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Incorporando el Diseño Instruccional a la Práctica de Enseñanza en Línea del Inglés como Lengua Extranjera en Moodle

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Incorporating Instructional Design to Pre-service Online Teaching English as a Foreign Language in Moodle

Incorporando el Diseño Instruccional a la Práctica de Enseñanza en Línea del Inglés como Lengua Extranjera en Moodle

Incorporando Design Instrucional na Prática de Ensino de Inglês como Língua Estrangeira Online no Moodle

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Resumen

Implementing virtual field experiences for online language learning has long been recommended as part of an early English language teachers' preparation, by authors like Compton (2009) and more recently Ottenbreit-Leftwich et al. (2018). This article reports a case study whose general objective was to obtain theoretical and practical experience elements, for the design and implementation of a didactic sequence for online teaching of English as a foreign language (EFL), B1 level in a course hosted in Moodle. A preliminary research cycle, where a group of experts in online learning was interviewed (n=11), helped a pre-service teacher to do further documentary research to learn about the concept of instructional design. The result was designing and implementing a didactic sequence for a university English language course following David Merrill's Model of instructional design. This way the pre-service language teacher identified and practiced the necessary knowledge and basic skills for online language learning and teaching via Moodle, as well as the interactions and roles that were promoted. Finally, awareness was also raised about the need of incorporating content and activities that better account for the needs posed by different ability levels in the classroom.

Keywords: **Experiential learning, Online learning, Instructional design, David Merrill Model, EFL.**

Resumen

La implementación de experiencias de práctica para la enseñanza de lenguas en línea ha sido recomendada desde hace tiempo como parte de la formación temprana de los docentes de inglés, por autores como Compton (2009), y en años recientes por Ottenbreit-Leftwich et al. (2018). Este artículo reporta un estudio de caso cuyo objetivo general fue obtener elementos teóricos y de experiencia práctica, para el diseño e implementación de una secuencia didáctica para la enseñanza en línea del inglés como lengua extranjera (EFL), nivel B1 en un curso alojado en Moodle. Un ciclo de investigación preliminar, donde un grupo de expertos en enseñanza en línea fue entrevistado (n=11), ayudó a un docente en formación a documentarse sobre el concepto de diseño instruccional. El resultado fue el diseñar e implementar una secuencia didáctica para un curso universitario de inglés, siguiendo el Modelo de David Merrill. De esta manera, el docente en formación identificó los conocimientos y habilidades necesarios para la enseñanza en línea en Moodle, así como las interacciones y roles que se promovieron. Finalmente, también se creó conciencia de la necesidad de incorporar contenido y actividades para mejor atender los diferentes niveles de habilidad en el aula.

Palabras clave: **aprendizaje experiencial, aprendizaje en línea, diseño instruccional, Modelo de David Merril, ELE**

Resumo

A implementação de experiências práticas para o ensino de línguas online há muito é recomendada como parte da formação inicial de professores de inglês, por autores como Compton (2009), e nos últimos anos por Ottenbreit-Leftwich et al. (2018). Este artigo relata um estudo de caso cujo objetivo geral foi obter elementos teóricos e experiência prática, para a concepção e implementação de uma sequência didática para o ensino online de Inglês como Língua Estrangeira (EFL), nível B1 em um curso hospedado no Moodle. . Um ciclo de pesquisa preliminar, onde foi entrevistado um grupo de especialistas em ensino online (n=11), ajudou um professor em formação a documentar o conceito de design instrucional. O resultado foi projetar e implementar uma sequência didática para um curso universitário de inglês, seguindo o Modelo de David Merrill. Desta forma, o professor estagiário identificou os conhecimentos e competências necessários para o ensino online no Moodle, bem como as interações e papéis que foram promovidos. Por fim, também foi conscientizada a necessidade de incorporar conteúdos e atividades para melhor atender os diferentes níveis de habilidade em sala de aula.

Palavras-chave: **aprendizagem experiencial, aprendizagem online, design instrucional, David Merrill Model, EFL**

I. Introduction

English language teacher preparation programs have long focused on enabling pre-service teachers with the necessary knowledge and skills for the planning, implementation and evaluation of learning activities that aim at developing different competences and types of knowledge, and the context for these has been mainly through in-classroom practices. Compton (2009) had already argued that teacher preparation requires of new teaching skills that are suitable for online learning; however, counting with the appropriate conceptual and methodological frameworks as well as the tools to mediate the training processes for online teaching and learning is also vital.

