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# A Blueprint for In-Service Teacher Training Program in Technology Integration\*

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| Article Info  | Abstract  |
|---|---|
| Received: 23.04.2020<br>Revised: 14.05.2020<br>Accepted: 25.06.2020 | The developments in the digital age are reflected in foreign language classrooms today, yet, teachers' incompetence resulting from insufficient training about various technologies during their previous education prevent them from integrating technology into their classrooms effectively. Especially with the sudden increasing demand of   |
| Research Article  | online teaching due to COVID-19, there is a strong need to handle this issue as teachers continue doing their jobs. However, due to many reasons, in-service teacher training programs have been the subject of criticisms. This paper explains a blueprint for designing and implementing a context-specific in-service teacher training program for using web 2.0 tools in EFL lessons. The participants were 122 English language teachers working at the School of Foreign Languages at Anadolu University. Survey forms were utilized as data collection tools in this design-based study. Eight successive stages were followed in the training program. The feedback gathered both from the learners and the teachers show that both groups appreciated technology integration and the in-service teacher training program. Thus, based on overall findings, this blueprint can be suggested and developed for similar institutions wishing to increase their teachers' competencies in integrating technology into their classrooms.  Keywords: in-service teacher training, technology integration into language teaching, professional development, web 2.0 tools, teacher training program |

### 1. INTRODUCTION

In the 21st century the world is going through changes in ICT and thus in instructional technologies. However, the year 2020 has been marked by some other rapid and urgent changes caused by COVID-19 pandemic. These changes made policy makers, school leaders, teachers and all the other stakeholders rethink how various technologies should be used in the classroom. Moreover, considering that each classroom is unique in its learners, physical setting, and teaching and learning opportunities, the inevitability of diversifying educational technologies has increased rapidly as well, with its natural reflections in English language teaching (ELT)

before the pandemic, English teachers were expected to integrate new technologies into their teaching (Motteram, 2013), and this expectation usually comes from their learners because today's learners are claimed to be active individuals reaching the source of information and synthesizing it in a very short time, rather than receiving it passively. Moreover, as Johnson (2011) states, today's learners are "collaborators, scrutinizers, fun seekers, and speed chasers" (p. 4), and they are believed to be multitaskers in a networked format (Ormiston, 2011; Smaldino, Lowther & Russell, 2012).

#### 2. LITERATURE REVIEW

The literature review conducted for this study shows that many other good reasons are available to support the use of technology in teaching. First of all, it is motivating and offers immediate and interactive feedback to the learners (Sharma & Barrett, 2007), encourages learner autonomy, and exposes learners to a higher amount of authentic language both in and outside the classroom (Stanley, 2013a; 2013b). Providing individual learning materials with real language like in e-mails, blogs, and text messages in English are the other benefits that can be added to the list (Chapelle & Jamieson, 2008). Furthermore, Hockly and Clandfield (2010) call attention to increases in achievement when learners are offered a learning environment that blends face-to-face and online elements.

The natural consequence of integrating technology into teaching for the teachers is a need to keep up to date with today's generation of learners and their needs as well as keeping pace with the rapid changes. This need, in return, creates the need for equipping teachers with the necessary tools to alter the way they teach. Additionally, using various technologies in lessons is expected as one of the competencies teachers need to have in the 21st century (Borko, 2004; ISTE, 2008; MEB, 2008; OECD, 2001; TED, 2009; Younie and Leask, 2013). Nevertheless, literature also points out a mismatch between the available professional development activities and the required technopedagogical competencies from the teachers (O'Bannon & Puckett, 2010). The current teacher training programs regarding both pre- and in-service stages have been argued to be insufficient in meeting the needs of teachers in terms of gaining the expected competencies in using various technologies in the classroom efficiently. For instance, Bakır (2016) argues that despite various steps taken, technology in teacher education has still been facing the same problems reported in the OTA report in 1995 for the first time. The report argued that the majority of teachers start their job with limited familiarity with technology in

their pre-service training, and this is the primary source of the problems. Then, it becomes difficult to change their self-esteem and attitudes toward technology integration in their inservice years. However, as a requirement of the 21st century, teachers are expected to guide their students to acquire the knowledge and skills, and using technology efficiently is one of the most critical competencies (Borko, 2004).

Researchers have suggested several factors that could have an impact on the effectiveness of a training program. First, creating opportunities for teachers to gain experience by modeling, practicing, evaluating, and reflecting ensures the success of the training (ISTE, 2008; Oliver & Townsend, 2013; Ronen & Langley, 2005). Additionally, as Buabeng-Andoh (2012) points out, personal, institutional, and technological factors should be considered in designing the training program since they play a vital role in the success of the technology integration process. According to Sharma and Barrett (2007), the first of those factors is the attitude toward technology. They claim that teachers might have negative attitudes towards technology use because of their negative experiences, lack of knowledge, or fear of technology. Similarly, Younie and Leask (2013) argue that the lack of teaching experience with technology, in-service training opportunities, and a deeper understanding of the affordances of technology can affect how teachers benefit from technology integration. A supportive school administration, school technology leaders, a tech-support team, and a reliable technology infrastructure facilitate the integration process. As Vrasidas and Glass (2005) explain, while a supportive school administration can plan, implement, and guide the integration process based on curriculum objectives and the needs of teachers, school technology leaders can work more closely with teachers and deliver training sessions as well as helping them with those technologies. Related to this, Newby et al. (2006) emphasize the importance of having a good technology integration plan. As they suggest, for meaningful integration, teachers need to know when, why, and how to use the relevant tools to facilitate learning. This means that teachers need to acquire the knowledge of the technologies, areas that those technologies will be used for, and the skills that will be needed for these actions.

