The Journal of Teaching English with Technology

ISSN 1642-1027

Publishers

IATEFL Poland Computer Special Interest Group

University of Nicosia

Maria Curie-Skłodowska University

Vol. 16 NO. 3 July 2016

The Journal of

Teaching English with Technology

(TEwT)

Publishers

IATEFL Poland Computer Special Interest Group

University of Nicosia

Maria Curie-Skłodowska University

ISSN 1642-1027



Editors-in-Chief

Jarosław Krajka, Maria Curie-Skłodowska University, Poland Christopher Alexander, University of Nicosia, Cyprus

Statistics Editor

Ferit Kilickaya, Mehmet Akif Ersoy University, Turkey

Assistant to the Editor

Kamila Burzyńska, Maria Curie-Skłodowska University, Poland

Social Media Assistant

Hussein Meihami, Shiraz University, Iran

Site Administrator

Andreas Andreou, University of Nicosia, Cyprus

MEMBERS OF THE EDITORIAL BOARD

Antonie Alm, University of Otago, New Zealand

Atef Odeh Suleiman AbuSa'aleek, Oassim University, Kingdom of Saudi Arabia

Abdelmajid Bouziane, Hassan II Mohammadia University, Morocco

Tita Beaven, Open University, UK

Leanne Cameron, Macquarie University, Australia

Maria Carmen Campoy Cubillo, Universit Jaume I, Spain

James Dalziel, Macquarie University's E-Learning Centre of Excellence, Australia

Robert Debski, University of Melbourne, Australia

Joy Lynn Egbert, Washington State University, USA

Elżbieta Gajek, Warsaw University, Poland

Kristi Jauregi, University of Utrecht, the Netherlands

Maria Kordaki, University of the Aegean, Greece

Vladimir Krasnopolsky, East Ukrainian Volodymyr Dahl National University, Ukraine

James Leigh, University of Nicosia, Cyprus

Spyros Papadakis, Hellenic Open University, Greece

Salomi Papadima, Cyprus University of Technology, Cyprus

Anna Franca Plastina, Universita della Calabria, Italy

Włodzimierz Sobkowiak, Adam Mickiewicz University, Poland

Vance Stevens, Petroleum Institute, Abu Dhabi

Ursula Stickler, Open University, UK

Michael Thomas, University of Central Lancashire, UK

Cornelia Tschichold, Swansea University, UK

Katarina Tuinamuana, Australian Catholic University, Australia

Mark Warschauer, University of California, USA

Shona Whyte, Universite Nice, France

Katerina Zourou, University of Luxembourg, Luxembourg

BOARD OF REVIEWERS

Katarzyna Alexander, University of Nicosia, Cyprus

Stan Bogdanov, New Bulgarian University, Bulgaria

Saadiyah Darus, Universiti Kebangsaan, Malaysia

Reza Dashtestani, University of Tehran, Iran

Eva Dobozy, Edith Cowan University, Australia

Alejandro Curado Fuentes, University of Extramadura, Spain

Jozsef Horvath, University of Pecs, Hungary

Brian E. Hutchinson, Gyeongju University, South Korea

Joanna Pitura, Warsaw University, Poland

Arburim Iseni, University of Tetova, Macedonia

Anna Kamont, Higher School of Linguistics, Poland

Maria Jose Luzon Marco, University of Zaragoza, Spain

Lucas Kohnke, Hong Kong Polytechnic University, Hong Kong

Ferit Kilickaya, Mehmet Akif Ersoy University, Turkey (Statistics Editor)

Malgorzata Kurek, College of Foreign Languages, Czestochowa, Poland

Mariusz Marczak, Pedagogical University of Cracow, Poland

Mohammed Ali Abdullah Mohsen, Najran University, Saudi Arabia

Bilge Ozturk, Kocaeli University, Turkey

Susan Jacques Pierson, Cabrini College, USA

Md. Motiur Rahman, Qassim University, Kingdom of Saudi Arabia

Maria Grazia Sindoni, University of Messina, Italy

Ruba F. Bataineh, Yarmouk University, Jordan

Xavier Pradheep Singh, Chidambaram College, India

Mateusz-Milan Stanojević, University of Zagreb, Croatia

Anna Turula, University of Social Sciences, Warsaw, Poland

Levent Uzun, *Uludag University*, *Turkey*

Senem Yildiz, Bogazici University, Turkey

Özge Can, Dokuz Eylül University, Turkey

Abstracting and Indexing













Australian Government

Australian Research Council



Reviewing Procedure

- Each publication is reviewed by at least two external reviewers.
- Since the language of publication is English, at least one reviewer is a native speaker of English.
- At least one reviewer has a different affiliation country than the author.
- The submissions are subject to the double blind review process.
- Every care is taken so that there is no conflict of interest between the authors and the reviewers.
- The review is made in a written form with a clear conclusion on acceptance or rejection of the submission.
- The reviewing procedure and the reviewer file are published on the Journal's website at http://www.tewtjournal.org/reviewingprocedure.html
- The names of reviewers for particular issues are not revealed, instead, once a year, the aggregate list of reviewers for the entire volume is published.

ALL THE SUBMISSIONS SHOULD BE SENT TO

Kamila Burzyńska, kamila.burz@wp.pl

AND

Jarek Krajka, jarek.krajka@wp.pl

Chris Alexander, alexander.c@unic.ac.cy

Volume 16, Issue 3

FROM THE EDITOR	1
Jarosław Krajka	
THE EFFECT OF TECHNOLOGY INTEGRATION ON HIGH SCHOOL STUDENTS' LITERACY ACHIEVEMENT	3
Kara Robinson	
KAHOOT IT OR NOT? CAN GAMES BE MOTIVATING IN LEARNING GRAMMAR?	17
Ewa Zarzycka-Piskorz	
TEACHING A FOREIGN LANGUAGE IN A DESKTOP VIDEOCONFERENCING ENVIRONMENT	37
Krzysztof Kotuła	
WHAT THE GOOD (DIGITAL) LANGUAGE LEARNER CAN TEACH US? Anna Turula	52
SAME TIME SAME PLACE: DO MALL CLASSROOMS EXIST?	74
Jason Byrne	
FLIPPED ESL TEACHER PROFESSIONAL DEVELOPMENT: EMBRACING CHANGE TO REMAIN RELEVANT	85
Rafiza Abdul Razak, Dalwinder Kaur, Siti Hajar Halili and Zahri Ramlan	
ASSESSMENT IN ONLINE AND BLENDED LEARNING ENVIRONMENTS	
(Book Review)	103
Ferit Kılıckaya	

FROM THE EDITOR

by Jarosław Krajka

Maria Curie-Skłodowska University
Ul. J. Sowińskiego 17/336, 20-041 Lublin, Poland
jarek.krajka @ wp.pl

With the current issue of Teaching English with Technology, A Journal for Teachers of English, I am proud to present the international readership with the selected works of Polish scholars dealing with Computer-Assisted Language Learning at higher education institutions in two major Polish academic cities, Cracow and Lublin. The Polish CALL community, though not very numerous, is extremely active at organising annual PL-CALL conference (first two editions in 2013 and 2014 in Warsaw, then next two in 2015 and 2016 in Cracow – Anna Turula), publishing TEwT journal (Jarosław Krajka, Kamila Burzyńska), participating in technology-related projects (Małgorzata Kurek, Elżbieta Gajek) or conducting CALL and e-learning consulting and Moodle management (Przemysław Stencel, Tomasz Walasek). Quite a few Polish CALL scholars are active at investigating particular aspects of technologyenhanced language acquisition - Włodzimierz Sobkowiak dealing with CALL and Second Life in pronunciation instruction, Krzysztof Kotuła researching language acquisition in a gaming environment, Agnieszka Leńko-Szymańska interested in corpus linguistics, Przemysław Krakowian undertaking studies of computer-assisted assessment, Mariusz Marczak investigating translator education in the cloud, Marcin Kleban involved in research into technology use in rural areas, Wojciech Malec dealing with language acquisition via authored e-learning platform or Anna Turula investigating digital language learners, to name just a few.

It is my great pleasure to see how the initial support of The British Council Sprite (then ICT for teachers) projects, headed by Aidan Thorne followed by Wojciech Drajerczak, led to development of CALL studies in Poland, manifested in digital teacher training specialisations at English departments at a number of Polish universities, robust sections devoted to CALL in Poland-based EFL magazines such as *The Teacher* or *Języki Obce w Szkole*, participation in a number of CALL projects with European partners (for instance, ClipFlair, CEFCult, Social media and language learning, LangOER, INTENT). With a number of Ph.D. theses in CALL well under way in Poznań, Warsaw, Cracow and Lublin, the

Polish CALL community is bound to grow to better serve the needs of language teachers at home and abroad.

This issue of *Teaching English with Technology* features three papers presented at the 2015 PL-CALL conference in Cracow. Ewa Zarzycka-Piskorz undertakes the topic of gamification in language learning, asking an interesting question "Kahoot It or Not?" The author aimed at investigating the role of the popular online game tool in fostering grammar acquisition. In the next paper, Krzysztof Kotuła explores the ways language instructors teach with a synchronous multimodal setup (Skype), reporting on research which evaluated how over 120 teachers use technologies to enable them to work in distance learning contexts. Finally, Anna Turula asks another important question, namely, "What the Good Digital Language Learner Can Teach Us?" The study gives a number of insights into how learners augment their language education with the use of the new media as well as show areas in which they still need the assistance of the (digital) teacher.

Another paper, "The Effect of Technology Integration on High School Students' Literacy Achievement" by Kara Robinson, presents a critical overview of current research into the role of technology integration in high school students' literacy achievement. The author identifies the gaps within the research through comprehensive analysis and explores the challenges faced by more and less tech-savvy educators.

In quite a novel strand of research, Jason Byrne uses Google Analytics data collected from two EFL learning mobile apps, gathered over a five month period from more than 6,000 cities worldwide. The analysis of big data allows the author to provide a sample of actual user behaviour and prove that independent study is the main form of MALL activity.

Flipped classroom, and in particular flipped teacher development, is the topic undertaken in their contribution by Rafiza Abdul Razak, Dalwinder Kaur, Siti Hajar Halili and Zahri Ramlan. The authors propose an implementation framework of flipped professional development program, integrating theories of Zone Proximal Teacher Development (ZPTD) and revised Bloom's Taxonomy.

Finally, computer-aided assessment is the topic of the book "Assessment in Online and Blended Learning Environments" reviewed by Ferit Kılıçkaya. This important 2015 publication brings together both theoretical and practical information on how assessment in online and blended learning environments can be conducted.

I wish you good reading!