The pandemic of COVID, unveiled and brought to the front-line the long-standing need of enabling teachers with the knowledge, skills, and disposition for embarking on online teaching and learning. However, authors like Beaven et al. (2010), Ottenbreit-Leftwich et al. (2018), Valera-Ordorica and Valenzuela-Gonzáles (2020) had already pointed out to the lack of resources such as infrastructure (hardware and software), the lack of time and support for using the different digital learning tools, the lack of teachers' knowledge and skills for online teaching-learning (planning, implementation and assessment), the lack of self-confidence for using technology, and certain beliefs and attitudes towards the technology, as barriers for the use of it in the teaching and learning of several subjects. These observations need to consider that, context dependent, a mismatch between teacher's and students' online learning skills may also be found, which has both a positive and a negative effect. In the positive one, effective learning can be enhanced by the teacher's use of resources for online learning and in the negative one, the students may not meet their expectations and they may feel demotivated by a poor online learning environment.

In relation with the observed limited use of technology by beginning in service teachers in their courses and classrooms, Tonduer et al. (2016) and later Ottenbreit-Leftwich et al. (2018) had argued that authentic experiences and internships during teacher education programs are desirable and of value, because they influence beginning teachers' uses of technology, and in the long term, teachers who had had early encounters with the integration of technology for learning may use it subsequently more frequently and in more diverse ways. Thus, the benefits of early teaching experiences are not only at gaining knowledge and developing specific skills for online language teaching, but also at the level of increasing teachers' confidence for supporting students' language learning in this type of learning environments. Re-

garding language teachers, it has been specifically recommended to improve the state of their preparedness by:

a) developing online language teaching skills through existing courses; b) developing online teaching skills at different levels of expertise and responsibilities for different roles; c) revamping existing technology training; and d) implementing early virtual field experiences and virtual practicum. (Comptom, 2009, p. 92-95)

This requires moving towards a curriculum with a view of teachers' preparation based on experiences that bring together both theoretical and practical learning. As it will be shown, another valuable source of first-hand information and knowledge for pre-service language teachers, is getting in touch with communities of online learning experts, who constitute a group of specialists willing to learn from each other by sharing their knowledge, points of view and experiences with others (Compton, 2009; Ottenbreit-Leftwich et al., 2018). These communities of specialists, who are also teachers with high levels of knowledge and skills, can be considered as sources of knowledge which pre-service and novice teachers can benefit from, by interacting with them to obtain information about their experiences with online learning, specific topics, resources, etc.

So, this paper reports a case study where a pre-service teacher, enrolled in a BA Program in Teaching Languages, practices the design and implementation of an instructional sequence for English language learning (B1 level), in a course hosted in the virtual platform Moodle. The general objective was to provide this pre-service teacher with the opportunity to start developing teachers' knowledge and basic skills for online language learning in a principled manner in a Moodle program. The specific objectives were a) to identify basic and important information that constitutes specific knowledge and skills for online learning such as theories, processes, and tools from experts and related bibliography and b) to design and implement an online language learning sequence for English in Moodle (EFL). The related research questions are: What do pre-service language teachers need to know to teach in online courses and with online activities? How to facilitate the development of knowledge and skills for online learning in the pre-service English language teachers to better support the students' development of the Communicative Competence?

II. Method

A case study with an experiential component developed in 3 phases (see table.1). This design provided the context for the pre-service teacher to experience the use of Moodle and resources there, as well as

for the practical application of the theory (Compton, 2009; Hoven, 2007).

II.I An Inductive Investigative Process

Phase 1 An inductive investigative process	Phase 2 Preparation of the experiential component	Phase 3 Experiential component
Interview guideline preparation Quest within a experts' community N=11 Interviews' analysis for categories identification	Literature review that investigated on the category 'instructional design'. Design of a didactic sequence following David Merrill's instructional Design	Implementation and evaluation: an online learning sequence in Moodle, based on David Merrill's Model for online learning of EFL (B1 level), in a BA Program for Language Teaching

II.I.I Participants

A group of specialists in online teaching based in Mexico (2 male and 9 female, 32-55 years old with mid-to high levels of training and expertise), participated in the phase 1 in the case study. The specialists hold qualifications such as BA in Pedagogy and Psychology; Diploma in Online Learning; MA and PhD in Educational Psychology, Science Methodology and in Virtual Learning Environments. Most of these experts teach about and have experience in the planning, design, implementation, and evaluation of learning, for high school to university levels at both private and public institutions, in virtual learning environments. They were sampled through the 'snowball' technique (Griffe, 2012; Hernández Sampieri, Fernández Collado, Baptista Lucio, 2006). For the phase 3, an in-service teacher and the pre-service teacher (male, 23 years old, L1 Spanish, English as a Foreign Language-B2 level) collaborated in setting the learning objectives, topic, the content, and the timing for the implementation of the sequence that was designed. Finally, data for the evaluation of the practical component was obtained from a group of undergraduate students (L1 Spanish; EFL course B1 level, n =23; ages 21-37 years old) and from the pre-service teacher own reflections on the experience.