The appropriateness of training types for adult teachers is one of the essential factors in determining the success of the training. EFL teachers, as adults, have their own experiences in learning and teaching a foreign language, so they understand what works or does not work in the classroom and why. Thus, based on Knowles, Holton III, and Swanson (2015), it can be claimed that they expect that training sessions include elements that will cater for their needs

to become more proficient users of the tools and bring something new to their teaching practices by relating new knowledge to their prior knowledge and experiences in practical hands-on and problem-oriented sessions. Additionally, motivation, both intrinsic and extrinsic, plays a vital role in adult learning (Slaouti, Onat-Stelma & Motteram, 2013). All these would imply that an in-service teacher training program for technology integration should consider teachers' characteristics as learners, their needs, and their context as well as their attitude and motivation towards this integration. This paper will explain how all these implications suggested in the literature were realized in the design of an in-service teacher training program. The blueprint presented here is hoped to be used as a model to follow for other language teaching programs wishing to integrate technology into their curriculum in any other part of the world.

## **Context of the Study**

In Turkey, schools of foreign languages (SFL) are responsible for providing intensive foreign language education to first-year university students before they start getting their education in their departments. This study was carried out in Anadolu University School of Foreign Languages (AUSFL), a state university providing language education to approximately 3000 students with 24 or 26 hours of instruction depending on their proficiency level.

With the change in the administration in 2014, the curriculum followed was redesigned involving all the stakeholders in the renewal process. After a thorough needs analysis, as the first step of the renewal process, which was explained in detail by Aydın (2017), technology integration was identified as a significant component to be added to the new curriculum both by the students and the teachers. The changing profile of learners, the role that technology has in the everyday lives of the learners, and the need to expose learners to the English language outside the classroom more by the use of various technologies were the main reasons stated behind this need. Preparing a learning environment that is more motivating, engaging, and suitable for the learners' preferences was the motive which resulted in the requirement of preparing the teachers for their new roles and helping them to gain new technopedagogical skills. Therefore, designing and implementing a context-specific, structured, and continuous inservice training program for the teachers emerged as an indispensable necessity. Thus, this paper aimed to answer the following question: What is the blueprint for designing a context-specific in-service teacher training program for using Web 2.0 tools in teaching English?

### 3. METHODOLOGY

## **Curriculum Development Model**

Because this research aims to design and implement an in-service training program for technology integration, there was a need to adopt a curriculum development approach. After a survey of appropriate models, Taba's curriculum development model (1962) was chosen. This model was appropriate for the context of the study because it focuses on diagnostic checks to inform teaching with an analytical seven-step approach to curriculum development. These steps are 1) Diagnosis of needs, 2) Formulation of objectives, 3) Selection of content, 4) Organization of content, 5) Selection of learning experiences, 6) Organization of learning experiences and 7) Determining of what to evaluate and how to do it. Moreover, this model of curriculum development, which is pedagogical and practical in nature, is inductive, focuses on the needs and habit formation of the target audience, and considers curriculum "a living whole, comprised of experience actually going on in school" (Läänemets & Kalamees-Ruubel, 2013, pp. 5-7)

# **Data Collection Tools**

Survey forms were utilized as the data collection tool in this design-based research due to several reasons. First of all, researchers can collect and analyze first-hand data in a short time from a large number of participants, and thus the research team would be able to make any necessary changes in the design and delivery of the program. Second, survey forms can include different types of questions for different purposes. Finally, they are cost-effective. (Akalın, 2015; Aziz, 2015; Baş, 2013; Sönmez & Alacapınar, 2016)

Considering these advantages, the survey forms given after training sessions for teachers included five questions based on a 3-point Likert scale ranging between "disagree" and "agree" were administered. The student version of the survey forms given at the end of the semester included four questions on a 5-point Likert scale ranging between "strongly agree" and "strongly disagree. Additionally, there was an open-ended question at the end of the survey form that asked students to share their positive and negative opinions about the lab tasks. Similarly, teachers' opinions about the strengths and weaknesses of the lab tasks were collected at the end of the semester using a survey form that consisted of two open-ended questions.

## **Participants**

122 language teachers working at the School of Foreign Languages at Anadolu University during the 2014 -2018 academic years participated in the teacher training program. Table 1 presents the profile of the teachers. As seen in the table, the majority (N=92) of the teachers were graduates of English Language Teaching (ELT) departments with BA degrees (N=69), older than 31 years (N=95), and had more than ten years of teaching experience (N=87). Thus, it is possible to conclude that the training program for technology integration was organized for a large group of experienced and middle-aged teacher groups.

Table 1
Participants

| Major                           | N  | Degree     | N  |
|---------------------------------|----|------------|----|
| English Language Teaching       | 92 | BA         | 69 |
| English Language and Literature | 10 | MA         | 51 |
| American Culture and Literature | 7  | PhD        | 2  |
| Translation and Interpretation  | 6  |            |    |
| Others                          | 7  |            |    |
| Age                             | N  | Experience | N  |
| 31-35                           | 40 | 17 +       | 31 |
| 36-40                           | 29 | 13-16      | 29 |
| 42+                             | 26 | 10-12      | 27 |
| 26-30                           | 19 | 4-6        | 15 |
| 22-25                           | 8  | 1-3        | 12 |
|                                 |    | 7-9        | 8  |

# **Data Analysis**

In order to analyze the data collected from the participants, descriptive statistics were used. Descriptive statistics help researchers to get the big picture, in other words, discover the general tendencies in the data set. This was made possible by calculating frequencies or percentages. Then, the quantitative data were externally validated by the school administrators referring to their expert opinions for reliability and validity (Creswell, 2016; Yıldırım & Şimşek, 2013).

