## Evaluative Checklist in Advance to An Application of Computer Assisted Language Learning Materials in Turkish as a Foreign Language Settings

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#### **Abstract**

This paper aims to lay out guidelines for the use of computer assisted language learning (CALL) materials in Turkish as a foreign language (TFL) settings. To address this issue, the study is comprised of three complementary subsections: (1) Technological Pedagogical Content Knowledge (TPACK) to demonstrate foundational teacher knowledge significant to employ technology as a tool instead of making it a focus of the lesson, (2) questions to raise before applying CALL materials in TFL settings, and (3) Substitution - Augmentation - Modification - Redefinition (SAMR) method to present the yardstick to evaluate and exemplify CALL materials. As this paper is a combination of theory and practice, each section involves hands-on examples and illustrations to guide TFL instructors.

**Keywords:** CALL; Turkish; Second language acquisition; Foreign language teaching; Material development

#### Introduction

One of the challenges for people who teach TFL is the lack of effective language materials. Lesson materials used for educational support in Turkish lessons are either limited in number or restricted to use outside of schools. Those available on the internet need classification and quality verification. This paper therefore aims to provide guidelines in technology integration into lesson activities in TFL settings. The target audience is K-16 Turkish language teachers and school administrations that plan to employ CALL materials.

As there is an increasing interest in the field of TFL, the amount of lesson materials produced recently has increased dramatically. However, this increase in the amount does not necessarily mean a higher quality of language materials to use in the field. As Dooly, & Sadler (2016) explains "[w]hile it has almost become a cliché to emphasize the necessity of integrating technology into language teaching in today's society, how to do so still remains a pending issue" (p. 73); therefore, there is an immediate need for a guide to lead Turkish language teachers to evaluate technological course materials. This paper aims to fill in this gap.

Technological material in this study is operationalized as software-embedded machinery, computers, devices, and tools that are used for educational purposes. In this spectrum, the use of any technological tools available for language learners in TFL classes is part of this study. While most studies in CALL focus on most commonly taught languages (such as English and Spanish), fewer studies available on less commonly taught languages mostly address instructional or linguistic issues. Evaluation of CALL materials in Turkish, a less commonly taught language, is a pending issue that needs to be addressed in academic settings.

## **Evolution of the Internet Technologies and Its Reflection** on TFL Settings

The world wide web was first launched in the late 1980s as a result of a rising need to share softcopy information among universities and organizations across the world (Humm, et al., 2021). In this early stage, the main purpose of the internet was to provide users with inquired information. These early web pages are today called Web 1.0. The content of the web pages was provided to users, and it was not possible for users to interact with the host or edit the webpage. This stage, therefore, is the stage of reading as internet users had access to web pages designed with the sole purpose of

providing information for users to read. Instructors can recourse to these web pages for educational purposes if students only need to receive the information from a website. Online dictionaries by the Turkish Language Institution (https://sozluk.gov.tr/) are an example of Web 1.0 as users of these dictionaries cannot edit the content of the dictionary. This type of web page is an essential source of information especially if users are looking for a trustworthy source of information in the digital age.

With the advent of Web 2.0 technologies, there has been a significant increase in the amount of online content creation. This is a newer stage of reading and writing as users are granted the access to designate their own web content. Social media platforms have been developed in this stage that allow each user to share and create content. Originally TFL learners and instructors were only able to obtain information through Web 1.0; now they can produce, collate, and compile information via forums, blogs, and social media. From the stage of being receptive only, learners have obtained the opportunity to become producers of the target language.

As Web 2.0 technologies develop constantly, the opportunities it brings move beyond sharing content on social media. TFL instructors can guide learners to create language

content, share it, receive feedback, edit, and publish. To illustrate, in a guided activity in which learners are expected to introduce the city they live in, learners can co-create a tourism flyer via a shared account, or they can add one another as collaborators if the web tool has this function. Adobe Spark (https://www.adobe.com/tr/products/spark.html) or free of use Google Docs (https://docs.google.com/) has a multiuser function. In the following activity, learners can share their first draft and receive feedback. In a coda to the process, they edit the original flyer in accordance with the feedback they receive and finally publish it to guide real-time visitors to their city or town they live in. This type of activity is not limited to creating flyers. Learners can take 360° photos via Google Street View mobile applications and publish them or plan and write reviews on travel or restaurant recommendation websites and applications.