THE EFFECT OF TECHNOLOGY INTEGRATION ON HIGH SCHOOL STUDENTS' LITERACY ACHIEVEMENT

by Kara Robinson

Our Lady of Mercy Catholic College Burraneer Cronulla, New South Wales, 2230, Australia kara.robinson @ syd.catholic.edu.au

Abstract

This literature review presents a critical appraisal of current research on the role technology integration plays in high school students' literacy achievement. It identifies the gaps within the research through comprehensive analysis. The review develops an argument that the use of laptops in secondary English classrooms has a significant impact upon students' literacy achievement in both a positive and negative manner. The literature review begins by exploring early research and finds that there is a lack of longitudinal studies regarding laptop integration. This is a result of the trend at the time, which was to focus on the impact on student and teacher attitudes rather than the impact on literacy. Through the critical appraisal of current research it is revealed that the attitudes and beliefs of individual teachers to laptop integration is the leading cause of student literacy achievement. The literature review progresses to explore the challenges facing educators and the concerns for educators.

Keywords: technology; integration; laptop; literacy; high school; teaching

1. Introduction

Many secondary schools at the start of the 21st century are very traditional in their approaches to teaching literacy in English classrooms, educating for example via pen and paper methods. In the context of this review the term 'literacy' refers to the ability to read and write. Also, when using the phrase 'literacy achievement' I am referring to students' levels of proficiency in the streams of reading and writing. In many secondary English classrooms within Australia each student has access to a laptop. The review of current literature has revealed that in some cases they are rarely accessed as a tool for improving literacy, the review also exposes a correlation between this finding and individual teacher perceptions. This idea is explored in greater depth later in the literature review. To put it simply, laptops are not successfully utilised in the classroom to improve student literacy.

The question of whether laptop integration has positively or negatively impacted student learning is hotly contested in the literature thus far. Overall, literature offers conflicting answers to this question. However, many seem to agree that there are many barriers, such as funding and teacher training, which inhibit schools and teachers to

effectively utilise laptop integration in the secondary English classroom. Few deny the growing influence of technology and its use in teaching students who use digital technology daily. These results are often found within the same research and by reviewing the literature on these studies, this literature review explores some of the limitations of the research methodologies.

Currently there is a significant gap within the current bodies of research, as much of the research focuses on best practice for teachers, rather than the implications of laptop use on students' literacy. This review aims to fill this gap by looking closely at these implications. As there is paucity in the research from Australia in the interest of this literature review the case studies drawn from are primarily based in the United States. Research that emerges in the US is useful for studying Australian context as the American educational context does have some parallels to the Australian context.

2. Why are educators just expected to use laptops in classrooms?

It has been the experience of the author that for many educators it is an expectation that technology such as laptops and the day-to-day learning experiences be integrated into the curriculum. However, often educators are left questioning *why*, as often there is little understanding of the pedagogical implications. It is the intention of this literature review to answer this question by looking closely at those studies which explore pedagogical inferences. As Hsu (2011) puts it, often the expansion of information and communication technology infrastructure in schools is just expected to promote learning through its very presence. As a result the integration of technologies used outside the classroom such as word processors, e-mail, digital video, and the Internet must be part of the 21st century secondary English classroom.

These technologies have changed the landscape of skills and competencies needed for literacy in profound ways (Watts-Taffe, Gwinn, Johnson, & Horn, 2003). There is an increasing demand for students to be competent in their ability to access, interpret, compare and contrast, synthesize, and communicate ideas electronically through the use of laptops and additional technologies. Therefore, in the secondary English classroom the strands of literacy, technology and literacy instruction are quickly converging, and are lagging behind changes made in other aspects of students' lives. As a consequence of this teachers must be challenged to not only integrate the use of laptops with traditional aspects of pen and paper literacy instruction but they must also engage students in emerging technological literacies. Linik (2011) has found the scientists "posit that digital native students' brains are actually

developing in new ways because their gray matter is constantly engaged with digital devices. When neurons fire together, they wire together, making connections based on their interaction with technology" (p. 25). The implications of this observation is that inevitably students in secondary English classrooms are hardwired to engage with digital devices, in a way that may not be the case for many educators who are responsible for the introduction and instruction of digital technologies, such as laptops, in these classrooms. Therefore, a conclusion could be drawn that simply using laptops in the secondary English classroom does not promote learning educators are challenged to integrate laptops in a pedagogically sound way.

3. What does early research say about laptop integration?

Early research notes that specific benefits of laptop integration included increased student motivation (Gardner, Morrison, Jarman, Reilly, & Helena, 1993; Rockman, 1998) and a shift toward more student-centred classroom environments (Rockman, 1998). It is important to note and take into consideration early research exploring laptop integration because literacy education is not static and is constantly changing; therefore, it is essential to reflect on where research has come from. The use of laptops is a relatively new phenomenon beginning in the early nineties. As a result, there is little research that studies the long-term effects of laptop usage on literacy achievement in secondary schools. A report conducted by Gardner et al. (1993) found that the positive literacy outcomes attributed to laptop integration were limited to the fact that students could make use of word processors and publishing software, and that most of the curriculum learning outcomes in writing can be addressed through this software. The authors also concluded that there were notable benefits to be gained from the use of spellchecking and thesaurus facilities; however, over time this understanding has been often refuted amongst educators. This Ireland-based study was founded on tests and questionnaires that were completed by the students from the ages ten to fifteen across nine schools over one school year. The study also drew on the experiences of teachers and students, which they recorded in diaries for the purpose of the study, combined with the observations of a research team. By making no use of quantitative data, they left obvious holes in their conclusions – as teachers and students kept diaries for the purpose of the study, this may have tarnished the honesty and integrity of their responses. This lack of quantitative data also limited the aspects of student achievement that could be accurately measured. They found that the impact of laptops after one year was at best marginal on achievement in mathematics, science and writing, however, this is based only on observations and qualitative data. It is important for

the reader to note that much has changed in secondary English classrooms and this study was focused on student-centred experiences, as was the trend at the time.

Also conducting research during the nineties, Fisher and Stolarchuk (1998) in their Australian study of laptop use in middle school science classrooms found out that the classrooms that made use of laptops had the most positive impact on student learning and attitudes when skills and the process of inquiry were emphasized. Their study was designed to assess the effectiveness of laptop integration, students' attitude and achievement outcomes. Student's perceptions of the classroom environment were also utilised to determine this effectiveness. Achievement was measured using a scale from Test of Enquiry Skills among other quantitative instruments which were administered to over eight hundred students in years eight and nine, in fourteen independent schools across four Australian states in 1995. One of the limitations of this study has been that all qualitative data was collected from only two of the fourteen schools in 1996. It is unlikely that by collecting data from only two schools has given a clear and broad enough understanding of the experiences of students and educators making use of laptops in secondary classrooms. By prolonging time between the study and the collection of the qualitative data the authors of the study have inadvertently extended the chance of the data reflecting the current classroom environment rather than the environment from the previous year. It is important to note that unlike Gardner et al. (1993) the focus was also on student attitude to laptops rather than on their achievement against learning outcomes. Correspondingly, Fisher and Stolarchuk (1998) reported a more positive relationship between laptops and student attitudes than between laptops and academic achievement. Rockman (1998) reached similar conclusions to Fisher and Stolarchuk (1998) and Gardner et al. (1993); a majority of teachers in laptop schools reported an increase in cooperative learning and an improvement in project-based instruction. There is very little early research that focuses on the long-term effects of laptop integration on literacy, as laptop integration was in its early stages and laptop use was not widespread.

4. Laptop integration in the 21st century

As research moved into the 21st century, new digital literacy skills became part of the demands placed upon schools to develop 21st century competencies (Spektor-Levy & Granot-Gilat, 2012). As a result of these newly found needs federal legislation in the United States mandated that technology be integrated into school curricula because of the popular belief that learning is enhanced through the use of technology (Davis, 2001). This phenomenon is not unique to the United States; other countries, such as Australia, have also implemented

one-to-one laptop programs. Australia was once considered to be a leader in laptop integration in classrooms (Fluck, 2011). Fluck conducted six case studies of government primary schools to gather data about current initiatives in laptop integration. One of the limitations of this study is that each of the schools was observed by a single researcher on only one day in only one classroom. Many educators will agree that it is very difficult to effectively evaluate the performance of students by observing them on only one occasion. Comparative analysis in the study demonstrated that the potential of laptop-based schooling could be conflicted through concerns about curriculum direction and equity. While technology integration has been mandated in some countries including Australia, the United States and Ireland, there is little in the way of research on the effect this has on secondary school students' literacy. Whilst Linik (2012) postulates that reading and writing are fundamental skills of literacy, and when technology is integrated effectively it can be powerful tool for literacy instruction.

4.1. Challenges of successful laptop integration faced by educators

Integrating laptops into secondary English classrooms with a focus on improving student literacy has the potential to create challenges for educators. Davis (2001) recognizes that the challenge for educators is to understand how to best teach with laptops while developing the literacy expertise of their students. Rather than seeing laptops as something to fit into an already crowded agenda, Biancarosa and Griffiths (2012) argue that laptops can be conceptualized as beneficial tools that teachers can deploy in their quest to create young readers who possess the higher levels of the literacy skills demanded by today's information-based society. There is a want and need among teachers to learn how to use classroom technologies more effectively (Labbo et al., 2003). The teachers' statements provided as a part of the study conducted by Labbo et al. (2003) were drawn from a United States survey conducted as one component of a larger study. The one hundred and twenty five survey participants included teachers and technology coordinators who participated in an online interview and survey. Like previous research the study makes complete use of qualitative methods. The focus was on the advice, insights and cautions about laptop use rather than on any impacts of student achievement.

As previously mentioned Information and Communication Technologies (ICT) such as word processors, e-mail, CD-ROMs, digital video, and the Internet have changed the landscape of skills and competencies needed for literacy in profound ways (Watts-Taffe, Gwinn, Johnson, & Horn, 2003). As part of their study, Watts-Taffe et al. found that there had been little research on the ways in which pre-service teachers are taught to integrate

technology with their literacy instruction. This is another of the many challenges faced by educators when attempting to integrate laptop usage into English classrooms in order to improve student literacy achievement. Watts-Taffe et al. (2003) describe a study of the technology integration practices of three pre-service teachers in their first year of teaching. They chose the most accomplished students to participate in the study to avoid any distracting factors that could be caused by lower-achieving students. The data was collected over three months via a portfolio, emails, observations and group meetings. The results of this study showed how individual teacher knowledge; training and beliefs impact upon the way they integrate laptops into their classrooms, and this idea is investigated in further detail later in this literature review.

4.2. The positive impact of laptop integration on student literacy achievement

The intention of this literature review has been to explore the impact of laptop integration on student literacy achievement. Thus far the review has looked at where early research has come from and how moving into the 21st century, literature has focused primarily on the qualitative methodologies and student and educators' attitudes and opinions. There have been challenges for educators in the introduction of laptops into secondary English classrooms. Despite these Lai, Chang & Ye (2006) used international data to investigate computer usage in elementary school reading classes and the impacts of computer usage on students' reading performance across fifteen countries. The study compares and reveals computer use levels in reading classes, frequencies of teachers having students use computers, times and places of students' computer usage, computer activities of male and female students, and effects of computer usage on students' reading interests and achievement by country. Countries selected for data analysis were considered to be geographically representative, because the national characteristics were comparable to each other as represented through the Progress in International Reading Literacy Study database. Descriptive statistics and figures were used to analyse the tendencies of laptop use in elementary schools. Qualitative methodologies were employed; chi-square was used to compare rates of computer usage in reading classes, and the rates of male and female students' usage. T-tests were used to compare the differences of students' reading interests and achievement by presence/absence of computer use in reading classes. Spearman correlations were used to determine the influences of computer use across the three aspects to students' reading interests and standardised reading achievement. The investigators found that secondary school teachers incorporated computer usage in their classes infrequently and this directly impacted upon achievement.

