Primary School Education and Computer Assisted English Language Learning

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ABSTRACT

Developing foreign language skills as well as information communication skills belong among the key competences defined by the EU. We do realize that the current generations are digital natives and they live in the world that is different than was ours. Even though we are ready to use technologies to simplify our life, to make some processes more efficient, our children use them naturally. The article presents information gained in the research realized among elementary school teachers who teach 6-7 years old children. The focus group consisted of the teachers who use internet to support their teaching and their pupils use the net for their home preparation and practice.

1 Introduction

The Guardian brought a report written by Charles Arthur (February, 1st, 2013) about the rapid growth of tablet and smart phone shipments. The graphs he presents (see fig 1) shows the trends in the last three years comparing the sale of pcs, smartphones and tablets.

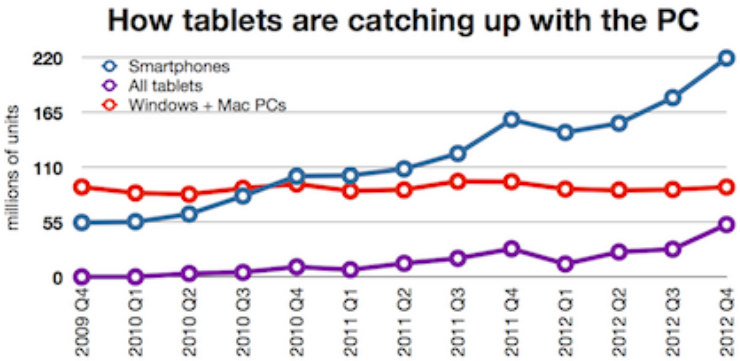

Fig. 1 Smartphone, PC and tablet shipments by quarter from 4Q 2009. (Source ICD In: Arthur, The Guardian)

1.1 Digital world we live in

Young learners taking pictures, playing games on computer, watching DVDs, listening to mp3 players are reality. They are digital natives and even though we may complain that young "techno" – generation are "asocial", on the other hand the truth is that it is us, the adults, who "allow" or even "lead" them to use technologies without a special (e.g. educational) purpose.

It often happens that the kids are "put away"by their parents by suggesting (or allowing) them to use computers. They play games, skype, chat, watch movies; young learners have already facebook accounts so they can play different games.Prensky (2001) claimstoday's average college grads "have spent less than 5,000 hours of their lives reading, but over 10,000 hours playing video games (not to mention 20,000 hours watching TV). Computer games, email, the Internet, cell phones and instant messaging are integral parts of their lives". These numbersmapped the situation 12 years ago. The institute for Social Research published a report almost 10 years ago with alarming data that children and teens spend 2.75 hours a week using home computers; Kaiser Family Foundation published information (2003) that 70% of Americans 4-6 year-olds

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have used a computer; what was even more alarming was that in any given day, 68% of children under two will use a screen media, for an average of just over two hours (Pay attention,2007).

We use crayon tools instead of crayons, we rather send the SMS than write a short letter or Christmas postcards and thus we cannot be surprised that our kids read e-books, take pictures of slides during the lectures rather than write notes, use phones to make shopping lists. Is it really so surprising that our kids live digital life in digital era?

1.2 Digital world, technology and education

How should teachers react to this reality? Most of them are still digital immigrants teaching digital natives, considering their education being better than the one offered to this generation… If we go some 20 years back there were no computers at schools not even speaking about internet, LCDs or interactive whiteboard. Today most of us are nervous (even though we are digital immigrants) and uncomfortable if there is no wi-fi or if we are not online. No wonder, the kids want it as well.

We have the feeling, we have to have a phone all the time with us, no wonder students want it as well. Whatmore, parents want to have the feeling their kids (even those who are first graders) are safe and thus they give them a phone. Why should we wonder that kids are "addicted" to phones, they are calling, they are texting (a lot of services free of charge in case of wi-fi accessibility) they are using their phones as mp3 player, cameras, e-readers, calculator, etc. All-in-one.

I do not want to sound skeptic or pessimistic but travelling on train and seeing a mother with two kids and all three concentrated on the screens of their phones all the journey makes me sad. People talk less, their vocabulary and means of expressions are being changed, they do not know to socialize, they are living their virtual lives more actively than the real one.

Prensky (2013) stresses that "it's important to understand that technology isn't just a "new way to do old things," which is mostly how we use it in schools today. That is, in fact, the most trivial use of technology. The only reason to use technology in that way is to make us more efficient and enable us to cut out something old to make room for new things we need."