It is also necessary for TFL instructors to be informed about the future of internet technologies. The following stage in the development of internet technologies is Web 3.0. It is also called "semantic web" because with the birth of Web 3.0 computers are expected to understand information and build onto it. In this stage, users not only read and create content, but computers are also able to evaluate data and propose solutions accordingly. Although there is not yet a full capacity

of Web 3.0 available to use, web pages can recommend more items available for sale when users look for books that will be helpful for their courses. When people travel for educational purposes, web pages provide further information on libraries and language schools within the milieu. It is therefore recommended for Turkish language schools or coursebook writers to make their school or coursebook information publicly available as searched keywords such as learn Turkish result in Turkish language schools within the user's vicinity and coursebooks tagged with the same keywords.

## Technological Pedagogical Content Knowledge (TPACK)

TPACK is an acronym that stands for the three areas of a teacher's knowledge: technological, pedagogical, and content knowledge (Koehler, et al., 2017). TPACK therefore comes with three interrelated domains, integrating what teachers know, i.e. content; how they teach, i.e. pedagogy; and how they apply technology, i.e. technological knowledge.

The first pillar is the content knowledge (CK) of a teacher. In other words, teachers must possess knowledge of the content they are going to teach. This is the what section of TPACK as content is the answer for the what to teach

question. In TFL classes teachers are expected to have knowledge of the functions, forms, facts, concepts, and organizations of the Turkish language.

Simply having content knowledge in the field does not automatically correspond to being a good teacher. As Halliday (2016) indicates "[i]t becomes clear that language for education is not something that can be defined merely in terms of its content" (p. 73). Learning is a complex of very many different activities. Teachers should have tools to convey the subject matter effectively besides the knowledge of the content. This is called the pedagogical knowledge (PK) of a teacher. Teachers should have methods to teach their subjects. This is the how section of TPACK because the pedagogical knowledge of a teacher is the answer to the question of how to teach. Pedagogical knowledge includes approaches, methods, and principles to teaching such as using direct instruction, encouraging group work, and modeling the target language. In TFL classes, teachers can benefit from communicative language teaching methods, content-based approaches, or they can develop their own teaching strategies.

In twenty-first century teaching, having technological knowledge (TK) improves the acquisition of content and creates new methods to teach; however, "[u]sing technology in

delivering a lesson or instructional unit will not make bad pedagogy good" (Golonka, et al., 2014, 93). When technological knowledge (TK), pedagogical knowledge (PK), and content knowledge (CK) combine, TPACK helps teachers choose the best technological tools for their teaching strategies. In other words, when choosing the most appropriate technological material for learners, instructors should possess technological, pedagogical, and content knowledge – TPACK. When deciding on the technological materials, teachers should consider how technology can improve the content and pedagogical dimensions of their teaching.

### Questions to Raise Before Applying New Technological Instruments

There are several points one needs to consider before introducing TFL learners to a new type of CALL material. As educational technologies are implemented in a vast number of institutions across the world, it should be noted that the success of classroom material is not directly related to its market price. One criterion that needs to be considered is how the material is aimed at guiding students through the target language skills. Despite lacking costly facilities, an important number of language classes in the developing and developed

world today contain students thriving in language arts. Thus, economically accessible technological materials might provide promising results. For instance, students with musical interests might be unwilling to work on a costly web design project, whereas they might be voluntarily active in an economically achievable music archive assignment.

Another issue to be addressed is the need to get the technological material ready to start before the lesson. Technological materials are frequently employed in classroom projects today due to the comfort and convenience they bring to instructors and learners. However, the complex structure of these devices might cause difficulty in use. That is why it is highly recommended that instructors anticipate possible problem areas before the use of technological devices and prepare these devices before the start of a lesson. For example, instructors who plan to use audio should have a file accessible offline in case there is a failure with the internet connection.

If not applied properly, technology deprives students of critical thinking skills in educational activities. As the development of science is possible through the accumulation of knowledge over time, instructors should not let learners simply become users of technology in the class. The use of technological materials should not be the main objective in

classroom settings and educational activities. Technology is a tool to build on knowledge. It will prove to be effective when it is used for critical thinking skills such as interpretation, verification, and refutation of information.