Eteokleous revealed the same understanding in part of a study that was published in 2008 and conducted in Cyprus that revealed that laptops are not extensively used in classrooms. "When they are used in classrooms, it tends to be in a rather sporadic fashion, more as supporting tools or fancy chalkboards than as educational tools. Few teachers were found to use computers in any sort of progressive way" (p. 669). The study examined how elementary educators make use of laptops, and what factors influence laptop integration in their classroom practices by making use of qualitative research methodologies. The study employed a mixed method approach through the usage of structured questionnaires and semi-structured, open-ended interviews as the major methods of data collection. Quantitative and qualitative data were gathered from a sample of Cypriot teachers identified as high and low laptop integrators. Unlike Lai et al. (2006), this study makes use of the qualitative data to help identify why some educators are experiencing difficulties in making consistent and progressive use of laptops as a tool for instruction.

However, it is no secret that the uses of laptops do not, in and of themselves, transform classrooms or provide promising solutions for institutional or instructional problems that result in poor learning. Based on observations of a 2008 study, Warschauer claims that "while a one-to-one laptop program can make a school better, it will not fundamentally alter a school with problems" (p. 133). The case study examined literacy practices in ten United States schools with one-to-one laptop programs. Findings were that reading instruction featured more scaffolding and epistemic engagement, whereas student writing became "more iterative; more public, visible, and collaborative; more purposeful and authentic; and more diverse in genre" (p. 52). Students also gained important technology-related literacies such as those that involve analysing information or producing multimedia. However, despite these findings laptop programs were not found to improve test scores. One crucial finding of Warschauer's research is that it is "the teachers' overall approach rather than the use of technology" (p. 142) that determines the extent to which laptops contribute to the development of students' literacy skills. Similarly, Chase and Laufenberg (2011) deduce that having access to technology is not the key, instead, an inquiry-driven curriculum served by technology is critical.

Spektor-Levy & Granot-Gilat (2012) also looked closely at laptop use and their results indicate, on the practical level, the positive effect of learning with personal laptops and routinely available ICT on students' achievements and competencies. The goal of this study was to examine the impact of a one-to-one laptop program on the implementation of learning skills, information literacy, and the usage of computerized tools among students. These skills

are part of the demands placed upon schools to develop 21st-century competencies. Seventh and ninth grade students participated in this study. One group had routinely studied in one-to-one classes with personal laptops while others studied in regular classes with no ICT. Findings indicated that students from one-to-one classes performed significantly better than students from the control group.

As stated previously, current research has identified many positive outcomes as a result of the integration of technology in the classroom. In 2011 Shapley, Sheehan, Maloney, & Caranikas-Walker conducted an experimental study involving comparisons between twenty-one middle schools that received laptops for each teacher and student. Instructional and learning resources, professional development, and technical and pedagogical support were provided for each of the schools. The researchers made use of a hierarchical linear model to analyze the longitudinal survey and achievement data. Shapley et al. (2011) found that technology immersion had a positive effect on students' technology proficiency and the frequency of their technology-based class activities and small-group interactions. Here it is important to note that whilst the research has indicated some correlation between laptop integration and literacy achievement, there has been little focus on exactly what is causing this correlation.

4.3. How individual teachers impact the implications of laptop integration

Similarly to Eteokleous' (2008) research, the results from a correlation and regression analysis of laptop usage by Hsu (2011), mentioned earlier in this literature review, indicate that teachers who infrequently use basic ICT tools such as word processing rarely assign ICT activities to students. This study reports what variety of ICT activities teachers are likely to assign to students, and what type of teachers are more likely to assign these activities. Teacher ICT usage and student ICT assignments were examined using a sample of over three thousand elementary and junior secondary school teachers in Taiwan. A questionnaire was administered to educators in three hundred and thirty four schools. One of the limitations of this study was that not all educators who participated had access to laptops or the Internet in their classrooms and only about sixty per cent of educators felt that the laptops provided by their schools were satisfactory for their teaching needs. Despite these limitations it is clear that whilst there can be a positive impact on student literacy achievement from laptop integration, the research indicates that individual teachers impact upon student laptop usage and thus their literacy achievement.

Likewise, research findings by Chen (2008) indicate that "Teachers' beliefs play an important role in their deciding how they will integrate technology into the classroom" (p. 65). The author used qualitative research methods to explore the relations between teachers' pedagogical beliefs and technology integration. Participants were twelve Taiwanese secondary school teachers, and findings indicated inconsistency between the teachers' expressed beliefs and their practices. Using qualitative methods Chen (2008) collected data from multiple data sources, specifically interviews, syllabi, lesson plans, handouts, PowerPoint slides and classroom observation over two months. One of the limitations of this study is that it relied on data from only school that the author had chosen which was understood to have a reputation for technology use and was above average academic achievement. Therefore, the study did not use a representative sample.

Ottenbreit-Leftwich, Glazewski, Newby & Ertmer (2010) revealed that teachers used laptop integration to address professional and student needs, all of which related to the underlying value belief of promoting student learning. This hermeneutical phenomenology study investigated the value beliefs that underpin teachers' uses of laptops. Data were collected from eight award-winning teachers through the qualitative methodologies of an interview, observation, and electronic portfolio. Like Eteokleous (2008), Hsu (2011) and Chen (2008), this study indicates that individual teachers hold their own beliefs about laptop integration, which has a direct impact on student laptop usage and, in turn, affects student literacy achievement.

4.4. Negative impacts of laptop integration on student literacy achievement

While this literature review has focused on the positive effects of laptop integration and how individual teachers can negatively impact on this, it is also important to understand that not all the studies indicate positive results. There have been many recorded negative impacts of technology integration on high school student literacy achievement. Lai et al. (2006), as previously indicated, have used international data to investigate computer use situations in elementary school reading classes and the impacts of computer usage on students' reading performance across fifteen countries. The results reveal that the effects of computer usage in reading classes and reading teachers' computer activities on elementary students' reading interests and achievement are unclear. Students' reading achievement did not show significant improvement with computer use in classes, or teachers' and students' computer activities, and some even showed negative influences. "The results of this study using an international perspective confirm that computer usage in education is not always beneficial to students'

academic achievement" (Lai et al., 2006, p. 63). While there can be many explanations for this divergence, the failings can be attributed to "moderate awareness and low level of working knowledge, but a high degree of interest and openness" (Jost & Mosley, 2012, p. 5) among teachers. This survey based on laptop integration competencies as outlined by experts in the field collected data from two hundred and twenty-four pre-service teachers in ten different teacher education courses. In the survey teachers responded to questions about themselves, in order to measure their technology literacy in three levels: awareness, working knowledge, and transformative practice. Results indicate a moderate awareness and low level of working knowledge, but a high degree of interest and openness to laptop integration for the researchers this indicated a need to design a strong curriculum for teachers as part of the curriculum on technology and literacy (Jost & Mosley, 2012). Similarly Techlehaimanot, Mentzer & Hickman (2011) offer the view that lack of confidence in integrating technology and making use of laptops combined with a deficiency of understanding of the benefits of technology integration to student learning were identified to be contributing to this discrepancy. As previously stated, individual teachers have impact on student literacy achievement based on laptop integration. By looking closely at the research which focuses on the negative impacts of laptop integration it has become apparent that again it is individual teachers who are ultimately instigating these impacts.

4.5. Strategies for improving student literacy achievement via laptop integration

Current research has developed a need to investigate strategies to use laptop integration to improve students' literacy achievement. Therefore, there has been a significant amount of research conducted regarding strategies for improving the use of laptops in classrooms. Wendt (2013) provides suggestions for integrating literacy learning in the general curriculum at the secondary level with particular attention to content area literacy and laptop integration. "Studies have shown a slight increase in achievement through the use of e-books" (p. 44), though this minor increase requires further study and repeated trials. Likewise Warschauer, Arada & Zheng (2010) also discovered positive outcomes, however in a different area.

We have found that the greatest impact of individual laptop use is on student writing. When students have daily access to Internet-connected laptops, they conduct more background research for their writing: they write, revise, and publish more, they get more feedback on their writing; they write in a wider variety of genres and formats; and they produce higher quality writing (p. 221).

This research has implications for the ways in which laptop use is incorporated into the daily English secondary school classroom. There is little research to support the claim that this improvement corresponds to other areas of literacy such as spelling and grammar, which should be considered integral parts of students' literacy achievement.

Moore-Hart (2008) attributes the improvement of students' writing to the inclusion of technology tools. Students improved their literacy through challenging learning experiences. This study investigates how two elementary teachers begin to use laptops in a private school that had access to technology at many levels. Using a collaborative teacher-research model, Moore-Hart (2008) specifically examined how to support teachers' practice as they integrated technology tools within their literacy curriculum. Due to a supportive context, the teachers reformed their writing instruction to include technology tools, and students improved their literacy through challenging learning experiences. Ottenbreit-Leftwich et al. (2010) offer another view, stating that "when teachers believe technology uses are valuable, they are more likely to incorporate those uses into their practices" (p. 1321). Findings indicated that teachers used laptops to address professional and student needs, all of which related to the underlying value belief of promoting student learning. This research has left a gap; there is a need for researchers to examine exactly how these strategies have directly impacted on student literacy achievement.

4.6. Concerns for researchers regarding laptop integration

Making accurate measures of literacy achievement can be quite difficult in this context. A concern for researchers is how to best measure the impact of laptop use on secondary student literacy achievement. It could be measured with pre-existing curriculum accountability frameworks. In Australia this is the National Assessment Program – Literacy and Numeracy. As Fluck (2011) observed, it was also a hotly debated issue whether laptops will lead to increased scores in the National Assessment Program – Literacy and Numeracy testing. In the main principles were wary of suggesting this should be used as a means of judging the efficacy of the laptop-based learning. This is understandable, since National Assessment Program – Literacy and Numeracy testing is largely pen and paper, and handwriting skills may noticeably diminish when laptops are more frequently used for literacy. The impact of laptop use could also be measured by other factors such as student engagement. Fluck (2011, p. 13) observed that pupils with laptops were more engaged with learning, and undertaking learning at home. An example stated in the results of this study demonstrated how two girls, who were considered to be low-achieving, used their laptops to read at home and brought

reflective reviews back to school. So whilst some studies have identified both positive and negative impacts of student literacy achievement as a direct result of laptop use one of the limitations of this research is that often the skills required for pen and paper literacy tests are not the same as the skills comprised in laptop based literacy. This may impact the results that these studies have found.

