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THE USE OF ICT AMONG THE TEACHERS OF ENGLISH IN ESTONIA BY COMPARISON WITH EUROPE AND ASIA

MA thesis

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ABSTRACT

The current thesis presents findings from a survey carried out among teachers of English from Estonia as well as several other countries in Europe and Asia in order to find out their relation to ICT use when teaching ordinary students and students with language differences. The results reveal that even though the preferences of teachers are generally similar, there still appear to be slight differences in the choice of ICT tools, ICT-related tasks and activities between participants from Estonia, other countries of Europe and Asia. The findings also show that teachers tend to use the same ICT-related materials when teaching ordinary students and students with language differences.
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INTRODUCTION

Being a teacher today does not only mean standing in front of students with a book in one hand and a piece of chalk in the other. Due to the changes in the society and the rapid development of information technology, approaches towards teaching and learning have changed a lot. The importance of motivation and creative thinking has received more and more attention during the past couple of decades. In order to develop motivation and creativity in a student, a teacher has a variety of methods and textbooks to choose from. In addition, Information and Communication Tools (ICT) are a good means to help raise the level of motivation in students. Crystal (2010, 414) discusses revolutionary changes that have brought computers, mobile phones, Blackberries, personal digital assistants and answer phones and into our daily routine and also into our classroom, in addition to the devices that teachers have been exploiting since the middle of the 20th century. If a teacher wants to inspire and motivate a student, they have to keep up with the development of modern technology. Nicholas Sparks (2006, 28) referred to teachers when claiming that, “They inspire you, they entertain you, and you end up learning a ton even when you do not know it.” That is exactly what ICT tools help a teacher do – make a class interesting so that a student would enjoy learning. This is important especially nowadays, when students are much more different compared to their peers generations ago. Prensky (2001, 1) notes that today’s students have not only changed their slang, clothes, body adornments, or styles, as has happened between generations previously. Prensky (ibid.) points out that today’s students represent the first generations to grow up with new technology. It means that they have spent their entire lives surrounded by and using computers, video games, mobile phones and other toys and tools of digital age, which are integral parts of their lives.
Digital natives are used to receiving fast. They multitask, thrive on instant gratification and frequent rewards, and prefer games to serious work (Prensky 2001, 2).

However, despite the exciting materials and tools, the gap between bright students and students with learning problems has been increasing gradually. In Estonia, we are facing a situation in which we are lacking proper materials to support foreign language learning of students with problems. Nguyen (2012, 130) uses the term language differences to refer to students with language learning problems and offers an explanation for distinguishing language differences from language learning disabilities. He suggests that for students with language differences, their language performance may not be comparable to that of their peers; they may lack cultural and linguistic experiences, limited vocabulary from little exposure to hearing and using English. When communicating, these students shift from one language to another within an utterance. However, their non-verbal skills (gestures, facial expressions, and physical proximity) are age-appropriate. Even though Nguyen (2012) refers to the students who study English in an English-speaking environment but whose mother tongue is not English, the description of such students can also be placed into our context. For example, in Estonia, many students who are included in groups of pupils with learning difficulties match the description. Nguyen (2012, 130) also points out that “educators have difficulty distinguishing language differences from disability when explaining the academic struggles these students encounter, and school officials report lacking tools, procedures, or qualified staff to adequately identify these students and their needs.” As before, the author refers to the situation in the USA. However, the same difficulties may also occur in school contexts in Europe or Asia.

While Information Technology is one of the best means of creating and increasing motivation both in ordinary students and students with language differences, being at the
same time a vast bank of resources, the current thesis focuses on the use of ICT tools as an aid in teaching English as a foreign language to students with language differences.

The current research paper tries to find answers to the following questions:

1. What activities do teachers of English from European and Asian countries use when teaching English to ordinary students and students with language differences using ICT tools?

2. What are the biggest problems, as well as pros and cons concerning teaching English to ordinary students and students with language differences using ICT tools?

3. What can be learnt from the experience of teachers from Estonia, other countries of Europe and Asia?
1. RELATED RESEARCH

Recent years have been rather productive concerning the research on the use of ICT tools in education. Different studies have been conducted to find out the importance of a teacher in the process of implementing ICT into education. Wikan and Molster (2011, 209) conducted a study that explored to what extent teachers in Norwegian schools use ICT in their classroom teaching and what teacher-level factors influence the use of ICT. The results show teachers’ commitment to ICT even though not all of them can see the educational value of it. However, the results of the survey of Wikan & Molster (2011), as well as Brodin & Lindstrand (2003, 86) reveal that teachers also feel lack of ICT confidence, often despite having taken part in ICT courses (Wikan & Molster, 2011, 209). Brodin & Lindstrand (2003, 86) go further, stating that educators are conscious of their own need for training, simultaneously being frustrated by the lack of time, economic resources and insufficient response of the management. Turkish teachers participating in the study carried out by Gulbahar & Guven (2008, 43) pointed out that the class time is too limited for ICT usage. They added that the introduction of ICT innovations into education requires promoting structural, pedagogical and curricular approaches. In addition, cultural perceptions should be taken into consideration. Gulbahar & Guven also support the thoughts stated above by reporting problems in relation to accessibility to ICT resources and lack of in-service training opportunities. On the other hand, teachers and students participating in the study, carried out by Wastiau et al. (2013, 12) on the use of ICT in schools in Europe, declared confidence in their digital competences (operational skills, social media skills, safe and responsible Internet use) and training (participation, content and modalities). The most important finding that Wikan and Molster (2011, 209) concluded from their survey was “that to integrate ICT in one’s own teaching is a difficult
and gradual process, and teachers must be given time to find their own way to merge ICT with their own teaching style.” The results of the study carried out by Sanchez and Aleman (2011, 914) agree with the findings of Wikan and Molster (2011), noting that teachers keep an open mind about integrating ICT into their daily practices.

While Wikan & Molster (2011) noted that teachers need time to merge ICT with their teaching style, Sanchez & Aleman (2011, 914) add that teachers also need to learn new teaching strategies to adapt to the new tools and applications. According to the results of the survey by Donnelly et al. (2011, 1477), teachers who see ICT as an opportunity for them to do something new and interesting with their students in terms of how their students learn, push to have a greater variety of resources in their classroom and it includes ICT. Hsu (2010, 847) examined the relationship between teacher and student usage of ICT and found out that teacher use of ICT significantly determines how frequently they assign students ICT activities. It turns out that if a teacher frequently uses ICT tools, they often assign students the same kind of ICT activities. For example, teachers who create complicated multimedia materials are likely to assign students multimedia activities. It shows that the teacher’s own ICT practices influence the type of ICT activities they assign to students. The participants of the study by Sanchez & Aleman (2011, 915) point out an advantage of the use of ICT in teaching and learning, noting that it improves access to course content materials and enhances communication between students and teachers, as well as students and their peers. However, despite general positive attitudes among many teachers, not all teachers are ready or eager to use ICT in their work. Elsaadani (2013) carried out a study to explore the relationship between teaching staff age and their attitude towards ICT in Egypt. The results show that the attitude is age-dependent. Elsaadani (2013, 223) finds that “there is a significant difference between the age of participants and
their attitude towards ICT.” The same author also refers to a related study (Elsaadani, 2013, 216), stating that older teaching staff are more adoption prone than younger teachers.

The results of various research papers have proved the importance of different aspects associated with teachers. However, the attitudes and skills of students are also considered important and several studies have been conducted in this field as well. Samuelsson (2010, 15, 16) carried out a study on the use of ICT among 13-year-old Swedish children, “who can be classified as belonging to the group called the digital generation.” The results reveal that all participants have access to ICT but they use it in various ways. Samuelsson (2010, 15) found out that the participants’ use of ICT differs in both qualitative and quantitative ways, but there is a lack in basic computer skills and seriousness about ICT use as a tool for learning. The findings reveal that school-related computer activities are rather uncommon among the participants of the survey and children prefer listening to music, socializing with friends or playing games rather than using ICT for educational purposes. This also stresses the importance of a teacher, who would guide students towards other ICT options that students can use in or out of school. On the other hand, according to the study by Deaney et al. (2003), students realize the advantages of computer-based tools and resources as help and associate the use of such tools and resources with changes in working ambience and classroom relations, as well as with raised interest and increased motivation within themselves. The findings of the same research (Deaney et al., 2003) show that even though outside school young people tend to control their own use of technology, at school, the focus is on “.../learning activities managed by the teacher, metered by timetable constraints, designed to meet curriculum criteria and attainment targets and incorporate mandatory use of ICT tools.” Besides being a guide for students, teachers have another challenge, which are different preferences of boys and girls as well
as representatives of various nationalities in class. A study carried out by Heemskerk et al. (2012, 155) investigated to what extent pupils from different gender and ethnic backgrounds appreciate different characteristics of ICT tools. The results show various appreciations between students from different origins as well as differences gender-wise. According to the findings, girls appreciate applications that deal with interesting subjects, are easy to work with, and provide good support more than boys do.

There are also studies carried out regarding the connection between ICT and students with special needs. Abbot et.al (2004) helped students and teachers see how ICT tools can help contribute to socializing, while learning something new. Abbot et al. (2004, 225) carried out a research among ten special schools in Northern Ireland and the Republic of Ireland, where the full spectrum of learning difficulties and disabilities was represented. In the frames of the study, students carried out joint tasks using asynchronous computer conferencing and video conferencing. The results revealed that the participants’ cultural awareness developed as far as their cognition allowed, when students in partner schools became aware of similarities and differences between themselves. In addition, through the experience, the participants could go beyond the frames of their own classroom to the ‘global classroom’, using the ICT application that suited them best (Abbot et al., 2004, 238). Lindström et al. (2012, 21) compared the use of ICT between students with and without physical disabilities. The results of their survey showed that students with a physical disability have restricted participation in computer-based educational activities in comparison to students from the general population. The authors stress the necessity for an individual plan for each student to focus on the aim of the computer use and examine the students’ needs in terms of ICT activities and their inclusion in education.
2. THE USE OF ICT TOOLS IN TEACHING AND LEARNING

English language teaching (ELT) has changed over the years, moving from very teacher-centred approaches to learner-centred ones. Kumar and Tammelin (2008) write about *blended learning environment*, which focuses on active learning. According to their words, it is commonly known that active learning advances the learning process and thus raises the quality of the language learning process. The same authors add that blended language learning uses multiple teaching and guiding methods by combining face-to-face sessions with online activities and utilizing a mix of ICT-based materials. Moreover, Steele (2005) points out that active learning is an important facet of a constructivist approach, one of the key ideas of which is associated with the theory that learning should be meaningful and related to real life situations. Saleh and Saleh (2012) also stress that innovations have brought changes in materials and technology devices. Why are those changes important? First of all, it is necessary because today’s students have changed. Prensky (2001, 1) points out that as a result of the ubiquitous environment and their interaction with it, today’s students think and process information fundamentally differently from their predecessors. He adds that it is very likely that our students’ brains have physically changed and their thinking patterns are different from the ones of their teachers as a result of how they grew up. Prensky (2001, 1) calls today’s students *digital natives*, native speakers of the digital language of computers, video games and the internet. Today’s generation also has another nickname. Deaney et al. (2003) refer to young people as *screenagers*, who have grown up “...in an increasingly technology-dependent society, connected by sophisticated telecommunication networks in a culture mediated by television and computer.” On the other hand, today’s teachers, who were not born into the digital world but adopted many aspects of the new technology at a later point in their lives, can be called digital
immigrants (Prensky, 2001, 2). In order to teach today’s students, teachers have to learn to communicate in the language of their students and one part of it is using ICT tools.

