

English teachers' profiles and technology-related professional development

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Introduction

This chapter discusses the possible contributions of virtual learning environments (VLEs) to the English teachers' professional development and teachers' profiles. It explores how English teachers that favor the use of new information and communication technologies (ICT) and VLEs have developed skills to design, monitor and assess teaching-learning activities, promoting an area of professional development focused on the self-transformation and the creation of new learning opportunities (Lee, M.-H., & Tsai, C.-C., 2010, Coppola, N., Hiltz, S., & Rotter, N. 2002). The emphasis on professional development recognizes technology as an important engaging practice that helps teachers to create work strategies, follow up and monitor learning (Paulson, K. 2002) while they re-signify the roles of teachers in face to face and virtual interaction (Savin, 2003, Lee & Tsai, 2010; Major, 2010; Natriello, 2005, Leyva, 2010).

English Teachers are required to incorporate teaching and learning practices in virtual environments, to do so, they are expected to be aware of the relevance of ICT in the English classroom as a part of the cultural, social

and political demands to promote collaborative and autonomous learning (McDougald, Jermaine S., 2013). This may turn into a challenge when they should create real opportunities for their students to practice the language and promote communities of practice in contexts where institutions are still struggling with the needed investment for the training and infrastructure to support this type of initiatives as a vital part of the process of teaching and learning (McShane, K., 2004) in face-to-face teaching¹. One important factor to be considered, regarding teachers' roles in VLEs in relation to time, space and interactions forms, is the teachers' response to changing and adapting to promote regulated activities to combine face-to-face teaching with VL activities. Although some teachers recognize that using VLEs implies a task on their own profile and personal investment, there are still a number of them who avoid the use of the virtual learning environment and prefer to assign it as an optional component of the student autonomous work due to the extra work it involves². So far, we have highlighted some aspects related more to the agentic and investment roles of English teachers to work on themselves to design, monitor and assess meaningful activities than their fulfillment of ideals and language visions.

The following pages provide a reflection on the competencies and roles developed by English teachers who favor VLEs, remarking a critical review of some implications for the promotion of a professional profile and detailing some of the characteristics that different circuits of VLEs provide to strengthen teachers' skills. In doing so, we have approached some research works in the field of virtual teaching but as well face-to-face and virtual combined teaching and some local policies and recommendations done by United Nations Educational, Scientific and Cultural Organization (UNESCO (2004)) to train teachers in technology use in terms of basic skills acquisition and professional development competences.

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- 1 According to Natriello (2005) the technology incorporation in face-to-face teaching has been modest. Some researchers point out that the transfer of traditional methodologies to virtual learning environments is one of the reasons that has not favored a major impact on VLEs (Kreber & Kanuka, 2006).
 - 2 According to Howard, S. K. (2013) the resistance to change cannot be regarded as a rejection to the innovation but to the roles and time/space requirements to support to their students on line, which entails a high workload.

The case of Colombia in the technology-related training of teachers

The notion of technological competence has been prioritized to strengthen teachers' professional development through the promotion of some training programs,³ launched to seek for the education of a new teacher profile capable to face the social and political demands of competitiveness and monetary development⁴. Precisely, this technological competence understood as a vocational integration in the higher education setting in terms of competencies has affected not only the teacher's role in face-to-face education but the institutional guidelines to assess and account for a teacher's profile consistent with these demands (Leyva, 2010). Indeed, the integration of technology in education is even more encompassing, thus the training strategies aim for merging ICT to the day-to-day life of teachers to increase their awareness of the technology benefits and motivates them to use technology in their workplace⁵.

For some institutions, the design and implementation of ICT training programs for teachers have meant an endeavor with profound political and educational reforms. While some teachers are open to connect ICT, and use VLEs as a complementary and integral part of face-to-face teaching; some others just prefer to use them to communicate with their students (e-mail, WhatsApp groups), underestimating VLEs potentialities to improve learning and their own professional development. Motteram, G. (2013) argues in favor of digital

3 According to the Colombian Ministry of Education, the last two decades have been decisive to empower the innovation and technology culture in the country. In the National Development Plan 2010-2014, under the slogan "Nurturing innovation to support prosperity", the education setting and particularly, the universities are responsible to connect and promote this innovation culture among young people and teachers. This document emphasizes the crucial component of ICT and VLEs as part of a quality system of higher education.

4 In the 2019 document: Colombia Vision and Bicentennial (Documento 2019 Visión Colombia II Centenario) the ICT targets promote the innovation for the competitiveness and the strengthening of human capacities to use CT+I to position Colombia in 2019 as a country that produces, distributes and uses knowledge due to the human talent and its social development in this area (p. 54). In this respect, the training of human talent in ICT must be a priority in the teachers' profile to make them able to create chains in different education levels to facilitate the promotion of knowledge and skills in science in technology among children, young people and adults.