5. Conclusion

The question of whether laptop integration has positively or negatively impacted student learning is hotly contested in the literature thus far. As a result of critical analysis of current literature a conclusion could be drawn that educators are challenged to integrate laptops in a pedagogically sound way rather than simply using laptops in the secondary English classroom which does not promote learning. Close analysis of early literature has shown that much has changed in secondary English classrooms and it is important to note that these studies were focused on student-centred experiences, as was the trend at the time. Moving into the 21st Century many governments have mandated the integration of laptops into classrooms. Yet in order to make significant improvements to students' literature in secondary English classrooms, educators continue to fail to successfully integrate these technologies effectively.

Despite this, positive impact of laptop integration has been recorded in many studies. Whilst the research has indicated some correlation between laptop integration and literacy achievement, there has been little focus on exactly what is causing this correlation. However, some attribute this correlation to individual teachers who hold their own beliefs about laptop integration. These attitudes have a direct impact on student laptop usage and, in turn, affect student literacy achievement. Similarly, teacher attitudes can cause opposing results, where negative impacts of laptop integration on literacy achievement are recorded. This has led researchers to investigate strategies of using laptops to improve students' literacy achievement. Likewise these contrasting results have caused researchers to analyse the limitations of some studies because often the skills required for pen and paper literacy tests are not the same as the skills utilised in laptop based literacy.

As educators we must all challenge ourselves to think more broadly about laptop integration. As laptops were integrated into secondary English classrooms, the focus was on traditional pen and paper literacy. As Watts-Taffe et al. (2003) note, it is "...crucial that we as literacy teacher educators begin to reconceptualise our notions of literacy and embrace the emerging and new realities of technological literacy" (p. 130).

References

- Biancarosa, G., & Griffiths, G. G. (2012). Technology tools to support reading in the Digital Age. *The Future of Children*, 22(2), 139-160.
- Chase, Z., & Laufenberg, D. (2011). Embracing the squishiness of digital literacy. *Journal of Adolescent and Adult Literacy*, 54(7), 535-537.
- Chen, C.-H. (2008). Why do teachers not practice what they believe regarding technology integration? *The Journal of Educational Research*, 102(1), 65-75.
- Davis, R. S. (2001). Understanding technology literacy: A framework for evaluation educational technology integration. *TechTrends*, 55(5), 45-52.
- Eteokleous, N. (2008). Evaluating computer technology integration in a centralized school system. *Computers* and *Education*, *51*, 669-686.
- Fluck, A. E. (2011). Laptop classes in some Australian government primary schools. *Australian Education Computing*, 26(1), 10-15.
- Gardner, J., Morrison, H., Jarman, R., Reilly, C., & Helena, M. (1993). *Personal Portable Computers and the Curriculum*. Kirkcaldy: Scottish Council for Research in Education.
- Hawkins, M. (2008). Language, literacy, and technology. TESOL Quarterly, 42(2), 339-343.
- Hsu, S. (2011). Who assisgns the most ICT activities? Examining the relationship between teacher and student usage. *Computers and Education*, *56*, 847-855.
- Jost, M. B., & Mosley, B. F. (2012). Where IT's AT? Teachers, assistive technology, and instructional technology. *Journal of Technology Integration in the Classroom*, 3(2), 5-16.
- Labbo, L. D., Leu, D. J., Kinzer, C., Teale, W. H., Cammack, D., Kara-Soteriou, J., et al. (2003). Teacher wisdom stories: Cautions and recommendations for using computer-related technologies for literacy instruction. *The Reading Teacher*, *57*(3), 300-304.
- Lai, S.-L., Chang, T.-S., & Ye, R. (2006). Computer usage and reading in elementary schools: A cross-cultural study. *Journal of Educational Computing Research*, *34* (1), 47-66.
- Linik, J. R. (2012). Literacy 2.0. Education Northwest, 17, 16-19.
- Moore-Hart, M. A. (2008). Supporting teachers in their integration of technology with literacy. *Reading Horizons*, 48(3), 177-200.
- Ottenbreit-Leftwich, A. T., Glazewski, K. D., Newby, T. J., & Ertmer, P. A. (2010). Teacher value beliefs associated with using technology: Addressing professional and student needs. *Computers and Education*, 55, 1321-1335.
- Shapley, K., Sheehan, D., Maloney, C., & Caranikas-Walker, F. (2011). Effects of technology immersion on middle school students' learning opportunities and achievement. *Journal of Educational Research*, 104, 299-315.
- Spektor-Levy, O., & Granot-Gilat, Y. (2012). The impact of learning with laptops in 1:1 classes on the development of learning skills and information literacy among middle school students. *Interdisciplinary Journal of E-Learning and Learning Objects*, 8, 8-96.

- Techlehaimanot, B., Mentzer, G., & Hickman, T. (2011). A mixed methods comparison of teacher education faculty perceptions of the integration of technology into their courses and student feedback on technology proficiency. *Journal of Technology and Teacher Education*, 19 (1), 5-21.
- Waeschauer, M. (2008). Laptops and literacy: A multi-site case study. *Pedagogies: An International Journal*, 3(1), 52-67.
- Warschauer, M., Arada, K., & Zheng, B. (2010). Laptops and inspired writing. *Journal of Adolescent and Adult Literacy*, 54(3), 221-223.
- Watts-Taffe, S., Gwinn, C. B., Johnson, J. R., & Horn, M. L. (2003). Preparing preservice teachers to integrate technology with the elementary literacy program. *The Reading Teacher*, *57*(2), 130-138.
- Wendt, J. L. (2013). Combating the crisis in adolescent literacy: Exploring literacy in the secondary classroom. *American Secondary Education*, 41(2), 38-48.

KAHOOT IT OR NOT?

CAN GAMES BE MOTIVATING IN LEARNING GRAMMAR?

by Ewa Zarzycka-Piskorz

Pedagogical University of Cracow
Ul. Podchorążych 2, 30-084 Kraków, Poland
ewa.zarzycka.piskorz @ gmail.com

Abstract

Gamification is not a very new concept. It is the use of game elements and game design techniques in a non-game context. It is used in various contexts for various purposes. There is strong evidence that shows the relationship between game playing and increased motivation. More and more learning games emerge and bring a promise to help to learn a language. There are certain game elements that could be used in non-game contexts to trigger effective player engagement as well as persistence and motivation to win/learn.

The paper outlines the influence of specific game elements onto players, presents the motivational aspects of game involvement, and investigates what game elements could be responsible for increasing motivation to participate and engage in a grammar learning game. All of these are investigated on the example of a Kahoot.it online game, which was used with the General English language course students attending the classes in The Modern Languages Centre at the Pedagogical University, Cracow, Poland. The main objective of the research paper is to observe and assess how the students' motivation increases – if – to learn and practise grammar and how effective this mode of learning is. It also presents the teachers' evaluation of the design process, its implementation and recommendations for further use.

Keywords: gamification; Kahoot; grammar instruction

1. Introduction

The question asked in the headline -- 'Kahoot it or not?'-- when translated into the main line of the present argument, should actually be 'How much do we know about gamification?' and 'How effective is gamification and why?' They are provocative questions as quite a number of educators may think they have no idea what gamification is, as they do not take part in it so they do not need to know. As a matter of fact, however, the majority of us *are* involved with gamified systems. The extremely popular flyers/buyers programs, collecting coupons/tokens/points before exchanging them either for money or products, as well as competitive and comparative apps such as Endomondo are just a few examples we come across on a daily basis.

The purpose of this article is to describe the potentials of gamification and gamified courses, to investigate and describe what specifically makes gamified learning useful in class, as well as to mark the areas for further research. The online gamifying tool that is chosen for the study is Kahoot, an online application that is free and accessible for the teachers of all subjects and can be used at various levels. It is neither difficult in use nor requires sophisticated skills or equipment¹. Teachers create their own questions adapting them to the level of knowledge and skills of their students. It is user-friendly for both parties as well as it contains the basic game elements: points, a leader board, instant feedback and a reward. Kahoot as an online game used in a classroom creates a context in which cooperation as well as autonomy can be observed. Fun and competitiveness add the value to it. The latter ones tap into intrinsic motivation, which is the primary interest of this research as games provide additional intrinsic enhancement. Fun, in particular, is also an element which students are interested in and which they like to be included into their learning/teaching. Dörnyei believes that it is one of the strategies to break with routine and boredom. He quotes a dialogue from the 1964 Disney film 'Mary Poppins':

'It's a game, isn't it, Mary Poppins?'

'Well, it depends on your point of view. You see, in every job that must be done there is an element of fun. You find the fun and – snap! – the job's a game. And every task you undertake becomes a piece of cake...' (Dörnyei 2001: 113).

To maintain and protect motivation in a classroom Dörnyei recommends the use of many various strategies (Dörnyei 2001: 76), out of which challenge, competition, stimulation, cooperation and fun, which ideally create a context of a game, became the focus of my attention. The study was carried out with a number of students at the Pedagogical University in Kraków taking General English courses conducted by the teachers from Modern Languages Centre. The students were from various departments as to have a wider spectrum of learners.

¹ In March 2016 it was used by 20 million out of 55 million elementary and secondary students in the USA (data quoted after: <a href="http://www.nytimes.com/2016/04/17/technology/kahoot-app-brings-urgency-of-a-quiz-show-to-the-classroom.html?WT.mc_id=SmartBriefs-Newsletter&WT.mc_ev=click&ad-keywords=smartbriefsnl&r=0

2. Background to the study

2.1. Affect gamified: intrinsic motivation

One of the most important factors in gamified education is motivation. What we are talking about, however, is a specific type of drive.

Jane McGonigal in one of her press interviews said:

I don't do 'gamification', and I'm not prepared to stand up and say I think it works, I don't think anybody should make games to try to motivate somebody to do something if they don't want to do. If the game is not about a goal you're intrinsically motivated by, it won't work." (Feiler, Bruce: 27 April 2012).

Because intrinsic motivation is pointed out as the main factor in the game engagement, the study's main focus is to investigate it.

In psychology and education intrinsic motivation is described in relation to Self-Determination Theory (Przybylski, Rigby, Ryan, 2010), developed by Edward L. Deci and Richard M. Ryan (1985). This theory is concerned with human motivation, personality and optimal functioning, and SDT claims that people have three innate psychological needs, viewed as universal necessities: competence, relatedness, and/or autonomy (Deci, 2000). First, the need for competence means the desire to control and shape the environment and outcome. We want to know how things will turn out and the results/consequences of our actions. Second, the need for relatedness deals with the desire to "interact with, be connected to, and experience caring for other people". Our actions and daily activities involve other people and through this we seek the feeling of belonging. Thirdly, the need for autonomy concerns having a sense of free will when doing something or acting out of our own interests and values.

SDT concepts of competence, relatedness, and autonomy correspond to some extent with Marczewski's results of investigation about gamification. Intrinsic motivation involves engagement through fun and play. Competence is fulfilled by solving problems in order to change behaviours. Relatedness is realised by working with other people to reach specific goals. Autonomy is made possible by making independent choices about how and what to use to achieve the purpose.²

This is largely confirmed in the area of business by one of the SDT followers, Daniel Pink (2009), who argues against the models of motivation driven and enhanced by rewards and fear of punishment, dominated by extrinsic factors such as

² The words in bold are taken from the Marczewski's list of most frequently repeated words in the attempt to define gamification.

money. He believes that human motivation is largely intrinsic, and that this motivation can be divided into autonomy, mastery and purpose. "SDT proposes humans have an innate drive to be autonomous, self-determined and connected to one another and that when that drive is liberated, people achieve more and live richer lives."