II.I.II Instruments and data analysis

A semi-structured interview (24 questions) that inquired about the experts' knowledge, insights, opinions, and experiences about online teaching and learning. All interviews took place during the month of August, 2018; all conversations (30-75 min long) were in Spanish and were recorded after permission was granted. This resulted in a corpus of 10 transcriptions for further open codification and categories identification-reduction with the help of a data matrix (Griffe, 2012; Hernández Sampieri, Fernández Collado, Baptista

Lucio, 2006). Also, the pre-service teacher kept a log and administered an ad-hoc questionnaire to evaluate the activities in the practical component.

II.I.III Categories identification

Fig. 1 shows the 4 main categories that were identified from the expert's corpus, with their corresponding subcategories. From those categories, the one of 'instructional design' was deemed as the focus for deeper investigation in the literature review in Phase 2, due to the importance and the frequency of mentions that the experts' group granted to it; also, subcategories like teacher and students' role, activities, evaluation of learning and the course, motivation and digital skills were of interest.

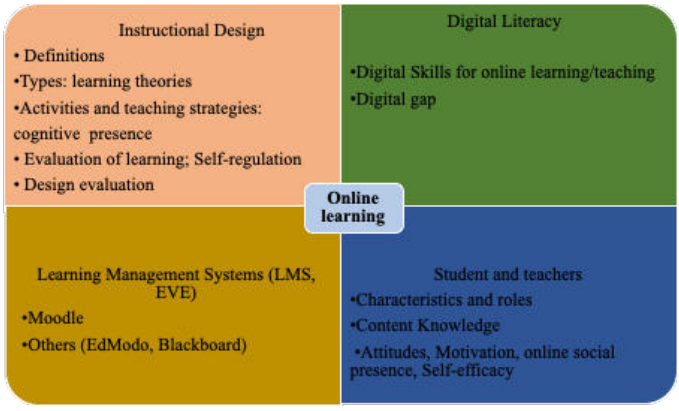

Figure.1 Categories and subcategories in the experts' corpus; our own source

As a salient construct in the interviews, 'instructional design' was defined as:

The methodological tool that allows an educator or a pedagogue or an educational psychologist to select the contents and to adequate these to the technology mediated language (…) the instructional design allows to establish the communication that you will have with other disciplines, which will be of support for the development of the contents, which in turn will be uploaded in the platform, with graphic design and programming. (…) it allows you to mediate between the user and the technology and the content, the conceptualization of a project. (M. García, personal communication, August 13, 2018).

This definition also implies that not only teachers, but tutors, the instructional designer and technical support staff, may be involved in the design of the learning activities and their implementation

in online courses. One more expert focused on the student-centered approach of instructional design:

A group of strategies and techniques and ways to approach educational elements that, briefly, will allow you to organize contents, resources, in an efficient, very precise way, to provide the student with much more independence and autonomy, because the attention is paid not so much to the teacher's figure but to the teacher-student interaction, to the interaction between those two agents, and to the resources that can be used for acquiring knowledge, to develop skills, to encourage attitudes that are related with the field of knowledge. (A. Flores, personal communication, August 13, 2018)

In this regard, Siemens also considers that in instructional design, it is the process whereby learning, not technology, is kept at the center of online learning. Besides being student centered, theories of learning underlie instructional design: "(…) there's instructional design with a behaviorist emphasis (…) with a cognitive emphasis and (…) with both a social and cognitive emphasis where the student is capable or learning with others too". (F. Palma, personal communication, August 14, 2018). From these interviews too, the following steps and elements of instructional design were identified: "1) planning the objectives, contents, time, selecting the Model of instructional design; 2) designing the sequence of activities, selecting materials, internet, and multimedia; 3) piloting; 4) evaluating learning and the course" (A. Flores, personal communication, August 13, 2018). So, instructional design is both a methodological tool and a process which comprises different phases like the analysis, design, development, implementation, and evaluation of all the instruction and learner activities (Arshavskiy, 2014; Patiño and Martínez Cantú, 2019; Siemens, 2002).

