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EFFECTIVE USE OF ICT TOOLS IN FOREIGN LANGUAGE EDUCATION: SOME REFLECTIONS FROM THE ICT-REV PROJECT

Yabancı Dil Eğitiminde BİT Araçlarının Etkili Kullanımı: ICT-REV Projesinden Yansımalar[1]

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Abstract

The use of technology in foreign language learning and teaching process has become increasingly popular in recent years in line with the rapid developments in technology. Foreign language educators seek ways of integrating technological developments into the classroom environment and try to attract the attention of today's students who are labelled as 'digital native'. On the other hand, these rapid developments in ICT tools and resources used to support foreign language education present both good opportunities and a number of problems. For example, some teachers follow technological developments closely and try to incorporate technology into their classrooms as much as possible, while others feel that they are not capable of doing so and they stay away from these tools in their classrooms. This causes some students to be deprived of the opportunities provided by technology in the process of foreign language learning, while others lose time with ICT tools that do not fully serve the purpose. In fact, it is not recommended to become a slave of technology, nor to keep technology away from classes. What is important is to be able to use the technology that provides a rich resource in teaching language skills and that is considered to have changed the nature of teaching skills in a determined and effective way. In other words, being aware of which technological tools are geared towards which language skills and which language learning theory supports them will facilitate teachers' work and they will be able to use the technology in a more qualified way. With all these in mind, the present study discusses ways of using technology effectively in language learning and teaching, and aims to provide some ideas and products from the 'ICT-REV' project supported by the European Center for Modern Languages (ECML) and the Council of Europe. The ICT-REV project aims to increase the potential of the use of existing ICT tools in foreign language learning and teaching in line with student needs and correct pedagogical approaches. In addition, some suggestions are made about the four basic language skills: reading, writing, listening and speaking and how sub-skills related to these skills should be related to ICT tools.

Keywords: Technology, ICT, technology integration, foreign language teaching, ICT tools

Öz

Teknolojideki hızlı gelişmeler doğrultusunda yabancı dil öğrenim ve öğretim sürecinde teknoloji kullanımı son yıllarda gittikçe yaygınlaşmaktadır. Yabancı dil eğitimcileri, teknolojik gelişmeleri sınıf ortamına

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aktarma yollarını aramakta ve 'dijital yerli' olarak tanımlanan günümüz öğrencilerinin dikkatlerini çekmeye çalışmaktadırlar. Öte yandan, yabancı dil eğitimine destek amaçlı kullanılan BİT araçları ve kaynaklarındaki bu hızlı gelişmeler hem çok iyi fırsatlar hem de bir dizi problemler ortaya çıkarmaktadır. Örneğin, bazı öğretmenler teknolojik gelişmeleri yakından takip edip teknolojiyi sınıflarına mümkün olduğunca dâhil etmeye çalışırken bazıları bunu yapabilecek yetenekte olmadığını düşünüp teknolojiden uzak durmaktadır. Bu da bazı öğrencilerin yabancı dil öğrenim sürecinde teknolojinin sağladığı fırsatlardan mahrum kalmasına, bazılarının ise amaca tam olarak hizmet etmeyen BİT araçlarıyla zaman kaybetmelerine yol açmaktadır. Aslında ne teknolojinin kölesi haline gelmek ne de teknolojiyi sınıflardan uzak tutmak önerilmektedir. Önemli olan dil becerilerinin öğretiminde zengin bir kaynak sunan ve söz konusu becerilerin öğretiminin doğasını değiştirdiği tartışılan teknolojiyi kararınca ve etkili kullanabilmektir. Yani hangi teknolojik araçların hangi dil becerisine yönelik olduğunu ve bu araçların hangi dil öğrenim teorisini desteklediğini bilmek, öğretmenlerin işini kolaylaştıracak ve teknolojiyi amaca uygun daha nitelikli şekilde kullanabileceklerdir. Tüm bunları göz önünde bulundurarak mevcut çalışma, teknolojiyi dil öğrenim ve öğretim sürecinde etkili kullanılmasının yollarını tartışmakta ve Avrupa Modern Diller Merkez (ECML) ve Avrupa Konseyi tarafından desteklenen 'Dil Öğrenimi ve Öğretiminin Desteklenmesinde BİT Kullanımı' (ICT-REV) projesinden bazı fikir ve ürünleri sunmayı amaçlamaktadır. ICT-REV projesi, yabancı dil öğrenimi ve öğretiminde mevcut BİT araçlarının kullanım potansiyelini öğrenci ihtiyaçları ve doğru pedagojik yaklaşımlar doğrultusunda artırmayı amaçlamaktadır. Çalışmada ayrıca okuma, yazma, dinleme ve konuşma olmak üzere dört temel dil becerisi ve bu becerilere ait alt becerilerin BİT araçlarıyla nasıl ilişkilendirilmesi gerektiği konusunda bazı önerilerde de bulunulmuştur.
Anahtar Kelimeler: teknoloji, BİT, teknoloji entegrasyonu, yabancı dil öğretimi, BİT araçları