According to Pink's idea, autonomy, which is the urge to direct our own lives, centres on four areas of human professional action: time, technique, team and task. As far as time is concerned, we need to be focused more on the output rather than on a rigid schedule in order to complete the task, which necessitates more flexibility and creativity. Techniques should be increasingly chosen by employees, with the employer providing initial guidance. Additionally, the freedom to allow employees to choose who they want to work with in a team is recommended, and a task is more likely to be undertaken and completed when employees work during their regular free creative hours. This is the time when they can do everything and anything that is not connected with their work. A further aspect of motivation, that is mastery, is defined as the desire to get better and better at something that really matters, although to be able to achieve this accordingly a certain environment needs to be created. Effective tasks are the ones which are neither overly difficult nor too simple so that employees develop their skills further. The final element within motivation is purpose, and Pink (2009) defines this as the yearning to do what we do in the service of something larger than ourselves. A direct and clear expression of goals and purpose, both individual and organizational, should be achieved through the use of purpose-oriented words, such as 'us' and 'we' to inspire and generate a feeling of being a part of a larger group focusing on a greater cause. Pink focused on and developed the SDT concepts for the professional context. They are mostly used in business to prompt how to shape certain demanded behaviours if not attitudes of both professionals and clients.

The expansion of motivational strategies in business brings the question about the existence of the similar trend in education. Dörnyei believes that the significant core in motivation research has proved to be effective and can be transferred into

³ Quoted after: <u>http://staffmotivationmatters.co.uk/pinks-theory-set-to-drive-up-employee-motivation-and-engagement/.</u>

practice (2001: 24). Four areas of motivational strategies (creating motivational conditions, generating initial motivation, maintaining motivation, and encouraging self-evaluation) distinguished by Dörnyei contain components which overlap with some of the game elements and mechanics. For example: a cohesive learner group with appropriate group norms can be identified with a game playing team, increasing the learner's expectancy of success with a win, increasing the learner's goal-orientedness sounds like a team or individuals levelling up, making learning (playing) stimulating and enjoyable are the goals of a game, promoting cooperation among the learners can be executed in a gaming team, providing motivational feedback as well as offering rewards in a motivating manner are carried out through the means of points, trophies or rewards.

The relationships between all the above mentioned elements are illustrated in the table below.

SDT	Pink	Dörnyei	gamification elements
competence	- mastery - time - task - technique	 expectancy of success increasing goal orientedness motivational feedback rewards 	- a win - levelling up - points/rewards
relatedness	- team	- cooperation - learners groups and norms	- game playing team
autonomy	- purpose	- making learning enjoyable	- game

Table 1. Motivational components and gamification elements

The potential of gamified education to influence intrinsic motivation (shown in the table) as well as the earlier discussion of gamified business lead to a question of how applicable these concepts are to language learning. The question was addressed in a study described below.

2.2. Defining gamified education

To understand the phenomenon, we first need to clarify the term 'gamification'. Kevin Werbach believes that gamification is the use of game elements and game design techniques in non-game contexts (Werbach, 2015). Another effort aimed at

defining the rather elusive concept of gamification was initiated by Andrzej Marczewski, the founder of a blog called GAMIFIED UK, who set up a challenge to formulate the definition collaboratively. There were many responses, both long and short. The shortest and most precise one was by 'Opusphere': 'A fun way to do things that have to be done'. Marczewski's own definition included all the characteristic elements of such a *modus operandi* as "the user-focused application of game elements, game mechanics, game design or game thinking in non-game contexts to engage, motivate, change behaviour, solve problems, make goals more achievable, make tasks more playful or add fun". These elements are, in fact, common to all the definitions proposed: certain key words were frequently repeated in them. The collection of these key words⁴, put together by Marczewski (blog entry: April 16, 2014) is presented below, listed in the order of the most frequent use:

engage	38
people	28
fun	25
motivate	22
play	16
solving problems	16
behaviour	16
goals	16

The results indicate that gamification can be engaging and fun and, therefore, may influence the motivation of the participants. Besides, it should not be forgotten and underestimated that a gamified activity includes and involves others in the same type of action.

Jane McGonigal, one of the greatest gamification enthusiasts and experts, as well as an American game designer, indicates in her numerous talks and interviews⁵ that the perception of games changes from recreational devices to serious ones that can influence various domains of life. Games can be applied as supporting tools measuring sport achievements, progress in language learning, enhancing cognitive processes, supporting patients in getting over specific medical conditions, simulating real life contexts in order to prepare the participants for the forthcoming events. They may even change one's behaviour.

⁴ All the definitions mentioned and more are available on Marczewski's blog under this entry: http://www.gamified.uk/2014/04/16/defining-gamification-people-really-think/.

⁵ Her website provides the access to her talks and interviews: https://janemcgonigal.com/. The overview of the various games ideas of Jane McGonigal is provided in the text of Bruce Feiler in the *NY Times* online: http://www.nytimes.com/2012/04/29/fashion/jane-mcgonigal-designer-of-superbetter-moves-games-deeper-into-daily-life.html? r=0.

Serious games such as Jane McGonigal's *Super Better* or projects like Volkswagen's *Fun Theory*⁶ prove to be effective in enhancing intrinsic motivation and shaping new attitudes or behaviours. To support this claim, Paweł Tkaczyk (Tkaczyk, 2012) quotes the research carried out at the Carnegie Mellon University. It was found that the average teenager spends about 10,000 hours playing computer games by the time they are 12 years old. It means that the alternative and parallel world of activities, including education, exists. It is the world in which action is triggered by rewards, fun, and competition; where creativity, problem solving, team work, determination, various skills are being developed. And this fact can no longer be unnoticed by educators. To be able to achieve the game-like effectiveness, educational contexts driven by game mechanics, rules and principles need to be created and designed.

2.3. Exploring gamified education

In 2010, a pioneer of edu-gamification, Lee Sheldon from Indiana University, Bloomingdale, prepared a course syllabus for students of the Department of Telecommunications called *Multiplayer Game Design*. The class took the form of a multiplayer game in which the participants were introduced to the design and production elements in order to create and maintain online games.⁷ Each level of the game was awarded a certain number of points for the specific work to be undertaken.

The final – and, mostly probably, the best known – gamified educational experience is Khan Academy, founded in 2008 and awarded a large grant from both Google and the Bill and Melinda Gates Foundation in 2010. The idea is to help students to learn, and the official website provides students with about 3,200 videos of lectures in order for learners to gain knowledge from various academic fields. Students are awarded points for solving a series of tasks, and when this is done really quickly and effectively achievement badges are given. When a string of ten problems in a row is completed, a student is said to have mastered the lesson and can move to the next one. Additionally, students can observe their progress on a knowledge map. 8

⁶ The collection of projects is available on the main website of Volkswagen's initiative: http://www.thefuntheory.com/.

The sylabus is available on this website: http://gamingtheclassroom.wordpress.com/syllabus

⁸ A whole chapter is about the idea behind the Khan Academy in: Burke B., Gamify. How gamification motivates people to do extraordinary things, Bibliomotion, 2014.

The listed examples regard only pioneering gamified courses. There is no exhaustive list of all possible courses, but only attempts to overview some of them⁹. They are developed in various areas: education and training, well-being, advertisement, business, cultural heritage,, interpersonal communication, biomedical and health care.

Some enthusiasts of gamification have introduced gamified academic courses at Polish universities. Piotr Prokopowicz, who works at the Jagiellonian University in the Psychology Department and teaches Personnel Psychology, collaborated with Grzegorz Żmuda in 2010 to design a gamified course as a part of the Psychological Organisation Diagnosis classes at the university. The aim of the course was to prepare students to be effective, if not excellent, organization diagnosticians. The participants were able to gain points in three areas: knowledge, experience, and charisma. They worked either individually or in teams, and different types of work were assigned and awarded points.

Another Polish attempt at gamifying education is the one undertaken by Anna Rogala from the Psychology Department at Gdańsk University, who used the scheme of a Role Playing Game to develop a gamified academic course. Between March and June 2014 students had to complete a special mission of de-conspiring the work of pseudo-psychotherapists. This meant identifying the false and incorrect elements in psychotherapist practices. A variety of activities were given to the students, each of which worth a certain number of points. The students could choose from the different options as not all the activities were obligatory. Extra points were also given for non-compulsory activities provided beforehand by a teacher. Each participant became a special agent using a code name, and the Edmodo platform was used as a communication channel.

All these courses announce a change in education which we may soon be facing. Brian Burke (2014) mentions a survey conducted by the Pew Research Center about the opportunities for gamification by the year 2020. 53% of those surveyed said that gamification would be widespread, whereas 42% predicted that gamification would not evolve and become a larger trend. In April 2015 Information Technology Big Market Research published a report about gamification in the e-learning marketplace. Mind Commerce, a research provider, projects that gamification in e-

⁹ One of such attempts was published by Fedwa Laamarti, Mohamad Eid, and Abdulmotaleb El Saddik and is available at: http://www.hindawi.com/journals/ijcgt/2014/358152/.

learning will grow to reach \$319 billion by the year 2020, and college education and MOOCs will hold 69% of the market share.

These predictions are serious enough to make one at least consider gamification options and their mechanics as well as their underlying affective factors.

3. Gamifying language learning -- the study

3.1. Aims of the research

Intrinsic motivation, pointed out as the main factor in game engagement, was the main focus of the research, whose theoretical frame was delineated by the Self-Determination Theory. Its main focus was why people may be interested in using gamified systems. I concentrated on one of the components: "trying to learn what is relevant to you", an obvious choice from the perspective of the teacher. Therefore, the research questions were as follows:

- 1. Why are students trying to learn what is relevant to them using gamification tools?
- 2. What makes them want to play a learning game?

3.2. Design and procedure

In my research I also concentrated on teamwork and task objectives identified as important in Dörnyei's proposal of motivational perspective as well as in Pink's overview. In practical terms it meant working in teams in order to complete the task where cooperation occurs according to a set of rules and norms. Teamwork also fitted the mastery and relatedness concepts, understood as doing something for others because each participant in a team worked towards winning. Having grammar knowledge, sharing it, and providing answers quickly resulted in getting more points than other teams and winning. By evaluating fun, stress, and interest the idea of making learning enjoyable was to be measured.

When it comes to the research context, I decided to work with an online game called Kahoot. In this application teachers/users have their accounts where they prepare tasks/tests that can be made public or kept private. This means that every user can adapt already existing public tasks/tests to their own needs and share their own tasks/tests with the rest of the users. To play the game the class needs access to the Internet, a projector and a screen where the task/test is displayed. The participants give their answers using mobile devices, such as smartphones, tablets or laptops.

