


A web-based Learning Didactical Design for Training Teachers in the Incorporation of Technology to the English Classroom

Diseño Didáctico de Aprendizaje basado en la Web para Entrenamiento Docente en Incorporación de Tecnología a la Clase de Inglés

Gonzalo Camacho Vásquez¹ 

Elena María Díaz Pareja² 

Juana María Ortega Tudela³ 

1. Magister Pontificia Universidad Javeriana, Bogotá, Colombia. Docente Asociado Universidad del Tolima. Estudiante Doctorado en Innovación Didáctica y Formación de Profesorado, Universidad de Jaén, Jaén, España. Correo Electrónico: gcv00005@red.ujaen.es
2. Ph.D. Universidad de Jaén, Jaén, España. Profesora Titular Universidad de Jaén (España) Correo Electrónico: emdiaz@ujaen.es
3. Ph.D. Universidad de Jaén, Jaén, España. Profesora Titular Universidad de Jaén (España) Correo Electrónico: jmortega@ujaen.es

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ABSTRACT

The remote teaching and learning for emergency lived during Pandemic Times has demonstrated the urgent need to train teachers in the incorporation of technology into their classrooms. In English Language Teaching (ELT), this need becomes a must since the use of digital tools enables the development of Cultural and Intercultural Competence by approaching authentic language registers in native speakers of English, and variations of the language in speakers of English from other languages. A conducted literature review shows that models like Mishra and Koehler's T-Pack, Puentedura's SAMR, and Salem's SOSE shed light on how to lead this process of ICT integration to education in general; but there is not a didactical design that describes concrete procedures on how to train English Teachers in this issue. The current article aims at describing and supporting theoretically a conceived Web-based Didactical Design for training English teachers in the use of ICT for ELT, based on the analysis of existing models. The Didactical Design is part of the planned intervention of a study that intends to find out its effects in Teachers' Digital Competence using the DigCompEdu framework, in three groups of basic, middle, high school, and Tertiary Education English teachers from Colombia.

Keywords: ICT; ELT Didactics; Didactical Design; Innovation; Teachers' Professional Development.

RESUMEN

La enseñanza y aprendizaje remotos por emergencia durante pandemia han demostrado la urgente necesidad de capacitar a los docentes en la incorporación tecnología al aula de clase. En la enseñanza del inglés (ELT), esta necesidad se convierte en una exigencia debido a que el uso de herramientas digitales posibilita el desarrollo de la competencia cultural e intercultural mediante el acercamiento de los estudiantes a registros auténticos en hablantes nativos, y variaciones de la lengua objetivo en hablantes de inglés pertenecientes a otras lenguas. La revisión literaria demuestra que modelos, como el T-Pack de Mishra and Koehler's, el SAMR de Puentedura, y el SOSE de Salem, muestran como guiar este proceso de integración de las TIC en educación en general, pero no existe un diseño didáctico que describa concretamente los procedimientos para capacitar docentes de inglés. El presente artículo busca describir y sustentar teóricamente un Diseño Didáctico basado en la Web para entrenar docentes de inglés en el uso de las TIC en ELT. El Diseño es parte de la fase de intervención de un estudio que persigue establecer sus efectos en la Competencia Digital Docente utilizando el marco del DigCompEdu en tres poblaciones de docentes de inglés en Colombia.

Palabras Claves: ICT; didáctica del ELT; diseño didáctico; desarrollo profesional docente.

INTRODUCTION

Training English Teachers in the incorporation of ICTs to ELT more than a need is a must. It has been proved that the use of Web-based technologies benefits language acquisition (Pikhart, 2018; Kara, 2021; Cong-Lem, 2018). There are multiple pedagogical models or learning designs that seek to show a path in the integration of technology to education. The TPACK Model Mishra and Koehler (2006) the SAMR Model Puentedura (2014) and the SOSE Model Salem (2019) present solid theoretical foundations and attempts to show procedures for their implementation. A second group of models raise awareness on the importance of considering other aspects like elaboration of knowledge, use of multimedia, and teachers' background and beliefs.

TPACK Model (Technological Pedagogical Content Knowledge) proposed by Mishra and Koehler (2006) is a common denominator in the creation of other new proposals. The model conceives teachers' professional development in the field of technology from three types of knowledge that need to be integrated: Pedagogical Knowledge, Technological Knowledge and Content Knowledge. The Pedagogical Knowledge are the different methodologies or teaching approaches applied in the classroom, the Technological Knowledge are the technological resources and tools that are used to teach the content; and the content is the specific subject area or discipline. When these three types of knowledge are combined, they become Technological Pedagogical Content Knowledge that is presented in Technological Pedagogical Knowledge, Technological Content Knowledge and Pedagogical Content Knowledge.

A conducted literature review allows to realize that most of the pedagogical models focused mainly on the technological knowledge because it is taken for granted that educators already manage the content and the pedagogical knowledge; however, this latter becomes an obstacle when teachers intend to move the same didactical strategies, they use in the physical classroom to a virtual learning environment. That is where the SAMR-TPACK Model, proposed by Puentedura (2014) gains validity.