Introduction

The use of technology in foreign language learning and teaching process has become increasingly popular in recent years in line with the rapid developments in technology. Students use technology outside the classroom in their daily lives and many educational institutes tend to invest in technology. In addition, foreign language educators seek ways of integrating technological developments into the classroom environment and try to attract the attention of today's students who are labelled as 'digital native'.

Besides the rapid developments in technology, ICT tools and resources used to support foreign language education present both good opportunities and a number of problems. For example, while some teachers feel comfortable with using technology, others feel anxious about their ability to integrate technology and advise their students about the practical and technical use of particular ICT tools (Walker & White, 2013). This may cause some students to be deprived of the opportunities provided by technology in the process of foreign language learning and both teachers and students lose time with ICT tools that do not fully serve the purpose. In fact, it is not recommended to become a slave of technology, nor to keep technology away from classes. What is important is to be able to use the technology that provides a rich resource in teaching language skills and that is considered to have changed the nature of teaching skills in a determined and effective way. In other words, being aware of which technological tools are geared towards which language skills and which language learning theory supports them will facilitate teachers' work and they will be able to use the technology in a more qualified way.

The developments from WEB 2.0 to WEB 4.0 make it possible for teachers and students to reach plenty of ICT tools to support their language learning process. However, technology is transient and the specific resources and tools available and popular today will be outdated tomorrow (Walker & White, 2013). For this reason, teachers need to have theoretical knowledge about effective technology integration into learning. This means that teachers who 'have an understanding of the theoretical underpinnings and issues involved in using technology with learners' can easily integrate new technology in a principled way (p. XIII).

Considering the relationship between different approaches and techniques to language learning, teachers should be selective about ICT tools they will utilize and be aware of the underlying theory of learning these tools will address. For this reason, teachers should find answers to the following questions:

1. What is the relation between different phases of computer-assisted language learning (CALL) and approaches to learning?

2. What is Digital Competence?

3. What skills do language teachers need in order to use technology for language learning?

4. How do ICT materials support language learning?

Three Phases of CALL

It is believed that technology integration into language learning develops at the same time with the changes in language teaching approaches and techniques. Warschauer (1996) categorizes the history of CALL as behavioristic, communicative and integrative phases. Behavioristic CALL is based on the behaviorist theories of learning which include repetitive language drills and practice. Computers are used as *tutors* which enable teachers to deliver instructional materials to the students. Warschauer (1996) explains the rationale behind Behavioristic CALL as follows:

*Repeated exposure to the same material is beneficial or even essential to learning.

*A computer is ideal for carrying out repeated drills, since the machine does not get bored with presenting the same material and since it can provide immediate non-judgmental feedback.

*A computer can present such material on an individualized basis, allowing students to proceed at their own pace and freeing up class time for other activities (p. 2).

As it is highlighted in the quotation above, computers can provide opportunities for students and teachers for more repetition and drills in which each student can proceed at their own pace. In accordance with these notions in this phase, some tutoring systems were developed for repetitive language drills and practice. The harsh criticism against behavioristic CALL resulted from the developments in technology and rejections of behaviorist theories (Warschauer, 1996).