As for the research tools and procedures, I decided to observe a group of university students during the classes of English conducted by the teachers of the Modern Language Centre functioning within the Pedagogical University in Kraków. The research was carried out with the group of 112 students. They were between 19 and 24 years old (45 between 18-20, 58 between 20-22, 9 between 22-24), with twice as many women (76) than men (36). Their level of language was upper-intermediate. They came from various university departments: Information Technology, Polish Language and Literature, Public Administration, Political Studies, Sociology, Philosophy, Culture Studies, with the departments chosen at random. The students played the game between 1 and 3 times.

The games in question focused on grammatical content ranging from irregular verbs forms, question formation, and passive voice through various tense differences, before finishing with reported speech, conditionals and subjunctives. This type of content is usually rather sensitive because these structures frequently create problems for students.

The first immediate evaluation of each game was carried out right after the students had finished playing the game. This evaluation is a final component of the game and it is generated by the system. They rated the quiz, assessing the fun element they had experienced while playing. They could decide how many stars out of total five can be given as the reflection of how funny/enjoyable it was for them. They also assessed if they learnt something and if they would recommend this game to others, which is done by marking the Like or Dislike icon. Finally, they could indicate how they felt during the game: happy, indifferent, unhappy, by touching the appropriate icon. Figure 1 shows what students saw on the mobile devices screens during the immediate game evaluation. Figure 2 illustrates the final results which the teacher and students could see on the main screen.





Figures 1 and 2. The screenshots of the immediate evaluation which students see when the game is over

During the last semester of the course, an additional form of evaluation was implemented. It was a questionnaire which focused on students' motivation that drove them to take part and participate in the game they were offered in classes. The questions referred to using online language games before either individually or in a group, the frequency of using the Kahoot game during English classes at the university, and the will to continue playing this particular game in class in the future. The second part of the questionnaire was devoted to grading the level of fun, stress, interest, as well as on the game form of grammar teaching class. Reasons of being motivated to take part in the game were also evaluated. They were listed as follows: reaching a win, mastering the knowledge, cooperating with the others, having a clear objective. Finally, the students graded if this game was better than traditional class grammar exercises.

3.3. Results of the questionnaire

The very first evaluation generated by the game system contained three pre-designed questions as illustrated in Figure 3.

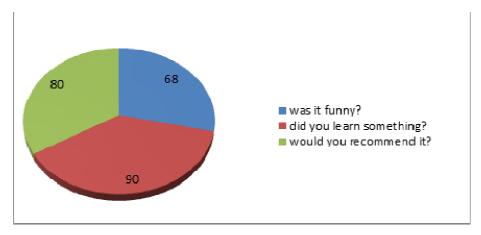


Figure 3. Immediate feedback triggering students' opinions on the game system

As far as the fun assessment is concerned, the overall grade was 3.9 out of a maximum of 5. 68% of students thought the game was fun, whereas almost every third student thought the opposite. However, the vast majority of the students (90%) stated that they had learnt the intended grammar structure as a result of game. What is more, 80% of the students would recommend this way of learning. The evaluation segment, completed immediately after the game, involved also stating how the students felt after playing. The students were given three options to choose as illustrated in Figure 4 below.

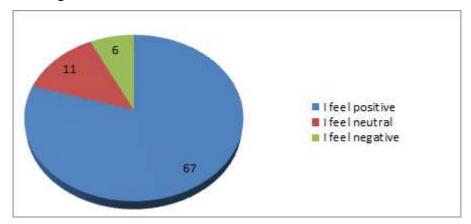


Figure 4. Immediate feedback about feelings

Not all the students gave their answers because many left the game without completing the evaluation. However, the majority of those who assessed the game touched the positive feeling icon (67%), few (11%) felt neutral, and a tiny proportion (6%) felt negative.

While the game system evaluated fun, the learning outcome, and feelings, the post-gaming questionnaire addressed the key question of the research, evaluating how

motivating the Kahoot game could be. The students were asked a set of questions which were placed in 4 groups.

First of all, it was interesting to see to what extent the students were familiar with any language games, both online and offline.

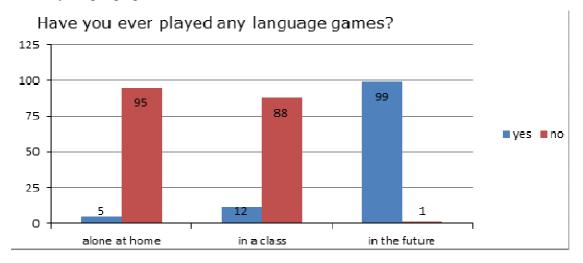


Figure 5. Language game experience

Only 5% of students have played some or indeed any kind of language game at home. The overwhelming majority did not play any foreign language game, however, there were a few who mentioned *Duolingo*. Yet, as far as classroom game use was concerned, the percentage is a little higher: more than twice as many students had played language games in class. Based on the descriptions given by the students, the games seem to be Hot Potatoes and other forms of crosswords, word boxes, etc. 99% of students stated that they would want to play language games in a class.

The next question to be asked was: Would they be so eager to learn grammar in a gamified way? Announcing that grammar which is to be the focus of a class is usually answered with a deep sigh of suffering. Therefore, the motivation to learn grammar using this particular game had to be measured. The students were given the criteria as illustrated in Figure 6.

¹⁰ *Duolingo* is a language learning application in which a participant goes level after level gaining points (lingots) .One language is used as a medium for learning another one.

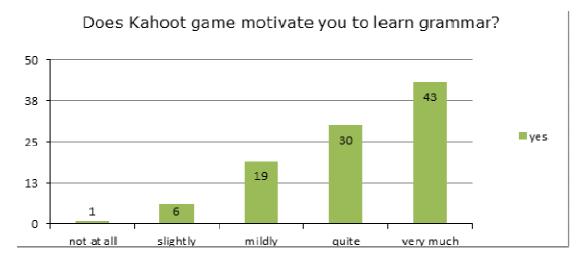


Figure 6. Students' motivation to learn

The final two findings indicate that about 70% of students feel motivated to learn grammar after they have played Kahoot, altogether 26% seemed rather indifferent. Almost three out of four students were fairly strongly driven to take in the grammatical content.

I decided to test three components of intrinsic motivation as defined by Pink: mastery, team and purpose. I also added the component of reward, and named it the desire to win.

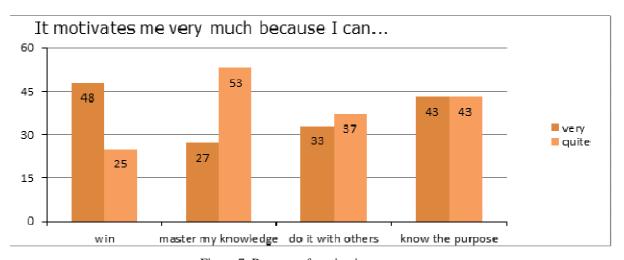


Figure 7. Reasons of motivation

The desire to win dominated as the game itself is about winning and losing. Almost half of the students were strongly engaged with the game because of the reward waiting at the end – the first place in the competition. A quarter of the students were quite motivated by the prospect of winning.

The results were reversed in the case of mastering knowledge. A quarter of the students were very interested in developing competence, whereas more than half were only quite interested in it. One in three students either liked the idea of playing with others very much or quite liked it. The clear and known purpose of the game - which is not only winning but also revising, checking, and consolidating knowledge – was also appreciated by about 80% of students. Playing the game for winning and other already mentioned reasons were equally important.

As it is known that fun can lead to a change of behaviour, I also wanted to examine how the game was perceived as far as fun was concerned.

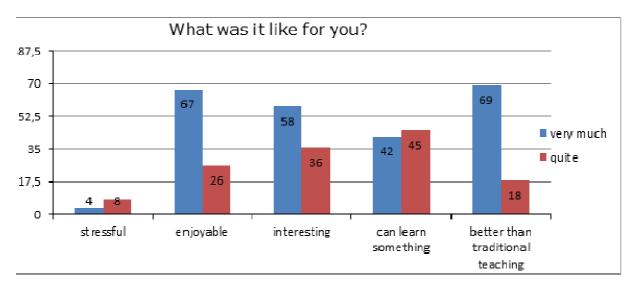


Figure 8. Fun and non-fun component

90% of students responded that playing a game in class with others was either very enjoyable or quite enjoyable. Even more (94%) found themselves interested in it. A tiny minority (12%) decided that it was either very or quite stressful. And finally, the overwhelming majority (87%) think that they can learn something through playing games (42 very and 45 quite). And the very same 87% decided overall that this form of learning is better than traditional methods, and 69% of the students are strongly convinced of this.

4. Discussion

The first immediate evaluation was possible because of the Kahoot's systemic assessment, which allows the evaluation immediately after the game is finished. It shows four things: fun, learning effectiveness, learning recommendations, and types of feelings accompanying the game.

The first significant finding from this immediate evaluation is the grammar learning effectiveness, which is graded very high (90%). This shows that even though the content may be difficult, the students seem to be open and eager to learn through the use of an online game. The high level of this type of learning recommendation suggests as well that anything is better than traditional grammar teaching and the subsequent practice involving numerous and monotonous exercises, such as filling the gaps, completing sentences with appropriate verb forms, matching forms, or choosing the correct option in multiple choice exercises. The fun is not graded the highest, but not the lowest either. This may be influenced by the competitiveness of the game. The disappointment of failure might be a factor. And, therefore, might limit the element of fun. The positive feedback about feelings is related to the genuine sense of fun and competition that the students experienced during the game. The disappointment or disengagement may be due either to technical failures or to accidental mistakes the students made that resulted in lower positions in the game.

As the second part of the research was based on delayed feedback, it allowed to measure different things: familiarity with language games, motivating reasons to play, and the role of the fun component. It shows clearly that students are not familiar with online class games, and that they would approve of their use more in the future. This finding suggests that using Kahoot or any game in class would be welcome. One may wonder if this is because of the lack of methodological variety, work overload, constant presence of games in their lives, the need for strong stimuli or the desire to have fun rather than monotonous hard work. The reasons of playing the game in the class vary, ranging from the desire to win to the need to master the knowledge. Fun, reward, leader boards, avatars, points, challenges, which all are game elements used in a non-game context, appear overall to be effective in motivating the students. The results show that these are not the only reasons.

There might be a number of explanations for such results, but a statement by Jane McGonigal could cast some light on this phenomenon:

The real world just doesn't offer up as easily the carefully designed pleasures, the thrilling challenges, and the powerful social bonding afforded by virtual environments. Reality doesn't motivate us as effectively. Reality isn't engineered to maximize our potential. Reality wasn't designed from the bottom up to make us happy. (...) Reality, compared to games, is broken.' (2011, loc. 124)

Fortunately, the classroom reality can be 'engineered' by the intrinsic motivation drive built in the class online game. In case of the researched group of students, expectancy of success after reaching a certain level of competence because of developing certain language skills is satisfied by gaining points, and finally coming closer to win. The motivational feedback is delivered instantly in the form of points depending on the language/grammar correctness. Even though the reward may be 'insignificant', it is still a reward. Goal-orientedness is enhanced by the possibility of making the step-by-step progress towards the class objectives stated by the teacher, as well as the chance of winning the game and being the best in the class. All of these are underlined by the presence of social experience, described by Deci as relatedness, and viewed by Dörnyei as cooperation. The students are not left alone, they act together, establish the manner in which they work together, as well as face the consequences of their wrongdoings/mistakes together. Therefore, the class-with-agame reality is not broken, because it offers more motivational stimuli than just reality.

