



## How Collaborative Environments and Communication Technologies can Influence the Teachers' Cooperation and the Effectiveness of the Learning Process

Lidia Wojtowicz

University of the West of Scotland (United Kingdom)

[Lidia.Wojtowicz@uws.ac.uk](mailto:Lidia.Wojtowicz@uws.ac.uk)

### 1. Introduction

Introducing Information and Communication Technologies to Language Learning and teaching cannot be considered as an innovative form of teaching any more. For a digital society, which we have become, these technologies, for some time, have become an integrated part of everyday life and the process of learning. What can be considered as innovative, however, is evaluating these technologies and using them in a new creative way, which reflect the needs of the new generation of learners. It can be very challenging for the teachers and language educators as "we teach in a time of rapid change, when, for the first time in history, we are preparing our students for a future that we cannot clearly describe"[3]. What worked well for previous generations of learners sometimes does not work for digital learners, using digital tools in a digital classroom or even a digital learning environment with the learning space extended beyond the conventional frameworks. Digital technologies changing the fabric of society changed not only the ways we live and communicate but also the way we educate. In Europe, after its unification, this process went in parallel with the developing of multicultural and multilingual society on the scale that has not been seen before. It now means that teachers and educators, rather than based on their previous experience and knowledge at designing the educational process of their students, have to search for new solutions, or even new combinations of old ones which can be adapted to the new generation of students. To be successful they cannot go through this process alone but have to cooperate and collaborate with other educators in the process of finding pedagogic solutions suited for the new multicultural classes of digital students.

### 2. Collaborative Environments

Collaborative environments are defined as "Digital Places and Spaces for Interaction" [4] and in this meaning the definition refers to any space where, thanks to digital technologies, five elements of collaborative learning occur: face-to-face: interaction, positive interdependence, interpersonal skills, monitoring and processing of group functioning and individual accountability. The term can also be defined as "any learning environment where participating students work and learn together collaboratively". What is strongly connected with the definition of collaborative learning Dillenbourg defines this as "a situation in which two or more people learn or attempt to learn something together" [5]. Panitz describes collaboration as "a philosophy of interaction and personal lifestyle where individuals are responsible for their actions, including learning and respect the abilities and contributions of their peers" [6]. He also explains the difference between collaboration and cooperation, defining the latter as "more as a structure of interaction designed to facilitate the accomplishment of a specific end product or goal through people working together in groups" [6]. Developing effective collaboration inside the traditional classroom can be difficult and in virtual environments we may encounter even more challenges. One of the biggest reasons for that is that according to Sonwalkar "Many instructors try to recreate a traditional class within an online learning environment"[7]. However the essence of the collaboration is always the same, and based on the transference of knowledge, sharing common goals, learning and building agreement. In virtual environments it is also strongly connected and influenced by the proper use of collaboration tools. Together with the transition from web 1.0 to web 2.0 and to web 3.0 these tools are transformed as well. They become more interactive and effectively incorporate teamwork. Students have now opportunities to interact with students around the world and, together with their teachers, collaborate on the project via online activities. It increases not only their IT skills but also their exposure to the different languages and cultures.

### 3. Collaborative environments for educating multilingual and multicultural societies

Digital technologies, in changing the fabric of society, changed the ways we live, communicate and educate. In a unified Europe this process went in parallel with the developing of multicultural and multilingual societies on a scale that has not been seen before. European Unification has rendered a stronger impact in proportion to its national citizens in the EU 27 Member States. "The total number of non-nationals (i.e. persons who are not citizens of their country of residence) living on the territory of the EU Member States on 1 January 2009 was 31.9 million, representing 6.4% of the total EU population."[8] As a result of that cultural and linguistic diversity Europe experiences the benefits of a greater multicultural and multilingual society. But also of crucial importance for the maintenance and development of multicultural societies is the provision of educational strategies that raise awareness of the issues and foster intercultural dialogue and communication. Cooperation in a virtual environment can be seen as the best way of developing and implementing these strategies and supporting students in the process of learning/teaching in the multilingual and multicultural classes. Understanding the foreign language, and the ability of communicating in it, is not the same as understanding the



culture which stands behind the language. Understanding them both is crucial to fully participate in the society. Collaboration and cooperation through the virtual environment make this process of understanding easier. Increasing the student's exposure to the foreign languages and cultures brings greater integration between different cultural backgrounds and prepares students for living in the digital, multicultural and multilingual society.