Finally, because this program design research has a mainly qualitative basis, in contrast to reliability and validity measures in quantitative research, measures for credibility and confirmability were taken. To increase credibility, member checks, and peer reviews of the administrators and technology leaders were utilized. Additionally, confirmability was

established by inter-coder analysis among technology leaders for the qualitative data (Yıldırım & Şimsek, 2013).

#### **Research Procedures**

As in all curriculum development processes, the first step was to conduct a needs analysis. This needs analysis was done in two phases. In the first phase, the researchers went through the local and international literature to find out what is expected from teachers in terms of technology integration in the classroom (CEPPE, 2013; Cüre & Özdener, 2008; Korkmaz, 2016; MYK, 2015; OECD, 2005; TED, 2009; UNESCO, 2008; YÖK, 2011). In the second phase, the researchers analyzed the online learning platform of the coursebook in use and its components to find out how the coursebook can be supported by other technologies.

The following steps (from 2 to 7) in Taba's curriculum development model (1962) correspond to the eight successive stages presented in Figure 1 below, which the in-service teacher training program design followed.

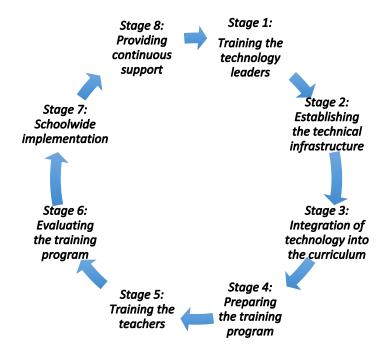


Figure 1. The blueprint of the training program

# **Stage 1: Training the technology leaders**

The first and the most crucial step of designing the in-service training program was training the technology leaders. Since the primary source of the problems of in-service teacher training

programs has been stated as their inappropriateness to the context of the teachers and to their needs, training leaders among the teachers of the institution was significant. Most of the programs have also been criticized for not going beyond transferring theoretical knowledge by the trainers who might be experts in their topics but unfamiliar with how that theory can be transferred to teachers' classrooms in the most efficient way (Uysal, 2012; Uztosun, 2018).

To go through a bottom-up approach and have a permanent solution for not only single training sessions, but a continuous professional development system for the institution, Technology Integration Unit (TIU) was formed among the volunteer teachers who were interested in web 2.0 tools and willing to improve themselves as technology leaders to support their colleagues' professional development. To achieve this aim, for about two years, the 10 members of the unit received a series of training in various types, including getting formal pieces of training from experts in the field, attending national and international conferences as well as reading and discussing the related literature on the models of technology integration in various parts of the world and the implications of these studies conducted on these models. Through continuous and systematized meetings, these leaders shared and discussed the input they received with each other, conducted demo training sessions on practical implications, and assisted the improvement of each other's training skills by creating a collaborative experience sharing process. These leaders did not get any previous training on how to become a trainer, yet they were teaching in the same context and familiar with the characteristics and the needs of the learners and the teachers. Therefore, it can be argued that training these technology leaders was the core of this in-service training program.

# **Stage 2: Establishing the technical infrastructure**

Establishing the technical infrastructure and opening the doors of 13 computer labs with 370 computers which already existed, but were not actively used were the next steps taken. This move required establishing a tech-support team, which consisted of four nonfaculty members with a high level of software and hardware knowledge, and assigning them the responsibility of continuously updating and maintaining the technical infrastructure. These technical support team members worked closely with the technology leaders and the administration.

# Stage 3: Integration of technology into the curriculum

After establishing the necessary structure, it was time for the essential component, aligning technology with the curriculum based on steps 2 to 4 in Taba's (1962) model. With the development of the new curriculum, which was explained in detail by Aydın (2017), two hours

of lab classes for each group of students at each proficiency level were planned for each week. First, the online platforms which would enable teachers and students to communicate, post assignments, course materials, and to give and receive feedback, that is Edmodo and Turnitin, were selected as the decision of the team leaders and the administrators. Then, various web 2.0 tools that would serve to achieve the outcomes determined in the curriculum were selected. The most critical issue was preparing the content of the syllabi that would be followed in the lab classes in cooperation with the curriculum unit members. Similarly, lab tasks students would produce to practice the foreign language in a more enjoyable and creative way were prepared for each proficiency level of students. Detailed guidance for the teachers and the learners accompanied each task for each level. Samples of the tasks for two different levels of students can be found in the Appendix. Evaluation criteria of lab tasks were also developed. The crucial part, which determined the success of the program, was the alignment of each component with one another. That is, the content of the lab classes, lab tasks students would complete, and their evaluation were all aligned with the outcomes of the curriculum.

# **Stage 4: Preparing the training program**

Hands-on training sessions involving the Web 2.0 tools chosen at the previous stage were designed by the members of the technology leaders based on step 5 in Taba's (1962) model. First, the members helped each other's learning in a collaborative and reflective way. Demo sessions followed by feedback of the other members, discussions, and self-reflections were conducted during these preparation sessions. The technology leaders video-recorded themselves, practicing how to conduct sessions with their colleagues. This cycle continued until the leaders felt ready to train their colleagues.