What we (teachers and parents) need to take into consideration is what our kids do and for how long. We should consider especially whether it is worth using computer instead of different tools. Especially in early schooling years we need learners to develop critical thinking, to express their opinion (rather than easily get and copy information from the web and present it as their own attitude and opinion).

Prensky (2010) states that "Today's students will not live in a world where things change relatively slowly (as many of us did) but rather in a future where things change extremely rapidly—daily and exponentially. So today's teachers need to be sure that, no matter what subject they are teaching, they are teaching it with that future in mind". The same indicates Stacey Harris presenting the striking data gained in the research report realized by Brandon Hall Group addressing talent scarcity issues with respect to developing the next generation workforce. Some data were presented in NetDimensions'conference Next Steps in London (October 2013) by Stacey Harris. She pointed out that "More than 83% of organizations with a skilled labor workforce state that it's difficult to find employees capable of addressing their organizations' hiring needs. By 2020, global workforce shortages are predicted for critical skilled roles in healthcare, high-tech, and manufacturing." She also highlighted that the jobseekers do not have the skills and competences the new jobs require. The trade has changed, the job market has changed and this should be reflected in education as well.

BrandonHall group graphically display the progression of learning and its focus in a course of time as follows:

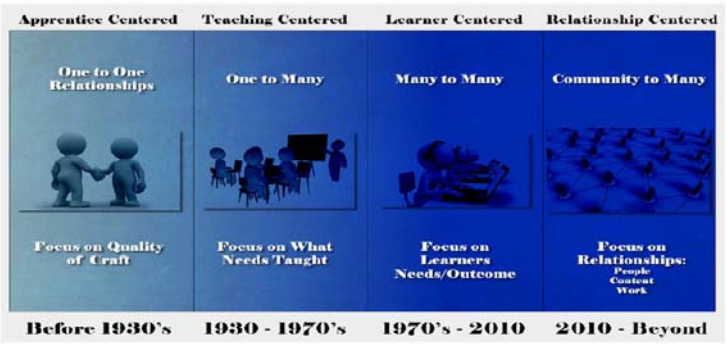

Fig. 2 Progression of learning (Source BrandonHall group report, April 2012)

Even though the graph speaks mainly about educating the workforce and relations between learners, their goals and their environment, there is always a transfer to formal education, especially concerning technologies, methods and approaches. Although it was not typical for our cultural context the collaborative learning and sharing as well as autonomous learning and self-evaluation are becoming extremely significant in the educational process. They are (even though quite slowly) building their position in teaching-learning process.

Use of internet becomes unavoidable. Even though there are some parents who allow children only limited access and under parental supervision many times it happens that once they come to schools where there are no net administrators (what means no site blocks/restrictions have been set) they are exposed to negative aspects on net. There are also teachers who do not have training how to use technologies from the methodological perspective and they are afraid how to use it.

1.3 Foreign language teaching in the Slovak context

Foreign language teaching is compulsory since the 3rd grade in the primary level. Both digital competence as well as communication in foreign language belong among eight key competencies that have been defined at EU level (along with communication in mother tongue, mathematical competence and basic competences in science and technology, earning to learn, social and civic competences, sense of initiative and entrepreneurship and cultural awareness and expression).

Interdisciplinarity and combining two or more competences development helps learners to understand that in real life we use them mutually and gives them a sense of authenticity. (Many times they play games in English (e.g. dressing Barbies or car racing) what helps them to acquire some words in English).

Previously, the compulsory foreign language teaching started at the age of 8 years (3rd grade) or alternatively 10 – 11 years (5th grade), however most schools used to teach foreign language since the first grade. Since 2011 the English language (not foreign language) has been a compulsory subject for all learners from the age of 8–9 (3rd grade of elementary school). Even though English is most popular foreign language in recent decades it was not perceived as the only correct decision and there are already suggestions to change it to foreign language teaching.

Teachers of English language have always had a variety of literature focusing on methods of foreign language teaching as well as introducing latest trends. Most of the textbook for English language teaching are written by non-Slovak authors and are written for multinational trades. This logically means that there might be small and bigger teams of experienced experts in textbook writing. Similarly the methodology support – e.g. using technologies in language teaching are accessible at the book markets. A lot of conferences, e-conferences, webinars, workshops are organized and English language teachers have no problem to attend it.