The importance of instructional design for online, distance and blended learning, also known as mixed or hybrid courses, with a range of types like rotation, flex, self-blend, and the enriched-virtual courses (Alammary, et al., 2014; Bliuc et al., 2007; Staker and Horn, 2012) was illustrated in one of the interviews, with a comment where elements of instructional design are lacking in a language course:

English was terrible, these were only texts that had been uploaded and the only thing that had been asked the students to do was, as such, to answer to some questions, which were in Spanish; that had nothing to do with the instructional design and they were not learning English at all, really, they were taking English I and II. As time passed and the next generations arrived, really, a course was designed where students had to interact, where students had to do exercises, a course where they even had to record themselves in an

audio file, they had to produce short videos that had to be uploaded; that already required other type of activities and they also learnt the grammar rules (…) (P. Hernández, personal communication, August 16, 2018).

According to Comptom (2009, p.83-86), online language teacher skills fall into 3 broad categories: technology in online language teaching, pedagogy of online language teaching and evaluation of online language teaching. These represent a continuum of expertise which pre-service and in-service teachers fall into at some point in their professional development: novice, proficient and expert. Thus, within the novice level of the Pedagogy of online teaching skills, the following types of knowledge are included: knowledge of curriculum design frameworks for online language learning, knowledge of strategies to facilitate communicative competence and online interaction, knowledge on language learning theories for online language learning and knowledge of strategies for online language assessment. As it stands, instructional design as a construct includes all the elements related to the pedagogy of online language teaching as well as knowledge of technological skills and of evaluation. A language teacher plays the role of both teacher and instructional designer in Compton's (2009) framework; also, authors like Garrison et al. (2000) consider that the design of the educational experience which includes the selection, organization, and primary presentation of course content, as well as the design and development of learning activities and assessment, is the teacher's responsibility. However, the role of instructional designer in distance learning programs is also taken by a sole person who communicates and collaborates with the teacher, the expert in the content, to design the learning activities and their impact in terms of learning results for an online course (Arshavskiy, 2014; Patiño and Martínez Cantú; 2019, Salas Soto, 2018).

II.II Preparation of the Experiential Component

II.II. I David Merrill's Model of instructional design

A literature review looked up at the definitions and types of instructional design. So, authors like Arshavskiy (2014), Merrill (2002) and Siemens (2002) identify different Models for instructional design: Flipped classroom/instruction, David Merrill's Model, ADDIE (Analysis, Design, Development, Implementation, Evaluation), Five E Model (Engage, Explore, Explain, Elaborate, Evaluate), among others. For the experiential phase, David Merrill's (2002) Model was used by the pre-service teacher since its principles are compatible with the principles underlying other instructional designs, but mainly, with

approaches for languages learning like the task-based learning and problem solving (Merrill, 2002; Reigeluth, 2012). Briefly, Merrill's Model is based on five principles of general cognitive learning and four phases (Merrill, 2002, p.45-51):

1. Learning is promoted when learners are engaged in solving real-world problems.

2. Learning is promoted when existing knowledge is activated as a foundation for new knowledge.

3. Learning is promoted when new knowledge is demonstrated to the learner.

4. Learning is promoted when new knowledge is applied by the learner.

5. Learning is promoted when new knowledge is integrated into the learner's world.

According to Merrill, the 4 phases for this problem-solving based instructional design are: (1) activation of prior experience, by linking previous experience and knowledge with the current learning task; in this phase the interaction with other learners is an effective strategy for discussing and preparing for the new learning material; (2) demonstration of skills or showing how new information —content and operations— is used and applied to solve the initial problem by providing examples/counterexamples, processes, expected behaviour; (3) application of skills, by practicing the new learning content, the operations and actions through interactions and exercises like recalling or recognizing information, locating, naming, describing, identifying new examples, doing a procedure, predicting a consequence of a process given conditions, or finding faulted conditions given an unexpected consequence. Students then are provided with feedback and coaching, and finally, (4) integration of these skills into real-world activity, where students perform successfully in a more complex task, where reflection and creation are ways to both defend and use the new knowledge or skill.