In order to specify what is meant by the use of ICT tools in teaching and learning, it would be wise to start with describing what the term ICT includes. There are many different approaches of describing this term. According to Hennessy et al. (2005, 2), the term ICT encompasses the range of hardware (desktop and portable computers, projection technology, calculators, data logging and digital recording equipment), software applications (generic software, multimedia resources), means of telecommunication and information systems (Intranet, Internet). On the other hand, Livingstone (2012, 13) brings out conflation of diverse forms of educational technology under the umbrella term ICT. According to her words, this term can include one to many technologies, which are used by the teacher in front of the classroom, but also peer-to-peer technologies, professionally produced and user-generated contents. In addition, Livingstone (2012, 13) suggests that it may include technologies specific to the school (e.g. interactive whiteboards) or applications used across formal or informal boundaries (e.g. education games) as well as networked technologies. Wastiau et al. (2013, 13) note that laptop and tablet computers as well as cell phones are increasingly seen as useful in education as they offer portability and choice as to when and where to use them. They add that a tablet has been found to be best used together with a wireless network and wireless data projector as it enables it to be moved around between pupils in class. On the other hand, Lindström (2012, 43) points out the advantage of a computer used in conjunction with relevant educational software, noting that it can also represent an alternative tool for learning when used as a remedial tutoring artefact, for example, for doing reading and spelling-related exercises. In addition, Jurich (2001, 8) is of the opinion that besides the most powerful technologies, such as the
Internet, less powerful technologies can be used. For example, radio is inexpensive to buy and can be used anywhere in the world, even in places without electricity, solar-powered stations can be broadcast radio programmes to a relatively large audience (Jurich, 2001, 8). However, Jurich (ibid.) also notes that technology is a tool to help the teacher and students reach educational tools, not a goal in itself. Jurich (ibid.) adds that in case the technology is not integrated into the overall lesson plan, the outcomes cannot be successful.

According to Gulbahar & Guven (2008, 43), “.../ the use of technology under the right circumstances improves educational outcomes, and many educators believe that a new pedagogy that incorporates technology is necessary to prepare students for work in the information age.” So what is the best way of inserting the ICT tools into the teaching and learning process? The integration of ICT in teaching and learning is not a method, it is rather a medium in which a variety of methods, approaches and pedagogical philosophies may be connected and where a number of different ICT tools may be integrated in teaching and learning (Salehi, Salehi, 2012). According to Zounek (2005, 2), formal education tends to use modern technologies not as a tool for radical changes, but to support its past achievements. However, it is difficult to distinguish which aspects of technologically mediated learning are effective in any particular situation and if all situations can be covered with such aspects (Livingstone, 2012, 13).

Afriyasanti (2011) writes about four stages of using ICT in teaching and learning. They are discovering ICT tools, learning how to use ICT tools, understanding how and when to use ICT tools and specialising in the use of ICT tools. In the first stage, teachers are supposed to direct students to be able to recognize the ICT tools used and consider their general function and uses. In the following stage, students are supposed to know and understand every component used in ICT in advance. Therefore, teachers have to provide
scaffolding and introduce its elements and functions to the students so that the teaching and learning process will proceed smoothly. In the next stage, the teachers are supposed to control the teaching and learning process as a language class and not as an IT class. Eventually, using ICT tools in English language teaching, teachers should be able to recognize the use and how to operate the tools. Afriyasanti (2011) also points out that through the use of ICT tools students not only learn the language but also indirectly learn technology. According to the report by Balanskat et al. (2006), which included evidence from 17 studies across Europe, the two types of ICT that were found particularly useful by teachers are the Internet and interactive whiteboards. The Internet alone gives plenty of resources to be added not only as stimulus but also to increase learners’ engagement and interactivity within the classroom. They encompass YouTube, Skype, Twitter, blogs and many more. Mompean (2010, 376) stresses the usefulness on blogs as a pedagogical aid for foreign language learning, noting that keeping a blog can help students develop online interactions and authentic productions. In addition, blogs have an added value as they are aimed not only at the teacher and the learning community but also made visible to the outside world (Mompean, 2010, 376). The aims of using blogs as a pedagogical aid are also in accordance with the principles of the Common European Framework of References for Languages (Council of Europe, 2001, 143), which establishes special goals for language learners, such as task-based learning, authentic interactions and collaborative learning. Chhabra (2012) brings out the importance of the Internet in general, writing “Internet is not merely a source of authentic material in English but also a source of information in the form of articles, courses, conferences and many more.” He points out its importance for a teacher, who can send assignments to their students via e-mails as well as organise online tests and exams, for parents, who can view their children’s work and
follow their progress any time, for students, who do not miss their lessons because even if they cannot come to a class, they still have access to learning materials and tasks and for schools, who are linked in a network and work on joint projects. Besides the use of interactive whiteboards and the Internet, Chhabra (2012) also promotes the use of mobile phones as learning tools, which have a variety of applications and podcasts. The latter are series of digital-media files which are distributed over the internet using syndication feeds for playback on portable media players and computers. According to the study carried out by Wikan & Molster (2011, 213), most teachers use ICT applications to prepare their own lessons, by using a learning platform and getting information on the Internet. Hsu (2011, 847) agrees with the previous statements going further into detail and bringing out teacher ICT usage that includes course preparation or instructional support, such as creating quizzes, searching the internet to find lesson plans and resources, creating presentations, building and hosting websites, etc. The results of the research mentioned above (Wikan & Molster, 2011, 217) also show that teachers often use ICT for more indirect reasons such as to access learning material, stimulate motivation or improve presentations. Regarding teachers’ integration of computers into the classroom, Hsu (2011, 848) points out four uses: 1) as a problem-solving/ decision making tool, 2) as a productivity tool (to create charts, reports, etc.), 3) as a communication tool (e.g. e-mail, electronic discussion, etc.), and 4) as a research tool for students. The findings from research papers show that most teachers tend to ask learners to use the Internet for information search during school hours and for homework (Wikan & Molster, 2011, 213). According to Hsu (2011, 847), student ICT usage includes writing reports, conducting Internet searches, doing practice activities, sharing with others on the web, and collaborating on computer projects. He also points out that teachers’ choice of technology is very important because it influences students’ high-
order thinking skills. Moreover, if teachers use the technology in a constructivist way, the impact of technology on higher-order skills is more effective (Hsu, 2011, 849). These findings show the significance of the importance of teachers in students’ learning as well as in the implementation of ICT into classrooms. According to Prensky (2001, 2), the biggest problem education is facing today is that our digital immigrant instructors (teachers), who speak an outdated language (that of the pre-digital age) are struggling to teach a population that speaks an entirely new language. Moreover, Zounek (2005) points out that the role of teachers in ICT implementation in schools is crucial and irreplaceable as their negative or positive attitude affects the overall results of integration of modern technology into the learning and teaching process. Donnelly et.al (2011, 1470) note that there are three main factors associated with the teachers who impact technology integration in classrooms. They are technology proficiency, which not only refers to knowledge of technology, but also its enabling conditions, pedagogical compatibility (pedagogical beliefs and technology being used), and social awareness, which highlights the significance in the ability of a teacher to negotiate the social facets of school culture.

The studies mentioned above have referred to teachers’ influence on students’ ICT use. However, a relationship between teachers’ and students’ use of ICT has been reported by researchers meaning that students also influence teachers’ ICT use. According to Hsu (2011, 849), a student’s age and subject matter influence a teacher’s ICT use. Moreover, Hsu notes that researchers have suggested that students can manage new instructional technology and show teachers how to use it. Furthermore, findings have shown that students can often operate equipment with little or no intervention from the teacher. However, from the viewpoint of different subject matters, students still need guidance from teachers.
Zounek (2005) stresses the importance of school, noting that school management plays a key role in introduction of new technologies into the process of education. The same author adds that its role especially concerns decisions on supplying the school with technologies, which, in its turn, determines the availability of technological infrastructure for students and teachers. Another factor, not less important than the teacher and student ICT use or the importance of school mentioned above, is the importance of home. Livingstone (2012, 14) is of an opinion that “visions of learning ‘anywhere, anytime’, schools without boundaries, peer-based learning, the home-school link and building ‘whole school communities’ all depend not only on state policy and provision regarding schools but also on individual decisions by parents to provide internet access for their children at home.” If parents are not willing or financially capable of doing it, the goals mentioned by Livingstone (2012, 14) and other authors above, would be impossible to achieve.

Another important issue is certainly the choice of content of educational ICT tools. According to Heemskerk et al. (2012, 156), many authors have argued that there must not be any obstacles to students giving personal meaning to the subject matter. The same authors claim that in order to do that, perspectives must be multicultural, non-sexist and respectful of different social classes. It means that the content is considerate of the values, manners and taboos of different cultural groups. Heemskerk et al. (2012, 168) also suggest that while designing or selecting educational tools, it is necessary to pay attention to these indicators in order to improve inclusiveness of the tools. However, “...the adaptation of ICT by teachers depends on their values and beliefs about the importance of ICT for learners (Schibeci et al., 2008, 314).”
2.1 The advantages of using ICT in teaching and learning

“The process of learning a second language may be structured in different ways – in a classroom or at home, with or without a teacher, emphasizing or minimizing grammar, gradually exposing the student to native speakers or prompt immersion. No matter where and how the learning occurs, information and communication technologies are powerful tools to improve the teaching/learning process (Jurich, 2001, 7).” The fact that ICT contributes to the development of everyone involved in education is also supported by Livingstone (2012, 20), who states that the evolution of ICT has been accompanied by changing expectations and attitudes regarding learning among teachers, students and society at large. Moreover, Livingstone (2012, 9–10) stresses that ICTs bring together traditionally separated educational technologies – books, writing, telephone, television, photography, databases, games, etc. The same author adds that they bridge forms of knowledge and literacy; they intersect places of learning – home, school, work and community. Yang (2012, 101) adds that the motive of underlying educational transformation bringing ICT tools into schools is to realign the knowledge and skills taught at school with the types of knowledge and skills that learners need to survive and compete in society. Zare-ee & Shekarey (2010) point out the advantages of ICT noting that there are five important roles that technology plays in education. According to their words, they bring the real world experience into the classroom, providing scaffolding which enables learners to participate in complex cognitive tasks, increases opportunities to receive sophisticated and individualized feedback, builds communities of interaction between teachers, students, parents and other interested groups, and increases opportunities for teacher development.
Houcine (2011) brings out advantages of ICT in foreign language teaching and learning that include the opportunity to have access to authentic materials on the web, quick feedback and the possibility to focus on one aspect of the lesson (pronunciation, vocabulary, etc.). Isisag (2012) adds the possibility to adapt easily the teaching materials according to circumstances, learner’s needs and response. It may mean pre-teaching difficult vocabulary and concepts, providing the reason for listening, reading or writing, providing study guides, worksheets, a film script, lecture outlines, a graph, a table or highlighted material, finding a text written at a lower level, looking for the same content in another medium, providing alternative methods for students, reducing the amount of new ideas, helping the student visualize what is read or heard, etc. (Bulloch, 2009). He also points out that with the help of ICT-based tools and the constantly growing number of available educational resources, language teachers can give individual and personalized guidance to the learners. The study by Balanskat et al. (2006) brings out benefits of the use of ICT tools for learners. According to their report, ICT impacts positively on educational performance, particularly in English; the use of ICT improves attainment levels of school children in English; schools with good ICT resources achieve better results than those schools that are poorly equipped. They add that ICT has a positive impact on students’ learning, their subject-related performance and basic skills. The report also stresses that even though the educational achievements of students improve through the use of ICT, and academically more capable students benefit more from ICT use, ICT also serves weak students. Zare-ee & Shekarey (2010) points out several advantages that are important in language teaching and learning. They bring out examples such as providing rich banks of resources and information, also sense of modernity and progress for teachers as well as learners. In addition, the same authors point out that ICT offers multi-media capabilities,
promotes individualized learning, facilitates distance learning, makes individualized feedback easier, gives learners and teachers opportunities for endless repeatability, can be motivating, and can be used whenever and wherever. Zounek (2005) adds to the list, associating ICT with active involvement of students, noting that “.../rather than being simply passive recipients, students may use technologies to support or assist their active involvement.”