The second phase was named as Communicative CALL since communicative approaches to language learning started to be popular in the 1970s and 1980s. Underwood (1984) states that communicative call;

* focuses more on using forms rather than on the forms themselves;

* teaches grammar implicitly rather than explicitly;

* allows and encourages students to generate original utterances rather than just manipulate prefabricated language;

* does not judge and evaluate everything the students nor reward them with congratulatory messages, lights, or bells;

* avoids telling students they are wrong and is flexible to a variety of student responses;

* uses the target language exclusively and creates an environment in which using the target language feels natural, both on and off the screen; and

* will never try to do anything that a book can do just as well (p. 52).

Based upon the remarks of Underwood, it can be stated that knowledge about language can be constructed in learners' mind through techniques and exercises belonging to the Communicative Language Teaching (CLT). Computers can help learners use language in a communicative way.

The third phase is integrative CALL which is associated with computer-mediated communication (CMC). Integrative CALL presents opportunities for learners for communicating directly through various ways such as e-mail, synchronous/asynchronous communication, collaborating writing tasks, utilizing sounds, graphics, videos, radio broadcasting, and so on. With the advent of sound Internet connection, learners are able to interact with each other easily with the help of authentic materials, which makes constant communication possible at anytime and anywhere notion.

Digital Competence

Communicative Competence which is a term coined by Hymes in 1972 refers to the ability of using socially appropriate language. The idea behind the term has great effects on Communicative Language Teaching (CLT) that emphasizes real communication in meaningful context. Canale and Swain (1980) identified four components of communicative competence; Linguistic (Grammatical) Competence, Sociolinguistic Competence, Discourse Competence, and Strategic Competence. Linguistic (Grammatical) Competence means having the ability of how language works including phonology, orthography, vocabulary, word formation and sentence formation. Sociolinguistic Competence refers to the ability of knowing how language is used in social context. In other words, it is the ability of using appropriate language with appropriate lexis and form in socially appropriate situations. Discourse Competence is the ability of using language coherently and cohesively in different types of contexts. Strategic Competence is related to compensatory strategies in which language learners are expected to manage communication and repair communication breakdowns.

Similar to communicative competence, Walker and White (2013) proposed a model of digital competence modern language learners should have. Digital competence consists of four components as communicative competence does; Procedural Competence, Socio-digital Competence, Digital discourse Competence, and Strategic Competence. The following figure illustrates the complementary aspects of these four components.

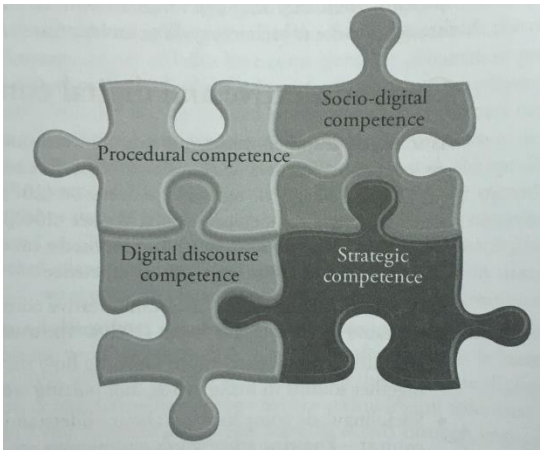

Figure 1. Digital Competence (Walker & White, 2013, p. 8)

Procedural competence is the ability to integrate technology into learning. In other words, procedural competence, which can be regarded as the counterpart of linguistic competence in the traditional view of communicative competence, refers to knowing how, when and why to use technology. It is accepted as the basic skill of digital competence. Socio-digital Competence is the knowledge concerning what technology and language is appropriate to use in different social contexts. That is to say, it refers to the ability to decide on the appropriate technology integration for appropriate situations in the course of learning. Digital Discourse Competence is the ability to create and manage written or oral tasks through appropriate digital aids. It is related to the use of various applications and tools for extended tasks. Lastly, Strategic Competence refers to the ability to compensate for the technology-related problems students and teachers encounter. For instance, a person having strategic competence knows the alternative ways of exploiting technology in case of problems. An understanding of digital competence is attached great importance since 'it provides a mechanism for diagnosing, understanding, and repairing the digital needs of learners' (Walker & White, 2013, p. 9).