### **Stage 5: Training the teachers**

In the training sessions based on step 6 in Taba's (1962) model, in order to create a more interactive environment, all the teachers were divided into small groups, and the tools were introduced in concurrent sessions by the technology leaders. The training program included two sessions. First, each tool was demonstrated by one of the leaders in a short, interactive input session explaining what it is and modeling how to use it in their lessons. Then, all the teachers were invited to the computer labs for practical first-hand experimentation of the tools individually. Concurrent sessions were organized so that all the teachers got the training at the same time. Technology leaders acted as facilitators and coaches during these hands-on practices in the labs. All these training sessions were also video-recorded for two reasons: First, to create

an archive for the teachers to remember the details when they needed, and second, to help the trainers make self-reflections and improve their skills as trainers for the upcoming events.

# **Stage 6: Evaluating the training program**

Right after the in-service training sessions were conducted, teachers' feedback was gathered for evaluating the training program and improving the future ones based on step 7 in Taba's (1962) model. They were given a short survey and asked to indicate their opinions on the content, organization, pace, duration, and the impact of the training.

# **Stage 7: School-wide implementation**

The new curriculum including two hours of computer lab classes for each proficiency level was first implemented during the 2014-2015 Academic Year. In those two hours, the learners were taught how to use the web 2.0 tools, informed about the requirements of their lab tasks, and were expected to produce the target language they were being exposed to. As one of the policies of the School of Foreign Languages, continuous feedback was gathered both from the learners and teachers about every component of the curriculum: the materials, pace, tasks, quizzes, exams, extra-curricular activities, etc. Lab classes and lab tasks were also included in the surveys given to the teachers and the learners each semester.

# **Stage 8: Providing continuous support**

Since the first year of technology integration at the school, continuous support has been provided to the teachers in various formats. While some external experts are invited for the training sessions, the technology leaders trained in the context have always been the primary source used for in-service training provided continuously to the teachers of the institution. These leaders acted in various roles as needed; sometimes, they helped their friends when they had difficulties in using a tool; at other times, they acted as facilitators and organized many different hands-on workshops introducing new tools or other applications. Some of these trainers started focusing on technology integration academically in MA or Ph.D. programs. All these resulted in many academic studies presented at different national or international conferences and papers published in various journals. This paper is also a product of a project titled "In-service Training Program Development for Technopedagogical Needs of Foreign Language Instructors (Anadolu University, 2017) explaining the whole process from different points.

### 4. FINDINGS AND DISCUSSIONS

As described above, the participant teachers were given a survey to evaluate the training program based on its components. The responses received from the teachers are presented in Table 2.

Table 2
Teachers' Opinions on the training they received

|   |   | Disagree | % | Partly agree | %  | Agree | %  |
|---|---|----------|---|--------------|----|-------|----|
| 1 | The content of the training program was clear.                      | 0        | 0 | 1            | 1  | 121   | 99 |
| 2 | The training was well organized.                                    | 1        | 1 | 2            | 1  | 119   | 98 |
| 3 | I could easily follow the training given.                           | 0        | 0 | 3            | 2  | 119   | 98 |
| 4 | The duration of the training was sufficient.                        | 2        | 1 | 8            | 7  | 112   | 92 |
| 5 | I learned applications I can directly transfer to my own classroom. | 6        | 5 | 22           | 18 | 94    | 77 |

As revealed in the responses, the training sessions were appreciated by the teachers and met their needs. Teachers expressed their satisfaction with the content of the training, its organization, and the time allocated for each session. They also stated that they could easily follow the training and learned new applications they could use in lessons. However, teachers' feedback also revealed that some teachers would need more guidance and stated their doubts about their abilities to apply what they learned on their own.

Both the students' and the teachers' opinions included positive comments as well as the negative ones for the first implementation. As expected, while some of the learners and the teachers were highly satisfied with the web 2.0 tools' integration process and the lab tasks and wished to have more, some others thought the opposite. While statistical results of the surveys are not presented in this paper, the following quotations can be given as positive samples to the learners' thoughts for the 2015-2016 Academic Year:

<sup>&</sup>quot;We cannot deny the positive impact of lab classes on our learning."

<sup>&</sup>quot;We are learning about very practical applications."

<sup>&</sup>quot;We don't have to worry about forgetting our assignment at home."

<sup>&</sup>quot;We can reach our assignments from everywhere."

<sup>&</sup>quot;Lab tasks reinforce our learning."

As a summary, learners who found lab classes and tasks useful believed that what they did in the labs facilitated their learning in an easier, more enjoyable, and organized way. Adding variety to the tasks with web 2.0 tools was appreciated, and they wished to have more lab classes and do more lab tasks.

On the other hand, not all the learners were satisfied with the web 2.0 tools' integration. The samples below show why they did not have positive opinions on lab classes and lab tasks:

- "I like working with paper and pencil. I don't like sitting in front of the computer."
- "I do not find lab tasks enjoyable."
- "I believe doing tasks on paper is easier for us to do and for the teachers to give feedback. I had technical problems with some of the tools."
- "I think technology is useless. Even Japanese people who are very technologically developed do not use it in education."

To summarize, some of the learners did not think that using technology in the classroom was useful or necessary. They preferred the traditional way of doing assignments and learning. The technical problems that they experienced were the main reasons for their negative thoughts.

Just like their learners, most of the teachers had positive ideas and were ready and willing for web 2.0 tools' integration.

- "I like lab classes because they bring variety to our teaching; they are especially good for helping learners to become more autonomous and have the responsibility for their own learning."
- "The web tools we are using are very practical and enjoyable."
- "Students love lab classes because it is a different environment."
- "Especially for the students who are already motivated, lab tasks are very useful; they help them to be able to individualize their learning."