Before the implementation of new technological material, instructors and administrative offices at schools should seek answers to several questions to determine its effectiveness for educational activities:

#### 1. Is there available data to back its effectiveness?

Since education is a growing market, to get a share of the pie a large number of companies and institutions constantly produce and release novel CALL materials. Educational organizations are therefore surrounded by commercials for recently launched software. As there are a number of websites, educational software, and electronic books available that claim to catapult language learning, misguiding commercials might result in a loss of time and money. It might even cause a lack of self-confidence for learners in the field of language learning. Therefore, instructors should first ask for a trial version of the device they are planning to purchase. Preliminary tests, experimental studies, and available data on the technological device will also guide instructors to obtain time-and-money

efficient tools in the educational materials market. In TFL settings, possible yet subtle issues include coursebook audio recordings that are not voiced by professionals and hence hard to perceive, and electronic books simply prepared to read-through instead of embedding multimodal hands-on activities within the software.

#### 2. Is the technological material user-friendly?

Technological devices may rely on long detailed functions which can cause delays during instruction. It is important for instructors and learners to know how to use the device or ways to get help for it when necessary.

Some devices might no longer be compatible with recently produced technological materials. They may lack some necessary units to connect with new products, or older devices may not be able to read the code or software of a newer product. Unless these possible problems are checked before the use or purchase, it may cause a loss of time and money.

The clarity of the language used in the technological material is also important since the main goal in the use of CALL material is to assist learners to acquire the function and form of language items. The language of the interface should

also be age-appropriate. Any CALL material to use in TFL settings that is originally designed for adult learners may not be age-appropriate for young learners.

As a result of needs and demands from instructors and learners, a growing number of educational materials today are released into the market as well as social media. User-friendly products are usually sold with guide manuals and online support lines. User-friendly interfaces, guide manuals, and online support lines are among the features of a technological material educational organizations and instructors would prefer to choose.

#### 3. What is the level of judgment / bias?

Although this criterion can be ignored at times, it is important to note which voices are represented in the material. Stereotypical ideas that are found quite frequently in coursebooks might make it all the way to the cutting-edge technological course materials. It is important to note that course materials might willingly or unwillingly represent the agenda or sociopolitical viewpoints of authors and publishing companies. It is recommended that TFL organizations and instructors demand trial use and check the CALL materials thoroughly before any purchase.

#### 4. Is the information in the material correct and updated?

Frequent research in the information age produces new information or creates updates for previous information. It is essential that information provided in the technological material is checked to present students with correct and up-to-date information about the Turkish language and culture. Some TFL materials involve pictures of banknotes that are no longer in use, provide hyperlinks that are broken, or popular culture sections that are no longer part of the popular culture.

5. Does the material have features that help provide motivation and student participation?

One other reason to employ CALL materials in TFL settings is to raise learners' interest. A technological device that provides effective results in one type of setting may not be as effective in another because learners' interests, and classroom dynamics are important factors in the effective use of technological tools.

## Substitution, Augmentation, Modification, Redefinition (SAMR)

SAMR is a method that is applied to evaluate CALL materials. It is designed as a guide for teachers in order to assess how they are integrating technology into lesson activities (Tondeur, et al., 2021; Puentedura, 2012). As Croser (2015) states, in the SAMR model "technology is a tool for learning – not a substitute for a teacher" (p. 186). The SAMR model describes four levels of technology integration into educational settings. Each higher level integrates technology as a more integral part of the lesson activity.

Substitution means the replacement of traditional course materials with technological devices. In this process, there is no functional development; the same task is completed with the use of technological devices. An assignment written on a tablet computer instead of a piece of paper is an example of substitution as students are substituting paper for a writing processing program.

Aşağıdakilerden hangisi "süre"

# sözcüğünü anlatır? Kah ty OAnswers Saat 3'te Her Salı 45 dakika 2015 yılında

Figure 1. Kahoot Sample Question

In the task in the picture above, students are asked a multiple-choice question. The teacher prepares the question (Which of the following words below is an example for the duration?) and four choices (at 3 o'clock – every Tuesday – 45 minutes – in 2015). The teacher reflects the question and the choices on the smartboard or the classroom board via a projector. Using the Kahoot (https://kahoot.com/) application on their smartphones, students click on the answer on their phones. When all students have chosen an answer, the teacher shows the correct answer. This task employs several technological devices. The teacher needs a smartboard or a projector, a computer, and an internet connection. Each student needs a smartphone, the Kahoot application, as well as an internet connection. This can be a fun activity; students might enjoy it as it does not involve traditional paper-based testing materials. However, students can also do the same task on a piece of test paper. In the example above, there is no

functional development if the task is used as a substitute for traditional testing. This type of task is hence named substitution because students substitute their smartphones for pencil and paper.