The Skills Language Teachers Need for the Effective Use of Technology

Technology integration into language learning process has been debated for a long time together with the constant developments in educational technology. The focus of the current research in the related literature is usually on the skills of students regarding how technology can help them learn better. However, the skills language teachers need for the effective use of technology should be equally important. The current literature suggests that simply listing the skills for language teachers for integrating technology is not enough considering the complexity of training and developments needed (Hampel & Stickler, 2005). More detailed and to the point understanding of required skills is needed for better professional developments of language teachers in terms of technology use.

The skills associated with technology integration for language teaching usually consist of the ones related to basic technical skills such as having the ability of how to turn the sound up (Walker & White, 2013), use some basic applications, deal with ICT problems and limitations, etc. However, it is required to combine technical and pedagogical skills for integrating technology effectively. For instance, Hampel and Stickler (2005) suggests a

pyramid of skills starting from 'the most general skills forming a fairly broad base to an apex of individual and personal styles' (p. 316).

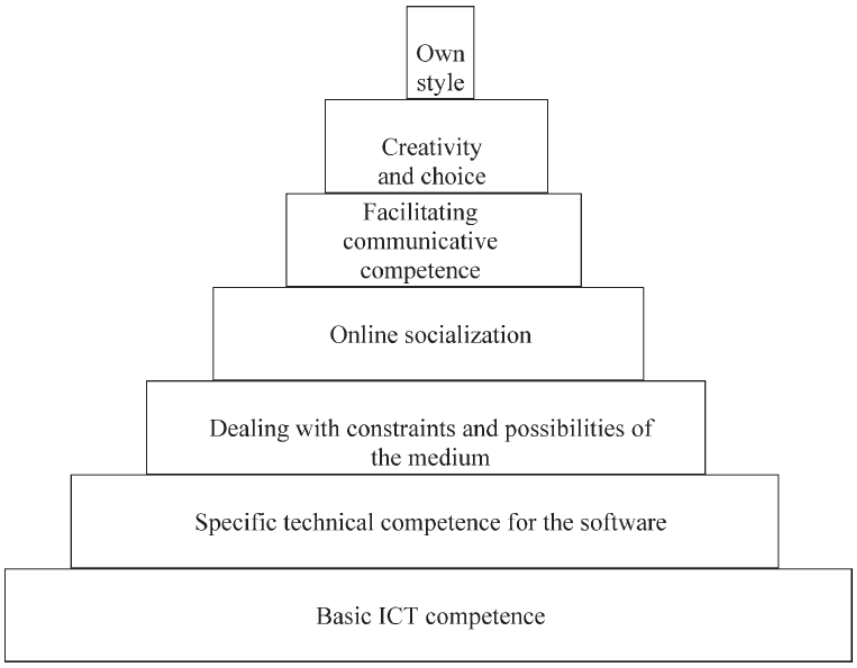

Figure 2. Skills Pyramid by Hampel & Stickler (2005, p. 317)

The pyramid is comprised of seven levels in which teachers are expected to acquire each skill in turn. In the lowest level, basic ICT skills refer to general competence on networked computers. At this level, teachers are supposed to be able to use keyboard and mouse, word processing, the internet, audio replay, download images, audio, and video files, etc. At the second level, specific technical competence is required for the field in which the teacher is specialized. For instance, foreign language teachers should be competent in selecting and using online dictionaries, interactive white boards, software enabling them to set up virtual learning platforms, etc. The third level of the pyramid is related to knowing how this particular software facilitates learning and what the limitations are. The next level is of utmost importance for the creators of the pyramid since language teachers need to interact with learners through creating online communities which help them build a feeling of trust between their learners (Walker & White, 2013). The other level focusing on communicative competence refers to online tasks and activities which will enable teachers to create opportunities for their students to communicate and interact. Teachers should have the ability of integrating role plays, information gap exercises, simulations, and all other meaningful communicative activities for the successful socialization of the students with the help of technology. The sixth level is creativity and choice which emphasizes the use of authentic online materials enhancing communicative competence. Teachers, at this level, are expected to select, modify, and

create the most appropriate digital materials for a particular group at a particular time (Walker & White, 2013). As for the highest level, Hampel and Stickler (2005) states that

'On the highest level of the skills pyramid, an online teacher will have developed her or his own personal teaching style, using the media and materials to their best advantage, forming a rapport with his or her students and using the resources creatively to promote active and communicative language learning' (p. 319).