Practicality, variety, leading to autonomy, and individualizing learning were among the main reasons for the teachers who had positive ideas about the web 2.0 tools' integration. However, the ones who did not have the same thoughts stated that;

- "The tasks, especially requiring students to record their voices, are problematic."
- "We should have fewer tasks with web tools."
- "Students are not using much language in the lab tasks. They are not very useful."

Along with the revisions in the curriculum regarding the materials used, pace of the lessons, and assessment, feedback gathered from the learners and teachers resulted in making revisions in the lab tasks and the web 2.0 tools, as well. The tools they did not find useful or the ones

they had technical difficulty with, such as Voki, were eliminated from the program. After this revision process, more detailed feedback was gathered from the 2015-2016 Academic Year learners. As seen in Table 3, the feedback gathered from the learners was more positive.

Table 3
Students' Opinions on Lab Classes and Tasks

|   |   | StA | %  | A   | %  | U   | %  | D   | %  | StD | %  |
|---|---|-----|----|-----|----|-----|----|-----|----|-----|----|
| 1 | I am happy with lab classes   | 255 | 28 | 378 | 42 | 135 | 15 | 66  | 7  | 63  | 7  |
| 2 | I am happy with lab tasks   | 135 | 16 | 295 | 34 | 204 | 24 | 101 | 12 | 133 | 15 |
| 3 | I am happy with<br>The amount of<br>time given for the<br>lab tasks | 213 | 25 | 341 | 40 | 144 | 17 | 73  | 8  | 92  | 11 |
| 4 | I am happy with<br>The evaluation of<br>the lab tasks               | 268 | 31 | 363 | 42 | 130 | 15 | 31  | 4  | 64  | 7  |

As seen in the table, with the necessary revisions based on students' opinions, students were contented with the lab classes as well as what they produced there.

### 5. CONCLUSION AND SUGGESTIONS

The blueprint of an in-service training program, how it was designed and implemented for 122 EFL teachers working at Anadolu University School of Foreign Languages to integrate web 2.0 tools into their courses was explained in this paper. The whole process can be argued to be a success story considering the following:

• Integrating technology into the curriculum was a collective decision taken with the involvement of all the stakeholders during the curriculum renewal process. The main motive of the achievements behind was following this bottom-up approach. Ensuring that both the students and the teachers were ready and motivated for this integration, which actually came from them rather than a decision taken by the administration, caused the success of the process. It would not be sufficient just to integrate web 2.0 tools into lessons separately and expect success. All the components of the curriculum were aligned with each other and addressed the needs of the learners. Otherwise, what was done would be just utilizing just pieces and bits of web 2.0 tools, and it would not be meaningful to the learners.

- Creating a context-specific training program which addresses the needs of the teachers
  and which provided them continuous support was something that has always been
  suggested in the literature, but not easily achieved.
- The whole process originated its trainers and created a local source that could serve the institution continually, as well as the professional development of the individuals.
- Trainers' familiarity with the students' and the teachers' characteristics as well as their needs as being members of the same community enabled both parts to have healthier and more stress-free communication.
- Enabling teachers' active involvement during the training sessions helped to achieve the desired outcomes, as revealed in the feedback gathered.
- Most importantly, creating a continuous learning and sharing environment among the members of the teaching community was the real achievement of the whole process.

As Hayes (1995) explains, change is a slow process. Therefore, the design and development of an in-service training program is a never-ending route, yet following the blueprint explained, and more importantly, considering the characteristics mentioned above will most probably conclude with a success story for the other institutions, as it has in the fourth year of this training program. Contradicting with Hayes's claim that change is a slow process, the novel Coronavirus (COVID-19) speeded change in every area of education for both the teachers and the students, so the readier we are as teachers, the more easily we will be able to adopt the new situations and facilitate our students' learning process.

# **Limitations And Suggestions For Further Research**

The data obtained in this research is limited to the location and time of data collection, students and teachers who participated in the research, so the results cannot be generalized to other similar institutions. However, the design model could serve as a blueprint for similar teacher training programs with further adaptations. Additionally, the needs of the students and teachers may have changed since then, which makes this research context-and-time-specific. However, this working model and its content, as well as delivery options, could be modified to fit the current needs that can emerge unexpectedly as in the COVID-19 pandemic, and can be used in other institutions.

Further research can include a focus on an ever-evolving program design that tracks changes in the needs of students and teachers. Thus, any change could be reflected in the blueprint for adaptations, which can serve as a reference for further development later. A second suggestion could be to design a fully online program on an LMS to reach all the teachers in the school without time constraints. Thanks to this online nature of the program, any teacher could log in to the system and reach the information they need. This way, the online version may as well become an online repository of web 2.0 tools with advanced features such as live demos, discussion boards, and refresher courses. A final suggestion is to divide the program into sections based on skill levels such as beginner, intermediate and advanced courses. This division might bring together teachers with the same or similar level of technology knowledge and skills providing opportunities for training in homogenous groups.