5 In particular, the National Program Use of new technologies and mass media. Path of teaching professional development for the use of new technologies (2008, p. 5) (Programa Nacional de uso de medios y nuevas tecnologías. Ruta de desarrollo profesional docente para el uso de nuevas tecnologías, 2008) pinpoints the teachers training strategy as a key one to help teachers to cope with the affective and cognitive demands of ICT use in their work and daily routines. The program addresses the teachers' subjective preparation (inclusion and awareness-raising) and the teachers' cognitive preparation (disciplinary integration).

technologies, which are ideally placed to help teachers working with learners, and learners working independently (p. 34). Teachers as mediators and peer as mediators (Guerrero, C. H. 2007, p. 225) are fundamental to obtain good results in L2 classrooms. The importance of teachers' monitoring skills to revise students' work is an opportunity to set a different kind of relations. UNESCO (2004) considers the technological competence of teacher educators as an essential component of these teachers' professional development. In fact, UNESCO (2004) urges teachers to teach and share exemplary practices of technology use to make them worthy of emulation by student teachers and colleges (p. 38).

English Teacher Professional Development program situated

The promotion of ICT/VLs as opportunities for growth and professional development is crucial to increase the use of technology beyond the technical aspects. A real connection with the pedagogical potentialities of its use might result appealing for teachers who are not interested yet or for those who resist it for different reasons. Savin (2003) explains it within the notion of an effective professional development that includes progressive stages in a space-time continuum to help teachers have clear ideas about the benefits of technology for teaching and learning. Accordingly, Savin (2003) suggests 5 points to achieve an effective professional development that we will discuss in the light of implications for English Teachers case.

1. The teacher professional development must be connected to the intellectual significance, the social and emotional commitment, the ideas and material available within and outside teaching.

A TPD program for English teachers must consider English teachers' ideals and visions of language in a dialogic way. In this sense, the integration of VLEs is subjected to some English teachers' principles in relation to their pedagogical practices and forms of seeing the world. This implies an exploration of teachers' interests and expectations within and outside teaching to create a TPD program flexible and open to be fed and updated.

2. The teacher professional development works with the teaching context and the experience of teachers.

The case of English teaching in Colombia is mediated by different conditions. It is not the same to teach English for clients, at public and private schools and even at public and private universities. The access to technology and connectivity can be an issue to reconsider when some lessons are designed. The type of topics to be covered during a course is regulated by some institutions, while some English teachers are more autonomous to design syllabi and lessons according to an ample repertoire of ideas and experiences that are decisive to work with a CLIC emphasis for instance. A TPD program accessible to everyone needs to pay attention to English teachers' experiences, which are not all the same, and vary from teacher to teacher and from context to context.

3. The teacher professional development that brings support for the informed dissent.

Dissenting voices should be well received. The attention given to these voices cast light on aspects that need to be re-considered promoting different types of programs in which some recommendations might work later to invite teachers who dissent.

4. The professional development that helps teachers to situate their practices in a broader context than the classroom, based on a perspective more encompassing of purposes and preparation practices with the tools to observe and experience what students do using technology.

Some ELT strategies incorporate mobile learning activities to consolidate projects where teachers and learners share with the city, the life outside the classroom with different purposes. English is used to post messages or identify places and people in images. It is about taking advantage of what students can do to practice English.

5. The teacher professional development that prepares teachers (and as well families and students) to use techniques and perspectives to ask themselves.

The invitation is to move from a consumer perspective to a producer one, allowing every English teacher to assess the reliability of the activity placed on the VLEs.

ICT teaching competencies

According to some studies (Lipponen, & Simons, 2007; Anderson, Rourke, Garrison, & Archer, 2001; Berge & Collins, 2000; Goodyear, Salmon, Spector, Steeples, & Tickner, 2001; Graham, Cagiltay, Lim, Craner, & Duffy, 2001; Guasch, Alvarez, & Espasa, 2010; Salmon, 2004), roles and competencies developed in VLEs differ from roles and competencies enacted in face-to-face teaching. This affirmation is based on some aspects that stress a specialized pedagogy in which net-work collaborative practices, technical and legal and social aspects are stressed (UNESCO (2004).