As it is seen, the last level deals with teachers' competence in creating personal teaching styles that enables them to decide on the correct and effective online applications, tools, and materials for their learners.

How ICT materials support language learning

There is no doubt that digital age presents plenty of opportunities to students for learning a foreign language. The ongoing developments in ICT make it possible for learners to be exposed to comprehensible input which is crucial in language learning process. Today's students who are labelled as 'digital natives' need to be supported digitally to develop their thinking skills. Inspired from Bloom's taxonomy promoting higher forms of thinking in learning and education, Churches (2009) suggests the following version;

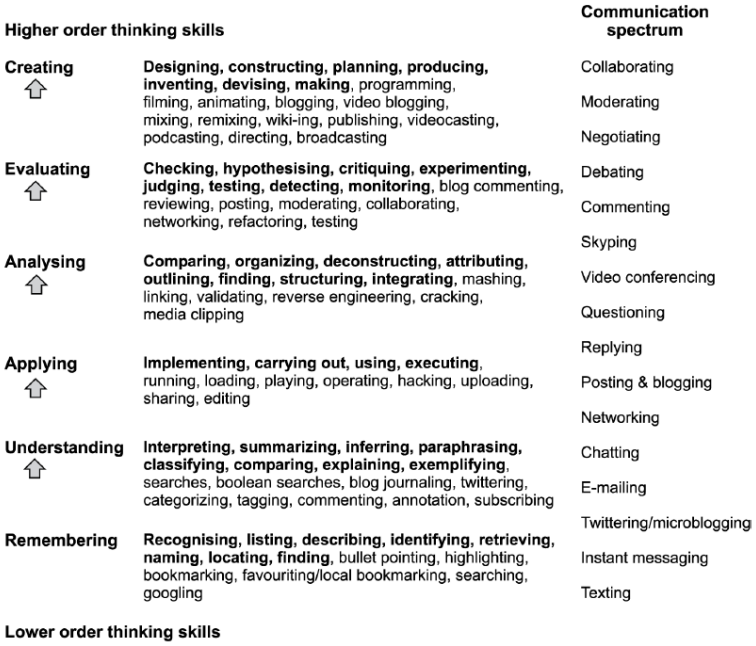

Figure 3. Bloom's Digital Taxonomy

Bloom's digital taxonomy consists of not only cognitive domain but also method and tooling (Clarke & Clarke, 2009). The taxonomy emphasizes the relations on how the thinking skills from lower to the higher order corresponds to the skills of todays' students having digital thinking skills. Considering the very nature of todays' students and their *digital world,* language teachers need to use and adapt ICT materials, tools, and application in a principled way. From remembering to creating skills, different aspects of learning are related with appropriate digital skills. Likewise, Walker and White (2013)

provide some examples of ways in which technology can support these different aspects of learning.

Table 1. Different Aspects of Learning and their Counterparts in Technology (Walker and White, 2013, p. 155)

Type of learning activity	Examples of how TELL can support it
Repetition and memorization	- Using the repeat button on an embedded video or audio podcast in order to listen again to something not understood first time around. - Playing a 'find the hidden object' game with commands and explanations which are repeated, often in different context, for example rooms in a house. - Highlighting a word in a reading text, and asking a comprehension question which will make the learner revisit the word. - Having another 'go' at a task – the computer won't mind how many times you do it!
Input – making it comprehensible	- Including images with, or adding them to a spoken or written text to clarify meaning. - Providing hyperlinks to online dictionaries, explanations, or translations (or students search for them themselves).
Salience and noticing	- Highlighting language items, and adding commands such as 'Click to hear the underlined words'. - Annotating parts of a reading text with 'sticky notes'. - Using a concordancing program to explore how a word or phrase is used in different contexts.
Output	- Writing blogs and emails. - Using MovieMaker to make a short video and posting it on YouTube. - Voting in an online survey.
Interaction	- Taking part in CMC, for example in discussion groups and virtual classrooms. - Doing collaborative projects such as wikis, podcasts, and making digital storybooks.