Livingstone (2012, 17) identifies a positive effect that ICT tools have on children’s creativity, naming a range of soft skills that emphasize play, improvisation, experimentation, simulation and the ability to judge diverse information sources. However, Livingstone also admits that these are challenges for both teaching and assessment. In addition, Hsu (2011, 848) points out the importance of the use of technology for active learning, which is one of the long-standing goals for ICT integration for students. Hsu notes that technology-rich environments promote student-centred learning opportunities. The same author adds that a student-centred and technology-supported classroom is one where students routinely employ collaborative and problem-solving activities, which they benefit from for their future life. However, studies have shown that not all age groups equally benefit from the use of ICT. According to the findings of a study carried out by Livingstone (2012, 12), the mean effect size is significantly more positive for undergraduate and older learners. However, Livingstone refers to other studies that also show positive impact of ICT tools on educational performance in primary schools, particularly in English (Livingstone, 2012, 12). The same author adds that an advantage of ICT is that it can support a more flexible, learner-centred notion of education.


2.2 The disadvantages of using ICT in teaching and learning

Even though, ICT seems to be a perfect way for education to benefit from, it has also some disadvantages. Boulton et al. (2008) support Livingstone (2012, 12), suggesting that ICT “is not suitable for all learners in all situations and for all purposes, and may require some considerable learner training for effective use.” Therefore, using ICT in class may mean much overwork and extra effort from teachers to meet the needs of every single student. According to the study carried out by Benigno et al. (2007), teachers tend to lack time, sufficient knowledge of the pedagogical uses of technology as well as information on the existing software. Samuel and Bakar (2006) suggest that the negative attitude can also be one of the reasons why ICT tools are not frequently used in classrooms. According to the results of their survey, lack of ICT resources and infrastructure facilities in schools were cited as the most common reason that impedes the integration of ICT tools in the teaching and learning of English. In addition, a long waiting list to use the computer rooms, as well as exam pressure and fear of not being able to complete the syllabus were mentioned as obstacles of using ICT in classes. In addition, Deaney et al. (2003) bring out the anomaly of situations where use of ICT is promoted in classes but prohibited at examinations. Moreover, Livingstone (2012, 20) points out the debate over pedagogy – how and what children should learn, which is revitalized for the digital age, with fundamental lack of clarity over purposes undermining many initiatives. Livingstone adds that the confusion is mainly over the nature of media technologies and whether they proclaim a fundamental transformation in learning infrastructure, in which case it would be wise to think about the relations between pedagogy and society, teacher and student, knowledge and participation. Livingstone (2012, 16) also states that even though ICT has been promoted as a means of improving basic skills like reading and writing, both
enhancing exam results and reducing disadvantage in traditional assessment processes, critics still remain doubtful as exams and testing are still connected with the conception of drill-and-skill education while digital technologies tend to support a more flexible, learner-centred notion.

The results of the study by Benigno and others (2007) refer to the need for ongoing training for teachers in order to make informed decisions regarding the technological needs of all students, including those with special needs. The results of a survey carried out by Salehi & Salehi (2012) show that many teachers do not use ICT tools in the classroom because of the lack of technical support at schools and little access to the internet. All these statements are supported by the report on studies carried out in Europe (Balanskat et al., 2006), which refers to factors that impede successful implementation of ICT in teaching. The results show that teacher-level barriers include teachers’ poor ICT competence (even though teachers’ basic ICT skills have increased dramatically), low motivation and lack of confidence in using new technology. They also bring out school-level barriers, which include limited access to ICT, poor quality and inadequate maintenance of hardware as well as unsuitable educational software. Zounek (2005) points out that ICT implementation may be perceived, in some respects as a source of insecurity for teachers, which may cause even resistance to technological innovation. Zounek (ibid.) adds that overcoming these barriers is demanding in terms of time and energy on the part of individual teachers and requires support from school management. Schibeci et.al (2008, 314) point out that “the adaptation of ICT by teachers depends on their values and beliefs about the importance of ICT for learning.” There have been findings reported on the contradiction between teachers’ beliefs and practice regarding using ICT. According to Donnelly et al. (2011, 1470), there are many barriers that hinder putting their beliefs into action, for example, the
changing of teaching approaches under the pressures of preparing students for examinations. They add that an understanding of the role of external influences (e.g. curriculum, headmasters) is important to make sense of teachers’ mismatches between their beliefs and practice. Zare-ee & Shekarey (2010) bring out a list of the main disadvantages of the use of ICT in academic settings, noting that a lot of time and energy need to be spent on learning how to use ICT effectively. They add that ICT can take learners too far into individualized learning and create isolation. In addition, from the teachers’ point of view, it can sometimes be very difficult to measure the effectiveness of practices and getting intelligent feedback can also be difficult (Zare-ee & Shekarey, 2010).

2.3 ICT and students with special needs

Nowadays it is not surprising to meet a student with special needs among ordinary students. The policy of the recent years has been to integrate students with special needs into comprehensive school settings. Lindström et al. (2012, 22) note that the goal of the use of computers and computer-based devices in schools is to make education available, independently of whether the computer is used an educational tool, an alternative tool for learning, or as a compensatory tool. Brodin & Lindstrand (2003, 73) point out that studies carried out on the pupils with disabilities, mainly focus on students with serious reading and writing difficulties and the ones with autism, while pupils with intellectual disabilities have received much less attention. In addition, students with language differences, whose language performance may not be comparable to that of their peers, who they may lack cultural and linguistic experiences as well as limited vocabulary from little exposure to hearing and using English but whose non-verbal skills are age-appropriate (Nguyen, 2012, 130), have received even less attention, despite the fact that the amount of such students in comprehensive schools is bigger than the ones with serious disabilities. However, if the
findings of the survey by Lindström et al. (2012, 31) to be believed, ICT-wise, students with special needs benefit from attending a mainstream school as in special schools computers are used significantly less frequently than in mainstream schools. This finding is surprising knowing, considering the results of the survey by Lindström et al. (2012, 31), according to which there is a positive correlation between computer use and knowledge in main subjects (mathematics, literacy, and language), the basics that all children, including the ones with special needs, should acquire.

Lindström et al. (2012, 22) state that the potential of ICT to enhance teaching and learning has been proved and these technologies are known to be of value as an educational tool for all students. According to Brodin & Lindstrand (2003, 74), approaching the issue from a constructivist viewpoint, students with special needs can become participants and active problem solvers with technology’s help. The same authors add that children with disabilities can experience the joy of playing and a feeling of solidarity at the computer. Steele (2005) adds that children with learning disabilities benefit from constructivist approach because of their difficulty in generalizing from the classroom to other settings. Steele (ibid.) points out that with the realistic examples built into the instruction, the students have specific practice with generalization. The same author adds that constructivist teaching skills such as summarizing, paraphrasing and predicting, which all involve active learning help students with learning disabilities understand and remember (Steele, 2005). The results of the study conducted by Abbot et al. (2004, 229) support the thought about students with special needs becoming more active problem solvers, adding that “ICT allows those with learning difficulties or disabilities to accomplish things they otherwise would not be able to do, or would have a very difficult time doing or would otherwise be denied to them.” Lindström et al. (2012,
22) support the latter thought, noting that for students with special needs, a computer can serve as a compensatory tool, for example, in writing, browsing a book or reading. Connected with this statement, Abbot et al. (2004, 229) note that the use of a suitable ICT tool or application is also good for a child’s self-esteem. In their opinion, “where pupils with special educational needs are concerned, the nurturing and enhancing of self-esteem in order to promote learning is a priority.” Children with special needs also benefit from the experience of being included, in terms of enhanced skills in language and reading, skills for life, and skills for learning in particular (Abbot et al., 2004, 229). However, the teacher’s task is to choose an ICT tool or application that is most suitable for a student or a group of students. In this case, quoting a participant from the study by Abbot et al. (2004, 239), “dissolving boundaries will offer a child moments of delight, moments of insight, moments of wonder, pride in achievement and happiness in being accepted.”

According to Brodin & Lindstrand (2003, 72), there are some studies that report on which students are favoured or disfavoured when computers occupy a more important part in the school work. Brodin and Lindstrand (2003, 72) point out that a group that run the risk of losing out is students who cannot read quickly or who find it difficult to decipher pictures. Another group that can fall behind are those students who come from poorer socio-economic backgrounds. The same authors add that for students with physical disabilities or communication difficulties the conditions are better because the technology can create possibilities for inclusion.
2.4 The trends of using ICT in teaching and learning English in Europe and Asia

**Europe.** Relatively many studies on the use of ICT in education, approaching from different aspects have been carried out in Europe, especially in Scandinavian countries (Wikan and Molster, 2011). The results of the surveys show that schools tend to make an effort trying to implement ICT into teaching and learning by providing teachers with opportunities to participate in various ICT courses. However, teachers still express lack of ICT confidence (Wikan & Molster, 2011, 209). Moreover, even though teachers have been familiar with ICT at school for many years, they still mainly use it to prepare their teaching rather than use it to work with students during lessons (Wastiau et al., 2013, 16). However, most teachers show commitment to ICT (Wikan & Molster, 2011, 209). Wastiau et al. (2013, 17) also add that teachers who are confident in their digital skills and positive about the impact of ICT on learning, use ICT-based activities with their students more frequently.

According to the results of the study carried out among schools in European countries by Wastiau et al. (2013, 25), European policies play a major role in bringing about a digital education system and increase the number of digitally supportive schools and digitally confident and supportive teachers as well as students by regularly monitoring the process in all Member States. The findings of the same survey show that the amount of computers in schools has increased twice, compared to the year 2006. In addition, the researchers point out that computers are more often located in classrooms; however, they are also frequently found in computer labs. According to the findings of the same survey, in some European countries laptops, tablets and net books are becoming pervasive and the presence of interactive whiteboards and data projectors is also showing the tendency of increase
(Wastiau et al., 2013, 14). On the other hand, even then, the survey reveals that school heads and teachers consider that insufficient ICT equipment is the major obstacle to ICT use.

Wastiau et al. (2013, 19) point out that across the countries surveyed, students are more confident in their digital competences when they have access to ICT at home as well as at school. They add that “across the EU countries, on average 30 - 35% of students are digitally confident and supportive students.” The results of the survey carried out by Samuelsson (2010, 15) show that children use ICT in various ways, from both qualitative and quantitative viewpoint. However, there seems to be a lack in basic computer skills and seriousness about ICT use as a tool for learning. Children tend to consider themselves to be more ICT literal than they actually are.