According to Merrill (2002), from the beginning motivation is driven by the problem and tasks themselves; however, Rourke et al. (1999) argue that maintaining the interest in the online learning activities requires from an instructional design that includes activities for promoting online social presence or "the ability of learners to project themselves socially and affectively into a community of inquiry" (qtd. in Topchyan, 2016, p.647). This encompasses emotional expression, emotions, open communication, risk-free expression, group cohesion, encouraging collaboration (Garrison et al., 2000). In the interviews an expert explained:

(…) Anderson talks of a social presence. He says that online teaching has a social presence, a cognitive presence, and a teaching presence, not a teachers' presence but a teaching presence (…) where your classmates or you can play that role (…); social presence is lived when students send each other's messages, or when they send the teacher messages; the teacher must make himself socially present through technology (…), so resources should be available for students to communicate with each other (S. Delgado, personal communication, August 14, 2018)

This social presence is part of the pedagogy of online language teaching, which involves knowledge of strategies for online community building and socialization (Compton, 2009). As mentioned before, part of the pedagogical knowledge for online language teaching is the knowledge of strategies to facilitate communicative competence and online interaction (Compton, 2009). Some of these basic teaching strategies and activities, are project and problem-based learning, cases, collaborative activities, debates, readings, concept maps, quizzes, the use of multimedia, blogs, chats, forums, wiki, and with video calls (Beaven et al., 2010; Sharma and Barney, 2007; Shulamit and Yossi, 2011; Siemens, 2002; Stanley, 2013; Vásquez Cano and Martín Monje, 2014). All these resources support individual and collaborative learning, synchronous and asynchronous communication, and interaction; hence, these can be used to develop communicative competence and online interaction while creating and maintaining the social presence and motivation for learning.

II.II.II Planning and designing the instructional sequence

This experience was situated in a Mexican public university that offers a BA program in Teaching Languages. In the program English is taught in both the full-time sessions (Monday through Friday) and in the part-time modality (Saturday), 90 min sessions, respectively, for 8 semesters. At this stage, the pre-service teacher was already familiar with the theoretical basis of Merrill's Model (Merrill, 2002; Reigeluth, 2012) and from looking at an example of how instructional design was used for other online courses (Meza et al., 2016). As mentioned before, an in-service teacher and the pre-service teacher collaborated in setting the learning objectives, topic, the content, and the timing for the implementation of the didactic sequence to be designed. This was done with institutional permission, as the study is part of the pre-service teacher's undergraduate research project, and all students in the course were informed of the activities that were done. The design was for an English course B1 level (n =23 students; L1 Spanish,

ages 21-37 years old, with little experience in using Moodle, but familiar with internet and social networks.). The observation of the course activities in Moodle suggested that it was being used as a repository of PDF files with some language exercises. Table 2 shows an example of the instructional sequence with Merrill's Model to be worked by students within a week period:

Table 2. An instructional sequence with Merrill's Model

Situation presentation: Preparing for a discussion about the financial problems that affect University students, where the language focus is on discussing personal finances, the expression of regrets, advice, and focusing the students' attention on the use of forms like wish statements (past tense) and vocabulary related with finances.		
Phase	Activity	Objective
Activation	Forum with a situation and 4 questions as prompts: students read and provided ideas (their own and in response to others') on the following: Sofia, in a conversation with friends, expresses her concern about the need of preparing ideas and arguments for an in-classroom discussion on youth finance problems.	To activate previous knowledge/experiences through the presentation of a situation that requires students to provide ideas, remember vocabulary and focus on grammar in preparation for an oral production activity (group discussion) on students' finance needs or problems.
Demonstration	A comparison chart and a link to a video in YouTube to study the explanation on the grammar forms and their meanings.	To show the content: forms, meaning, use, sound, texts, etc. needed to perform in that communicative situation: expressing regrets, and their implied meaning (wish statement and past regrets).
Application	A Moodle questionnaire to assess the use of the learned grammar structure: -Matching the form with the implied meaning -Choosing a verb and providing its conjugation (correct tense) to convey the indicated meaning. -Sentence transformation into wish statements.	To practice the form, its meaning, and its use. To assess the use and comprehension of the learned grammar structure. To identify errors and to provide feedback.

