



Examining the Effectiveness of Using Online Teaching Materials, Mobile Applications in Foreign Language Education and in Teacher Training The Experiences of an Online Language Pedagogy Course

Györgyi Kovács

Eszterházy Károly College (Hungary)
mako@ektf.hu, kovacs.gyorgyi@me.com

Abstract

In contemporary society people, especially youngsters, wake up and fall asleep with their smartphones and tablets in their hands. This new phenomenon of having a continuous access to the outside world is something that is new in numerous aspects and especially in a classroom environment. It is therefore of great relevance to integrate this information flow into an ELT setting, because it provides the students with authentic and interactive material which provides a variant approach to lessons and motivates the students since it is more fun for them as they are used to work with technology on a daily basis.

This paper aims to present the experiences based on an online language pedagogy course run for three years. As the participants are qualified, experienced language teachers my aim was to help them in being familiar with modern technology, web 2.0 tools that can be used in foreign language teaching.

I examine the use of online applications from two perspectives: from the teachers' and the students' point of view. Individual and active learning could be used in traditional language teaching, but technology supported language learning opened new perspectives. With the help of online materials and mobile applications the emphasis has moved from individual to collaborative learning in an interactive, social environment.

A successful language learner nowadays tries to get the control over his own language development, takes the responsibility of his communication skills. Learner's autonomy comes into view. All these cause changes not only in students' roles but also in teachers' roles. The language teacher should be not only the resource of language and sociocultural knowledge, but also an advisor, controller and facilitator.

Nowadays knowledge is everywhere; learners need only time and freedom to find the knowledge they need and that is suitable to their learning style.

1. Introduction

The study outlined in this paper is to present the experiences and efficacy research based on an online language pedagogy (OLP) course run for three years. As the participants are qualified, experienced language teachers my aim was to help them in being familiar with modern technology, web 2.0 tools and mobile applications that can be used in foreign language teaching. Although the participants are qualified, experienced language teachers studying for their master's degree, they are rather digital immigrants dealing with digital natives. Prensky defines digital natives as those born into an innate "new culture" while the digital immigrants are old-world settlers, who have lived in the analogue age and immigrated to the digital world" [1]. The participants of the OLP course were born before the existence of digital technology and adopted it to some extent later in their life, while their students are all digital natives who have been interacting with digital technology from the get-to go, they wake up and fall asleep with their smartphones and tablets in their hands. This is why it is understandable that digital immigrant teachers using technology often have fears, they know that their students, who are digital natives, are better in using technology. The objective of the OLP course was to convince language teachers to leave their fears at the door. Technology is not just the theme of the course, but participants are required to interact and collaborate during their studies as they expect it from their students: experiencing learning by doing. Participants are supported to experience social interaction, content sharing, reflecting on others' ideas and work, collaboration, peer-support, teamwork and being flexible in the learning environment. During planning the OLP course I had Ignacio Estrada's thought in mind: "If a child can't learn the way we teach, maybe we should teach the way they learn" [2].



2. Procedure

Participants attending the OLP course are given an overview about contemporary trends in modern languages education and changes of foreign language teachers' roles and tasks in education. The course gives the opportunity to develop attitudes and skills in order to help foreign language teachers to meet the new requirements. The OLP course introduces participants to the basic aspects of using learning technologies in the English language classroom in an efficient, engaging and effective way. The course consists of 4 modules, all modules have an underlying belief that activities using learning technologies in the classroom should be driven by pedagogy and not by technology, and students learn languages best through a communicative, constructivist approach. By the end of the course participants are able to recognise the advantages and disadvantages of using learning technologies in the classroom and recognise issues when integrating learning technologies into a lesson or course or syllabus. Participants are required to visit the 'Plenary Forum' to discuss pedagogic issues or questions by starting and commenting on topics that arise during their studies to promote online interaction and systematic thinking. They can also join 'Chat' for sharing their thoughts and ideas on a given question. For each unit participants are required to summarize their thoughts in the 'Reflective Journal' which is an activity designed to think reflectively and systemically by writing an essay on the main theme of the given Module. The online language pedagogy course was developed by applying various activities in order to create an effective online learning environment based on social constructivism theory. Vygotsky stated that by interaction and help from more knowledgeable peers, one could develop more profound comprehension than his individual capacity. According to social constructivism, learning occurs when students share background information and participate in the give and take of collaborative and cooperative activities. While they are negotiating the meaning, they are constructing their own knowledge. The social constructivism theory places the emphasis on students rather than teachers or tutors. Students learn best when they actively construct their own understanding through social interaction with their peers. They are encouraged to discover their own solutions and to try out ideas and hypotheses. The responsibility of the instructor is to facilitate the students' learning process around a particular content. Instructors and tutors should design and structure learning activities so that students can exercise their capabilities in knowledge formation [3]. Examining the efficacy of the online language pedagogy course the following two surveys were applied:

1. Constructivist On-Line Learning Environment Survey (COLLES) by Taylor and Maor, 2000 [4].
2. Attitudes to Thinking and Learning Survey (ATTLS) by Galotti et al. (1999) were applied [5].

222 participants were involved in the research during 3 years between 2011 and 2014. Answering the questions of the surveys were voluntary. The main objective of this study is to help us examining how the participants' active social interaction and reflective collaboration could develop their communicative competence and how the online language pedagogy course could help them in learning in the aspects of relevance, reflection, interactivity, tutor support, peer support and interpretation. The other objective of the research is to examine how the participants' critical sense was developed during the online language pedagogy course and how participants could use the interactive capacity of the online language pedagogy course in order to acquire dynamic learning skills. The hypothesis of this study was that an online learning course designed on social constructivism theory would promote social constructivist learning environment.

The Constructivist On-Line Learning Environment Survey (COLLES) measures participants' perceptions and preferences and was designed to help tutors assess from a social constructivist perspective, the quality of their online learning environment. Taylor and Maor state that "the efficacy of innovative web-based teaching for engaging distance learners in enriching their epistemological growth cannot be evaluated adequately without obtaining a measure of learners' perceptions of their online classroom environment" [4]. In social constructivism learners are portrayed as active conceptualisers within a socially interactive learning environment. The theory describes an epistemology where learners collaborate reflectively to co-construct new understandings in the context of mutual inquiry grounded in their personal experience by developing a communicative competence that enables them to engage in critical discourse with their peers and is characterized by an empathic orientation to constructing reciprocal understanding [6]. There are 2 forms of the COLLES, the preferred and actual form. The COLLES contains parallel items designed to measure how often participants express preferences and the actual extent of the online learning environment. Thus, the person-environment match could be estimated as participant satisfaction, which is measured by comparing actual and preferred scores. It could reveal whether the participants' expectations are fulfilled. This survey consists of 24 questions arranged into 6 aspects, including relevance, reflection, interactivity, tutor support, peer support, and interpretation. Relevance questions assess how this online learning is relevant to participants' professional practices. Reflection questions ask if this online



learning stimulates participants' critical reflective thinking. Interactivity questions measure the extent of participants' online educative dialogue. Tutor Support questions evaluate how well tutors enable participants to participate in this online learning. Peer Support questions assess if fellow participants provide sensitive and encouraging support. Interpretation questions ask if students and tutors make good sense of each other during their communication. Those 6 aspects are concerned with participant preference and perception of the existence of an online social constructivist learning environment. The question items utilize a 5-point Likert response scale on which 1 = never, 2 = seldom, 3 = sometimes, 4 = often/frequently, and 5 = almost always. Participants completed the preferred form of the COLLES at the beginning and the actual form at the end of the course.