In European schools ICT is also used to enhance different skills of students with special needs. Findings of studies (Brodin & Lindstrand, 2003, 74, Abbot et al., 2004, 238) point out that ICT helps students with special needs to become better problem-solvers and enables them to develop their cultural awareness as well as increase their motivation, confidence and self-esteem.

Asia. Schools in Asia also make efforts to integrate ICT into education. The report carried out by the south-eastern Asian Ministry of education (SEAMEO, 2010, 8) shows that governments of south-eastern Asian countries (SEAMEO member countries) have committed substantial financial resources during the past decade to bring ICT into schools. However, the same report (2010, 19) admits that SEAMEO member countries are at very different stages of integrating ICT into education. The report highlights Malaysia and Singapore moving towards the stage of ICT-mediated teaching and learning pedagogies, which are likely to equip students with competences to be competitive in the future.
As for Asian countries outside SEAMEO, according to studies, the Ministry of Education in Taiwan has been increasing the amount of ICT equipment in classrooms (Hsu, 2010, 848) and the Ministry of National Education in Turkey has made huge investments in order to attain the goal of improving the quality of education through enriching the learning environment with the help of educational software and technologies (Gulbahar & Guven, 2008, 37). Furthermore, in both countries a lot of attention has been paid on teacher training. Workshops and in-service training opportunities have been provided to help teachers develop ICT skills and improve ICT integration proficiency (Hsu, 2010, 849, Gulbahar & Guven, 2008, 37). In Taiwan, computer skills, such as word processing, multimedia editing, and website editing, as well as ICT integration skills such as design and evaluation of technology-enhanced classes have been included in these programmes (Hsu, 2010, 849). The results of the report by SEAMEO (2010, 9) show that the Philippines, Indonesia, Thailand and Vietnam have developed ICT plans and policies in education. However, due to the rural-urban gap and different levels of access to ICT infrastructure, there are still some parts that are in the applying and even emerging stage. According to the same report, the main concern for the rest of the south-eastern Asian countries (Cambodia, Lao PDR, Myanmar, Timor Leste) is access to ICT infrastructure, hardware and software. Despite the fact that steps have been taken in order to promote ICT, traditions and culture can be powerful factors that influence the implementation of ICT into education, especially in Asia and the Middle East. Introducing change into a system can be relatively easy, insuring that the change flows from policy into the classrooms can turn out to be a challenge (Robertson and Al-Zahrani, 2012, 1136). According to the results of the survey by Robertson and Al-Zahrani (2012), even though training and exposure to computers and ICT tools contributes effectively to boosting
teachers’ motivation and computing habits, where traditional views of teacher-directed learning remain unchallenged, the change is conservative and the context specific.
3. MATERIAL ADAPTATION STRATEGIES

Ready-made materials that a teacher finds online or in textbooks often need adaptation to meet their students’ needs. Matton (2010) emphasizes that “teaching strategies and educational materials need to be adapted to make them accessible to students, and also to ensure an educational activity is allowing the student to master and demonstrate the target skill.” She also brings out the three-step process of adaptation, which includes identifying the skill to be taught, evaluating what skills the educational activity is testing for, and adapting the material so the only challenge presented is the target skill. Pena Dix (2011, 13) points out that effective adaptation is the matter of congruence, which means constant striving towards congruence among several related variables: teaching materials, methodologies, students, course objectives, the target language and its context, and the teacher’s own personality and teaching style. Bulloch (2009) is of the opinion that when choosing an adaptation strategy, a teacher needs to be aware of where the student’s problems lie. In her article she gives examples of different adaptation strategies to be used in case of problems connected with listening, reading, speaking, spelling, or writing. The adaptation strategies that Bulloch (2009) suggests when the student has difficulty learning by listening, include pre-teaching difficult vocabulary and concepts, stating the objective, providing a reason for listening, teaching the mental activities involved in listening- mental note-taking, questioning, reviewing, providing study guides/worksheets, providing script of film, providing lecture outlines or visuals via the board or overhead, using flash cards, shortening the listening time required, etc. When the student has difficulty expressing themselves verbally, she suggests that teachers use written reports, artistic creations, charts, graphs, tables, maps, photo essays, teaching the student asking questions in class, etc. When the student has difficulty reading written material, Bulloch suggests using such
strategies as finding a text written at a lower level, providing highlighted material, rewriting the student's text, shortening the amount of required reading, looking for the same content in another medium (movie, filmstrip, tape), providing alternative methods for student to contribute to the group, such as role playing or dramatizing (oral reading should be optional), reducing the amount of new ideas, helping the student visualize what is read, etc. To help a student who has difficulty expressing themselves in writing and spelling, Bulloch advises using oral reports, tape-recorded reports, collage, cartoon, or other art, maps, reviews of films and presentation of an appropriate one to the class, allowing more time, shortening the written assignment (preparing an outline or summary), open-ended stories, having students make flashcards and highlight the difficult spots on the word, teaching words by spelling patterns (teach "cake," "bake," "take," etc. in one lesson), providing a tactile/kinaesthetic aid for spelling (sandpaper letters to trace or a box filled with salt or cereal to write in), etc. While Bulloch (2009) gives detailed suggestions of what adaptation strategies to use and in what cases, Pena Dix (2011, 17) summarizes the concept of adaptation strategies, which consist of adding, including expanding and extending; deleting, including subtracting and abridging; modifying, including rewriting and restructuring; simplifying and reordering.

Lenz and Schumaker (2004) point out the importance of adaptation in the case of students with disabilities saying that “for students with mild cognitive disabilities, most adaptations should be a bridge to skill development, not a substitute for intensive instruction in the skills and strategies that students will need to become independent learners.” In other words, they say that adaptations should be approached as a short-term solution to increase the probability that the students will be able to complete a task. However, Lenz and Schumaker (2004) add that there may be some cases in which short-
term adaptations become permanent adaptations if they are needed by a particular student. The same authors also point out that ideally, adaptations should be designed into curricular materials by the developers, and the built-in adaptations would be broad enough and flexible enough to assist students regardless of their disability. However, it is not often like this, so teachers need to adapt materials themselves. Lenz and Schumaker (2004) emphasize that in some cases, making and implementing adaptations can be more time consuming and complex than teaching the student the skills needed to meet a particular demand.
4. ICT TOOLS AND MOTIVATION IN FOREIGN LANGUAGE TEACHING AND LEARNING

According to Boulton et al. (2008), ICT is often thought to increase motivation. What is meant by motivation? According to Holešinska (2006), motivation, which is undoubtedly the essential part of a language learning process, can be defined as a certain push that makes students take an action. ICT can easily be the push and using ICT in the classroom makes the job of the teacher and students more challenging and easier at the same time. The results of several surveys have proved the importance of the teacher attitude and motivation. Benigno et al. (2007) stress the importance of the teachers’ motivation stating that innovation cannot cross the school threshold without teachers’ deep and active involvement. As mentioned above, today’s students can be called digital natives and teachers digital immigrants (Prensky, 2001, 1). Prensky (2001, 3) proposes a question whether digital natives are not motivated at school or whether they choose not to. The same author points out that often from the natives’ point of view their digital immigrant teachers make their education not worth paying attention to compared to everything else they experience. The same author adds that it is highly unlikely that the digital natives will change backwards. Therefore, smart teachers accept that they do not know enough about the new world and take advantage of their students to help them learn and integrate. On the other hand, not-so-smart teachers, as Prensky (2001, 3) calls them, keep spending most of their time grousing about how good things were. Benigno et al. (2007) add that, besides the choice of using or not using ICT, the educational effectiveness of any technological means mainly depends on the choice teachers make. Several other researchers (Elsaadani, 2013, Samuelsson, 2013) agree with the statements above, noting that a teacher’s role is critical for the success of digital learning environments and the key to successful
integration of ICT into education. Isisag (2012) also stresses the importance of ICT tools as motivators, saying that “lectures become more interesting and less ordinary, which boosts learners’ engagement.” The results of 17 studies carried out across Europe (Balanskat et al., 2006) show that ICT can increase enthusiasm for teaching: for example, issuing teachers with their own laptop computers is said to raise positive attitudes towards teachers’ work. Furthermore, the report refers to the fact that increased efficiency and collaboration seem to result when ICT is used to prepare lessons and this is due to a more collaborative approach between teachers, as ICT enables teachers to cooperate more and share curriculum plans with colleagues and managers. Prensky (2001, 6) supports the statements of the previous authors pointing out that it is important that today’s teachers invent digital methodologies for all subjects, at all levels in order to reach today’s students. Samuel and Bakar (2006) add that “English lessons that incorporate multimedia applications can exert powerful motivation and provide bored students with exciting new ways to learn.” However, when selecting ICT tools or applications, it is important to know the attitude of students towards it. Heemskerk et al. (2012, 166) note that students learn more when working with the tool or application they appreciate most. They add that students appreciate tools and applications with an interesting and attractive content. According to Heemskerk et.al (2012, 166), it turns out that “.../students appreciate to work in an exploratory and cooperative way with the opportunity to try things for themselves and consult their fellow students.” However, boys and girls can be motivated by different kinds of factors. According to Heemskerk et al. (ibid.), girls tend to be attracted to ICT tools with instructions that are easy to understand and work with. Their interest in ICT tools and applications also depends on how interesting they find the subject. In addition, the results of the survey (Heemskerk et al., 2012, 116) show that girls generally have fewer
ICT skills than boys do. Also, they were found to appreciate step-by-step instructions more than boys. It is also interesting to note that students of different origin tend to be motivated by different aspects of a language. The findings of the survey by Heemskerk et al. (2012, 167), who carried out a study in Dutch schools, showed that students with Turkish and Moroccan backgrounds considered focusing on language important while students originating from other African and Asian countries seemed to be attracted to applications with explanatory images, requiring less reading. Heemskerk et al. (ibid.) point out that in order to make a tool more inclusive to students from different backgrounds, it is important to take into account different levels of prior knowledge, especially regarding computer skills and language. The results of the survey by Benigno et al. (2007) show that the majority of teachers agree that ICT tools and resources have a great potential to foster inclusive practices in schools and they declare their interest and willingness to personally explore their potential benefits. Balanskat et al. (2006) state that the teachers who are exposed to ICT in positive ways have been found to use ICT in project-oriented, collaborative and experimental ways, becoming more of an advisor, critical partner, and leader to students. In Isisag’s (2012) opinion, ICT and the internet in particular provide language learners with the opportunity to use the language that they are learning in meaningful ways in authentic contexts. Wastiau et al. (2013, 19) sum up the importance of the teacher attitude noting that students’ use of ICT for learning during lessons is related to teachers’ confidence in their own ICT competences, their opinion about the relevance of ICT for teaching and learning as well as their access to ICT at school. Their survey findings provide evidence that those teachers who are confident in their digital skills and positive about the ICT impact on learning organize more frequent ICT-based activities with their students.
However, even though the list of advantages of using ICT in the classroom is rather long and it seems to be a great motivator when teaching as well as learning, the results of several surveys reveal that not all teachers and students can or are eager to use ICT tools. The findings from the study carried out by Wikan and Molster (2011, 209) show that many teachers do not feel confident about using ICT tools even though they have undergone some sort of short-term ICT training. According to the same study, less experienced and older teachers are those using ICT least. The results of another study (Elsaadani, 2013, 215) support the previous finding, stating that the attitude of the teaching staff towards ICT is related to their age, and older teachers and supervisors are more reluctant to use ICT in their work. One of the reasons why teachers are not always eager to use ICT is that they do not see the benefit for the students or themselves. Sanchez & Aleman (2011, 912) and Wikan & Molster (2011, 216) share the opinion that teachers are often unsure whether ICT will have any positive effect on the learning outcome of their students. Some teachers are of an opinion that the new tools would represent more workload and extra effort as they need to learn new teaching strategies. According to the report by Balanskat et al. (2006), the most difficult process for teachers, which also decreases their motivation, is to give up control and have more trust in students planning their work independently. The results of another study (Boulton et al., 2008) are also disappointing – ICT does not necessarily increase motivation; the learners tend to lack sufficient autonomy to make the most of it without specific training. Benigno and others (2007) support their opinion by referring to the fact that technological tools (both hardware and software) may present technological barriers to some students, especially those with disabilities. Boulton and others (2008) also summarize the situation according to the results of their survey and state that in schools teachers are faced with students who are reluctant to use ICT because they do not know
how to use it efficiently, and reluctant to find out because they think the process is uninteresting, unimportant or time-consuming. They also add that the majority of the learners tend to be less computer literate than might be expected, and there might be many learners who are not particularly motivated by technology, and may even find it demotivating. They state that despite the wide range of resources available, these learners tend to fall back on familiar, traditional tasks. In addition, Deaney et al. (2003) bring out three major considerations students’ enthusiasm for using ICT at school can be tempered by: firstly, wider skills are needed to make effective use of ICT tools; secondly, the power of technology must be strategically focused if the aim is to enhance subject teaching and learning; and finally, in spite of the fact that familiar patterns of classroom interaction are shifted by the use of ICT, teachers still remain central to the provision of structure and support.
5. THE IMPACT OF ICT ON LEARNER AUTONOMY