Integration	-Writing a text where a similar experience is described for the expression of regrets. -In-classroom role plays implemented by the expert-teacher with the students. -Debate	To show in written form the mastery of the expression of regrets about a past situation. To stage situations where the students talked about similar problems

III. Results

III. I Experiential Component

First, students considered that the activities in the platform promoted their participation and interaction during the whole sequence (Forum, quiz with exercises, video, see Fig. 2 below). The forum was a space to write their ideas and appreciated having asynchronous access to the activities and materials with explanations; they too became aware of some of the possibilities for collaboration and interaction available in Moodle (Aikina and Boulsunovskaya, 2020; Pérez et al., 2010; Arteaga Sánchez and Duarte Hueros, 2010). The less skilled students resorted to the pre-service teacher and their classmates to get support. So, receiving previous training or technical support is needed as this influences the perceived ease of use and usefulness of resources in Moodle (Aikina and Boulsunovskaya, 2020; Pérez et al., 2010; Arteaga Sánchez and Duarte Hueros, 2010).

The pre-service student expressed during one supervision of the design of the sequence (see fig. 2) that "… thinking on the activities and purpose for each phase in Merrill's Model, these represented a move away from instructional sequences such as the Presentation-Practice- Production taught to and known by pre-service language teachers" (R. Contreras, personal communication, July 10, 2019). In fact, the P-P-P instructional sequence (Woodward, 2001), is different to Merrill's Model the context that the initial situation presents helps them see a purpose for language use (forms and their meaning, as well as vocabulary) use. Also, in his teaching log author wrote about a sense of control on the activities-design and mentioned that: "… creating my own quizzes instead of using an online quiz helped me to get real practice, 1st time practice, in using the activities in Moodle and in following a specific Model of Instructional design" (Author, personal communication, September 10, 2019).

He noticed that "it also required to think on a way to contextualize forms and their meaning, as well as the vocabulary for the

intended use" (R. Contreras, personal communication, September 10, 2019). The pre-service teacher reflected and identified the double role that he played: instructional designer and tutor. As instructional designer, the task was identifying the type of activities that would help students to attain the learning objectives in each of the phases in the instructional Model. In evaluating the outcomes, he wrote: "in the forum discussion, students provided their ideas, but the interaction wasn't bidirectional, in the sense that students seemed not to take into consideration each other's' ideas, as expected". (R. Contreras, personal communication, September 10, 2019). As tutor, the pre-service teacher answered students' questions about the content of the activities and on the use of Moodle (see fig. 2); along this process he also knew of the activity logs that the system produced, which allowed him to assess better the use of the resources he had included in the sequence: seen material, responded activities, access time, score graphs. For instance, both the score graphs and students' feedback on a questionnaire to evaluate the sequence, suggested that the activities were rather easy to answer, for example, 18 students (80%) obtained a score 7 out of 10 points in the quiz. For the students also, the materials and activities in the platform allowed them to better manage their time to study, since access to these resources was possible remotely and at different times. These have been identified as the advantages of Moodle for facilitating following students' progress, providing feedback and for the tutoring that accompanies teaching (Aikina and Boulsunovskaya, 2020; Pérez et. al., 2010; Arteaga Sánchez and Duarte Hueros, 2010).

IV. Discussion and Conclusions

Among the aspects to improve are the pre-service teacher's observation on the type of participation in the forum discussion: students provided their ideas, but the interaction was not bidirectional since students seemed not to take into consideration each other's ideas. This was related to their lack of experience in forum participation and interaction. As noted by the supervisor, the activities, initially lacked materials for building on new vocabulary related with the situation; so, the inclusion of more multimedia resources is recommended (Sharma and Barney, 2007; Stanley, 2013; Vásquez Cano and Martín Monje, 2014), where content related with the initial situation is provided. Also, differentiating the activities and materials for multilevel courses was an outcome of the evaluation as more complex tasks for students with higher language skills was also evident, for example, writing a short opinion letter, reading newspaper articles, and discussing their

content, creating a dialogue or recording in video their own conversations or discussions.

Finally, this first hands-on experience designing sequences for online courses in Moodle, with David's Merrill instructional design, provided the pre-service teacher with an opportunity to know and experience what teaching in online courses takes and involves, in terms of technical, pedagogical, and evaluation knowledge and skills. So, controlled experiences like this, may help pre-service teachers to build their self-efficacy as future in-service language teachers using online learning resources, because they are able to try and implement new ways of facilitating language study and learning with ICT resources and activities like in Moodle, while observing and receiving feedback, before proceeding into further practice (Compton, 2009; Ottenbreit-Leftwich et al., 2018; Van Dinter et al., 2011). This requires, however, that in-service teachers too be open to and show disposition to share their knowledge as expert teachers, to support and co-work in the practice/practicum with the pre-service teachers- in their role of designer-tutor-, and in allowing the incorporation of technology resources for educational purposes in their teaching.