Puentedura's model organizes classroom technology implementation in four stages. Substitution is the simplest stage, where EdTech (Educational

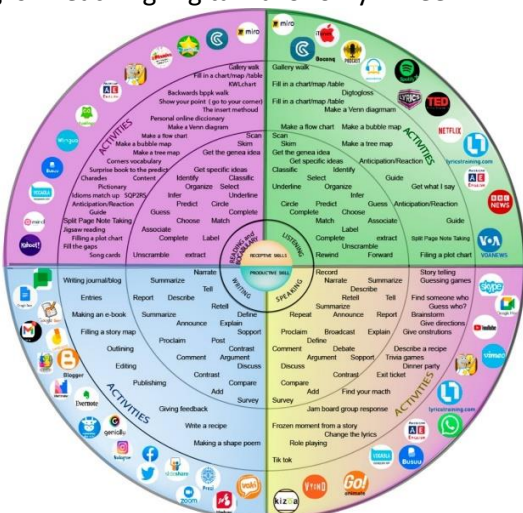
Technology) is used as a substitute for traditional classroom practices. One example of substitution could be when the black board or the white board in the classroom is changed by a Google Jam board, where students not only can write for the whole group, but they can also work collaboratively at the moment of visiting other classmates' boards and add comments or suggest ideas. It is important not to substitute only because of the fashion of technology, but because the new source adds something else to the learning process (Puentedura, 2013). This is exactly what augmentation deals with. Having students inquire in the World Wide Web about concepts of a particular subject or project theme, instead of the mere teachers' input, train them in the use of self-regulated learning strategies, allow them to grow in autonomy and foster lifelong learning strategies. In the Modification stage, technology is used to design interactive and dynamic tasks beyond the limits of the physical classroom. Introducing changes to the traditional pen and paper activity called "Find Someone Who" enables students not only to ask questions to their classmates, but takes them to use WhatsApp to interact with students worldwide by voice or text messages according to the communicative skills the English teachers intend them to practice. Finally, in the Redefinition stage teachers design new tasks that introduce new learning chances. Technology is integrated meaningfully through engaging activities that connect students' senses and train them in the use of soft skills when exposing them to multiple cultures, multiple literacies and multi modal resources.

One of the most interesting proposals in terms of its theoretical foundation and the response to learning in the XXI Century is the SOSE Model proposed by Salem (2019). It is a new web-based model that comprises 3 main stages: preparation, data refinement, and cooperation and publishing. It can be defined as "an internet-based environment in which students investigate a topic, try to answer some set questions or solve a problem in collaboration with their peers" Salem (2019, p. 2505). Pupils are actively involved in their own learning, take risks, learn from their errors and assume responsibility for their own learning. Another important point related with SOSE is that its main components cope with the requirements for developing hard skills (i.e. cognitive skills), soft skills (i.e. higher-order thinking skills and twenty-first Century Skills) and hot skills (i.e. collaboration) in addition to its positive impact on developing

academic achievement and language skills. In fact, the model is founded on well-known theories and approaches to learning like Web-Based Learning, Constructivism, Scaffolding strategies, Project-Based Learning, Inquiry-Based Learning and Discovery Learning. Unfortunately, there is not much theory that describes the method in depth. The steps established in the learning trajectory seem not to be enough to demonstrate the application of the founded theories that provoke its emergence.

The SECI Model Nonaka and Takeuchi (1995) seeks to introduce innovation and creativity through solid theoretical foundations that provoke learning through the incentive of explicit knowledge and tacit knowledge, while the incorporation of PLE's (Personal Learning Environments) in OER (Open Educational Resources) merge as a wonderful possibility to organize available web resources in the construction of a taxonomy for language teaching and learning as it is proposed by the author of this article (See figure 1). The Model of Holistic Competence for the Digital Word Esteve *et al.* (2018) is addressed to basic education teachers, and intends to surpass the definition of Digital Teacher Competence by assuming the concept not from an instrumental vision of technology, but responding to an integral teacher. With regards to the Teachers' Digital Competence, the authors say that educators need to have the ability of using ICT to enrich classical didactic models that respond to students learning needs. They also insist on the idea of using Design-based Research (DBR) or Educational Design Research (EDR) to assume research as a teaching practice.

Figure 1
English Teaching Digital Taxonomy Wheel



Source: own elaboration

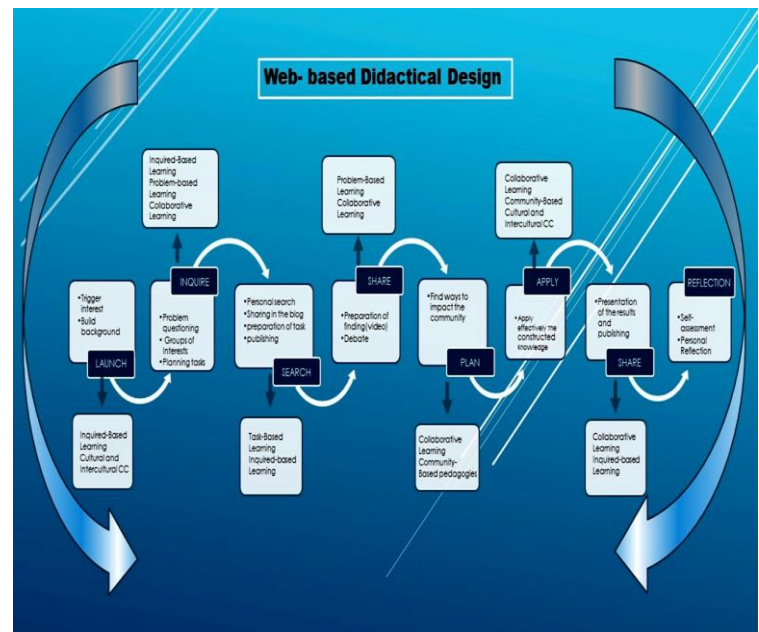
The literature review allows to conclude that a didactical design to train teachers in the use of ICT to ELT needs to have the following components: solid theoretical foundations that define its procedures as the SOSE Model shows, awareness on the way teachers integrate technology into their practice using the SAMR Model as a reference, knowledge processing from individual to group interactions and from elaboration of explicit knowledge to tacit knowledge as recommended by the SECI Model, use of PLEs (Personal Learning Environments) to achieve the aforementioned purposes, use of multimedia web-available resources, take into account teachers' background as the Holistic Model for the Digital World, and consider teachers' beliefs and contextual issues as the Ecological Model recommends.