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### Teknoloji Entegrasyonu Konusunda Bir Hizmet içi Öğretmen Eğitimi Programı Taslağı

#### Özet

Dijital çağdaki gelişmeler günümüzdeki yabancı dil sınıflarına da yansımaktadır ancak öğretmenlerin dijital teknolojilerle ilgili daha önce aldıkları yetersiz eğitimden kaynaklanan yetersizlikleri sınıflarında teknolojiyi etkili bir şekilde entegre etmelerine engel olmaktadır. Özellikle de COVID-19 nedeniyle çevrim içi öğretime artan ani taleple, öğretmenlerin işlerine devam ederken bu sorunla baş etmeleri için güçlü bir gereksinim vardır. Ancak çok sayıda nedenden dolayı, hizmet içi öğretmen eğitimi programları eleştirilerin odağı olmuştur. Bu çalışma web 2.0 araçlarının yabancı dil olarak İngilizce sınıflarında kullanımı konusunda bağlama özgü bir hizmet içi eğitim programı tasarlama ve uygulama konusunda bir taslak sunmaktadır. Çalışmaya Anadolu Üniversitesi Yabancı Diller Yüksekokulu'ndaki 122 İngilizce öğretmeni katılmıştır. Tasarım tabanlı bu araştırmada veri toplama aracı olarak anket formları kullanılmıştır. Eğitim programında birbirinin devamı niteliğinde altı aşama takip edilmiştir. Öğrencilerden ve öğretmenlerden elde edilen dönütler, her iki grubun da teknoloji entegrasyonu ve hizmet içi öğretmen eğitimi programından memnun olduklarını göstermektedir. Bu nedenle, elde edilen sonuçlara dayanılarak, bu taslağın sınıflarında teknoloji entegrasyonu konusunda öğretmenlerinin yeterliğini arttırmak isteyen benzer kurumlarda kullanılabilir ve geliştirilebilir.

**Anahtar kelimeler:** hizmet içi öğretmen eğitimi, dil öğretiminde teknoloji entegrasyonu, mesleki gelişim, web 2.0 araçları, öğretmen eğitimi programı

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### **REFERENCES**

- Akalın, M. (2015). Örnek açıklamalarıyla sosyal bilimlerde araştırma tekniği anket. Ankara: Seçkin.
- Anadolu University. (2017). *In-service training program development for technopedagogical needs of foreign language instructors*. Grant No: 1506E546. Eskisehir: Anadolu University.
- Aydın, B. (2017). Türkiye'de hazırlık okullarında yaşanan sorunlara bir çözüm önerisi: Anadolu Üniversitesi örneği. Ankara: Pegem.
- Aziz, A. (2015). Sosyal bilimlerde araştırma yöntemleri ve teknikleri. (10. basım). Ankara: Nobel.
- Bakır, N. (2016). Technology and teacher education: A brief glimpse of the research and practice that have shaped the field. *TechTrends*, 60(1), 21–29. <a href="https://doi.org/10.1007/s11528-015-0013-4">https://doi.org/10.1007/s11528-015-0013-4</a>
- Baş, T. (2013). Anket: Nasıl hazırlanır? Nasıl uygulanır? Nasıl değerlendirilir? Ankara: Seçkin.
- Borko, H. (2004). Professional development and teacher learning: Mapping the terrain. *Educational researcher*, *33*(8), 3-15. <a href="https://doi.org/10.3102/0013189X033008003">https://doi.org/10.3102/0013189X033008003</a>
- Buabeng-Andoh, C. (2012). Factors influencing teachers' adoption of information and communication technology into teaching: A review of literature. *International Journal of Education and Development using Information and Communication Technology* (IJEDICT). 8(1), 136-155.

- CEPPE. (2013). Learning standards, teaching standards and standards for school principals: A comparative study. Accessed 30 October, 2017. https://www.oecdilibrary.org/education/learning-standards-teaching-standards-and-standards-for school-principals\_5k3tsjqtp90v-en
- Chapelle, C. A. & Jamieson, J. (2008). *Tips for teaching with CALL: Practical approaches to computer-assisted language learning*. USA: Pearson Longman.
- Creswell, J. W. (2016). *Araştırma deseni: Nitel, nicel ve karma yöntem yaklaşımları.* (Çev. S. B. Demir). Ankara: Eğiten Kitap.
- Cüre, F. & Özdener, N. (2008). Öğretmenlerin bilgi ve iletişim teknolojileri (BİT) uygulama başarıları ve BİT'e yönelik tutumları. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 34, 41-53.
- Hayes, D. (1995). In-service teacher development: some basic principles. *ELT Journal*, 49(3), 252–261. doi: 10.1093/elt/49.3.252.
- Hockly, N. & Clandfield, L. (2010). *Teaching online: Tools and techniques, options and opportunities*. UK: Delta Publishing.
- ISTE. (2008). *ISTE standards teachers*. Accessed 13 September 2017. https://www.iste.org/docs/pdfs/20-14\_ISTE\_Standards-T\_PDF.pdf
- Johnson, S. (2011). Digital tools for Teaching: 30 e-tools for collaborating, creating, and publishing across the curriculum. FL, USA: Maupin House.
- Knowles, M. S., Holton III, E. F. & Swanson, R. A. (2015). *The adult learner: The definitive classic in adult education and human resource development.* 8<sup>th</sup> ed. USA: Routledge.
- Korkmaz, Ö. (2016). İlk ve orta öğretimde öğretimsel amaçlı teknoloji kullanımı. K. Çağıltay ve Y. Göktaş (Editörler), *Öğretim teknolojilerinin temelleri* içinde (ss. 473-487). Ankara: Pegem Akademi. 473-487.
- Läänemets, U. & Kalamees-Ruubel, K. (2013). The Taba-Tyler rationales. *Journal of the American Association for the Advancement of Curriculum Studies* 9, 1-12. https://doi.org/10.14288/jaaacs.v9i2.187723
- MEB (2008). *Öğretmenlik mesleği genel yeterlikleri*. Accessed 1 September 2017.

