

# Educational Technology for New Learning Methods and their Impact on Children's Language and Intercultural Competencies

PEIL Sigrun Corinna (1), OSÓRIO José António (2)

Universidade do Minho, Portugal (1)

Universidade do Minho, Portugal (2)

## Abstract

*Digital media are used in all areas of life and children are used to handle all kinds of devices easily. Although there are risks and concerns, like distractions and addictions, advantages of these media are obvious: direct two-way communication, interaction and multiple ways of dealing with information and knowledge. This, as well as gamification elements may activate children's intrinsic motivation to learn. The focus of my doctoral research project is on studying how digital media can play a role in gaining intercultural and second language skills, because these competencies are becoming more important in times of globalization. With this project I would like to contribute to the agenda on researching about the preparation of children for those actual and upcoming challenges.*

*Different sorts of multimedia are already used in the classrooms but many learners stay passive and have no possibility to learn and discover on their own. Today, however, there is a huge variety of Electronic Media and dealing with a smartphone or a tablet seems to be taken for granted for most children. But why do we not use all these possibilities more intensively in a positive way, when it is about encouraging children's enthusiasm for learning?*

*Learners differ very much from each other regarding their needs, motivations and learning styles. With digital media we have the chance to offer each learner an appropriate way to fulfil their needs. Moreover, the foreign language and intercultural skills of youths can profit from connecting with far-away living native speakers, other learners and language teachers. This requires not only a difference in the technical infrastructure of schools but also a trust in autonomous work of individuals as well as a change in the student-teacher and the student-student relationship.*

*In this presentation I will be analysing tools and activities that may have a role in finding out how we can use digital media to overcome these barriers.*

**Keywords:** *Intercultural Communication, Personalised Language Learning, Language Exchange, Language Learning Anxiety*

## 1. Introduction

Globalization with its effects is one of the central topics of the 21st century worldwide. We travel to the remotest places, since the modern means of transport make it possible. We consume products which were produced and traded in different parts of the world, and which were transported around the globe. At the same time, the interdependencies have become so complex that we can no longer keep track of some of them. Everyday we see or hear news dealing with climate change, wars, terrorism and many other factors that force people to leave their home country. At the same time, we are seeing isolation movements and an increasing nationalism and, in the European Union, where controls at internal borders are once again the subject of discussion.

In addition to increasingly complex interrelationships, we are experiencing a drastic increase in the speed of information. Today, information is spreading rapidly over the Internet, social media are used worldwide in all areas of life. Not only politicians and large companies are permanently connected in this way, but also journalists and people individually. In this context, today's expectations of employees also include spatial and international mobility, and constant media accessibility. Against this background, intercultural and communication skills in foreign languages are becoming more important than ever before. Individuals of all ages are also used to constant accessibility, as they interact with newly emerging media, which are integrated into their daily lives.

These developments place completely different demands on raising young generations. With ever-increasing private and professional networking, it is important to be able to resolve emerging political and interpersonal tensions and to communicate peacefully. How can young people be prepared for these challenges of globalization and digitalisation? My research project is dedicated to the question of how new technologies can be used to impart young people abilities in the field of foreign languages acquisition and intercultural competence development.

## 2. Language learning context in Europe

Language learning is a central part of the curriculum in schools across Europe. However, "There are considerable differences in the availability of and opportunities for language learning (duration, teaching/learning time, starting ages, and range of foreign languages) both for the first and the second foreign language." Moreover, the countries' ambitions and outcomes differ very much from each other but "there is no close relationship between the duration of learning or teaching time and the competences achieved by students". [1]

In its meeting in Gothenburg on 17 November 2017, the European Commission stated that 50% of EU citizens do not speak any language other than their mother tongue and that only 25% of EU citizens are capable of speaking two foreign languages. And although all Member States have invested considerable resources, there is a lack of efficiency in the compulsory teaching of foreign languages. To remedy this, the European Commission recommends the "Mother Tongue plus 2 by 2025" programme and "Increasing the efficiency of language teaching and learning by systematically supporting the introduction of innovative methods such as 'bilingual teaching' and the use of digital tools". [2]

## 3. Technological Progress and Translation

Digital tools for learning languages? Why should we not be using automatic digital translators, which are already able to translate a conversation simultaneously into another language? These technological developments are becoming increasingly mature. Do they make language learning unnecessary?

According to an article in the German edition of the magazine "Technology Review" [3], the automatic translator, which produces the most appropriate translations, is "DeepL". In blind tests, the results were chosen as the best translation three times as often as the results of other translators. To achieve these results, the translating tool works with already existing translations, made by human beings. [3]

So, the work of translators even gains more importance because they are not only used for the specific translation itself but even for improving the translating programme. Furthermore, human translators are even able to understand dialects, slangs and proverbs as well as complex contexts in the particular field of expertise, and can react to cultural differences intuitively. However, as the majority of people is not working in the field of translation, might this issue be irrelevant to them?

Boroditsky, Schmidt and Phillips [4] conducted a study, which showed, that languages with a gender for nouns are giving the speaker different connotations about the word. "For example, the word for 'key' is masculine in German and feminine in Spanish. German speakers described keys as *hard, heavy, jagged, metal, serrated* and *useful*, while Spanish speakers said they were *golden, intricate, little, lovely, shiny, and tiny*. The word for 'bridge', on the other hand, is feminine in German and masculine in Spanish. German speakers described bridges as *beautiful, elegant, fragile, peaceful, pretty, and slender*, while Spanish speakers said they were *big, dangerous, long, strong, sturdy, and towering*." [4]

So, studying a new language might open up a new way of thinking to the learner, a key to understanding another culture better. The need to learn other languages and cultural codes - and thus new ways of thinking - is essential in an increasingly connected and complex world. Technologies might help meet these actual and upcoming challenges.