1.4 Digital textbook and educational portals in Slovakia

Portals "without chalk" and "komensky" have been introduced to elementary and secondary schools in Slovakia recently. The portals allow immediate contact of teacher-parent-learner. The similar product "Planet of knowledge" also offers digital textbooks to learners and students. There are more possibilities; however these two seem to be most popular and most widely used. The support portal "learn more" brings

more than 35000 interactive educational materials but whatmore it offers online tools for material creation. The content and tools are accessible to those teachers who have bought the license.

The portal "planet of knowledge" was bought (after the heated discussions) by the Ministry of education and thus it is accessible to teachers free of charge (the registration is necessary). After the several discussions with teachers we found that only few of them use the portals (approximately half of them have never even tried to access and check the materials and tools available). The planet offers the materials for 5 subjects (Nature Science, Physics, Mathematics, Chemistry, Biology). Its biggest advantage is the visual support and the possibility for learns to work in their own tempo. The structure of individual topics is clear, it frequently includes different animations, simulations, audio and video recordings. The teacher has the tools to tailor the content to the needs of his/her students. In any moment he can set the default version. Numerous methodological material (texts and videos) are available for its users. The portals are learning management systems were teachers can track students work and progress easily, as well they can communicate effectively.

Concerning EFL there numerous webpages available online and thus English language teachers have had different experience with the use of them (not with LMS, rather with individual websites, or interactive activities and different educational multimedia).

Various researches show that the cognition is same in case of digital and "traditional" education; however, many backers of digital education claim that the motivation is not measured as well as the development of computer skills.

2 Research description

2.1 Aim of the study

Teachers are forced (both, intrinsically and externally) to use technologies. In this study we wanted to get an insight into early EFL learning and use of ICT, especially internet and educational portals in primary education. We focused on the following research questions:
1. Do teachers use ICT (a) for their preparation, b) in pupils' preparation, c) in EFL lessons)?
2. Are teachers confident in using technologies (a) Internet, b) Interactive whiteboard, c) E-learning)?
3. How do teachers perceive benefits of using ICT in groups of primary education?

2.2 Sample and instruments

A total of 127 teachers from Prešov and Košice region participated in the study.The teachers who use English language were selected as there are numerous numbers of pages available for teaching English. They were drawn from several schools and all were qualified primary education teachers studying English to get qualification for teaching English to young learners. A small subsample (9 teachers) was selected for an interview to get a more in-depth insight into the classroom teaching, attitudes, opinions and experience.
Relevant data on context of teaching were gathered by means of teacher questionnaires; to get the qualitative data, a picture of activitiesand the scope of using technologies we used a structured interview (with both, fixed, close-ended and open-ended questions).

The Slovak primary education system is frequently described as over-feminised and our sample also proves it. Out of 127 participants there were 18% of males (23 men) and 82% were females. We set up 4 age categories; 1st 20-30 years old teachers, 2nd – 30- 40 years, 3rd - 40-50 years and the forth group were teachers over 50ty.

Category	Aggregate Results Frequency table: sex (YL_comp.sta)				
	age	Count	Cumulative Count	Percent	Cumulative Percent
f	1 (20-30)	23	23	79,31034	79,31034
m	1 (20-30	6	29	20,68966	100,0000
f	2 (30-40)	33	33	78,57143	78,5714
m	2 (30-40)	9	42	21,42857	100,0000
f	3 (40-50)	25	25	83,33333	83,3333
m	3 (40-50)	5	30	16,66667	100,0000
f	4 (50-)	23	23	88,46154	88,4615
m	4 (50-)	3	26	11,53846	100,0000

Fig. 3 Frequency table sex vs age

A subsample of 9 teachers participated in focus group interview, the aim of which was to get a qualitative insight into the use technologies in the young learners' classes. The participants were selected to represent different schools and age categories (2 females from age group 1, 2 females and 1 male from the age group 2, 2 females and 1 male from the age group 3 and a female from the age group 4 (total 9 teachers). There was one interviewer, an interview was realized in person, audio-recorded and analyzed.

2.3 Procedure

A questionnaire aiming at finding the reasons whether teachers use/ do not use technology in their teaching was distributed to teachers studying to get qualification to teach English to young learners (already fully qualified for teaching ISCED 0 and 1 level general core subjects). The questionnaire was published on the educational portal, could be downloaded and sent via email. To enable anonymous responses they could have used a common gmailaddress with the login and password provided. The questionnaire consisted of 13 questions (11 closed question and 2 open ended questions).