Some expert English teachers in VLEs recognize that transferring methodologies used in face-to-face teaching to VLEs is an ineffective move for students, whose responses are evasive and lack consistency and creativity in terms of expected results (Kreber & Kanuka, 2006). Murname, (2009) argues the need of a specific pedagogical knowledge to obtain, assess and make information meaningful. In this sense, an English teacher development program must incorporate pedagogical practices that allow teacher to understand technology as an object-tool that should be exploited to get the most of it in this new culture of innovation. In this way, the pedagogical competence is understood here as a “macro-competence conformed by other ones, making possible relations among them and the emergence of a specific discipline domain and its learning and teaching conditions” (Hernández, 2008, p. 9). In other words, this domain straightens dimensions such as receptiveness, adaptability, flexibility and commitment to making decisions on an ad hoc basis.

Hernández, F. (2006) explains that the integration of some other competencies (communicative, technological, social) to the pedagogical one is key for the articulation between theory and practice to post problems and teaching contents. Similarly, Hernández, F. (2006) stresses the importance of the didactic and research competencies to design English learning activities to learn English learning while improving knowledge in general. the focus is shifting to the understanding of pedagogy as a complex patchwork of knowledges that complement each other to facilitate teaching mediated by technology. It draws the attention to the teachers’ intellectual capacities to distinguish not only between methods and techniques but discern good information from noise one to use it with pedagogical purposes.

Another important aspect is noticed by Tobon, M. (2007, p. 17) is the role of cultural advances and social transformations that link local and global contexts

to relate pedagogy and technology within pedagogical scenarios in VLEs. In this line of thought, Tobon found relevant the pedagogical model introduced by Gomez (2003) that integrates three angles: knowledge, teaching and information. As a result, the way English teachers cope with the information is crucial to design an appropriate content for the VLE.

Given these considerations, some authors (Lipponen, & Simons, 2007; Anderson, Rourke, Garrison, & Archer, 2001; Berge & Collins, 2000; Goodyear, Salmon, Spector, Steeples, & Tickner, 2001) claim that a digitally competent teacher has a digital literacy profile that enables him to overcome the actual everyday use of any other user. The pedagogical purposes are vital to mediate the use of technology and signify the teaching practices, the connectivity and knowledge production (Cabello, 2006, p. 4). The technological competence has been explained through the digital literacy concept to note a cross-cutting approach to literacies rather than (Hagel 2012a) digital technologies per se that emphasize in the ways users work with the information (finds it, uses it and disseminates it). In the case, of English teachers this aspect is relevant to create teaching learning processes which enact the use the information to read critically and solve problems, among other activities that had been formulated as objects of knowledge. Briefly, we can understand the teacher digital competence as the skill to use technology with teaching purposes, which means acquiring technological knowledge and adapted it pedagogically.

In sum, VLEs competencies foster teachers' attitudes and metacognitive skills to perform different type of tasks (UNESCO (2004), Hagel, 2012a). Some of these characteristics can be clustered as follows:

- An English teacher with a technology-related profile finds in ICT a potential richness to favor forms and learning styles in which English is not an end but a means.
- Has a higher literacy competence to facilitate students' social action educational intervention, where bi-literacy is important in EFL contexts.
- Enjoys the virtual interaction as an everyday user of ICT, being open to receive feedback and opportunities for improvement.
- Creates appealing VLEs to work with students' senses and forms of interaction

- Invests quality time for his own training on specialized programs and software to elaborate tasks and practice to check their effectiveness.
- Helps students to get familiarized with ICT and acquire some experience to push them to learn not only the technology use but the language.
- Keeps up to date through new technologies and networking communities.
- Considers VLEs a scenario to empower himself while students learn.
- Has a better understanding of opportunities and ICT implications for the curricula in teaching and learning dimensions.
- Provides assessment within a flexible and open environment.

Trends in VLEs have become the English learning in a revolutionary activity, CALL (Computer-Assisted Instruction and L2 Learning), CMC (Computer Mediated Communication), E-Learning and E-Culture among others, can be considered complementary scenarios for teachers to trace students' performances. Indeed, some skills in the planning, control, assessment and monitoring stages are considered relevant to strengthen the teachers professional profile due to some key aspects in the design of tasks (Romero *et al.* 2002, p. 30).

Planning. This skill involves the development of a strategic knowledge to select materials and resources, design tasks and anticipate students moves to execute the activities. Galvis (1992) argues that the design of Virtual learning environments is a multi-scale planning process in which the analysis of learning needs must be crossed with the problem-posing stage, the role of the technology (web sites, web Quest, editing programs, etc.) and the type of information provided and needed.

Control. This skill subsumes an examining position, in which the teacher pays attention to details to identify problems and their solutions. According to BECTA (2012) in the most controlled environment of a school, online assessment could prove useful for summative testing.

Monitor and assessment. The former refers to the given values to regulatory processes and the products of comprehension and learning, and the latter refers to the evidences gathered through observation of strategies and modifications during the process in the planning session to guarantee results. Monitor process

for is important because it allows English teachers to plan several tasks to get to know information in terms of their students' progress, according to levels of difficulty on a specific topic. The established rules to have access to on-line readings and chats is part of a collaborative network between teachers and students.