As the Table 1 makes it clear, learning and teaching a foreign language requires practicing certain learning activities such as repetition, being exposed to comprehensible input, noticing, raising awareness, generating output, interaction and so on. Foreign language coursebooks, supplementary materials and teachers all focus on these learning activities in a way. Therefore, foreign language teachers should know how to support the learning activities with appropriate ICT tools and applications which will provide adequate comprehensible input and facilitate learning process.

Considering the plenty of tools and applications aiming to foster language learning available in the digital world today, it does not seem so easy to decide on the correct options of technology integration for foreign language teachers. Although the Internet serves as a rich source for this, some explicit explanations concerning which tools can be used for which purposes are needed. ICT-REV project, which aims to fill in the gap between practice and theory in technology integration, presents a compile of ICT tools that are evaluated with sound pedagogical criteria in mind. The project is supported by

the European Center for Modern Languages (ECML) and the Council of Europe. The ICT-REV project aims to increase the potential of the use of existing ICT tools in foreign language learning and teaching in line with student needs and correct pedagogical approaches. The rationale for the project is explained as follows;

Language education is an area where open-access resources, online courses, virtual classrooms and social networks based on information and communication technology (ICT) are being increasingly used to give learners access to information, promote interaction and communication, and enhance digital literacy skills. However, the rapid development of tools and resources presents both opportunities and challenges. In order to maximize the potential of ICT in language teaching, it is crucial that it is used in a pedagogically sound way that corresponds to the individual needs of the learners. It is also important that the use of ICT is introduced and supported in a sustainable way and in a range of pedagogical approaches that promote lifelong learning.

(taken from https://ict-rev.ecml.at/en-us/Home)

As the outputs of the project, the most remarkable one is a website with an annotated and searchable inventory of ICT tools and open educational resources. The following figure illustrates a sample screenshot from the project web page.

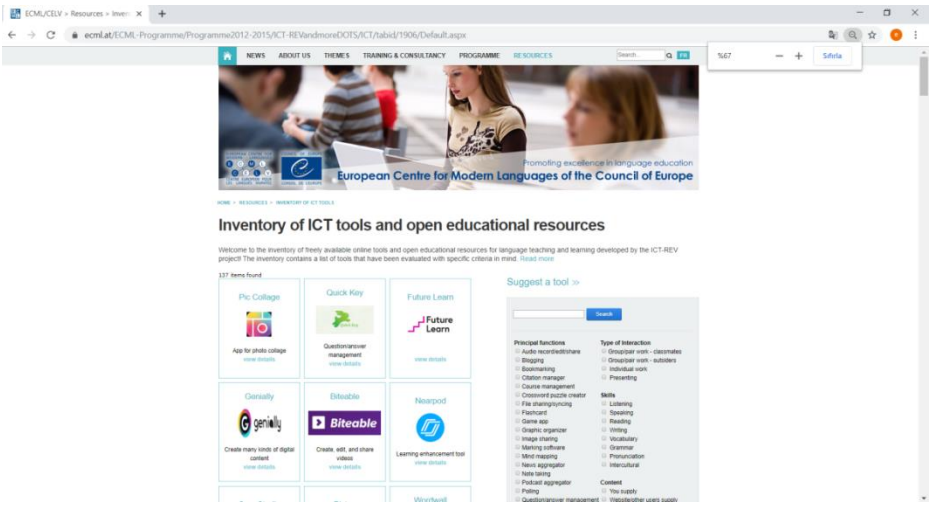

Figure 3. A Sample Web Page from ICT_REV Project

(taken from https://www.ecml.at/ECML-Programme/Programme2012-2015/ICT-REVandmoreDOTS/ICT/tabid/1906/Default.aspx)

ECML promotes language education all around Europe and supports lots of quality projects about enhancing language learning and teaching. ICT-REV project is one of the three interlinked projects funded by ECML. The DOTS (Developing Online Teaching Skills) project 2008–2011 and the More DOTS project 2011–2013 (http://dots.ecml.at) are the other two projects. All of the projects were led by a team of experts from Croatia, Germany, Spain, the United States, Great Britain and Canada (Hampel, 2015).