Besides being a motivator, ICT also improves independent learning. The use of ICT in language learning not only involves pedagogical challenges for teachers but also includes environmental and pedagogical changes for learners who are traditionally used to face-to-face teaching in classroom (Isisag, 2012). Bolton et al. (2008) also point out learner autonomy, which, according to their study, is also affected by the use of ICT. According to Boulton and others (2008), autonomy is “...the ability to take charge of one’s own learning.” Yang (2012, 105) adds that a child’s autonomy over their learning requires that children should be equipped with the learning skills needed for personalized and collaborative learning. Lim and Chai go further, stating that “autonomy is a capacity for detachment, critical reflection, decision-making and independent action” (2003, 216). It presupposes that the learner develops a particular kind of psychological relation to the process and content of learning. Lim and Chai (ibid.) add that the capacity of autonomy is displayed both in the way the learner learns and in the way they transfer what has been learned to a wider context. It means that when learners have a substantial amount of control over their rate of learning and learning sequences, they are in a better position to make judgements about their progress, monitor their own learning needs, and construct their own knowledge based on the information available. Moreover, they can ultimately adopt a more favourable approach towards learning, and operate more efficiently in the learning environment. All in all, it means that a learner should be able to make their own decisions regarding their learning process: determine their objectives, choose materials, select methods, organize their learning as well as assess their progress. Yang (2012, 104) sums it all up under the umbrella of metacognition, self-evaluation and information and digital literacy being identified as essential learning skills that students need to take
advantage of technology’s potential of enhancing learning. Yang notes that “.../metacognition requires that learners are able to design their own learning methods and reflect on their effectiveness (Yang, 2012, 104).” The same author adds that triangulating different sources of information is another essential metacognitive strategy for obtaining more accurate and objective understanding. In addition, Yang mentions self-evaluation, which is evaluation of one’s learning process as well as learning products.

Bolton and others (2008) state that ICT befits autonomy because “it is claimed to provide greater freedom and flexibility to learn at one’s pace and convenience.” According to Balanskat et al. (2006, 32), “students assume greater responsibility for their own learning when they use ICT, working more independently and effectively.” They add that from the teachers’ point of view students work more in cohesion with their own learning styles resulting in a favourable impact on both academically strong as well as weak students and students with special needs and behavioural difficulties gain in different ways from the use of ICT. Lim and Chai (2003, 215) add that the primary motivation for integrating ICT in education is to provide students with the learner autonomy to construct their own knowledge and engage themselves in cognitive operations that might not be possible in a traditional classroom. However, the results of their study reveal that learners tend to lack sufficient autonomy to make the most of the use of ICT tools without specific training. It can be one of the reasons for the lack of motivation among learners regarding the use of ICT when learning a foreign language. Learners tend to give up working on a task when confronting a difficulty which needs dealing with independently. Lim and Chai (2003, 215) suggest that “ICT is not a panacea to learning in schools. Like any tool in the learning environment, it can be used well or poorly, and care and experience are needed when using it.” Lim and Chai (2003, 217) are also of the opinion that learner autonomy can
only be understood as a social process. That is, it does not represent learners’ obliviousness to social influences but rather their intentional use of these forces. Therefore, it cannot be assumed that students automatically take up the learner autonomy provided by ICT. Lim and Chai (2003, 217) suggest that students may lack a belief system that views knowledge as complex and evolving and they might view it as simple and fixed, so they may not be capable of self-modification. Both of the aspects mentioned above can be reasons why students with language differences often have problems with the development of their learner autonomy. Compared to students with more sophisticated beliefs, less autonomous students are less likely to engage in the higher order thinking activities. Lim and Chai (2003, 225) also suggest ways to support learner autonomy. According to their words, the activities have to address the students’ belief system and their lack of learning strategies as well as motivation to learn with the ICT tools. All in all, Yang (2012, 104) stresses that “information and digital literacy are essential skills for personalised learning.” He adds that “an information-literate person must be able to target and evaluate information in terms of its validity and reliability, process and transform it into a form suitable for the learning purposes, internalise it into his or her existing knowledge framework and contribute to collective knowledge-building.”
EMPIRICAL STUDY

METHOD

In the study the following research questions were put forward:

1. What activities/ tasks do teachers of English from European and Asian countries use when teaching English to ordinary students and students with language differences using ICT tools?

2. What are the biggest problems as well as pros and cons concerning teaching English to ordinary students and students with language differences using ICT tools?

3. What can be learnt from the experience of teachers from Estonia, other countries of Europe, and from Asia?

In order to answer the questions, an online questionnaire was compiled for teachers of English. The choice of participants was random. The author’s personal contacts as well as the online lists of schools in Estonia were used to find participants for the survey. The data was collected via Free Online Surveys. For data analysis diagrams were compiled to show similarities and differences between the three target groups.

Based on the information from different sources two hypotheses were set:

1. Teachers from Estonia, other European countries and Asia use and compile similar types of tasks to be used with the help of ICT tools.
2. The biggest problems that teachers face, also experience concerning the pros and cons of using ICT tools, tend to be similar in Estonia, other countries of Europe, and in Asia.

The hypotheses are based on the knowledge that countries in Europe (including Estonia) as well as in Asia have made considerable efforts to promote the use of ICT tools in schools. In addition, as the World Wide Web is open to most countries in Europe and Asia, teachers can have access to the same materials, web sites and instructions online.
PARTICIPANTS

The survey was carried out among 79 teachers of the English language, 66% of whom were from Estonia, 19% from other countries of Europe (Greece, Romania, Italy, Hungary, Georgia, Finland, Germany, Denmark, Portugal) and 15% from Asia (Indonesia, Turkey, India, Nepal, Saudi Arabia). 92% of the participants were female and 8% male, which also reflects the current situation in schools where the percentage of female teachers is higher than the one of male teachers. All the age groups (18–25, 26–35, 36–45, 46–55, 56–65, 65+) were represented, even though most of the participants belonged to the age groups between 26 and 55 years. Most of the Estonian teachers who participated in the survey teach on the basic (41%) or/and upper secondary school (40%) levels. However, participants from Europe (58%) and Asia (43%) were secondary school teachers. The number of teachers teaching on the university level is also relatively high among Asian teachers (21%). The percentage of the teachers teaching ordinary students is the highest in every research group (Estonia 69%, Europe 73%, Asia 83%). The number of teachers teaching both ordinary students and students with learning differences is relatively small, especially among the Asian sample (17%).
RESULTS

The use of ICT tools

Most teachers in all the target groups use ICT tools when teaching ordinary students (Estonia 67%, Europe 73%, Asia 83%) or both ordinary students as well as students with language differences (Estonia 29%, Europe 20%, Asia 17%). None of the teachers from Asia uses ICT tools for teaching only students with language differences. Among Estonian and European teachers the percentages were 2% and 7%, respectively. Two per cent of the participants from Estonia do not use ICT tools at all. The reasons that were brought forth were the lack of technical equipment, knowledge and time.

![Figure 1. Use of IT tools.](image)

Figure 1 shows that some ICT tools are used more frequently than others. For example, computers and laptops as well as the internet are used most of all by teachers from all the target groups. However, Asian teachers also seem to exploit projection technology together with a computer or laptop more than teachers from Estonia or the rest of Europe. Both percentages (26% and 21%, respectively) are higher in the case of Asian
teachers than participants from other countries. Multimedia software is used less frequently than the ICT tools mentioned above. However, Figure 1 shows that European teachers (10%) use them more than Estonian (6%) or Asian teachers (7%). Estonian teachers (15%) seem to use translation and dictionary software far more often than their European (6%) or Asian colleagues (2%). The question about the use of ICT tools also enabled me to figure out how many different ICT tools teachers of English from all the three target groups use.

![Figure 2. Number of different ICT tools.](image)

Figure 2 shows that, the number of ICT tools used by Estonian teachers ranges from one to seven, which was the maximum number. However, almost half (46%) of all the participants from Estonia tend to use five different ICT tools when teaching. The number of ICT tools used by the teachers from Europe ranges between three and seven. More than half of the participants from Europe (27% and 27%), as well as Asia (25% and 25%) use either three or six different ICT tools when teaching. The number of ICT tools used by Asian teachers ranges between one and seven. However, surprisingly the percentage of teachers using only two different ICT tools is fairly high (17%).
Activities and tasks exploited and made using ICT tools

Among other questions, the participants were asked to name activities that they exploit in their classes with the help of ICT tools. The results were classified according to their nature and will be presented by target groups.

![Estonia](image)

*Figure 3. Activities exploited by Estonian teachers.*

Estonian teachers exploit activities of a different nature, most of them are connected with the internet in one way or another. According to Figure 3, listening practice is most popular among Estonian teachers and a high percentage of participants (41%) uses ICT tools for listening practice. Listening activities are often connected with visual aids – making and watching videos (including YouTube), music and songs, documentaries, films or extracts, listening tasks on CDs and DVDs, (BBC) news, ESL lab and web uploads, as well as podcasts were listed as activities that are used for practising listening comprehension. Another activity that is exploited by a high number of teachers (26%) is presentations. Estonian teachers tend to use Powerpoint and Google Docs presentations to introduce new material, revise a topic, present tasks, rules, etc. Sometimes they also have students make presentations on different topics and issues. 12% of the Estonian
participants also exploit activities classified under the category 'other’, which includes e-lessons from Macmillan, tasks from the British Council website, online materials of previous state exams, Miksike, illustrations, photos, pictures, online exercises, tasks and tests and Hot Potato tests/activities. The percentage of the use of 'other’ activities ranges between 1% and 6%. Activities practising writing, which seem to be the least popular (1%), concern only blogging. Activities practising speaking and communication, which are slightly more exploited (2%), include describing pictures online, word clouds for retelling stories and Livemocha, which is a free language learning site. Estonian teachers who use ICT tools for grammar practice (3%) refer to online grammar exercises, YouTube grammar lectures and ego4you.com (grammar exercises and tests). 4% of the activities mentioned, included entertainment (interactive tasks, games, making charts, and mindmaps). Teachers also use ICT tools to search for information and lexis (5%) and to practise vocabulary and reading (6%). Quizlet.com (browse and create), web pages of foreign newspapers, software for compiling crosswords, vocabulary exercises, newspaper articles, reading tasks and interactive whiteboard vocabulary practice activities were mentioned as good ways of practising reading and vocabulary.