The most important feature of this teaching mediated by technology is teachers' control of contents, processes and times to perform activities and the corresponding evaluation of the cognitive components of the resources used. In this sense, some skills are developed, namely:

Skills to judge the achievement of a task, intervene requalifying a course of action, discern on the spot the execution process of a task, identify sources to give answers to questions, capacity to comprehend what is going on with their students and give recommendations to them, recognize knowledges in action, detect levels of understanding and difficulty. These skills are intertwined with processes of self and peer assessment that according to Martín Pérez (2002, p. 39) help teachers to encourage their students to reflect upon ideas and challenge them, to collaborate and being able to take risks. In terms of professional development, teachers learn to postpone their opinions to give students opportunities to create and, in that sense, teachers are more open to work on students' ideas than in their own constraints.

General guidelines to work in VLE in resistance contexts

Although teaching practices mediated by technology in the Colombian context have widespread political support that has oriented some institutional decisions in schools and campus to improve research, connectivity and teaching, clearly two tendencies coexist in teachers' profile, one of them has involved technology as part of professional development and everyday work and the other still resists to incorporate technology and work in VLE. The causes for this resistance has been broadly studied by Howard, S. K., (2013) and Howard, S. K. & Mozejko, A. (2015) as rejection to a high workload that this type of monitoring demands. Some institutions do not include the work done in VLE as part of the work schedule to be included in the salary. So, the amount of time devoted to these activities, as well the roles adopted (facilitator, instructional designer, social, managerial, and technical roles)

if the programs and software are not efficient to deliver results, can be too massive to be handled.

As a result, some recommendations have been made, for instance UNESCO (2004) has considered 5 features to set technology as innovation in education in this type of scenarios. Based on the teachers' need analysis in relation to the reason to incorporate it. 1) relative advantage: to prove the benefits of learning mediated by technology in relation to traditional learning without it. 2) level of compatibility: to demonstrate that the use of technology is not opposed to the viewpoints, values and current educational approaches. 3). Complexity: to show technology handiness implementation to teaching. 4) empirical testing: to give teachers opportunity to try ICT in not threatening environments, which means technical support and time. 5) observation: give teachers the opportunity to observe successful technology implementation to teaching. According to Palomo et al (2006, p. 24) to get teachers' acceptance a good innovation meets the following characteristics:

- An innovative project that foresees activities with possible ends.
- Coherence between objectives and means to get objectives fulfillment.
- An innovation fully integrated to the educational process.
- And finally, an innovation negotiated and discussed for the whole community.

One of the most relevant aspects in English teachers' profile within a technology-related professional development is the possibility to be engaged in academic networks to share ideas, materials and even their own insights about English teaching in different contexts. The communicative and interactional potential of ICT surpasses the limits of a classroom and gives teachers opportunities to learn new things and cooperate with peers around the world. Some social aspects emerge as part of this network. UNESCO (2004) has recognized that teachers who engage in these collaborative roles have a critical position to judge learning opportunities not only for students but for themselves. For instance, in a setting of new teachers' education program, Pilkington *et al.*, (2000) explains that student teachers using online seminars can increase their participation and performance.

Resistance to technology is an aspect that should not be considered negative, indeed teachers' reasons to reject technology implementation must be the components to reflect upon the convenience or inconvenience of some training courses and the reasons to provide budget to cover real expectations

in terms of workload. According to Rienties, B. *et al.*, (2016, p. 4) based on the theory of Technology Acceptance Model state that the intention to use ICT (and thus a VLE) is influenced by two main factors: the perceived usefulness (i.e. the extent to which a teacher believes the use of a VLE will, for example, enhance the quality of his/her teaching, or increase students' satisfaction with the module) and the perceived ease of use (the perceived effort it would take to use a VLE). In our point of view, an innovative project needs to work with these teachers and not force them to use technology. Teachers' will to work in VLE can be modified for self-assessment processes in which they decide which aspects can be accepted and what aspects refused⁶. Technology is a tool, and as such is there to serve those who see some utility on it. That is precisely, the pedagogical component of an educational ICT course, to show some experiences and environments in relation to professional development programs, where distinctions between teachers' professional profile of those who integrate technology and those who do not, are not located in hierarchy but considered different modes of being teachers.

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⁶ Resistance is not a negative aspect when it is associated with declared modes of being a teacher. In Méndez, P. (2012) resistance discourses are relevant to note how discourses become spaces for the construction of subjectivities. When teachers' refusal to incorporate technology is related with preferences and affirmations of other type of interactions, it is important to understand these positions as legitimate.

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