To conclude, the case study with the experiential component reported here allowed the communication with a group of specialists in online teaching and learning whose contributions-knowledge and experiences- provided a pre-service teacher with information for further documentary investigation, genuine motivation, and self-confidence for this type of practicum. This way, the pre-service language teacher applied some basic pedagogical knowledge and skills for online teaching while playing the role of both designer and tutor. Among the specific skills that are required for online language teaching, and that future designs need to consider are the following: principles of instructional design, activities for multilevel groups, the integration of language skills, as well as promoting online interaction for knowledge sharing. Finally, teacher education programs could benefit and provide pre-service teachers with a microteaching opportunity where they teach their peers a technology-enhanced lessons, this way, developing online teaching digital skills are fostered among pre-service language teachers. ■

References

Aikina, T. and Bolsunovskaya, L. (2020). Moodle-Based Learning: Motivating and demotivating factors. *International Journal of Emerging Technologies in Learning (IJET)*, vol.15, no. 02, pp.239-248. dx.doi.org/10.3991/ijet.v15i02.11297

Alammary, A., Sheard, J. and Carbone, A. (2014). Blended learning in higher education: Three different design approaches. *Australasian Journal of Educational Technology*, vol.30, no.4, pp. 440-454. doi.org/10.14742/ajet.693

Arshavskiy, M. (2014). Instructional design for e-learning. www.yourelearningworld.com

Arteaga Sánchez, R., and Duarte Hueros, A. (2010). Motivational Factors that Influence the Acceptance of Moodle Using TAM. *Computers in Human Behavior*, no.6, 2010, pp. 1632-1640, doi:10.1016/j.chb.2010.06.011

Beaven, T., Emke, M., Ernest, P., Germain-Rutherford, A., Hampel, R., Hopkins, J., Stanojevic, M. M., and Stickler, U. (2010). Needs and Challenges for Online Language Teachers. The ECML project DOTS. *Teaching English with Technology: A Journal for Teachers of English*, vol.10, no.2, pp.5–20. ocw.uoc.edu/webapps/o2/bitstream/10609/115686/2/Ernst_Hopkins_TET_Needs.pdf

Bliuc, A. M., Goodyear, P. and Ellis, R. A. (2007). Research focus and methodological choices in studies into students' experiences of blended learning in higher education. *The Internet and Higher Education,* vol.10, no.4, pp. 231-244. doi.org/10.1016/j.iheduc.2007.08.001

Compton, L. (2009). Preparing Language Teachers to teach Language Online: A look at Skills, Roles, and Responsibilities. *Computer Assisted Language Learning*, vol.22, no.1, pp. 73-99. doi.org/10.1080/09588220802613831

Easton, S. (2003). Clarifying the Instructor's role in Online distance learning. *Communication Education*, vol.52, no.2, pp. 87–105. www.tandfonline.com/doi/abs/10.1080/03634520302470

Ertmer, P., Ottenbreit-Leftwich, A. T., Sadik Olgun, S. E., and Sendurur, P. (2012). Teacher beliefs and Technology integration practices: A critical relationship. *Computers and Education*, vol.59, no.2, pp. 423–435. doi.org/10.1016/j.compedu.2012.02.001

Garrison, D. R., Anderson, T., and Archer, W. (2000). Critical inquiry in a text–based environment: Computer conferencing in higher education. T*he Internet and Higher Education*, vol.2, no.2-3, pp. 87-105. doi.org/10.1016/S1096-7516(00)00016-6

Griffee, D.T. (2012). An introduction to second language research methods.

Design and data. E-book, Berkeley, CA. USA, TESL-TJ Publications, www.tesl-ej.org/wordpress/issues/volume16/ej64/ej64r3/

Hernández Sampieri, R., Fernández Collado, C., Baptista Lucio, P. (2006). *Metodología de la investigación.* McGraw Hill.

Hoven, D. (2007) The Affordances of Technology for Student Teachers to Shape their Teacher Education Experience. Preparing and developing technology-proficient L2 teachers, edited by Margaret A. Kassen, Roberta Z. Lavine, Kathryn Murphy-Judy, and Martine Peters, Texas: CALICO Monograph Series, no.6, pp.133–164. auspace.athabascau.ca/bitstream/handle/2149/1674/Hoven_Final.pdf?sequence=1&isAllowed=y

Merrill, M. D. (2002). First Principles of Instruction. *ETR&D*, vol.50, no.3, pp. 43-59 doi.org/10.1007/BF02505024

Meza Cano, J. M., Morales Ruiz, M. E., and Del Carmen Flores Macías, R. (2016). Diseño e Implementación de un Taller en línea sobre Entornos Personales de Aprendizaje. Pixel-Bit. *Revista de Medios y Educación*, no.49, pp.75-90. www.redalyc.org/articulo.oa?id=36846509006

Moore, M., and Gregg, K. (1996). *Distance education: A systems view.* Wadsworth Publishing Company.