A WEB-BASED LEARNING DIDACTICAL DESIGN

Definition of the Web-based Didactical Design

The Web-based Didactical Design is an eight-step methodological proposal for teachers' training in the incorporation of ICTs to ELT with online and offline moments, founded on solid pedagogical theories and approaches, and intending to develop TDC.

Figure 2
Web-based Learning Didactical Design



Source: own elaboration of the author

Learning Aims of the Web-Based Didactical Design

The proposed design intends primarily to develop teachers' digital competence in the incorporation of ICT tools to ELT by means of a process of adoption, adaptation, appropriation and innovation of technology; secondly it pursues to train language teachers on the adaptation of ELT didactics to technology mediated environments as a way to foster collaborative and autonomous learning skills in their students; thirdly, the design intends to boost teachers' critical thinking in language teaching via problem-based learning and inquiry-based learning strategies, which may trigger their capacities of relating constructed knowledge to local contexts via community-based pedagogies' strategies. Thirdly, it intends to awake teachers' interest in the use of web-based learning materials as an alternative to develop cultural and intercultural competence.

Theoretical Foundations

Although the boundaries of the theoretical foundations are not clearly seen in a learning model, this section is devoted to define each of these theories and the manner they are present in the different moments of the learning trajectory. They should not be conceived as separated components of the model. An activity, a strategy, a technique or a tactic in the didactical design may be based on one or more of these epistemological bases.

Web-based Learning (WBL)

Zheng (2008) defines Web-based learning as "the type of learning that uses the internet as an instructional delivery tool to carry out various learning activities" (p. 752). WBL may be pure online learning, which has no face-to-face mediation between teachers and students, or hybrid, in which the instructors meet students half of the time online and half of the time in the classroom. In this case, the WBL Didactical Design is one of pure online learning with online gathering activities and offline individual and group tasks. Kalaian (2017) says that WBL is "an innovative student-centered instructional method for teaching/learning of the digital course content delivered in distance via the internet and mediated by computer communications and web-based technologies" (p. 23). This author mentions that WBL is also referred as e-learning, Cyber learning or online learning.

The WBL Didactical Design, that is implemented by means of a 200-hours online course, plans to fulfill the different learning conditions and learning needs of the groups of teachers that are part of the target population. It allows the inclusion of not only teachers that live in the state's capital city, but also educators from the five zones of the region and from all the country.

Constructivism

In the history of pedagogy, Constructivism is recognized as the theory that marked a shift from the behavioral perspective, which assumes that learners are empty vessels that need to be filled with the knowledge that teachers and books own, to a learner-centered conception where knowledge does not exist, but is constructed through active interaction with the environment involving senses to gain experience (Suhendi, 2018). This idea of learning is rooted in Piaget's and Vygotsky's theory. Piaget introduced the idea that learning happens when individuals interact with their real-world gaining experiences as new knowledge fits their cognitive capacities. Vygotsky, in his Cultural Historical Activity Theory (CHAT Theory) believes in a more social-focused process where learning results from the active interaction of individuals with their community and culture. Altogether, in language learning for example, teachers need to consider the mind capacities of the learners, their interests and likes and expose them to meaningful learning settings. For instance, to develop oral skills and acquire vocabulary related to food, teachers may change the classroom into a restaurant where students order meals from a menu and interact using realia. In the development of the WBL Didactical Design, real learning in meaningful contexts is prioritized. Teachers in training not only appropriate the technological or pedagogical knowledge, but make decisions on what to learn depending on their classroom needs. More importantly than the final product, the awareness of the learning process through personal reflection is emphasized, and learning occurs by applying the constructed knowledge to solve didactical problems of language acquisition in their classrooms.

Inquiry-Based Learning (IBL)

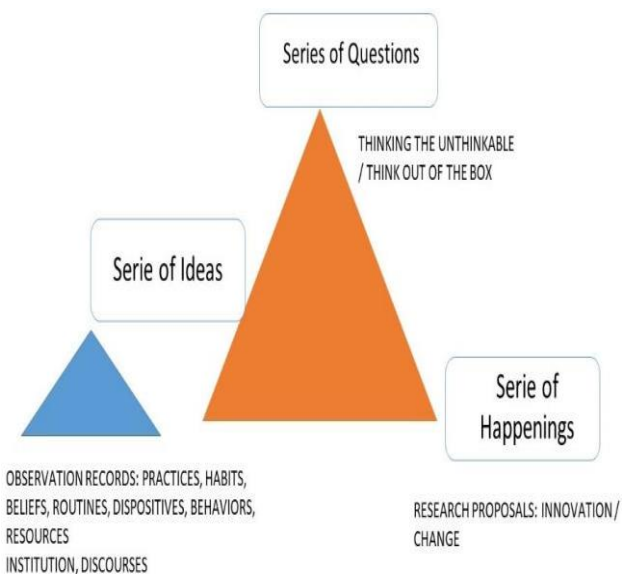
Inquiry-based Learning (IBL) is often associated with Problem-based Learning or Discovery Learning Acar

and Tuncdogan (2018). It may be defined as an educational strategy that is mainly used in science to guide students to discover learning through constant questioning and formulation of hypotheses that are tested by conducting experiments or making observations Pedaste *et al.* (2015). There exist three types of inquiries: Open vs. Closed Inquiries, Discovery-Focused vs. Information-Focused Inquiries, Individual vs. Team Inquiries.

In an open inquiry students identify the problem and the ways to solve it, while in a closed inquiry, the teacher introduces the problem and establishes the route to be solved. In a discovery-focused inquiry the aim is create an innovation by designing something that is original, like a product or academic knowledge; in an information-focused inquiry the objective is to explore and to acquire existing knowledge, for instance a literature review. Finally, an IBL could be used for individual inquiry or as a team-based learning.

In the process of inquiring, the formulation of the questions plays a fundamental role in the sequence of learning. Camacho (2017) carried out a research study to improve the construction of research questions by linking Inquiry as Orientation for Learning with the Logic of Sense (Deleuze, 2005). As a result, he came up with a question-formulation design that conceives three moments: the Series of Ideas, the Series of Questions and the Series of Happenings.