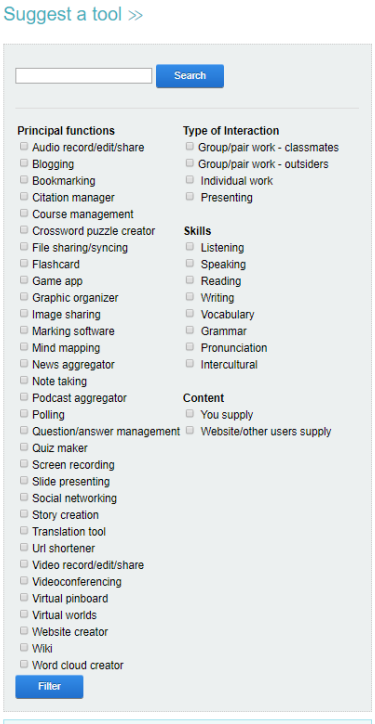

Figure 4. Functions, Skills, Interaction and Content Filter of ICT Tools

ICT-REV project provides teachers with a wide range of ICT tools that have been evaluated on the base of technology and pedagogy integration. The Web Page presents quality ICT tools that can be filtered according to the needs of learners and skills. The figure 4 above illustrates principal functions, type of interaction, skills and content of the evaluated ICT tools available on the project web site.

Conclusion and Suggestions

This study aims to explicate the relations between technological and pedagogical aspects of ICT use in foreign language teaching and learning. The rationale for such a study is twofold. First, it is assumed that ICT tools and resources used to support foreign language education present both good opportunities and a number of problems. The problems are usually related to the ability and competency of foreign language teachers to select the most appropriate tool among the hundred ones to help their students facilitate their learning. Second is the question of whether foreign language teachers use these tools for appropriate activities at appropriate times. Keeping all these in mind, the study tries to answer the questions of; a) What is the relation between different phases of computer-assisted language learning (CALL) and approaches to learning?, b) What is Digital Competence?, c) What skills do language teachers need in order to use technology for language learning?, and d) How do ICT materials support language learning?

Firstly, the study explains three phases of CALL and uncovers the relationship between ICT practices and approaches to learning. Subsequent to focusing on different phases, the study discusses the concept of digital competence compared to communicative competence which is accepted as an indispensable dimension of communicative language teaching. Secondly, the study touches on Hampel and Stickler's (2005) skills pyramid which provides particular competences in each level for language teachers. Later, it tries to present possible answers to the question of how ICT materials support language learning by dwelling on different aspects of learning and their counterparts in technology. Bloom's digital taxonomy which emphasizes the relations on how the thinking skills from lower to the higher order corresponds to the skills of todays' students having digital thinking skills has also been presented in this part. The current study emphasizes the roles of foreign language teachers who have an understanding of the theoretical underpinnings behind the tools and who can integrate technology in a principled way. To this end, ICT-REV project providing teachers with a wide range of ICT tools that have been evaluated on the base of technology and pedagogy integration has been introduced in the study as well.

Based on the relationships between foreign language teaching/learning methods and ICT practices, particular competences suggested by Hampel and Stickler's (2005), and the relations on how the thinking skills from lower to the higher order corresponds to the skills of todays' students having digital thinking skills, it can be suggested that foreign language teachers need to be selective in deciding which technology-assisted tool is appropriate for specific teaching methods. To this end, they should have digital competence which means they should have the ability of choosing among countless digital tools that can help in teaching process. In addition to the knowledge about what to choose, they should be able to decide on when and how to use the selected technology in foreign language classes. They should also cope with some unexpected situations related to technology-related problems and find alternative ways.

Another suggestion based on Hampel and Stickler's (2005) skills pyramid is that teachers with basic ICT competence are expected to create their own style in terms of having special competence for the selected tool and being aware of its limitations and communicative value. Foreign language teachers should also be aware of the digital thinking skills which have specific counterparts in Bloom's taxonomy. For instance, digital skills such as bookmarking, blog journaling, uploading, media clipping, networking, animating, etc. have some counterparts in the context of lower and higher order thinking skills.

Last but not least, it seems challenging for language teachers to select appropriate digital tool among the countless sources on the web; however if projects like ICT-REV helping teachers decide on the appropriate ones increase in quantity and quality, teachers will be able to make more appropriate decisions in choosing digital tools.

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