  <a href="http://otmg.meb.gov.tr/belgeler/ogretmen\_yeterlikleri\_kitabi/%C3%96%C4%9Fretme">http://otmg.meb.gov.tr/belgeler/ogretmen\_yeterlikleri\_kitabi/%C3%96%C4%9Fretme</a>

  <a href="mailto:n.yeterlikleri\_kitabi/%C3%96%C4%9Fretme">n.yeterlikleri\_kitabi/%C3%96%C4%9Fretme</a>

  <a href="mailto:n.yeterlikleri\_kitabi/%C3%A7a\_2.pdf">n.yeterlikleri\_kitabi/%C3%96%C4%9Fretme</a>

  <a href="mailto:n.yeterlikleri\_kitabi/%C3%A7a\_2.pdf">n.yeterlikleri\_kitabi/%C3%96%C4%9Fretme</a>

  <a href="mailto:n.yeterlikleri\_kitabi/%C3%A7a\_2.pdf">n.yeterlikleri\_kitabi/%C3%A7a\_2.pdf</a>
- Motteram, G. (2013). Introduction. In G. Motteram (Ed.), *Innovations in learning technologies* for English language teaching, (pp. 5-13). London: British Council.

- MYK. (2015). *Türkiye yeterlikler çerçevesi*. Accessed 10 November 2017. https://www.myk.gov.tr/index.php/tr/turkiye-yeterlilikler-cercevesi
- Newby, T. J., Stepich, D. A., Lehman, J. D. & Russell, J. D. (2006). *Educational technology* for teaching and learning. 3<sup>rd</sup> ed. USA: Pearson.
- OECD. (2001). The practice and professional development of teachers. Accessed 13 September 2017.

  <a href="https://www.oecd.org/site/schoolingfortomorrowknowledgebase/themes/ict/41289267.">https://www.oecd.org/site/schoolingfortomorrowknowledgebase/themes/ict/41289267.</a>
  pdf
- OECD. (2005). *Teachers matter: Attracting, developing and retaining effective teachers*. Accessed 02 February 2017. https://www.oecd.org/education/school/34990905.pdf
- Oliver, K. & Townsend, L. (2013). Preparing teachers for technology integration: Programs, competencies, and factors from the literature. *National Teacher Education Journal*, 6(3), 41-60.
- O'Bannon, B.W. & Puckett, K. (2010). Preparing to use technology: A practical guide to curriculum integration. USA: Pearson
- Ormiston, M. (2011). *Creating A digital-rich classroom: Teaching and learning in a web 2.0 world.* USA: Solution Tree Press.
- Ronen, M. & Langley, D. (2005). Facing the challenge of preparing science teachers to use simulations. In C. Vrasidas & V. G. Glass (Eds.), *Preparing teachers to teach with technology* (pp. 271-290). USA: Information Age Publishing.
- Sharma, P. & Barrett, B. (2009). Blended learning: Using technology in and beyond the language classroom. Thailand: MacMillan.
- Slaouti, D., Onat-Stelma, Z. & Motteram, G. (2013). Technology and adult language teaching. In G. Motteram (Ed.), *Innovations in learning technologies for English language teaching*, (pp. 69-85). London: British Council.
- Smaldino, S. E., Lowther, D. L. & Russell, J. D. (2012). *Instructional technology and media for learning*. 10<sup>th</sup> ed. USA: Pearson.
- Sönmez, V. & Alacapınar, F. G. (2016). Örneklendirilmiş bilimsel araştırma yöntemleri. Ankara: Anı Yayıncılık.
- Stanley, G. (2013a). Integrating technology into secondary English language teaching. In G. Motteram (Ed.), *Innovations in learning technologies for English language teaching* (pp. 45-66). London: British Council.

- Stanley, G. (2013b). Language learning with technology: Ideas for integrating technology in the classroom. UK: Cambridge University Press.
- Uysal, H. H. (2012). Evaluation of an in-service training program for primary-school language teachers in Turkey. *Australian Journal of Teacher Education*, *37*(7), 14-29. http://dx.doi.org/10.14221/ajte.2012v37n7.4
- Uztosun, M. S. (2018). In-service teacher education in Turkey: English language teachers' perspectives. *Professional Development in Education*, 44(4), 557-569. https://doi.org/10.1080/19415257.2017.1374989
- Taba, H. (1962). Curriculum development: Theory and practice. New York, NY: Harcourt, Brace & World, Inc
- TED (2009). *Öğretmen yeterlilikleri* . Accessed 1 September 2017. http://portal.ted.org.tr/yayinlar/Ogretmen\_Yeterlik\_Kitap.pdf
- UNESCO. (2008). *ICT competency standards for teachers*. Accessed 02 November 2017. http://unesdoc.unesco.org/images/0015/001562/156207e.pdf
- Vrasidas, C. & Glass, V. G. (2005). Achieving technology integration in classroom teaching.
  In C. Vrasidas & V. G. Glass (Eds.), *Preparing teachers to teach with technology*, (pp. 1-19). USA: Information Age Publishing Inc.
- Yıldırım. A. & Şimşek. H. (2013). Sosyal bilimlerde nitel araştırma yöntemleri. (9. baskı). Ankara: Seçkin.
- Younie, S. & Leask, M. (2013). *Teaching with technologies: The essential guide*. UK: CPI Group.
- YÖK. (2011). Türkiye yükseköğretim yeterlilikler çerçevesi (TYYÇ): 6. düzey (lisans eğitimi) yeterlilikleri. Accessed 17 November 2017. http://www.tyyc.sakarya.edu.tr/?pid=33