Figure 3
The Problem for the Logic of Sense



Source: own elaboration based on Deleuze (2005)

In the Series of Ideas, students are led to create awareness about the state of mind or collective ideas people usually have about an issue or problem. For example, Tik Tok is a social network used basically for entertainment. In the Series of Questions, students are encouraged to formulate questions that hesitate/doubt/suspect about the installed concepts in the Series of Ideas: What If Tik Tok is used for other purposes different from entertainment? What could happen if Tik Tok were used for English learning? The Series of Happening concrete what is formulated in the question by describing an innovative proposal: Teach Tok, a video-based social network for English learning.

In the WBL Didactical Design, IBL is put into practice in the steps called “Inquire” and “Plan”. In “inquire” teachers in training formulate problem questions based on the experience lived in the “Launch” step.

Problem-based Learning (PBL)

It is very related to inquiry-based Learning; the difference is that in IBL the problem can either be given to students (Close inquiry) or students may make it up by their own (open inquiry), while in PBL the problem is close-inquiry type. The teacher gives the problem, students search for information and get back to the problem to solve it Leal y León 2017 as cited in Arias *et al.* (2019).

To the aims of the current study, it is worth noting the following features of PBL Luengo Caballero, (2014 as cited in Arias *et al.*, 2019): it is a student-centered methodology, problems are realistic and are the core component of instruction, students work collaboratively in small groups what implies commitment and autonomous learning, the teacher becomes a facilitator of knowledge construction, students develop critical thinking, problem management skills, and self-directed learning skills; finally, PBL can be used to teach any subject area. There are a number of experiences that incorporated PBL to technology, what is called ePBL. Arias and Martin (2015, cited by Arias *et al.*, 2019) combined PBL with synchronous virtual classrooms (SVC) in higher education. The authors remark that the most meaningful fact in the experience is not the technology used, but the methodology to develop it. This methodology is proposed in three basic actions, which are teaching planning, teacher management and technical management tools. Among these tools,

the authors mention: audio communication tools, direct instant messaging, user profiles configuration which can coexist in the virtual room, presence control, interactive whiteboard, monitoring and evaluation tools, and shared and remote desktop.

In relation to ELT, Othman and Shah (2013) investigated the effects of PBL approach on students' language classes in course content and language development. They found benefits of PBL in the latter aspect, specifically on writing composition. Their manuscripts were richer in regards to the group that did not intervene in terms of support and arguments.

Ansarian and Teoh (2018) assert that there have been many failed attempts to incorporate PBL to ELT. Implementing PBL in language classes is notably different from implementing it in other disciplines since, in an English classroom, language is both the means and the target of instruction. Teachers need to be aware of students' content learning and language development at the same time. This fact makes it necessary to design PBL models that fulfill these specific characteristics of the language classroom in terms of particularities of students' culture and background.

From these steps of the Problem-Based Language Learning model, the Web-Based Learning Didactical Design shares the idea of knowledge as a problem and as a collective construction through team work; however, problems are not created by the course teacher or the teachers in training, but they are the result of an initial activity that triggers interests and provoke the formulation of questions. On the other hand, problems are not inherent to a practical solution. They are ways of conceiving new dispositions of thinking and conceiving already established knowledge, instead. It is understood that before going to a collective work to discuss information searched, teachers in training need to process it individually. Reflection is also a common final step in both models. The teachers in training self-evaluate their performance and in the case of the WBL Didactical Design, they also evaluate the different moments in the learning trajectory.

Collaborative Learning (CL)

As any other theoretical foundation analyzed in this section, CL is the result of knowledge construction through research from different human disciplines, especially psychology, sociology and motivational

theories. Moreover, collaboration is one of the XXI Century competencies, and "Personal, Social and Learning to Learn" one of the lifelong learning competencies. According to the European Communities (2019) developing these competencies implies skills like "the ability to learn and work both collaboratively and autonomously and to organize and persevere with one's learning, evaluate and share it, seek support when appropriate and effectively manage one's career and social interactions" (p.13). It also includes the development of attitudes like respecting diversity of others, showing tolerance, expressing and understanding different points of view, building confidence and empathy.

As can be seen CL is more than a theory or a classroom strategy or activity, it has a lot to do with enhancing human dimension. CL is frequently use instinctively to refer to Cooperative Learning or Peer collaboration Learning. Smith and MacGregor (1992, cited by Barkley et al., 2014) provide the following definition:

Collaborative learning is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. In most collaborative learning situations students are working in groups of two or more, mutually searching for understanding, solutions, or meanings, or creating a product. (p.10)

Bruffee (1995, cited by Barkley et al, 2014) makes some distinctions between cooperative learning and collaborative learning, based on the aims they pursue. The goal of cooperative learning is "to work together in harmony and mutual support to find the solution", while CL seeks "to develop autonomous, articulate, thinking people, even if at times such a goal encourages dissent and competition that seems to undercut the ideals of cooperative learning" (p.6).

In the proposed didactical design, CL plays fundamental roles in the construction of knowledge from tacit to explicit and its final application. After making the interest groups based on the formulated questions, teachers in training search for information individually and publish the result in their Personal Learning Environments (PLE). The group members visit each other's PLE previous to the Share moment where teachers in training work collaboratively to discuss the finding and prepare the team

presentation for the whole group. In that way knowledge is approached, individually, in teams and then in the whole group. Feedback is given in the last two moments, and teachers in training are given the chances they need to make adjustments. Online team and group discussion are done subdividing teachers by using a video conference platform that allows it. In the Learning Management System (LMS) there is a space for "Guest Speakers" where foreign lecturers and learners are invited to share their experiences in the use of technology for ELT.