The interview was realized at the university in the afternoon when all 9 teachers were available. We tried to create a relaxed sincere atmosphere, however some questions were provocative to develop discussion and provoke participants to express their opinion and arguments. We tried to keep the discussion focused to the subject with interviewer's clarification and hypothetical question.

2.4 Results and discussion

Computer skills development is a compulsory part of University education (in teacher training programs) at most Universities (if not compulsory, then optional subjects are offered to students). The in-service teachers are offered a wide spectrum of computer skills oriented courses in the frame of life-long learning. The data proved teachers perceive computers and internet as an invaluable source of information and tool simplifying and economizing their preparation.

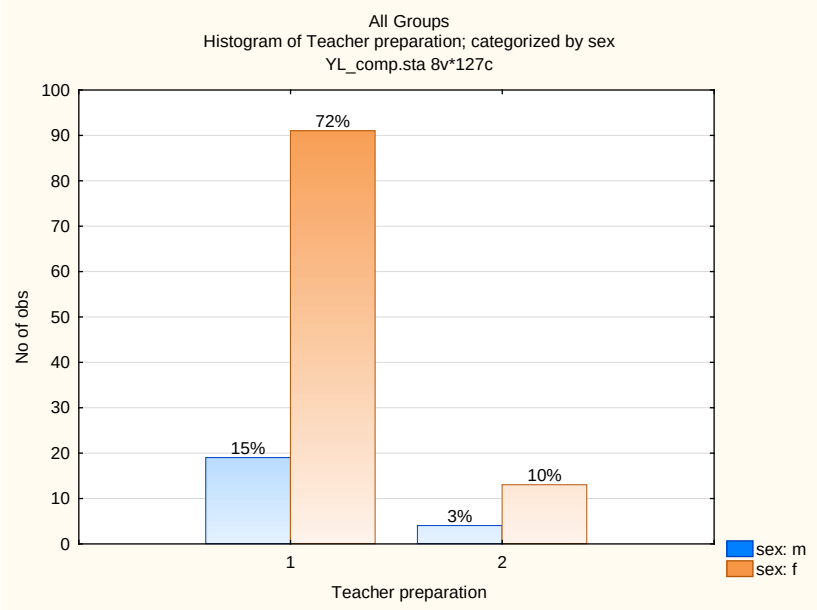

Fig 4 Use of internet for teacher preparation

Out of 127 teachers only 13% of respondents claimed they do not use computer for their preparations for the lessons. We were interested whether there is a tendency for younger teachers to use (or for older teachers not to use) computers for their preparations. The graph (fig 5) shows the data, however one must read it considering the size of individual age categories (1 –22,8%, 2 –33,1%, 3 –23,6%, 4 –20,5%.

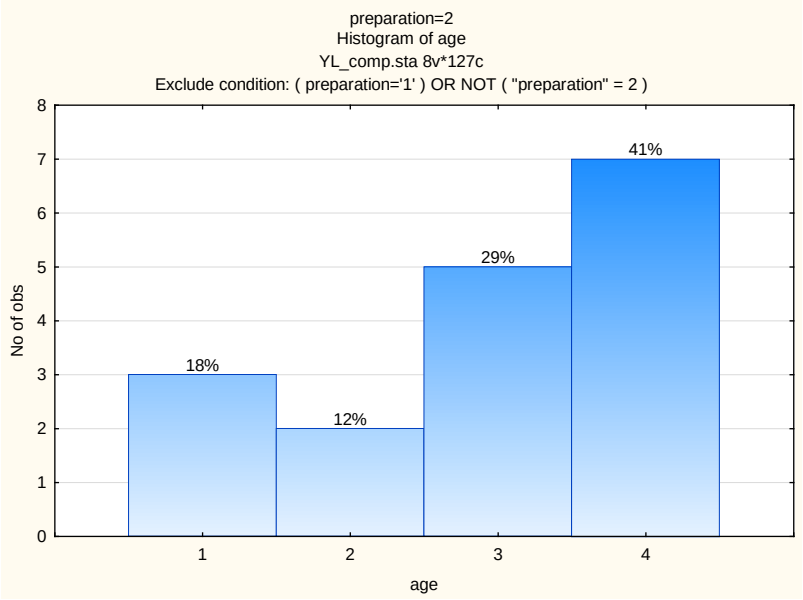

Fig 5 The distribution of teacher not using computers for their preparation according to the age categories

The data show that more than one quarter (27%) of teachers who are over 50 do not use computers. We did not expect that as many as 10,3% of people under 30 did not use computers for their preparation. It was striking as these teachers were in fact born to digital era and it sounds unbelievable that those people do not use computers.