# APPENDIX - SAMPLE LAB TASKS

# D Level Week 4-5 Lab Task 2

| LAB TASK 2             | Prepare a poster introducing a famous family in Turkey or in the world using Canva                       |  |  |  |  |  |  |
|------------------------|--|--|--|--|--|--|--|
| Description            | There are many famous families in Turkey and in the world like Sabancılar or the                         |  |  |  |  |  |  |
|                        | Kardashians. We see them on TV, in the newspapers or on the TV shows, so we become                       |  |  |  |  |  |  |
|                        | curious about their lives.   |  |  |  |  |  |  |
|                        |  |  |  |  |  |  |  |
|                        | In this task, it is your turn to find some information about a famous family and present it on a poster. |  |  |  |  |  |  |
|                        |  |  |  |  |  |  |  |
|                        | Your poster should answer the following questions about these people:                                    |  |  |  |  |  |  |
|                        |  |  |  |  |  |  |  |
|                        | • Who is the family?   |  |  |  |  |  |  |
|                        | Who are the family members?  |  |  |  |  |  |  |
|                        | What do they do?   |  |  |  |  |  |  |
|                        | What are their hobbies?  |  |  |  |  |  |  |
|                        | What is interesting/boring/different about them?   |  |  |  |  |  |  |
|                        | Week 4:  |  |  |  |  |  |  |
|                        | • Sign up or log in to <i>Canva</i> , pick a poster template, and use at least five pictures             |  |  |  |  |  |  |
|                        | • Write a short paragraph (at least ten sentences)   |  |  |  |  |  |  |
|                        |  |  |  |  |  |  |  |
|                        | Week 5:  |  |  |  |  |  |  |
|                        | <ul> <li>Keep on working on your poster following teacher feedback</li> </ul>                            |  |  |  |  |  |  |
|                        | Download your poster and share it on BlackBoard OR make it public and share                              |  |  |  |  |  |  |
|                        | its link on BlackBoard   |  |  |  |  |  |  |
|                        | <ul> <li>Pick one poster and write a few sentences about it by the next lab hour</li> </ul>              |  |  |  |  |  |  |
| Outcomes               | Can introduce others   |  |  |  |  |  |  |
|                        | Can talk about daily routines and people's jobs.   |  |  |  |  |  |  |
| Task                   | Common forms of verb 'to be', and other verbs in the present simple tense                                |  |  |  |  |  |  |
| Requirements           | Possessive adjectives  |  |  |  |  |  |  |
| (Language)             | Subject pronouns   |  |  |  |  |  |  |
|                        | Capitalization   |  |  |  |  |  |  |
|                        |  |  |  |  |  |  |  |
|                        | Basic vocabulary and structures related to giving personal information                                   |  |  |  |  |  |  |
| Task                   | Basics of Canva  |  |  |  |  |  |  |
| Requirements           | Photos   |  |  |  |  |  |  |
| (Others)  Notes to the |  |  |  |  |  |  |  |
|                        | • Students should do some research and prepare the photographs of the famous                             |  |  |  |  |  |  |
| students               | family before coming to the lesson to save time.   |  |  |  |  |  |  |
|                        | Click <u>here</u> for help from <i>Canva's</i> official page and <u>www.canva.com</u>                    |  |  |  |  |  |  |
|                        |  |  |  |  |  |  |  |
| Notes to the           | Get login details for <i>Canva</i> if you do not have any, and read the above guides                     |  |  |  |  |  |  |
| teacher                | before the lab hour to be able to guide your students for more useful language                           |  |  |  |  |  |  |
|                        | practice.  |  |  |  |  |  |  |
|                        | • Trying out the features on <i>Canva</i> before the lesson might be useful.                             |  |  |  |  |  |  |

# B Level Week 3 Lab Task (First Lab Hour)

# (Not graded - for regular vocabulary practice)

| Introductory                 | Preparing a vocabulary quiz by using Quizlet  |  |  |  |  |  |  |  |
|------------------------------|---|--|--|--|--|--|--|--|
| Task                         |   |  |  |  |  |  |  |  |
| Description                  | Prepare a sample study set of vocabulary related to units 1 and 2 by using <i>Quizlet</i> in the online Quizlet class set by the teacher.   |  |  |  |  |  |  |  |
| Outcomes                     | Can prepare a set of vocabulary from the coursebook, first with the help of their teacher, then on their own <i>regularly</i> .   |  |  |  |  |  |  |  |
| Task Requirements (Language) | Vocabulary in Unit 1&2  |  |  |  |  |  |  |  |
| Task Requirements (Others)   | <ul> <li>Basics of QUIZLET</li> <li>Min. 10 words</li> <li>For each word, give its definition or a sample sentence* and a picture (if available)</li> <li>*a sample sentence with the target word blanked out (e.g., Don't tell him your secrets. He all the time and says rude things about people. The word 'gossips' is not given in the sample sentence.)</li> </ul>  |  |  |  |  |  |  |  |
| Notes to the students        | <ul> <li>Click here for help from Quizlet's official page and www.quizlet.com</li> <li>Students work on the teacher's set first, and then they create their own demo set.</li> </ul>  |  |  |  |  |  |  |  |
| Notes to the teacher         | <ul> <li>Get login details for <i>Quizlet</i> if you do not have any, and read the above guides before the lab hour to be able to guide your students for more effective language practice.</li> <li>Create a Quizlet class before the lab hour and be ready to share its link with your students.</li> <li>Create a sample set (it doesn't have to be about the unit) for students.</li> <li>Trying out the <i>Live</i> game feature before the lesson might be useful.</li> </ul> |  |  |  |  |  |  |  |