![Figure 4. Activities used by European teachers.](image)
Like Estonian teachers, their colleagues from other European countries prefer to use ICT tools when practising listening (17%). Activities such as YouTube and other types of videos, listening tips and exercises online as well as on CD-s and listening to songs were brought out as means of practising listening. Presentations (Powerpoint and Prezzi) also seem to be fairly popular (17%). However, creative activities seem to be most often exploited by teachers from European countries. They involve creating an avatar, making animated films, dealing with different projects (e-Twinning, AEC-NET and other collaborative projects), creating a website, dramatizing and using Google Apps for group work). In order to search for information (11%) or have students deal with it, Wikipedia and Google are used. WebQuests also seem to be a good means of combining search for information with the cultural aspect of the language. Activities focusing on speaking (7%) and writing (6%) often to have a communication aspect in them. European teachers tend to use social networks and Skype as the means of practising speaking; story-telling and recording students’ voices were also mentioned. In order to practise writing, Moodle, blogs, e-mails and different documents are used. Besides listening, speaking and writing, reading (1%) seems to be the least popular target of practice. Only articles were mentioned as means of practising reading using ICT tools. On the other hand, entertaining activities, such as tasks on interactive CD-ROMs, crossword puzzles and online games are exploited more often (6%) and activities that are categorized under the title ‘other’ are even more popular (14%). They include online exercises, tasks using educational software, Hot potato tests and activities, worksheets and human rights resources. The results show that while Estonian teachers use ICT tools to practise and drill, teachers from Europe spend more time to develop creativity, put the language skills into practice and give their students opportunities to use the skills in real life tasks rather than practise a certain piece for a test.
Figure 5. Activities used by Asian teachers.

Similar to the data from Estonian and European teachers, Asian teachers also prefer to use ICT tools when practising listening (40%). YouTube and other types of videos, as well as songs are preferred, but also audio listening tasks and watching animated films were mentioned. Similarly to the preferences of the Estonian and European participants, Asian teachers also tend to use Powerpoint presentations rather often (29%). Activities used to practise reading (3%), speaking (3%), and vocabulary (3%) were little used by Asian participants. The use of digital books was mentioned as a means of practising reading, Proshows for vocabulary and karaoke to practise speaking and pronunciation. Asian teachers also use online games as entertaining activities (6%). Several activities, which could not be categorized under any heading mentioned above because they were not described or explained clearly enough, are referred to as ’other’. These are online exercises, tasks on an interactive whiteboard, activities from free websites and lesson plans. The results of the present study suggest that the teachers from Asian countries do not use ICT tools to practise writing; nor do they use them in order to develop creativity in students. The number of different activities used by Asian teachers is significantly smaller than in the case of teachers from Estonia or other European countries.
The survey also tried to find out if teachers who teach students with language differences use different kinds of materials from the ones they exploit when teaching ordinary students. They were also asked to specify in what way the materials differ.

**The use of learning materials**

![Figure 6. Materials used when teaching students with language differences.](image)

The results show that participants from all the target groups prefer to use the same materials when teaching students with language differences. However, most teachers shared the opinion that materials should often be altered. Estonian teachers often adapt materials to make them suitable for students with language differences. They make tasks simpler, instructions more step by step, provide more answers and hints, and use games more often. They also use the individual approach and give more detailed help as well as extensive feedback. The European teachers mentioned that sometimes they use different tasks with similar objectives and use the same topics on different levels depending on the students’ skills. Teachers in Asia give students different tasks based on their learning ability. They also try to use activities in accordance with the target students’ needs, competences, level, learning abilities, and background. Comparing the specifications of the teachers from all three target groups, it is obvious that Estonian teachers specified their
methods in a detailed way while European and Asian teachers referred to the differences of tasks more generally.

The survey also focused on whether teachers of English prefer ready-made tasks with ICT tools or whether they prefer to compile their own tasks and exercises. It turns out that 1% of all the participants from Estonia never use ready-made tasks, and 4% of the Estonian teachers always use ready-made tasks while the rest (94%) sometimes use ready-made tasks and sometimes compile their own tasks. Among European and Asian teachers there were no extreme variants. All the participants sometimes use ready-made tasks.

Surprisingly, more than half of the participating Estonian teachers (59%) wrote that ready-made tasks have no shortcomings. However, the list that was given by the rest of the teachers (41%) was rather long. In their opinion, the tasks are not always suitable for students with language differences. They often need to be adapted, even though browsing them can generate good ideas, ready-made tasks frequently contain grammar errors, the level of difficulty of ready-made tasks can be too high or too low – they can be too challenging or not challenging enough, specific topics may need modification. Ready-made tasks can sometimes be too specific, oriented to a different target group, or they might not be appropriate for the current curriculum, for particular students, or they might not be compatible with the available computer software. Estonian teachers also find it difficult to find tasks on a specific topic for a specific level that practise exactly the same things that they currently focus on.

Most of the teachers from Europe (53%) and Asia (50%) do not find ready-made tasks flawless. Teachers from Europe bring out the following shortcomings: the material or the language level required is not suitable for the majority of the class, ready-made tasks make it difficult for a teacher to get feedback, they are not flexible and sometimes not
specific enough. Teachers from Europe also agree with Estonian teachers about tasks needing adaptation, they are not always challenging enough. Asian teachers also bring out the cultural aspect of the ready-made tasks; they can sometimes be culturally inappropriate and need to be adapted to the local context.

Figure 7. Fields not covered by ready-made tasks.

Figure 7 shows the opinion of the teachers on whether they think every possible field of the English language learning is covered by ready-made tasks. According to Figure 7, most teachers from all the target groups agree that there are ready-made tasks available for practice in every possible field of English language learning. 12% of Estonian, 6% of European, and 7% of Asian teachers consider listening to be one of the fields that does not have enough ready-made tasks. 5% of Estonian, 6% of European and 7% of Asian teachers think the same about ready-made tasks on language structures. The field of speaking is also considered to be less covered by Estonian (10%) and Asian (25%) teachers. Estonian teachers (4%) also point out ready-made tasks on songs and tasks on the elementary level while teachers from Europe (6%) bring out the lack of ready-made tasks on cultural aspects.
As noted, most of the participants compile tasks and exercises with the help of ICT tools, as well as adapt ready-made tasks they find on the internet and from other sources. The participants were asked what adaptation strategies they have used to make them suitable for students with language differences.

![Figure 8. Adaptation strategies used by teachers of all target groups.](image)

All the teachers were given a list of adaptation strategies: preteaching difficult vocabulary and concepts; stating the objective and providing reasons for writing / reading / listening; providing study guides / worksheets, film scripts / listening tasks / songs, lecture outlines, chart, graph or a table; finding a text written at a lower level; providing highlighted material; shortening the amount of required reading; looking for the same content in another medium; providing alternative methods for students to contribute to the group, such as a role play or dramatization; reducing the amount of new ideas; helping a student visualize what is read or heard. In addition, an option was offered to add one or several strategies of their own, which was unfortunately not used by any participants. However, the results show that the choices of teachers from all the three target groups are more or less similar, the choices of Estonian teachers being in many aspects more similar to the ones of the teachers from other European countries than from Asia. According to
Fig. 8, the representatives from all the target groups prefer preteaching difficult vocabulary and concepts (Estonia 12%, Europe 13%, Asia 14%), as well as providing study guides and worksheets (Estonia 11%, Europe 11%, Asia 12%) and shortening the amount of required reading (Estonia 10%, Europe 9%, Asia 10%). Asian teachers prefer visualization of what is heard or read (14%) significantly more often than teachers from Estonia (9%) or other parts of Europe (8%), while they rarely provide lecture outlines. The strategies connected with looking for the same concept in another medium and using role plays or drama as alternative methods, are exploited significantly less by Asian teachers (2% and 2%, respectively) than by teachers from Estonia (6% and 6%) or from other countries of Europe (6% and 8%, respectively). However, European teachers seem not to prefer reducing the amount of new ideas as an adaptation strategy. The results of the survey suggest that, teachers from Estonia tend to exploit all the adaptation strategies and the percentages are rather balances while teachers from Europe and Asia seem to have certain preferences and some strategies are not exploited at all.

As noted, teachers from all the target groups prepare their own tasks to use with ICT tools. Figure 9 gives an overview of what kind of materials teachers from Estonia have compiled.

![Estonia](image)

**Figure 9.** Materials prepared by Estonian teachers.
32% of all the participants mentioned preparation of worksheets and information sheets. A high proportion of teachers (16%) have compiled entertaining tasks like crosswords, word search puzzles, quizzes, games and jeopardies. More than ¼ of all the participants from Estonia (15%) have compiled Powerpoint or Prezzi presentations. Teachers have also compiled tests (5%), grammar and vocabulary exercises (7%), listening activities (1%), webquests and questionnaires (9%), blogs, web pages and e-courses (4%), hot potato tasks (3%) and other kinds of tasks (4%) including surveys, storybooks, hometask check-ups, gridlines and diplomas. 4% the participants mentioned not having compiled any materials.

![Europe](image)

Figure 10. Materials compiled by European teachers.

The types of materials European teachers have compiled are more or less similar to the ones compiled by their colleagues from Estonia. The fact that the the number of different types is fairly smaller can be caused by the lower number of participants from other European countries. Similarly to Estonian teachers, participants from other European countries have also compiled worksheets most often (31%). Worksheets are followed by webquests and questionnaires (17%). Compared to Estonia, there are slightly more teachers from other parts of Europe who tend to compile webquests and questionnaires. In
addition, participants from Europe have compiled Powerpoint presentations (14%), entertaining activities (11%), including games, quizzes and crosswords, also blogs and websites (8%), grammar explanations and exercises (8%), vocabulary exercises (3%) and other kinds of tasks including hypertexts, videos and schemes (8%).

![Asia](image)

*Figure 11. Materials compiled by Asian teachers.*

Teachers from Asia seem to prefer compiling worksheets. 60% of all the participants from Asia have compiled them. The other activities mentioned are compiled by a lower number of teachers. The types of activities that Asian teachers have compiled include questionnaires and webquests (8%), websites (8%), entertaining activities, for example, clip arts and quizzes, also presentations (8%), charts and graphs (4%) and reading tasks (4%).

**Obstacles when using ICT tools**

One of the aims of the current survey was also to find out if teachers of English encounter problems or obstacles when using ICT tools in classes.
Figure 12. Obstacles encountered when using ICT tools in classes.