5. Conclusions

Teachers have to face the fact that gamification might be soon (if not already is) present in language classrooms. Learning happens every day, but it is sometimes hard, particularly in the case of delayed gratification or accomplishment. Gamification can add motivation to learning activities and as such should not be underestimated. Indeed, there have already been gamified classes in educational institutions and this trend is very likely to develop.

After having analysed the results of the questionnaire, which was focused mainly on the aspect of motivation, the motivational issues are to be particularly looked at. The intrinsic motivation components were evaluated and they indicate certain conclusions. In the online game context intrinsic motivation is enhanced by the perspective of winning and/or getting a reward. The win as a drive to play a language game cannot be underestimated. It is the factor which allows a learning class environment to be conditioned and shaped according to the needs of the students, the learning process, or the requirements of a course. Difficult or complex grammar input can be introduced and used by the teacher. Therefore, various learning objectives can be achieved, for example, introducing, revising, or consolidating the

language content. As demonstrated by the questionnaire results, students appreciate clear objectives, particularly if they help to master the knowledge or develop the language skills. Explaining the objectives to the students helps to take the language game beyond just pure fun. In order not to make the language game go beyond a gaming experience, it is valuable to enrich it with teamwork. Following the rules and norms within the group cooperation mode may allow students to go beyond just the content learning experience. It makes it purposeful and lets individuals relate themselves with the others. Getting instant motivational feedback in the form of points or levels indicates how effective this cooperation is.

All of the above assumptions are backed up with one important element: fun. Games provide fun and should not be only associated with something less serious. Having fun with others is not stressful, it is enjoyable. Playing a game together goes beyond the traditional way of learning, as the questioned game was designed to practice and revise the language, but also provides a thrill which is absent when doing ordinary grammar exercises. Everyday practice shows that students find anything better than the traditional old ways of teaching, and 69% of the questioned students were strongly convinced of this. The overwhelming majority of students admitted that they would like to see more games in their classes. Implementing language games into the learning process will bring variety, break monotony, enliven classes, and motivate students to work. Rewards, points, levels are forms of extrinsic motivators, but the whole gaming experience touches significantly the intrinsic motivation aspects. A more common view on gamification is expressed by Kevin Werbach, who claims that "[g]amification can motivate people to undertake activities that they otherwise wouldn't do. If that means hitting the gym regularly or having a more enjoyable engagement with a brand, it's a good thing". (Werbach, 2014, loc. 959)

6. Implications for further research

It may be thought that the use of language games is the best way of teaching and even though the results are highly satisfying, there are still many questions unanswered. Searching for the answers to them could be the focus of further research. Some problems and problematic issues that need to be measured, answered and solved are, for example:

• At what point, after numerous games, would the students become bored and disinterested?

- Will the students still be engaged after years of being exposed to various gamified systems? Or will their interest wane?
- How long-lasting are the results and how effective is this type of learning?
- How dangerous and monotonous can it be to enhance motivation only through a system of points and rewards?
- How effective can this method of gaining knowledge and improving skills be in the long run?
- Will universities demand that teachers prepare more and more gamified courses to attract more and more students?
- Will universities still need face-to-face teaching in the cost-cutting model of managing education?
- How much will teachers resist to this model of learning?
- Will gamified courses be as widely available and accessible as MOOCs are?
- Will the lack of such courses affect and form 'ghettos' of less educated students?
- Will the qualities and skills gained through gamified courses be appreciated by employers?
- What kind of game content can be game-proof?

The list of possible questions will probably increase as gamification becomes more popular and widespread. So far, my research has been concentrated more on the positive aspects rather than the negative.

Acknowledgements

I would like to thank Anna Turula for inviting me to contribute to this special issue and the anonymous reviewers, who really improved the quality of this paper.

References

- Anonymous (2015). Gamification in e-learning marketplace. *Big Market Research*, April, 2015. Last accessed July 22, 2016. http://www.bigmarketresearch.com/gamification-in-e-learning-place-market#whatech.com/101518.
- Burke, B. (2014). *Gamify. How Gamification Motivates People to Do Extraordinary Things*. Brookline: Bibliomotion.
- Deci, E. D., & Ryan, R. M. (200). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54-67. Last accessed July 22, 2016. http://www.sciencedirect.com/science/article/pii/S0361476X99910202

- Dörnyei, Z. (2001). *Motivational Strategies in the Language Classroom*. Cambridge University Press
- Feiler, B. (2012). She's playing games with your lives. *New York Times*, April 27, 2012. Last accessed July 22, 2016. http://www.nytimes.com/2012/04/29/fashion/jane-mcgonigal-designer-of-superbetter-moves-games-deeper-into-daily-life.html.
- Laamarti, F., Eid, M., & El Saddik, A. (2014). An overview of serious games. *International Journal of Computer Games Technology*, 2014. Last accessed July 22, 2016. http://www.hindawi.com/journals/ijcgt/2014/358152/
- Marczewski, A. (2014). Defining gamification what do people really think? *Gamified UK blog*, April 16, 2014. Last accessed July 22, 2016. https://www.gamified.uk/2014/04/16/defining-gamification-people-really-think/
- McGonigal, J. (2010). Gaming can make a better world. *TED2010*, February 2010. Last accessed July 22, 2016. https://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world
- McGonigal, J. (2011). Reality Is Broken. Why Games Make Us Better and How They Can Change the World. New York: The Penguin Press
- Singer, N. (2016). Kahoot app brings urgency of a quiz show to the classroom. *New York Times*, April 16, 2016. Last accessed July 22, 2016. <a href="http://www.nytimes.com/2016/04/17/technology/kahoot-app-brings-urgency-of-a-quiz-show-to-the-classroom.html?WT.mc_id=SmartBriefs-Newsletter&WT.mc_ev=click&ad-keywords=smartbriefsnl&_r=0
- Sylvester, J. (2012). Pink's theory set to drive up employee motivation and engagement, *P&MM Motivation*, October 23, 2012. Last accessed July 22, 2016. http://staffmotivationmatters.co.uk/pinks-theory-set-to-drive-up-employee-motivation-and-engagement/.
- Werbach, K., & Hunter, D. (2014). For the Win: How Game Thinking Can Revolutionize Your Business. Philadelphia: Wharton Digital Press.
- Werbach, K. (2015). *Gamification*, Coursera Platform: University of Pensylvania. Last accessed February 8, 2016. https://www.coursera.org/learn/gamification/.

Appendix 1 – List of Gamified Courses

 $\underline{https://gamingtheclassroom.wordpress.com/syllabus/}$

https://gameofpod2010.wordpress.com/rules-of-the-game/

http://annamariarogala.wix.com/beka#!misja/c4nz

http://www.ideatorium.ug.edu.pl/inspiracje.html

TEACHING A FOREIGN LANGUAGE IN A DESKTOP VIDEOCONFERENCING ENVIRONMENT

by Krzysztof Kotuła

Maria Curie-Skłodowska University ul. Sowińskiego 17, 20-610 Lublin, Poland christophe.kotula @ gmail.com

Abstract

This paper aims to explore how language instructors teach with a synchronous multimodal setup (Skype). It reports on findings from research which evaluated how teachers use technologies to enable them to work in distance learning contexts. A total of 124 teachers (86 female and 38 male), offering online private lessons, were asked to complete a survey in which they were asked to describe the advantages and disadvantages of Skype, as well as to enumerate functions they consider are missing in this tool. They were also invited to share their opinions about most efficient models of language learning and teaching. The results show Skype is, on the whole, judged by teachers as a valuable tool in the context of distance language learning. Its use in teaching, nevertheless, has some limitations, which stem from various factors, such as IT infrastructure weaknesses (e.g. interrupted connections), lack of some functions (e.g. supervising the content of the learner's screen) or the specific nature of contact with the interlocutor (the lack of a possibility to interact in a common space).

Keywords: CALL; distance learning; Skype; private tuition

1. Introduction

Characterized by Godwin-Jones as "the people's telephone" (2005), Skype is a freeware communication tool which enables voice conversations and provides the opportunity to see one's interlocutor by means of a webcam. A microphone and speakers are the minimum requirements to ensure a successful connection; however, the use of headphones seems to be the best way to eliminate any echo which may impede the quality of communication. Additional functionalities of this software include text chat that can be used when disturbances during voice conversation occur, and screen sharing capability, which is particularly useful in the educational context. Since its release in 2003, the popularity of Skype has been constantly growing, particularly on mobile devices. Equally, the use of Skype in educational contexts has been expanding as numerous lessons and online conferences take place by means of this application (Develotte *et al.*, 2010).

As some researchers have pointed out, programs such as Skype can "[...] facilitate a partnership between L2 learners and native/expert speakers of the target language" (Tian &

Wang, 2010: 181). Taking into account the possibility of barrier-free communication with people all over the world, numerous authors consider it to be a perfect tool promoting intercultural exchanges (O'Dowd, 2000, Taillefer & Munoz-Luna, 2014). Skype is also popular among teachers conducting private foreign language lessons. The possibility of reaching a broad range of clients as well as time- and money-saving properties encourage more and more language educators to make videoconferencing an integral part of their professional practice.

The paper's structure is the following. After a brief review of the benefits and drawbacks of using Skype in distance language learning, the author discusses and summarizes the findings of previous studies which guided his conceptualization of the current project. Then, the author describes the study conducted with Polish language teachers using Skype in their work.

2. Literature review

The advantages of using Skype as an educational tool were most accurately described by Hashemi & Azizinezhad (2011), who draw attention to such its characteristics as comfort of use (resulting from the fact that each user has a personal presentation screen), total focus on the content presented on the learner's computer, complete privacy, abundance of tools permitting sharing and reusing of lesson content (audio recording, chat history) as well as the availability of multiple and parallel communication channels (Hashemi & Azizinezhad, 2011). The authors concentrate on the possibility of reaching people coming from diverse economic, ethnic and cultural groups, and state that "CMC offers superior chances for interaction and improvement to students in an EFL setting where native speakers are few and far between" (Hashemi & Azizinezhad, 2011: 51).

The implementation of videoconferencing in education has been discussed in various publications, where the authors described their pedagogical experiences (Wang, 2004 & 2006; Jauregi & Bañados, 2008; Lee, 2007), and reflected on an optimum way of designing exercises most suitable for this context (Wang, 2007). In spite of the undeniable advantages of Skype-like tools, some aspects of using them in educational contexts may sometimes prove to be difficult, as, for instance, both the teacher and the learner have to function in two spaces at the same time: in the virtual space which is visible on the computer monitor, as well as in the real space, where one can access various educational materials such as dictionaries, student's books, notes, etc. As a consequence, the teacher is forced to integrate and perform various activities of a different nature simultaneously, such as moderating the conversation,

monitoring himself/herself and the learner, controlling the tools and managing the resources (Develotte *et al.*, 2010). Synchronous online teaching also imposes the necessity of adapting communicative skills, such as the use of appropriate body language, to the nature of the new medium (Licoppe & Relieu, 2007). In this context, it is not surprising that some teachers may see videoconferencing as an unsatisfactory alternative to face-to-face communication, the transmission being usually restricted to a close-up shot of the interlocutor, which does not enable speakers to perceive important elements that usually significantly shape interaction, such as dress code or body language (Zähner *et al.*, 2000; Lamy & Hampel, 2007).

