive use of VLE could be substituted by Personal Learning Environments which allow the student to articulate experiences in different contexts, including social network sites, blogs and wikis; this allows the creation and sharing of contents and the interaction with other people.

The concept of Personal Learning Environments (PLE) is based on recent studies which are driven by the increase of social software use. The researchers of PLE agree with the need to enlarge the number of tools, services and contents used in the learning context, this way allowing students to use all the potential of Web 2.0 in education (Downes, 2007, 2102; Martindale & Dowdy, 2010; Couros, 2010). However, the location and analysis of the distributed content among the different tools can become a long task which demands a lot of time. This might cause difficulties in the pedagogical mediation during the teaching and learning process.

In this study, we understand that it is possible to take advantage of both VLE and PLE in blended learning settings. Through this perspective, this chapter presents a reflection on the use of social software tools to enhance the interaction between students and make the constitution of virtual learning communities feasible.

The discussion about education in Web 2.0, the learning through communities, the personal learning environment, and the social software tools are the basic concepts of this reflection.

## BACKGROUND

There are many studies about interaction in online learning (Anderson, 2004, 2008; Hirumi, 2006).

Anderson (2004, p. 43) defines interaction as "reciprocal events that require at least two objects and two actions. Interactions occur when these objects and events mutually influence one another." This definition assumes a wider view of the interaction and considers that "both human and nonhuman interactions are integral and reciprocal components of a quality educational experience, whether delivered at a distance or on campus" (Anderson, 2008, p. 131).

According to this definition, it is possible to differentiate modalities of interaction in online education.

The most common forms of interaction in distance education are student-content, student-teacher, and student-student. In this perspective, learners can interact directly with content (student-content) or can learn with the assistance of a teacher (student-teacher). However, to work on collaborative learning (student-student) in net-based synchronous and/or asynchronous activities (video, audio, discussion forum, chats, or virtual world interaction) "illustrates potential gains in cognitive learning tasks, as well

## Related Content

Sadness, Negativity, and Uncertainty in Education During COVID-19 on Social Media

Luciana Oliveira, Paulino Silva, Anabela Mesquita, Arminda Sa Sequeiraand Adriana Oliveira (2022). *International Journal of Online Pedagogy and Course Design (pp. 1-21).*

www.irma-international.org/article/sadness-negativity-and-uncertainty-in-education-during-covid-19-on-social-media/282724

A Teaching Model for the College Algebra Flipped Classroom

Lori Ogden, Laura J. Pyzdrowskiand Neal Shambaugh (2014). *Promoting Active Learning through the Flipped Classroom Model (pp. 47-70).*

www.irma-international.org/chapter/a-teaching-model-for-the-college-algebra-flipped-classroom/94407

Development of Teaching Materials to Support Learning of Children With Cerebral Palsy in the Japanese Curriculum: Japan School Initiatives

Hisashi Okawara, Takahito Koyama, Toshio Shiraishi, Shuko Ishida, Chihiro Shinguand Atsushi Okawara (2019). *Handmade Teaching Materials for Students With Disabilities (pp. 160-184).*

www.irma-international.org/chapter/development-of-teaching-materials-to-support-learning-of-children-with-cerebral-palsy-in-the-japanese-curriculum/209991

Best Practices for Emergency Remote Teaching

Michelle Dennis (2021). *Handbook of Research on Emerging Pedagogies for the Future of Education: Trauma-Informed, Care, and Pandemic Pedagogy  (pp. 82-100).*

www.irma-international.org/chapter/best-practices-for-emergency-remote-teaching/276961

Developing a Model for Information Society Competencies Required by Managers in the Information Society

Elizabeth Broos (2010). *Handbook of Research on Human Performance and Instructional Technology (pp. 470-484).*

www.irma-international.org/chapter/developing-model-information-society-competencies/38303