Task-based Learning (TBL)

From a Communicative Language Teaching (CLT) perspective, acquiring a language goes beyond the understanding of grammar or memorization of vocabulary. The main purpose is to use the language for effective communication in real settings. Grammar and vocabulary are sub skills that underneath the main transactional aim in the management of skills. One of the well-known methodologies for CLT is Task-Based Learning and Teaching (TBLT), whose main idea is to learn by means of real-life like activities or "learn by doing" (Laurillard, 2002, p. 67; Ellis, 2003; Willis y Willis 2009; cited by Blake, 2018, p. 67). Long *et al.* (2019) defines TBLT as:

... the use of a syllabus whose content is a series, not of linguistic forms, but of pedagogic tasks sequenced in terms of increasing task, not linguistic, complexity, and lessons whose primary focus is communicative use of the L2 to complete those tasks. (p.501)

Ellis (2003, cited by Thomas & Reinderst, 2010) suggests six criterial features for TBLT: tasks contain a plan students need to follow, activities are focused on making meaning, they engage students in real-world authentic language use, they are focused on language skills, students make use of cognitive skills to solve the tasks, tasks have a communication-based learning outcome. In the same token, Ellis (2009) says that to be considered a task, an activity must meet these criteria: focus on meaning, have a gap that students need to fulfill to accomplish the task, students need to rely on linguistic and non-linguistic sources the need to use, and have an outcome or a product to show as evidence of task achievement.

From a macro perspective, implementing TBLT Long (2015) starts with a needs analysis that provides input for teachers to design a syllabus that targets students' interest, likes and necessities. With this syllabus design, teachers need to develop task-based materials and plan a methodology to implement the tasks. Finally, the learning process is assessed in two ways. One is through the exit tasks according to the proposed learning outcome (in the case of ELT, it could be the progress students reach in a language skills or subskill), and the course evaluation from a macro perspective.

For the purposes of teachers' training in the use of ICTs for ELT, activities in the learning trajectory arise in the form of tasks. A first task comes from the construction of the question and the creation of interest groups. Teachers in training look for information to answer the set question(s) with the aim of sharing this knowledge with the class. The second task has to do with the Application of constructed knowledge in the community, which demands thinking a "how", planning the execution, collecting the evidence and sharing the experience with the class again. As most of the application of digital tools for English teaching are related to its incorporation to enhance the development of language skills and subskills, TBLT is mostly applied in lesson planning that describes preparation and build background activities in the pre-task stage, application of technology in the development of the task and final reflection of students about the use of the tool and self-evaluation performance in the post-task stage.

Cultural and Intercultural Communicative Competence (CIC)

Being a proficient second or foreign language speaker is not only being language competent, but also communicative competent and intercultural communicative competent.

Balboni (2006) defines language competence like the one that generates validation or falsification of correctness. He refers to those grammar rules that make a statement to be accepted or not. For example, the order of words in a sentence. Communicative competence is in higher level because it does not only include language competence, but also, sociolinguistic (social factors that influence language use), pragmalinguistics (strategies for realizing speech intentions and the

linguistic items used to express these intentions) and extralinguistic grammars (non-verbal signs and clues), what allows comprehension, production and interaction in the target language. Intercultural communicative competence deals with the management of at least two communicative competences in two languages and cultures to allow interaction between the two.

For Byram *et al.* (2002) developing the intercultural competence in language teaching

... involves recognising that the aims are: to give learners intercultural competence as well as linguistic competence; to prepare them for interaction with people of other cultures; to enable them to understand and accept people from other cultures as individuals with other distinctive perspectives, values and behaviours; and to help them to see that such interaction is an enriching experience. (p.10)

Deardorff (2006) proposes a model for the development of intercultural competence that is based on five elements. Attitudes (respect, openness and curiosity); knowledge (cultural self-awareness, culture-specific knowledge, deep cultural knowledge, and sociolinguistic awareness); skills (observing, listening, evaluating, interpreting and relating); internal outcomes (attitudes, knowledge and skills transformed into flexibility, adaptability and empathy); and external outcomes, (behavior and communication skills that are product of a person's attitudes, knowledge, skills and internal outcomes).

The question that arises is: how to develop cultural and intercultural competence in a foreign language environment? The answer seems obvious: by exposing students to native, native-like speakers or speakers of English from other languages either personally or through the use of mediated technology. In the proposed WBL Didactical Design the cultural and intercultural development is a transversal component that is evident in the "launch" experience by the use of authentic multimedia materials, and in the "search" where teachers in training approach written and audio resources; besides, the LMS platform contains a "Guest Speaker" section and links to online dictionaries.

Community-based Pedagogies (CBP)

Linking classroom knowledge to communities is not something new. Freire (2005); Giroux (1992) and Kumaravadivelu (2003) made sense of pedagogy by developing critical thinking on students about their home communities. Freire (2005) proposes a problem-posing education where humans perceive critically the world as a reality of transformation. Giroux (1992) claims for a border pedagogy that equips students with disposition to think their communities beyond the limits of reigning discourses through multiple narratives in the form of critical reading and denouncing writing practices. Kumaravadivelu (2003) criticizes traditional classroom English Teaching methods by proposing a postmethod pedagogy founded on three parameters: particularity, practicality and possibility. The first parameter posits that any language pedagogy must be sensitive to specific sociocultural context; the second involves a teacher-generated theory of practice, and the third one pursues identity formation and social transformation through continual participants' quest.

Committed with the aforementioned purposes, a CBP teacher is a social activist that is able to involve the knowledge, beliefs, constructs and perceptions of local communities into the teaching practice Lastra *et al.* (2018) and enacts those knowledge traditions to make meaningful connections with children and their families (Murrell, 2001, cited by Sharkey *et al.*, 2016). Developing CBP projects implies that teachers become sensible to the community where they work, being able to transform the posed curricula into a meaningful curriculum by knowing and integrating the sociocultural and economic realities of his/her students.