A high number of participants from all the three target groups (Estonia 37%, Europe 44%, Asia 39%) seem to struggle with technical equipment. Teachers (Estonia 25%, Europe 32%, Asia 28%) find it either unreliable or difficult to handle (Estonia 12%, Europe 12%, Asia 11%). Teachers from the target groups (Estonia 19%, Europe 12%, Asia 22%) also connect the use of ICT tools with much pre-work. Some problems are connected with motivation. Several teachers from all the target groups (Estonia 16%, Europe 20%, Asia 6%) agree that instead of doing a task on the internet, students spend time playing games or chatting on Facebook. Estonian (5%) and Asian (11%) teachers also find that students often lack motivation. 11% of Estonian, 8% of European and 11% of Asian teachers also consider it difficult to find suitable-level tasks for all students. The problem mentioned previously and the lack of motivation may be also some of the reasons why students prefer playing games or chatting online instead of doing the tasks their teacher wants them to do. What is most surprising about the results of the final topic is that even though the number is not high, there are still some teachers in Estonia who do not know how to use ICT tools well enough to exploit them in class (2%), find materials to use with ICT tools (2%) or how to adapt ready-made materials (2%).
DISCUSSION

The composition of the sample of the current research paper clearly refers to the situation that we have in schools where most subjects are taught by female teachers. The Commission Staff Working Document (2012, 8) of the European Commission states that in European countries women are over-represented in primary and secondary education. According to their information, in 2009, in almost all Member States over 60% of teachers were women. In the Baltic States, the number was even higher - 80%. According to Postiglione and Tan (2007, 154), the ratio of male to female teachers is in the range 4/6, or 3/7. Regarding the resources mentioned previously, the sample of the current research reflects the gender-wise reality.

Regarding the age of teachers in Asia, Postiglione and Tan (2007, 154) mention that trends in the average age of full-time teachers are constantly increasing, the oldest average age of teachers in upper secondary schools, for example, being 43.8 years. The Commission Staff Working Document (2012, 8) of the European Commission supports the view, stating that “in many Member States, the majority of teachers currently in employment are in the highest age groups (40 – 49 and older than 50).” In the light of this information, it seems that the sample does not reflect to the reality age-wise. However, the sample certainly reflects which age groups are most likely to use ICT tools for teaching purposes.

The results show that most teachers from all the three research groups use ICT tools to teach English to ordinary students only. A rather equal percentage from every research group uses ICT tools to teach ordinary students as well as students with language differences. Actually, the number of the teachers belonging to the second group mentioned
can be bigger as teachers often cannot distinguish between lazy students and students with language differences. As stated by Nguyen (2012), the language performance of students with language differences may not be comparable to that of their peers; they may lack cultural and linguistic experiences, limited vocabulary from little exposure to hearing and using English. When communicating, these students shift from one language to another within an utterance; an accent or dialect may be the impediment. However, their non-verbal skills (gestures, facial expressions, physical proximity) are age-appropriate. It is obvious that a teacher should be aware of the existence of students with language differences and not to regard them as ordinary students who are lazy or students with general mental disabilities. One of the reasons why most participants claim not to teach students with language differences may result from the fact that the sample includes a large number of high school and college or university teachers. On a higher level, students with language differences can be more difficult to identify.

The findings show that most teachers use ICT tools when teaching ordinary students. It is rather understandable as the abilities, preferences and reactions of ordinary students are more or less predictable and it is relatively easy for a teacher to choose materials online, which are usually compiled for ordinary students. However, there were some teachers among participants from Estonia and other European countries who use ICT tools to teach English to students with language differences. For a teacher, it usually means much extra work as ready-made materials usually need to be adapted considering the specific needs of the students with language differences and sometimes a teacher has to compile tasks that serve the needs of a specific student. However, having contributed to it, teachers certainly benefit from all the extra work done by having students who are more motivated and whose self-esteem increases with the experience of independent learning.
The fact that the participants from Estonia included teachers who claimed not to use any ICT tools in their work at all, was rather surprising. The main reasons that were mentioned were the lack of technical equipment, knowledge and time.

It appears that of ICT tools, computers or laptops are exploited most often, mostly hand in hand with the internet. It is not surprising considering the amount of options the internet offers. The frequent use of projection technology and visual media is not surprising either. First of all, projection technology was the pioneer and it has been developed and exploited since the year 1420 (Marples, 2008). At school, projection technology has been used since the middle of the 20th century (ibid.) and together with visual media, they are effective ways of supporting students’ visual memory. Cohen et al. (2009) point out the importance of visual memory by stating that “the striking aspects of the original picture memory experiments are the speed and ease with which complex visual stimuli seem to slide into long-term memory.” They add that “hundreds or thousands of images, seen for a few seconds at a time, are available for subsequent recognition.”

Regarding the previously mentioned facts, it is natural that teachers tend to stick to good old tools that have served them for years and that have been proved efficient. Modern ICT tools like interactive whiteboards or multimedia software are used less frequently. The reason might be lack of interactive whiteboards at schools or the lack of knowledge of how to use them or how to use multimedia software. Teachers often tend to be rather conservative when it comes to new technical devices. As noted, time is also an important factor. Teachers often do not have time to learn about the possibilities of new tools and prefer using the methods that have served them for years. However, the research shows that most teachers use several ICT tools in class. An average teacher in Estonia uses five different ICT tools, while among teachers from other European countries or from Asia, this
number is between three and six. Among Asian participants the number of teachers using only two different ICT tools was fairly high, those two ICT tools being a laptop/computer and projection technology. The reason can be the lack of modern technical equipment in some schools as well as the conservative approach to teaching.

Activities to be exploited with ICT tools are most frequently in accordance with the most popular ICT tools. Presentations with projection technology are created and used to teach different topics and grammar issues; a variety of internet options are used to practise listening, reading, speaking and writing skills as well as to broaden the range of vocabulary and to motivate students by letting them have reasoned, educational fun. According to the results of the survey, it turns out that the activities and tasks Estonian teachers exploit using ICT tools focus on practising certain skills of the English language (listening, reading, speaking, writing, language structures and vocabulary) rather than developing team work or creativity. Teachers from other European countries also use ICT tools to practise the skills mentioned previously, however, their choice of activities and platforms often differs from the ones of Estonian teachers and enables their students to benefit from those activities more than simply practise a certain skill. The European teachers who took part in the survey tend to participate in various collaborative projects and exploit social networks to enhance the collaboration skills and creativity and bring the language learning out of the classroom. This is an approach that the Estonian teachers, including myself, should also head for – to make learning the language more practical, let students use their skills in real interactions. That would enable a teacher to develop creativity, collaboration and communication skills as well as critical thinking in students. Comparing the answers from Asian teachers to the ones from Estonia and other countries of Europe, it appears that the number of different activities used by Asian teachers is significantly smaller than the
one used by teachers from other participating groups. As mentioned above, it can be
connected with the fact that teachers from Asia may have more conservative approaches
towards teaching and they may prefer exploiting the tasks and activities they have used
several times before rather than try new ones. It may also be connected with the lowest
number of participants from Asia.

The results show that participants from all the target groups prefer to use the same
materials, ready-made tasks or their own tasks, when teaching ordinary students and
students with language differences. However, most teachers shared the opinion that they
often need to alter materials to make them meet their students’ needs. Bar-Yam et al.
(2002) refer to the disadvantages of convergent teaching, claiming that “the students are all
expected to strive toward one goal of learning specified required knowledge; some may
attain it and others may fall by the wayside or be given some remediation with limited
results. It is obvious that such a system leaves students with language differences at a
disadvantaged position.“ However, the same authors are also of the opinion that “even
when all the students are taught the same material, teachers can use different methods,
different techniques or different media, to cater to individual differences in abilities and
personality characteristics.” One of the options can be allowing students work at their own
pace. This is an option where the use of ICT tools, especially the internet, can certainly be
helpful. In addition, as noted, teachers can adapt tasks by using adaptation strategies. The
results of the present study show that the choices of teachers from all the target groups are
more or less similar. The representatives from all the three target groups prefer preteaching
difficult vocabulary and concepts, providing study guides and worksheets and shortening
the amount of required reading. The results are not surprising as these rather traditional
adaptation strategies already stretch back to the grammar-translation method. It shows that
teachers tend to be rather conservative in their choice of adaptation strategies. According to Lake (2013), the grammar-translation method, which is not widely used nowadays, is about learning vocabulary and grammar rules by doing drills and translation exercises. However, even though the grammar-translation method is not actively practised in today’s schools, the importance of acquiring vocabulary, especially in context, is still significant.

The range of materials compiled by teachers from all target groups is fairly wide. However, it also corresponds to their choice of adaptation strategies. As noted previously, one of the adaptation strategies teachers use is providing guides and worksheets. One of the most common types of material compiled by teachers of all the target groups is worksheets. Presentations are also fairly common, probably because of the wide range of opportunities they offer. Lee (2011) brings out advantages of Powerpoint, the most common type of presentations. According to his words, Powerpoint presentations receive and enhance the attention and interest of the intended audience rather easily, its tools are user-friendly and easy to follow with the various tips and samples offered by the programme, and it can be used as an effective tool for illustrating images and visuals that are difficult to draw with the use of traditional drawing tools. In addition, Powerpoint presentations are not the most recent ICT tools, which can also be one of the reasons why they are used rather widely. Even though teachers also compile other types of tasks (entertaining activities, games, quizzes, web quests, questionnaires, etc.), the results of the study still show that most teachers tend to be rather conservative in their choices concerning making their own materials.

As noted, there are obstacles that keep teachers from using ICT tools in classes. According to the results of the survey, a high number of participants among from all the three target groups struggle with technical equipment. Teachers find it either unreliable or
difficult to handle. The fact that Information Technology keeps developing and more and more new, improved devices are launched to be used for education purposes, adds to the problem. Teachers often do not have time to acquaint themselves with all the opportunities that information technology offers. Previous researchers support the results of the current study. According to the study carried out by Benigno et al. (2007), teachers tend to lack time, sufficient knowledge of the pedagogical uses of technology as well as information on the existing software. Samuel and Bakar (2006) pointed out the lack of ICT resources and infrastructure facilities in schools as the most common reason that impedes the integration of ICT tools in the teaching and learning of English. Balanskat et al. (2006) add that besides teachers’ poor ICT competence, low motivation and lack of confidence in using new technology, limited access to ICT, poor quality and inadequate maintenance of hardware as well as unsuitable educational software can be obstacles considering using ICT in classes.

Teachers from all the target groups also connect the use of ICT tools with too much pre-work. Using ICT in class often means that the teacher has not only to adapt tasks or methods to meet the needs of particular students but change their whole view on teaching and learning from the traditional teacher-centred, didactic approach to the student-centred constructivist approach (Lee et al., 2007, 1). The same authors suggest that one way to effectively integrate ICT into classroom teaching is for teachers to learn to implement different constructivist instructional strategies such as cooperative learning, problem-based learning, or knowledge building without realising the underlying theoretical considerations. The mentioned suggestions should also be a way to increase students’ motivation, which was also referred to as being one of the obstacles of using ICT tools in classes. The results of 17 studies carried out across Europe (Balanskat et al., 2006) show
that using ICT tools in classes helps increase motivation in students. These results are supported by Samuel and Bakar (2006), who add that “English lessons that incorporate multimedia applications can exert powerful motivation and provide bored students with exciting new ways to learn.” On the other hand, many teachers participating in the current study claim that their students pay more attention to playing games or chatting online instead of dealing with the tasks their teacher wants them to do. It can be associated with poor skills of learner autonomy, especially regarding students with language differences. According to Boulton et al. (2008), learners tend to lack sufficient autonomy to make the most of the use of ICT without specific training. So, being faced with a difficulty, the student does not make any effort to overcome it but gives up and finds another pastime. Boulton and others (2008) offer one more explanation, suggesting that students are reluctant to use ICT because they do not know how to use it efficiently, and reluctant to find out because they think the process is uninteresting, unimportant or time-consuming. They also add that the majority of the learners tend to be less computer literate than might be expected.
CONCLUSION

The present study showed that despite the wide choice of ICT tools and internet resources, which are available for every teacher all over the world, the range of the tasks and activities used by teachers is still slightly different in Estonia, compared to other countries of Europe, and Asian countries. Previous research shows that countries of Europe (including Estonia) and Asia have made huge investments during the past decade to implement ICT into education. However, many countries, especially in Asia, are still lacking access to the necessary hardware, software, or the Internet. Therefore, the range of ICT tools as well as tasks and activities that Asian teachers exploit is not as wide as the one used by teachers from Estonia or other European countries. However, even then the choice of the tasks and activities differs between teachers from Estonia and participants from other countries of Europe. According to the results of the current survey, Estonian teachers pay a lot of attention to the drill of different language skills (language structures, vocabulary, reading, listening, etc.). They use a wide range of different websites and online materials. The range of activities suggested by the participating teachers from other parts of Europe is not as wide, which might be due to the lower number of participants of this group. However, the teachers from other countries of Europe who took part in the survey seem to prefer to focus on developing creativity in students and letting them put their language skills into practice more often through projects, acting, making videos, etc. On the other hand, as mentioned above, the amount and variety of different resources and sites used by Estonian teachers is much bigger than by other two groups of respondents. It can be explained by the fact that the number of respondents from Estonia is significantly bigger than the number of participants from the other two groups.
The results of the present survey reveal that most teachers use the same materials while teaching students with language differences. However, materials are often adapted using adaptation strategies.