## 4. Modern Language Learning: A proposal

Language teaching in today's classrooms usually has the same content and procedures for all students. However, digital tools offer the possibility of redesigning the lessons in such a way that the individual student's needs can be addressed in a better way. In this context, I suggest the use of a language learning toolbox, which contains various materials and tools available online and offline, which can be precisely tailored to the respective student. An essential factor here is the motivation of the individual. Pupils can feel addressed by completely different learning approaches and with the combination of different teaching aids this intrinsic motivation can be activated in such a way that the student's greatest learning success is made possible.

But what can these tools look like in practice? They can be anything that can exert a linguistic and cultural influence on us, which means everything we come into contact with in our lives. For example, one student may benefit greatly from personal or virtual contact with native speakers, while others may be more interested in music or literature from the respective culture.



Digital tools like smartphone are going to play an important role in this scenario, as it reflects students' everyday reality. For example, in Germany, nearly all adolescents already have a smartphone and are therefore used to handle it easily. [5]

This new approach must take into account that the changed form of teaching also influences the relationships between teachers and pupils as well as among pupils. Students can take the opportunity to teach skills which they have already gained to other students. In addition, supported by their toolbox, students can explore new content on their own or in groups. The teacher acts as a mentor, a personal trainer who advises the students on which learning content and which learning method is suitable for their needs.

## **5. Challenges and related recommendations for action arising from this proposal**

### **5.1 Structural**

The curriculum must be flexible enough to allow future emerging technologies and related new teaching methods to be implemented from the outset. New laws in this area, as well as data protection concerns, can lead to large bureaucratic processes. The coordination of possible partner schools abroad can be demanding in terms of time and organization.

### **5.2 Personnel**

Teachers have to adapt to their new tasks and to changed teacher-student relationships. In order to be able to react to constant new challenges, continuous teacher training is necessary. In addition, schools need persons responsible for questions in the multimedia area who set up the necessary infrastructure on the one hand and react promptly to technical problems on the other hand in order to facilitate smooth teaching.

### **5.3 Technical**

A stable Internet connection is essential for the implementation of modern teaching methods. Most young people already have their own mobile devices. [5]

Using these would not only be inexpensive, but also convenient, since handling these devices is already a matter of course for teenagers. For students who do not have their own equipment, access should be ensured, for example through a pool solution. Access to equipment and the Internet should also be guaranteed outside school hours in order to be able to complete homework or exercises.

### **5.4 Financial**

A stable Internet connection, costs for programmes, apps and other materials, as well as for the training of teachers have to be provided.

### **5.5 Psychological**

Psychological factors play a major role in the use of digital media: the openness of teachers and students regarding new teaching methods is particularly important. Providing more exchange both online and offline does not only support the language learning but also the understanding of other cultures. Programmes such as Erasmus for teachers benefit not only the teachers themselves, but also the institutions where they teach, as well as pupils and parents. [6]

Digital technologies can offer new freedom, but can also lead to distraction and a lack of orientation among teachers and students. Teachers should therefore be trained in dealing with cyberbullying. Moreover, teachers must respond empathetically to students who suffer from language speaking anxiety.

## **6. Intervention and data collection**

The target group consists of students of an age between 13 and 15 years, who are studying the target language as a (at least) second foreign language. The language should be taught already for at least six months and not longer than two years. The current level of the students' language level should be determined on the basis of the Common European Framework of Reference for Languages. Furthermore, the students' and teachers' opinions about their language classes as well as their self-assessment, including questions about language speaking anxiety, and their awareness about cultural differences need to be found out, using questionnaires and one-to-one interviews.

After appropriate teacher training, the language learning toolbox will be implemented in one group, while another group continues with the former teaching concept.

## 7. Expected outcomes

After the experiment has been carried out, the tests and questions are repeated, and the data will be analysed. A better performance in the foreign language and intercultural competencies as well as a higher motivation and less language learning anxiety of the group using the new concept is expected.

## References

- [1] European Commission "Languages in Education and Training: Final Country Comparative Analysis", 2014, pp. 8
- [2] European Commission, "Strengthening European Identity through Education and Culture, The Commission's Contribution to the Leaders' Working Lunch" Gothenburg, 2017
- [3] Honsel, G. "Hä?" Technology Review – Das Magazin für Innovation, Hannover, 11/2017, pp.38
- [4] Boroditsky, L., Schmidt, L. A., & Phillips, W. "Sex, syntax and semantics". In D. Gentner & S. Goldin-Meadow (Eds.), Language in mind: Advances in the study of language and thought, Cambridge, MA, US: MIT Press., 2003, (pp. 61-79)
- [5] Feierabend, S., Plankenhorn, T., Rathgeb, T. "JIM 2016 – Jugend, Information, (Multi-) Media", Stuttgart, Medienpädagogischer Forschungsverbund Südwest (mpfs), 2016, p.8
- [6] Unlu, I., "Teacher Candidates' Opinions on Erasmus Student Exchange Program", Educational Sciences: Theory & Practice, Istanbul, Educational Consultancy & Research Center, 2015, pp.224