Augmentation enhances a task as there is functional development in this stage, but there is still a direct substitution with a technological tool. An assignment completed on a tablet computer with dictionary applications is an example of this stage as technology augments the same assignment.

Sözcük bulutuna bakalım ve metnin konusunu tahmin edelim. Büyük sözcükler metinde daha sık yer almıştır.



Figure 2. EdWordle Cloud

The task above asks students to guess the topic of a text they are going to read. It is designed to raise students' interest in an upcoming reading activity. The topic is Bir Bilim İnsanı Neler Yapar? (What Does a Scientist Do?) (Yapıcı, 2020). The teacher copies the text and pastes it on EdWordle (http://www.edwordle.net/), and the program shuffles the words of the text and creates a word cloud. The teacher can also do the same task using a piece of paper and scissors. However, EdWordle brings functional development since it shows the highest frequency words in a larger font or color. In the task above, the most commonly used words are bilim, insan, olmak (science, human/person, to become). Students, therefore, focus on bigger words when they try to guess the topic of the text.

Modification involves the transformation of a task. In this stage, technology allows for significant re-design of the task. An assignment that involves sound and visuals in TFL classes is part of this stage as technology significantly modifies the original task.

Arkadaşlarınız teknolojiyi ne kadar kullanıyor? Google hesabımızı açalım. Google Formlar sayfasına gidelim. Örnekteki gibi bir anket hazırlayalım.



Figure 3. Google Forms

In the task above, students create a survey for their

peers to ask about their use of technological devices. Students can also physically visit their friends and ask them questions using a survey sheet. Google Forms
(https://www.google.com/forms/) allows users to send the survey online. Students can add images, videos, and choose one of the embedded templates. Therefore, Google Forms significantly modifies the traditional methods of conducting a survey. In the activity above, students are asked to create a basic level survey with questions such as kaç saat, ne zaman, nerede (how many hours, what time, where). That is why this type of activity that involves CALL materials in TFL classes does not require higher levels of language proficiency.

Redefinition is the stage in which a task would be impossible without the use of technological devices. The process of creating an online blog or video, sharing it through social media, and re-designing it after the comments and other feedback from the subscribers help students use technology most effectively.



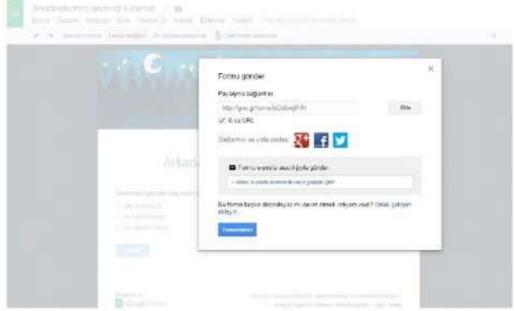


Figure 4. Google Forms Share Options



Figure 5. Google Forms Results Section

When students create a survey, Google Forms allows users to share the survey via social media, or users can simply create a link and share the survey online. As people complete the survey and send their results, it is possible to see a graph of the data. In the task above, students are asked to create a report on the use of social media after they receive the results from their peers. Students are asked to share the most surprising results with their classmates and comment on these results. In the next stage, students can re-design the survey according to results and feedback from their peers. This task is made possible through technology only, and it helps critical thinking, creativity, collaboration, and communication among students.

#### Conclusion

This paper is authored to guide TFL instructors and school administrations with their decision-making process before the purchase or the use of new CALL materials for educational support. In traditional classes, students are passive listeners during lessons. Instructors are expected to provide lists of grammar points in Turkish and learners to acquire them. In student-centered classes, on the other hand, students internalize, interpret, and build on the information. An increasing number of TFL instructors have started enjoying the opportunities brought by educational technologies. The misuse of technology might cause students only to receive readily presented information. That is why, CALL materials should be organized and applied in a way that students can analyze the information and build on it. It is essential that educational organizations and instructors are aware of best practices of CALL materials to use in TFL settings. Good technology cannot save a bad pedagogy.

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