Ottenbreit-Leftwich, A., Yin-Chan Liao, J., Sadik, O., and Ertmer, P. (2018). Evolution of Teachers' Technology Integration Knowledge, Beliefs, and Practices: How Can We Support Beginning Teachers Use of Technology?, *Journal of Research on Technology in Education*, vol.50, no.4, pp. 282-304. doi.org/10.1080/15391523.2018.1487350

Patiño, A. and Martínez Cantú, A. G. (2019). Tensiones en el Diseño Instruccional de Cursos en línea en Instituciones de Educación Superior. Edutec. *Revista Electrónica De Tecnología Educativa*, no. 69, pp. 102-120. doi.org/10.21556/edutec.2019.69.1381

Pérez, M.T., Martín, M., Arratia, O. and Galisteo, D. (2010). *Innovación en docencia universitaria con Moodle: Casos prácticos*. Editorial Club Universitario.

Reigeluth, C. (2012). Teoría Instruccional y Tecnología para el Nuevo Paradigma de la Educación. RED, *Revista de Educación a Distancia,* no. 32, www.um.es/ead/red/32/reigeluth_es.pdf

Rourke, L., Anderson, T., Garrison, D. R. and Archer, W. (1999). Assessing Social presence in Asynchronous Text-based Computer Conferencing. *Journal of Distance Education*, vol.14, no.2, pp. 50–71. eric.ed.gov/?id=EJ616753

Salas Soto, S. E. (2008). Diseño del Curso en línea: Trabajo interdisciplinario. *Educación*, vol. 32, no.1, pp. 99-122. www.redalyc.org/articulo.oa?id=44032108

Sharma, P. and Barney B. (2007). *Blended learning. Using technology in and beyond the language classroom*. Macmillan.

Shulamit, K. and Yossi, E. (2011). Development of E-Learning environments combining Learning skills and Science and Technology content for Junior high school. *Procedia Social and Behavioral Sciences*, vol.11, pp.175–179, doi.org/10.1016/j.sbspro.2011.01.056

Siemens, G. (2002). I*nstructional design in elearning. Online Teaching and Learning*, www.elearnspace.org/Articles/InstructionalDesign.htm EDDL_5141.

Staker, H. and Horn, M. B. (2012). *Classifying K-12 blended learning.* Innosight Institute, files.eric.ed.gov/fulltext/ED535180.pdf.

Stanley, G. (2013). *Language learning with technology. Ideas for integrating technology in the classroom*. Cambridge University Press.

Tondeur, J., Pareja Roblin, N., Van Braak, J., Voogt, J. and Prestridge, S. (2016). Preparing Beginning teachers for Technology integration in Education: Ready for take-off? *Technology, Pedagogy and Education*, vol. 26, no.2, pp. 157-177. doi.org/10.1080/1475939X.2016.1193556

Topchyan, R. (2016). Does Social presence relate to Knowledge sharing in Virtual learning teams?. *Knowledge Management and E-Learning,* vol.8, no.4, pp. 646–660. www.kmel-journal.org/ojs/index.php/online-publication/article/view/358/355

Valera-Ordorica, S. A., and Valenzuela-Gonzáles, J. R. (2020). Uso de las Tecnologías de la Información y la Comunicación como Competencia transversal en la Formación inicial de Docentes. *Revista Electrónica Educare (Educare Electronic Journal),* vol.24, no.1, pp. 1-20. doi.org/10.15359/ree.24-1.10

Van Dinther, M., Dochy, F. and Segers, M. (2011). Factors affecting Student Self-efficacy in Higher education. *Educational Research Review*, no.6, pp. 95–108. doi.org/10.1016/j.edurev.2010.10.003

Vásquez Cano, E. and Martín Monje, E. (2014). *Nuevas tendencias para la elaboración y edición de materiales audiovisuales en la enseñanza de lenguas.* McGraw-Hill-Interamericana.

Woodward, T. (2001). *Planning lessons and courses: Designing sequences of work for the language classroom.* Cambridge, Cambridge University Press.