CBP is evidence in the WBDD in the plan, apply and reflect stages. Teachers in training are encouraged to think about problem questions that link the acquired content and knowledge with their context by applying the technological content knowledge to solve a language problem, a language learning problem, or even a social problem they encounter in their classrooms or communities. For example, one of the teachers in training may realize that students in his/her classroom may lack oral comprehension skills. He/she may formulate a unit project to use song lyrics to train them on listening for general understanding or listening for detailed information. Although the emphasis could be on understanding, students in his/her classroom may also participate in karaoke activities to improve their pronunciation.

The teacher in training may also incorporate different digital resources to tackle problems his/her students may have with reading and writing: make an eBook that incorporate multimedia, social network and animated tools to narrate family stories, to write about their neighborhoods, their home towns or their personal expectation for future careers. Teachers in training are encouraged to listen to their students who are the ones that know their communities better. Based on the manifested needs, training teachers formulate problem questions and plan community interventions.

LEARNING SEQUENCE

Launch (online)

Learning is a Happening in the way Deleuze defines it in one of his axioms: "The event is of a different regime than the actions and passions of the body, even if it results from them" Badiou (2007, p. 38). In this way, an event is something different from what happens every day, something out of the ordinary and common: a sunset that makes us turn our eyes to the Sun, a movie plot that occupies our minds after the function ends.

The Launch needs to be an activity that affects students' minds and senses since the very first moment of the teaching act. This demands the teacher to be tuned with interests, likes and preferences of students, and find creative ways of connecting all this with the contents, the aims and other curriculum components. To teach a lesson about past habits, the teacher in training may use photos of his/her albums to tell the class what he/she used to do when he/she was a child, or prepare a PowerPoint presentation with real pictures of activities he/she usually does in a day.

In this first moment, besides triggering interests, the teacher builds background for the new learning. It means helping their students to connect what they already know with what they are going to learn. Explicitly, Vogt and Echeverria (2008) mention three forms of building background. The first is linking concepts to students' experiences (family, neighborhood, community in general), the second is linking past learning to new concepts, and the third is emphasizing key vocabulary (write, repeat, highlight). The class about past habits may continue with students trying to say similar sentences like the

ones introduced by the teacher to tell the class what they used to do when younger or when they lived in a different town or neighborhood. The teacher needs to highlight new expressions and new vocabulary so that students grasp their meaning to be used later in the lesson.

Inquire (online)

In the traditional school, questions are part of a test, are a strategy to confirm students' learning, are a kind of control over the knowledge, which is owned by the teacher. Questions are part of a dialectical thought that seeks for truths. These "truths" are in the books or are part of the teacher's speech. For Deleuze (2005) knowledge does not exist, but it is continuously constructed through the questions. As it was shown before in figure 3, when the installed knowledge or believed truth is quizzed by means of problem questions, it is possible to make the Happening emerge. In that way, the Happening is that idea, that proposal of a different thought that allows us to see what we did not see or what we deny to see; that is thinking what was unthinkable. On this regard, Velásquez (1995) concludes:

Al guiar el pensamiento a través de preguntas se ingresa en otra zona que no es la de la búsqueda de soluciones sino en un espacio de investigación, de experimentación. Se facilita la producción de un trabajo creativo en cualquier espacio de la vida social. (p.35)

In this way, "Inquire" is the moment in the learning trajectory when teacher on training pose questions provoked by the event in the "Launch". They are guided to write a list of questions and transform them into problem questions through the guide of the Logic of Sense. These questions need to include a proposal and the type of "What if..." or "What could happen if..."

Search (offline)

After defining the individual tasks, each team member does an individual search. Teachers in training may need the course teacher's guidance on this concern by training them on how to do trustful and reliable quests by using well-known web browsers like Google or Bing or Yahoo, or more academic sites like Google scholar, Web of Science,

Springer or any other databases. Once teachers in training refine the search and have the information ready, they publish it in their PLEs and send alerts to the team members to start the virtual visits. Teachers in training may include comments about the posted information and they may also suggest corrective feedback for language use. Every teacher in the course needs to visit the PLEs and write a summary of the main ideas that contribute to elucidate the problem that was turned into questions.

Teachers in training hold an online meeting to plan the presentation of findings to each of the questions. They may prepare a short video presentation of a guided tutorial to be shown to the whole class. For the application of resources from the English Teaching Digital Taxonomy (Figure 1), they may present, for example, a tutorial to illustrate what “Tik Tok” is, the tools it has to edit videos, and make suggestions on its use to develop a language sub skill or skill.

Share (online)

In an online session, teams take turns to present their findings to the whole group. It is important that each team remembers what the problem questions were to make connections with the new information. After each presentation, the group has time to clarify possible doubts or debate based on the relation problem-questions and information searched. After all the teams present the information, teachers in training self-assess and assess each other to decide if the information is clear and enough to give hints about the problems. The aspects in the checklist or the rubric given before the search stage is used to make informed decisions. In case the class decides that the team needs to continue the search, the team is given time to accomplish the aim of the activity. If necessary, team tutorials with the course teacher are programmed.

Plan (online)

Teachers in training gather again to find concrete strategies to impact the community or to put into practice the constructed learning. The course teacher affords a guide for students to organize the planning, with the following information: problem-question(s), description of the context and population, objectives, tasks, resources, expected results, and achieved results (see annex I)

In the case of the teachers’ training course, student teachers may plan the incorporation of digital tools to the development of language skills and subskills.

Apply (offline)

Teams work to execute the plan with constant support and assistance of the course teacher. Teachers in training need to collect evidence of each one of the steps in the plan to consolidate the data for the final oral report. Teams may hold video conferences with the course teacher to receive feedback and recommendations whenever it is required.

Once the implementation is done, teachers in training look for a creative manner to present the results to the whole class. The course teacher needs to inform the time each team has for the presentation as well as the assessment criteria.