#### 4. Collaborative tools

Collaboration in the digital environment is possible thanks to collaborative tools. In the digital age this term is used not only to define any tool which promotes communication, sharing common goals and increasing interaction, but also embraces terms like 'Collaborative Software', 'Social Software', 'Collaborative Technologies', or 'Computer Supported Collaborative Work'. What is common to all of them is "Strong Communication Capability (...) its ability to facilitate communication and interaction between participants, Easy to understand Interface and the Capability and Expectation of Collaboration" [9]. These tools transformed the transition from Web 1.0 to Web 2.0 and then to Web 3.0. The increased level of collaboration and cooperation was the major element of this process together with the growth of the degree of Information Connectivity and the degree of Social Connectivity. While in Web 1.0 the main purpose of these tools was to enable the reading and downloading of the content, in Web 2.0 of more importance was participating, sharing and uploading the content. In Web 3.0 of more importance were the elements of sharing and reusing data in a more personalised way. According to Steve Wheeler Web 1.0 connected information, Web 2.0 connects people, Web 3.0 connects knowledge and Web x.0 connects intelligence. While web 1.0 tools like e-mail and newsletters pushed content out to many people, the rapid development of virtual collaborative environments began and was possible thanks to web 2.0 tools. "Web 2.0 technologies opened new possibilities for content creation, participation, and social engagement". [10] Blogs, wikis, social networking sites, video sharing and many more enabled two-way communication inside the online virtual communities and made possible re-publishing of the content. Web 3.0 tools' abilities go beyond the desktop and laptop computers and move the interaction and collaboration to mobile devices. Thanks to mobile phones and tablets or Smartphone Apps, content can be created and shared on the go. For the effective use of collaborative tools it is important that rather than replace one another they should complement each other to create integrated and collaborative Web communication.

#### 5. Teachers' collaboration in Online Environments

Teachers' collaboration became an integral part of the educational system. Working together, can promote mutual understanding and seek solutions to common problems. In a traditional model of education it takes many forms like: face to face meetings, collaborative workshops or teachers' coaching. It enables teachers and professionals to continue teaching excellence through observation and assistance but also can enhance their own workspace by learning from others. Over the last decade, these forms have now spread to the virtual environment thanks to email contacts, web mentors, chat and discussion boards, and many more collaborative tools. Thanks to these tools it is possible that teachers' collaboration expands and brings teachers from different countries closer together across cultural backgrounds and community boundaries, Even if communicating through the variety of media and models can be challenging for the teachers, collaborative professional development may results not only in enhancing teachers' professionalism but also in increased students' learning and significant gains in their scores. Integrated Web communication, joining Web 1.0, Web 2.0 and Web 3.0 tools, enable teachers to create learning space. This New Collaborative Model came thanks to participation and cooperation ideas whereby a multilingual and multicultural society can be accomplished.

#### 6. Summary

The technologies of the Twenty-first Century have enabled discursive constructions that functions simultaneously in space and time. What is different today from the ways in which people linguistically communicated in the Nineteenth and Twentieth Centuries is that we can simultaneously and collaboratively engage in many different language practices all at once.[11] Developing collaboration through new technologies and increasing multilingualism and multiculturalism is no longer a choice. It is a very powerful tool. Breaking through geographical and social barriers, collaborative environments is one of the best places where these technologies can be used in a new innovative way. It is also a very good place where the idea of multilingual and multicultural society can be accomplished. However further studies are needed on collaborative tools and the examples of best practice.

#### References

- [1] Johnson, L., Levine, A., Smith, R., and Smythe, T. (2009). The 2009 Horizon Report: K-12 Edition. Austin, Texas: The New Media Consortium.
- [2] Brown, H., & Ciuffetelli, D.C. (2009). Foundational methods: Understanding teaching and learning, p. 508. Toronto: Pearson Education.
- [3] Warlick, D., In-Time, On-Going, & Self-directed Professional Development: Personal Learning Networks. Retrived 20 January 2012 from [http://davidwarlick.com/wordpress/?page\\_id=242](http://davidwarlick.com/wordpress/?page_id=242)
- [4] Churchill, E., Snowdon, E., and Munro, A. ; Collaborative Virtual Environments: Digital Places and Spaces for Interaction, London Springer, 2001
- [5] Dillenbourg, P. (1999). Collaborative Learning: Cognitive and Computational Approaches. Advances in Learning and Instruction Series. New York, NY: Elsevier Science, Inc.
- [6] Panitz, T. (1999), Collaborative versus Cooperative Learning: A Comparison of the Two Concepts Which Will Help Us Understand the



Underlying Nature of Interactive Learning. Available at: <http://home.capecod.net/~tpanitz/tedsarticles/coopdefinition.htm> Accessed 12 February 2012

[7] Sonwalkar, N. (2001). Changing the interface of education with revolutionary learning technologies. *Syllabus* 15(4), 10-13

[8] Eurostat, *Statistics in Focus*, 45/2010, "Foreigners in the EU are diverse and largely younger than the nationals of the EU Member States".

Retrieved on the 21 January 2012 from: [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-SF-10-045/EN/KS-SF-10-045-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-10-045/EN/KS-SF-10-045-EN.PDF)

[9] Lomas, C., Burke, M. and Page, C.L. (2008), Collaboration tools. *Educause* (August 2008)

[10] Palfrey, J., and Gasser, U. (2008). *Born digital: Understanding the first generation of digital natives*. New York: Basic Books.

[11] Garcia, O. (2009). *Bilingual education in the 21st century: A global perspective*. Malden, MA: Wiley-Blackwell