There are only 73 (57,4%) teachers in our group who use internet and/or interactive whiteboard in English language teaching. There are only 27 teachers (21%) who use educational portals in their teaching.

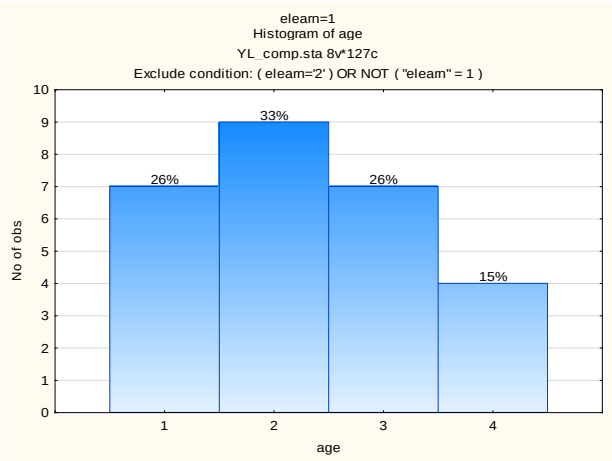

Fig 6 Teachers using LMS in their teaching according to the age category

(Most) Learners at home use internet since their childhood. There are 63% (80 teachers) who believe that in the groups of young learners there is no necessity to use computers for their home preparation. Some of them mention that, firstly, those kids have to learn „traditional" ways of learning, master learning strategies and computer skills should be introduced later. This might be discussed as we had already mentioned that the technologies are changed (not the content, skills or strategies).

It was interesting to learn that all the teachers who use LMS have learnt how to manage it in the frame of project realized by school (what made it also possible for school to buy necessary software and support).

In the interview we found out that teachers are challenged (by the school managements) to use technologies and that pupils appreciate it. Even though at the beginning teachers were under pressure they are enthusiastic nowadays and they are looking for various ways how to present new material digitally. They could see different positives in using technologies in language teaching, below are some ideas of Sona (34)

> *Sona: I hated all bureaucracy connected with the project and I even didn't like most of seminars. They were done in summer in the afternoon and mostly they explained technical aspects – how to calibrate board, how to download data and store them online, how to convert data. I missed methodology, how to… Then I made my first own interactive activity… and it was like … uughh… fantastic..it worked and children were running to the board to do the activity.*

She could see the increase of motivation and she perceives the creation of activities and use of technologies to be challenging. She sounded persuaded about the positive effects of technologies, she mentioned visualization of material and her own positive feeling from the effective work.
Some teachers mentioned they are tired of constant changes that they do not want to change their habits and that they rather use "verified" methods and techniques. Martin is 51 years old teacher with more than 25 years of teaching practice.

> *Martin: I do not design the activities, I use i-tools that came along with the textbook. I feel, that it is not enough, but I am too lazy to learn how to do it. Anyway, in 2-3 years there will be another technology.*

The last problem we want to point at is the triangle communication – management – teacher – parents. There must be harmony between the school management (the teacher must be sure there is a support) and the parents (who should understand theistrength, drawbacks and threats of technology used).

> *Petra (27): I tried it with my first graders, but the parents didn't like it… I knew I was saving nature but I also understand that parents had to help their children. We used portal "without chalk", it was really good, children could download materials and work online on their own. I chose activities that gave immediate feedback. But the parents complained and thus I am not using it now. But I still use the tools and kids work online at school.*

3 Conclusion

The research showed interesting results. The teachers use computers and technologies for their own preparation and planning the lessons. On the other hand, only slightly more than half use them at school. Teachers do not feel being ready for using technologies and most of them claim (even the younger ones) that the school did not prepare them for effective use of technologies. They generally understand that the young generation is different, however they are afraid they are not ready to substitute "old" techniques and methods by the "new, digital" ones and thus they prefer using the traditional one with seldom use of technologies. They even admit they use the online activities (where children work individually) when they need time for themselves what points to their methodological immaturity in using technologies in learning. The research highlighted the necessity to introduce not just the general ICT courses to University education but mainly Methodological aspects of using technologies in teaching.

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