Share (online)

The course teacher may organize a school event, like an online project fair, to present the results of the learning projects. Teams take turns to present the results of their application. At the end there should be given time for questions, comments and debate with the participation of the community and guests experts in the themes.

Reflect (offline-online)

Teachers in training self-reflect on their participation and collaboration in each of the learning moments based on a check list or rubric (See annex II). They may write a reflection paper that can be taken as a learning outcome of the unit/module/course. This is another chance to provide corrective feedback about writing abilities.

In an online session, teachers in training assess the development of the learning trajectory and may share their personal reflections. They also answer an assessment survey of the didactical design and make suggestions to improve.

CONCLUSIONS

The Web-Based Learning Didactical Design emerges as an innovative answer to the located needs of

training English Language teachers in the integration of technology to the English classroom. There exist pedagogical models and didactical designs that pursue the embodiment of ICTs with many different purposes; however, few of them are focused on language learning and none attempts to prescribe a procedure for training English teachers. The WBL Didactical Design is conceived as an eight-learning moments proposal that combines online and offline sessions. Each of these stages is founded on teaching and learning theories and approaches.

The construction of the learning design takes into account the integration of technological, pedagogical and content knowledge, emphasizing the effective application of the theory through the use of didactical strategies that involve the formulation of problem questions, the teamwork in collaborative learning, the true impact in the learning community by means of the formulation of Community Based projects and the acquisition of the language through the exposure to the target language culture. The preliminary aim of the Learning Design is to affect teachers' digital competence in the adoption, adaptation, appropriation and innovation with technology by following the DigCompEdu framework Cabero-Almenara and Palacios-Rodríguez (2020) as a reference. Teachers in training are expected to feed the proposed English Teaching Digital Taxonomy as they gain experience in the application of acquired competence in their classrooms.

The implementation phase is done by means of a Course in Digital Competence for English teachers, organized according to their Digital Competence. For the Didactical Design there are not pre-conceived curriculums with lists of topics and activities to be accomplished. The construction of the course depends on the real needs of teachers in the use of digital tools for the development of language skills and subskills. The effectiveness of the proposed design can only be established after the analysis of the data collection instruments that evaluates its implementation.

REFERENCES

Acar, O. A. y Tuncdogan, A. (2018). Using the inquiry-based learning approach to enhance student innovativeness: a conceptual model. *Teaching in*

Higher Education. DOI: 10.1080/13562517.2018.1516636

Ansarian, L. y Teoh, M. (2018). *Problem-based Language Learning and Teaching: An Innovative Approach to Learn a New Language*. Singapore: Springer.

https://books.google.com.co/books?hl=es&lr=&id=UfxlDwAAQBAJ&oi=fnd&pg=PR7&dq=Problem+based+Language+Learning+and+Teaching:+An+Innovative+Approach+to+Learn+a+New+Language.&ots=WRs47InYZb&sig=fwBx9khAyyShqNEhGufTvHOhtCY&redir_esc=y#v=onepage&q=Problem-based%20Language%20Learning%20and%20Teaching%3A%20An%20Innovative%20Approach%20to%20Learn%20a%20New%20Language.&f=false

Arias Masa, J., Martín Espada, R., Gutiérrez-Esteban, P., Delicado Puerto, G., Cubo Delgado, S., Alonso-Díaz, L. y Yuste Tosina, R. (2019). Synchronous Virtual Classrooms in Problem-Based Learning to Mentor and Monitor Students in Higher Education. In *Universities in the Networked Society* (pp. 133-154). Springer, Cham.

https://link.springer.com/chapter/10.1007/978-3-030-05026-9_8

Badiou, A. (2007). The Event in Deleuze. *Parrhesia. A Journal of Critical Philosophy*. No. 2. http://parrhesiajournal.org/parrhesia02/parrhesia02_badiou02.pdf

Balboni, P. (2006). Intercultural Communicative Competence: a Model. *Documents in Language Teaching Methodology*. Perugia: Guerra Edizioni.

Barkley, E. F., Cross, K. P. y Major, C. H. (2014). *Collaborative learning techniques: A handbook for college faculty*. John Wiley & Sons.

Blake, R. J. (2018). La ELAO en el marco del enfoque por tareas. *CÍRCULO de Lingüística Aplicada a la Comunicación*, 76, 67. <https://revistas.ucm.es/index.php/CLAC/article/view/62498/4564456548718>

Byram, M., Gribkova, B. y Starkey, H. (2002). *Developing the intercultural dimension in language teaching: A practical introduction for teachers*. Language Policy Division, Directorate of School, Out-of-School and Higher Education, Council of Europe.