The Attitudes Towards Thinking and Learning Survey (ATTLS) was used to measure the quality of discourse within the online language pedagogy course. It measures the extent to which a person is a 'connected knower' (CK) or a 'separate knower' (SK). People with higher CK scores tend to find learning more enjoyable, and are often more cooperative, congenial and more willing to build on the ideas of others, while those with higher SK scores tend to take a more critical and argumentative stance to learning. The two different types of procedural knowledge (separate and connected knowing) were identified by Belenky, Clinchy, Goldberger and Tarule [5]. Separate knowing involves objective, analytical, detached evaluation of an argument or piece of work and takes on an adversarial tone which involves argument, debate or critical thinking. "Separate knowers attempt to 'rigorously exclude' their own feelings and beliefs when evaluating a proposal or idea". Separate knowers look for what is wrong with other people's ideas, whereas connected knowers look for why other people's ideas make sense or how they might be right, since they try to look at things from the other person's point of view and try to understand it rather than evaluate it. These two learning modes are not mutually exclusive, and may 'coexist within the same individual'. Differences in SK and CK scores 'produce different behaviors during an actual episode of learning, and do result in different descriptions of, and reactions to, that session'[5].

3. Assessment

222 participants completed the preferred form of the COLLES at the beginning of the course. Participants expected the environment of the course to be social constructivist learning environment (4.0 ± 0.3). They had the highest expectation on the aspect of professional relevance (4.2 ± 0.5) and the lowest on the aspect of interactivity (3.7 ± 0.5)

220 participants completed the actual form of the COLLES at the end of the semester. The result showed that participants perceived the environment of the course as social constructivist learning environment with a mean score of (3.9 ± 0.3). Actual social constructivist learning environment scores on all aspects were rated in the same way as participant's preference scores that participants rated the highest on the aspect of professional relevance (4.1 ± 0.5) and the lowest on the aspect of interactivity (3.7 ± 0.5). The preferred and actual social constructivist learning environment scores were compared and no significant difference was found. The result indicated that participants' expectations were fulfilled and they were satisfied with the course.

220 participants answered the ATTLS questions. The 20 questions in the ATTLS are displayed in the questionnaire in random order as not to reveal which questions are Connected Knowing (CK) related and which are Separate Knowing (SK) related.

Like the COLLES the range for the responses of the ATTLS is from 1 to 5 for each question with 1 meaning 'Strongly Disagree' and 5 meaning 'Strongly Agree'. The higher the CK and SK scores, the higher the participants' connected and separate knowing. As mentioned earlier, these two knowing modes are not mutually exclusive as the same participant may be both a separate knower and a connected knower. In the online language pedagogy course's case, the mean CK score was 3.83 out of 5 and the mean SK score was 3.76 out of 5. This means that the average participant in the course was both a Connected Knower and a Separate Knower with the mean CK scores being averaged slightly higher than the mean SK scores.

4. Summary

The online language pedagogy course was developed by applying various activities in order to create an effective online learning environment based on social constructivism theory. It is believed that sharing various perspectives and experiences with other people who have similar or different perspectives and life experiences is the process of learning. The difficulty of this online language pedagogy course was in creating the most appropriate learning environments for participants to interact and construct their own knowledge. The tutor should influence the way of learning to develop and empower participants to take ownership and responsibility of their own learning. After the OLP course was implemented, it was hypothesized that this course promoted social constructivist learning



environment. Participants perceived that knowledge was gained and they were satisfied with the course. The result revealed that the social constructivist learning environment of this course was promoted. The mean actual score of the COLLES was (3.9 ± 0.3) . By implementing a new online learning tool, participants tended to prefer the environment of the course as social constructivist learning environment as seen by the mean preferred score of (4.0 ± 0.3) . The result was consistent with Taylor's findings that participants had rated the preferred form of COLLES as high expectations for social constructivist learning environment in an online course. [4]. The comparison between the preferred and the actual COLLES scores revealed that participants seemed to be satisfied since their expectation seemed to be fulfilled. The actual scores were not significantly different from their expectations. Under the social constructivist learning environment, participants constructed their own knowledge using social interaction. Participants found it was not easy to move from a passive learning to an active learning style. This result was confirmed by the relatively low actual scores of COLLES on 2 aspects: interactivity and peer support (3.7 ± 0.5 and 3.6 ± 0.5).

"Using different tech tools, methods and working on my own computer skills draw the colours of the rainbow. Many think that there are only seven colours of the rainbow but if you watch it carefully you will see the many lighter, darker or blurred colours. This is teaching English with technology for me."
[from participant's feedback].

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