In the lights of the first hypothesis, teachers from all the three research groups prefer to use and make worksheets most often. Teachers from Estonia and other countries of Europe also use web quests while Asian teachers prefer making presentations. Teachers from all the research groups prefer using ICT-related tasks to develop listening skills.

The second hypothesis was associated with problems that teachers face when using ICT in classroom. According to the results of the current survey, a majority of participants from all the research groups consider technical equipment to be unreliable. Many teachers also agree that using ICT-related tasks and activities in classes requires too much pre-work and the results are not always what teachers expect because when working on a computer, for example, students often prefer playing online games or chatting with friends instead of dealing with their tasks.

However, the variety of tasks and resources that teachers from Estonia, other countries of Europe and Asia mentioned in the survey is wide. Moreover, it is a good resource bank for teachers who are in need for ideas to integrate ICT into their classes. On the other hand, in order to complete even a longer list, an additional research should be carried out with a bigger number of participants from European and Asian countries.
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APPENDIX 1

Questionnaire

Dear colleagues,

I am a Masters of Art (MA) student at the University of Tartu, Estonia, carrying out a survey to find out what Information and Communication Technology (ICT) tools teachers in Europe and Asia use when teaching English as the second language to ordinary students and students with language differences. Nguyen (2012) uses a word combination language differences to refer to students with language learning problems and offers an explanation for distinguishing language differences from language learning disabilities. He suggests that for students with language differences, their language performance may not be comparable to that of their peers; they may lack cultural and linguistic experiences, limited vocabulary from little exposure to hearing and using English. When communicating, these students shift from one language to another within an utterance; an accent or dialect may be the impediment. However, their non-verbal skills (gestures, facial expressions, physical proximity) are age appropriate.

The research aims at collecting material about internationally positive experience in the field mentioned above. The topic was born out of necessity as we are in the situation where there are no proper study resources here, in Estonia, to teach English to students with language differences. Therefore I am very interested in what approaches and activities you use and I would be very grateful if you could spend 10-15 minutes of your time answering the questions below. This survey is anonymous and used for my Master's thesis only. Thank you! Your contribution will be most appreciated.
1. Gender Female/ Male

2. Age
   a) 18-25
   b) 26-35
   c) 36-45
   d) 46-55
   e) 56-65
   f) 65+

3. Country

4. Do you teach in….?
   a) elementary school
   b) basic school
   c) high school
   d) college
   e) university

5. Do you teach….?
   a) ordinary students
   b) students with language differences
   c) both ordinary students and students with language differences
6. Do you use ICT (Information and Communication Technology) tools when teaching?

   a) Yes

   b) Yes, when teaching ordinary students

   c) Yes, when teaching students with language differences

   d) No

7. If you answered “no” to the previous question, please give the reason why ICT (Information and Communication Technology) tools are not used.

   a) I use ICT tools

   b) I do not use ICT tools because of the lack of time

   c) I do not use ICT tools because of the lack of technical equipment

   d) I do not use ICT tools because of the lack of knowledge

   e) Other (please specify)

8. What ICT (Information and Communication Technology) tools have you used?

   a) I have not used any ICT tools

   b) computer, laptop

   c) projection technology

   d) interactive whiteboard

   e) visual media (TV, video)

   f) internet
g) multi-media software

h) translation and dictionary software

i) other (please specify)

9. Please name/ describe activities that you have exploited using ICT tools (e.g. Powerpoint presentations, listening tasks using YouTube videos, etc.). Please describe the activities as thoroughly as you can.

10. Do you use different kinds of materials/ tasks when teaching students with language differences and when teaching ordinary students? How do the tasks differ?

a) I use the same materials when teaching English to students with language differences as well as to ordinary students.

b) I use different types of tasks when teaching English to students with language differences. (Please specify as thoroughly as you can)

11. Do you use ready-made tasks/ activities?

a) Yes, I always use ready-made tasks

b) I sometimes use ready-made tasks and sometimes compile tasks myself

c) No, I never use ready-made tasks

12. What are the shortcomings considering ready-made tasks?

a) there are no shortcomings

b) there are some shortcomings (Please specify as thoroughly as you can)

13. What are the fields that have not been covered by ready-made tasks?

a) there are tasks available in every possible field of foreign language learning
b) listening  
c) speaking  
d) reading  
e) writing  
f) vocabulary  
g) language structures  
h) other (please specify)

14. Have you adapted ready-made tasks/materials to make them suitable for students with language differences? What adaptation strategies have you used?

a) I have never used any adaptation strategies  
b) pre-teach difficult vocabulary and concepts  
c) state the objective, providing a reason for listening/ reading/ writing  
d) provide study guides/ worksheets  
e) provide script of film/ listening task/ song  
f) provide lecture outlines  
g) provide a chart, graph, or table  
h) find a text written at lower level  
i) provide highlighted material  
j) shorten the amount of required reading  
k) look for same content in another medium (movie, filmstrip, tape)
l) provide alternative methods for student to contribute to the group, such as role playing or dramatizing

m) reduce the amount of new ideas

n) help the student visualize what is read/heard

o) other (please specify)

15. What materials/tasks have you compiled/created to be exploited using ICT tools (e.g. worksheets, web quests, etc.)

16. What obstacles have you encountered connected with using ICT tools when teaching English to students with language differences?

 a) technical equipment can be unreliable

 b) some pieces of technical equipment can be difficult to handle

 c) I cannot use an ICT tool

 d) I rely on ICT tools too much

 e) too much pre-work

 f) I do not know where to find materials

 g) I do not know how to adapt ready-made materials/tasks

 h) it is difficult for me to find tasks, the level of difficulty of which is suitable for all students

 i) students are not motivated

 j) while doing a task on the internet, students spend time playing games or hanging around in social networks instead of focusing on the task
k) other (please specify)
RESÜMEE

TARTU ÜLIKOOL

INGLISE FILOLOOGIA OSAKOND

FLORIKA KOLBAKOVA

THE USE OF ICT AMONG THE TEACHERS OF ENGLISH IN ESTONIA BY COMPARISON WITH EUROPE AND ASIA

(Infotehnoloogiliste vahendite kasutamine inglise keele õpetamisel Eestis võrdluses Euroopa ja Aasiaga)

Magistritöö

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Lehekülgede arv: 87

Annotatsioon:

Infotehnoloogia (IT) osatähtsus nii voodikeelte õppimisel ja õpetamisel kui õpetöös tervikuna on viimasel aastakümnel oluliselt suurenenud. IT vahendid aitavad õpetööd vaheldusrikkamaks ja huvitavamaks muuta, ka on IT vahendite kasutamine töös digitaalajastu õpilastega suuresti mõõdupäästliku ning vastasel korral on õpetajal suhteliselt keeruline püüda ja hoida
digiajastu õpilaste tähelepanu. Ent huvitavatele ja uuenduslikele digitaalsetele õpematerjale vaatamata on lõhe tava- ning erivajadustega õpilaste teadmiste ja oskuste vahel järk järgult suurenenud. Selle põhjuseks on spetsiaalselt õpiraskustega õpilastele suunatud õpematerjale (nii traditsiooniliste kui digitaalsete) puudus.


Analüüsi eesmärgiks oli saada teada missuguseid IT vahendeid, samuti ülesandeid ja tegevusi kasutavad inglise keele õpetajad oma töös tavaõpilaste- ning erivajadustega õpilaste, kas õpetajad koostavad materjalid ise või kasutavad valmismaterjale, kas ja kuidas nad materjale kohandavad, milliste raskustega puutuvad õpetajad kokku kasutades IT vahendeid inglise keele õpetamisel. Vastuste saamiseks viidi läbi online-küsitlus Eestist, teistest Euroopa riikidest (Kreekast, Rumeeniast, Itaaliast, Ungarist, Gruusiast, Soomest, Saksamaalt, Taanist, Portugalist) ning Aasiast (Indoneesiast, Türgist, Indiast, Nepalist, Saudi Araabiaast) pärit inglise keele õpetajate seas. Vastustest selgas, et enim kasutatakse internetiühendusega laua- ja sülearvutit ning projektorit, eeskätt esitluste tegemiseks. Enamik õpetajaid kasutab IT vahendeid tavaõpilaste õpetamisel, vähem kasutatakse infotehnoloogia vahendeid erivajadustega laste õpetamisel.

Tulemustest selgub, et küsitletud peavad infotehnoloogia vahendite kasutamisel tunnis põhiliseks takistuseks tehniliste vahendite ebausalduväärsust ning nende kasutamise keerulisust. Samuti leiab enamik osalejaid, et IT vahendite kasutamine tunnis nõuab õpetajalt palju lisatööd, mis alati ei õigusta ennast, sest õpilased ei pruugi olla motiveeritud.

Käesoleva uurimuse raames õpetajate mainitud ja kirjeldatud võtte ning ülesannete hulk on piisavalt mahukas, et pakkuda ideid, kuidas integreerida infotehnoloogia võimalusi inglise keele tundisesse. Teisalt leiab töö autor, et kuna käesolev töö kujunes rohkem eestikeskseks, peaks läbi viima uurimuse, mis keskendaks enam Euroopa riikidest ning Aasiast parit õpetajate kogemusele IT integreerimisel võõrkeele tundisesse.

Märksõnad: võõrkeeleõpe, IT võõrkeeletunnis, keelelisti erivajadustega õpilane
Lihtlitsents lõputöö reprodutseerimiseks ja lõputöö üldsusele kättesaadavaks tegemiseks

Mina_________________Florika Kolbakova __________________________________________

(autorinimi)

(isikukood:
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1. annan Tartu Ülikoolile tasuta loa (lihtlitsents) enda loodud teose
_________The use of ICT among the teachers of English in Estonia by comparison with Europe and Asia_____________________________________________________________,

(lõputööpealkiri)

mille juhendaja on ___________Enn Veldi____________________________________,

(juhendajanimi)

1.1. reprodutseerimiseks säilitamise ja üldsusele kättesaadavaks tegemise eesmärgil,
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Tartus_____15.05.2014_________ (kuupäev)

________Florika Kolbakova___________

(allkiri)