- Cabero-Almenara, J. y Palacios-Rodríguez, A. (2020). Marco Europeo de Competencia Digital Docente «DigCompEdu». Traducción y adaptación del cuestionario «DigCompEdu Check-In». *Edmetic*, 9(1), 213-234. <https://www.uco.es/ucopress/ojs/index.php/edmetic/article/view/12462/11154>
- Camacho Vásquez, G. (2017). La lógica del sentido incorporada a la noción de investigación como una orientación para el aprendizaje: dos experiencias en el aula. *GIST—Education and Learning Research Journal*, (14), 88-106. <https://latinjournal.org/index.php/gist/article/view/406/350>
- Cong-Lem, N. (2018). Web-based language learning (WBLL) for enhancing L2 speaking performance: A review. *Advances in Language and Literary Studies*, 9(4), 143-152. doi:<https://doi.org/10.7575/aiac.all.v.9n.4p.143>
- Deardorff, D. K. (2006). Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization. *Journal of Studies in International Education*, 10(3), 241–266. <https://doi.org/10.1177/1028315306287002>
- Deleuze, G. (2005). Quinta Serie del Sentido: “Novena Serie de lo Problemático”: “Vigesimoprimer Serie: del Acontecimiento. *La Lógica del Sentido*, 50-72.
- Ellis, R. (2003). *Task-based language teaching and learning*. Oxford: Oxford University Press.
- Ellis, R. (2009). Task-based language teaching: Sorting out the misunderstandings. *International Journal of Applied Linguistics*, 19, 221–246.
- Esteve F., Castañeda L. y Adell, J. (2018). Un Modelo Holístico de Competencia Docente para el Mundo Digital. *Revista Interuniversitaria de Formación del Profesorado*, 2018, 32.1
- European Communities. (2019). *Key competences for lifelong learning*, Publications Office. <https://data.europa.eu/doi/10.2766/569540>
- Freire, P. (2005). *Pedagogy of the Oppressed*. 30th Anniversary Edition. New York: Continuum.
- Giroux, H. A. (1992). *Border crossings: cultural workers and the politics of education*. New York; London: Routledge.
- Kalaian, S. A. (2017). Distance and Online Learning. In *Handbook of Research on Instructional Systems and Educational Technology* (pp. 23-36). IGI Global.
- Kara, S. (2021). An investigation of visual arts teachers’ attitudes towards distance education in the time of COVID-19. *International Journal on Social and Education Sciences (IJonSES)*, 3(3), 576-588. <https://doi.org/10.46328/ijonSES.246>
- Kumaravadivelu B. (2003). *Beyond Methods: macrostrategies for language teaching*. Yale University Press. https://books.google.com.co/books?hl=es&lr=&id=zFUvFP6e4iMC&oi=fnd&pg=PP7&dq=Beyond+Methods:macrostrategies+for+language+teaching&ots=xlXgvNpAHE&sig=qtAPfzud3p2xgqQU_-NcUM3vhNU&redir_esc=y#v=onepage&q=Beyond%20Methods%3Amacrostrategies%20for%20language%20teaching&f=false
- Lastra, S., Durán, N. y Acosta, D. (2018). Community based pedagogy as an eye-opening for pre-service teachers’ initial connections with the school curriculum. *Colombian Applied Linguistics Journal*, 20(2), pp. 209-229
- Long, M., Lee, Y. y Kobayashi, K. H. (2019). Task-Based Language Learning. *The Cambridge Handbook of Language Learning* (Cambridge Handbooks in Language and Linguistics). Cambridge: Cambridge University Press. doi:10.1017/9781108333603
- Long, M. H. (2015). *Second language acquisition and task-based language teaching*. West Sussex, UK: Wiley Blackwell.
- Mishra, P. y Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017–1054.
- Nonaka, I. y Takeuchi, H. (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.
- Othman, N. y Shah, M. (2013). Problem-Based Learning in the English Language Classroom. *English Language Teaching*. 6. 10.5539/elt.v6n3p125. <https://eric.ed.gov/?id=EJ1076845>

- Pedaste, M., Mäeots, M., Siiman, L.A., de Jong, T., Van Riesen, S.A.N., Kamp, E.T., Manoli, C.C., Zacharia, Z. C. y Tsourlidaki, E. (2015). Phases of inquiry-based learning: Definitions and the inquiry cycle. *Educational Research Review*, 14(1), 47-61. Elsevier Ltd. Retrieved October 14, 2022
from <https://www.learntechlib.org/p/197430/>.
- Pikhart, M. (2018, August). Technology enhanced learning experience in intercultural business communication course: a case study. In *International Symposium on Emerging Technologies for Education* (pp. 41-45). Springer, Cham. https://doi.org/10.1007/978-3-030-03580-8_5
- Puentedura, R. (2013). *SAMR: Getting to transformation*.
<http://www.hippasus.com/rrpweblog/archives/2013/04/16/SAMRGettingToTransformation.pdf>
- Puentedura, R. (2014). *Learning, technology, and the SAMR model: Goals, processes, and practice*.
<http://www.hippasus.com/rrpweblog/archives/2014/06/29/LearningTechnologySAMRModel.pdf>.
- Salem, A. A. M. (2019). Learning in a sheltered online scaffolding environment (SOSE). *Educ Inf Technol* 24, 2503–2521.
- Sharkey, J., Clavijo Olarte, A. y Ramírez, L. M. (2016). Developing a deeper understanding of community-based pedagogies with teachers: Learning with and from teachers in Colombia. *Journal of Teacher Education*, 67(4), 306-319.
- Suhendi, A. (2018). Constructivist learning theory: The contribution to foreign language learning and teaching. *KnE Social Sciences*, 87-95.
<https://knepublishing.com/index.php/KnE-Social/article/view/1921/4298>
- Thomas, M. y Reinders, H. (2010). Deconstructing tasks and technology. *Task-based language learning and teaching with technology*, 1-16.
https://books.google.com.co/books?hl=es&lr=&id=QGkzsqQ4HaoC&oi=fnd&pg=PA1&dq=Deconstructing+Tasks+and+Technology.+Task-Based+Language+Learning+and+Teaching+with+Technology.&ots=nnclQn75Jg&sig=tZSoT3nx6YP77RximN3KqqUb1KY&redir_esc=y#v=onepage&q=Deconstructing%20Tasks%20and%20Technology.%20Task-Based%20Language%20Learning%20and%20Teaching%20with%20Technology.&f=false
- Velásquez, R. E. (1995). *Preguntar la escuela. Unidad Coordinadora de Prevención Integral*. Serie Prevenir es Construir Futuro. Alcaldía Mayor de Bogotá
- Vogt, M. y Echevarria, J. (2008). *99 ideas and activities for teaching English learners with the SIOP model* (p. 208). Boston: Pearson Allyn and Bacon.
- Willis, D. y Willis, J. (2009). "Task-based language teaching: Some questions and answers". *Language Teacher* 33, 3, 3–8.
- Zheng, R. (2008). Understanding the underlying constructs of Webquests. In *Handbook of research on instructional systems and technology* (pp. 752-767). IGI Global.