Characteristic features of oral communication by means of Skype-like VoIP (Voice over the Internet Protocol) services are particularly interesting to investigate, as this aspect has direct influence on the quality of interaction in foreign language classes. In spite of the fact that, at first glance, videoconferencing seems to be similar to traditional face-to-face communication, in fact, in numerous respects, there are fundamental differences between these two types of interaction. The presence at a distance phenomenon was already described in 1999 by Weissberg, who states that "[it] do[es] not reproduce the performances we usually accomplish [but rather] invents another realm of perception [...]" (Weissberg, 1999: 14). In this context, activities such as speaking, seeing and listening become different to those experienced in face-to-face life. In his 2004 paper, Jones emphasizes this point, stating that "what makes communicating with new technologies different from face-to-face communication is [...] the different sets of 'mutual monitoring possibilities' that these technologies make available, the different ways in which they allow us to be present to one another and to be aware of other people's presence" (2004: 23). An additional difference is that in computer-assisted communication, oral and body language can be used along with a wide range of different media (pictures, video recordings etc.) enabling interlocutors to change the way they create meaning (Hampel & Stickler, 2012).

Finally, technical obstacles encountered while working by means of Skype-like VoIP applications also have to be mentioned. These include interrupted connections and various distractions (Oviatt *et al.*, 2004). Communication is hardly ever uninterrupted: micro-gaps, which constitute a particularly unfavourable phenomenon in the context of foreign language learning, occur frequently (Ruhleder & Jordan, 2001). Taking these factors into account is important since, as Eakin remarks, "(...) frustration with the functionality of a web-based tool has the potential to damage the pacing of a lesson and student's interest levels" (2012: 20). Nevertheless, some authors point out that this kind of inconvenience can, paradoxically, force users to increase the frequency of their contributions (Goodfellow *et al.*, 1996) and, therefore,

deepen oral exchanges (O'Dowd, 2006). As one can notice, the teacher certainly has to face an important task of tailoring his methods of work to the characteristic features of the medium in order to be able to fully exploit its potential.

When analysing the implementation of VoIP tools in foreign language teaching, several possible focal aspects must be considered, including: user opinions (both students' and teachers') about this work mode; the characteristic features of distance learning (a comparison of the course of a lesson with interactions that take place in real-life contexts), or, finally, the effectiveness of this teaching approach. The research conducted by the author of this paper focused on the first of these issues, namely, the way educators perceive the usefulness of Skype in their work. The use of videoconferencing in the context of private foreign language lessons constitutes a particularly important aspect, especially when one takes into consideration the background of the study which was conducted in Poland, where private lessons are the norm (Putkiewicz 2005). To the knowledge of the author, opinions of teachers using Skype in this particular context have not been yet described and analyzed in any publication. Therefore, the present study aims to fill an important gap in research related to the use of videoconferencing in language learning.

3. The study

3.1. Research aims, participants and design

In order to study teachers' opinions, a survey created by means of *Google forms* was used. Teachers of English, German and French, working in various schools in Poland, whose contact data were familiar to the author of the present study, were invited to take part in the survey. As they were asked to disseminate the survey further, it is not possible to calculate the exact response rate, because the actual number of people informed about the questionnaire is not known. The link to the survey was also sent to a total of 973 teachers who post on the website www.e-korepetycje.net, and who explicitly stated in their announcements that they offer online private lessons. Data were collected in March and April 2015. In total, 124 subjects completed the survey, 86 females and 38 males. Full descriptive statistics are presented later in this section.

The survey consisted of 29 items. Six opening questions related to basic personal information, such as gender, age, languages taught, the type of school they work at, the length of their professional experience, and the time during which they had offered online private lessons via Skype. The following five items were focused on a detailed description of work with Skype specific to every teacher, such as the context of teaching (individuals, pairs or

groups consisting of multiple members), software used together with Skype (e-mail, blogs etc.), hardware used to enhance Skype functions, the frequency of webcam usage and the assessment of its usefulness. The three items were open-ended questions, where the participants were asked to describe the advantages and disadvantages of Skype as well as to list functions they consider missing from this piece of software. In order to conclude their reflection, the subjects were invited to assess the overall usefulness of Skype in foreign language teaching on a scale of 1 to 10. The remaining 14 items were statements with five-point Likert-scale response markers ranging from "strongly disagree" (1) to "strongly agree" (5), concerning the participants' opinions about the most efficient models of language learning and teaching as well as their convictions with relation to their technical and pedagogical competences. Data were analysed with Statistica version 8 and SPSS version 22.

3.2. Results

Basic data referring to the sample are presented in Table 1 and in Figures 1 and 2 below. As it can be seen, teachers taking part in the survey differed considerably from one another as far as their age and length of professional experience are concerned. Interestingly, there was no significant relationship between the length of experience a particular teacher had in using Skype in their work and the length of their professional experience in general (r=0.17, p=0.06), indicating that some experienced teachers have started using new technologies only quite recently. Most of the participants (39%) declared that they taught more than one foreign language. As can be observed in Figure 2, for the majority of these teachers conducting private lessons constituted additional work. Only 19% of the participants said that they did not work at any school at the moment the study was conducted. Most worked at private language schools (58%), upper (45%) and lower secondary schools (35%), and they often worked in two or more institutions (57%).

Table 1. Participant characteristics

	M	Min	Max	SD
Age	30.81	21.00	55.00	8.42
Length of professional experience in teaching	7.87	1.00	23.00	5.82
Length of teaching experience using Skype	2.35	1.00	8.00	1.54

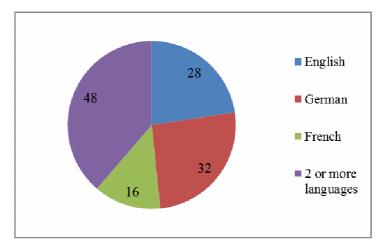


Figure 1. Languages taught by the participants of the study

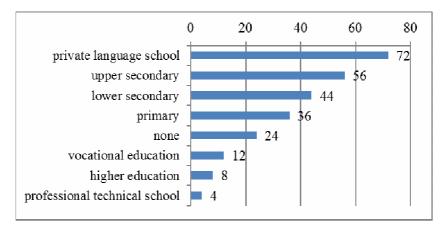


Figure 2. Institutional background of the participants

When it comes to the teachers' opinions, the usefulness of Skype as well as the capabilities of this tool were rated quite high by the participants (M=8.67, ranked on the ten point scale, SD=1.58); only in 8 cases was this rank found to be lower than or equal to 10. A one-way ANOVA showed no statistically significant differences between the opinions expressed by the teachers of particular languages: F(3, 120)=1.79, p=0.15.

A significant majority (100 teachers) were found to use Skype to give individual classes, 20 participants also used it to conduct lessons for pairs and only 4 sometimes organised lessons for more than 2 learners at once. The participants' answers regarding the use of the webcam are also interesting: 8 participants claimed they never used the webcam, 104 teachers used it from time to time and only 64 said they always used it in their online lessons.

As far as additional software used in distance learning is concerned, the teachers taking part in the study indicated e-mail as the most important tool enabling them to communicate with learners (e.g. negotiating the date of a meeting) and to provide them with

all kinds of materials. Other Internet tools were used with a significantly lower frequency: usually, the teachers did not create interactive exercises or quizzes, nor did they record or share video materials or make use of learning management systems (see Figure 3 for details).

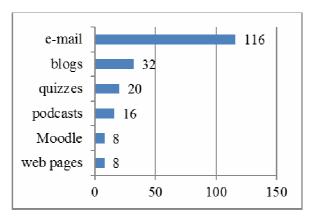


Figure 3. Tools used in distance learning by the participants of the study

Similar conclusions can be drawn when analysing the participants' responses to the question about the equipment used to enhance the potential of online lessons. The majority of the teachers (96) did not respond to this question at all, while the rest pointed out the most basic equipment, such as headphones, microphone or webcam. Only 2 people mentioned using a Figureics tablet, which is a useful tool that enables capture and transmission of handwritten data. As a result, one might suggest that the extent to which the teachers implement new technologies which have the potential to significantly enhance their work is quite limited.

A more detailed description of pedagogical experiences provided by the study participants in response to the three open-ended questions sheds more light on the nature of foreign language teaching via Skype. As indicated by the teachers, the benefits of using this type of software, such as saving time (67), saving money (55), or the possibility to get in touch with a greater number of clients who live, for instance, in small towns or abroad (19) are consistent with what one would expect. As far as the disadvantages of Skype are concerned, the majority of the subjects (71) mentioned technical problems, such as interrupted connections or insufficient audio or video quality. This problem is particularly serious in the case of communication in a foreign language, where every disturbance has a negative influence on the lesson quality. The second most frequently mentioned disadvantage, indicated by 60 teachers, was the lack of direct contact with the learner. 11 participants reported various problems with the environment, such as the lesson being disturbed by other

people present in a room, or by intrusive outside noises. Finally, 7 teachers complained about limited interaction with the learner. As teachers and pupils do not share a common space, some basic elements of non-verbal communication (e.g. pointing at particular objects) are eliminated. Due to this fact, as three of the participants stressed, it is not possible to conduct some kinds of exercises (e.g. those containing kinaesthetic elements) with the youngest learners.

Interestingly enough, only 8% of the participants suggested additional functions they would like to have integrated with Skype. These suggestions comprised call recording (7), speech recognition enabling teachers and students to easily obtain the transcript of a lesson (3), improved document sharing (3), payment integration (2) and control of the learners' screen (1). Some of these functions, such as, for instance, call recording, can be introduced by means of third-party plugins; others have not been implemented simply because Skype was not designed with a view to being utilised for distance learning. Finally, one has to underline that four participants indicated the growing popularity of Google Plus: a tool that does not require to be installed on the computer hard drive and which, according to the interviewees, offers higher quality of conversation. This indicates that, in the near future, Skype may inevitably face competition from other programs.

Next the participants' responses to Likert-scale questions were analyzed. In order to explore the underlying dimensions of all the items, factor analysis was used. The Kaiser-Meyer-Olkin measure verified the sampling adequacy of the analysis (KMO=0.61) and all KMO values for individual items were ≥ 0.54 , which is above the acceptable limit of 0.50. Bartlett's test of sphericity χ^2 (91)=972.37, p<0.001, indicated that correlations between items were sufficiently large for principal component analysis. A PCA with orthogonal rotation (varimax) was conducted. Four components had eigenvalues over Kaiser's criterion of 1 and in combination explained 65.88% of the variance, which is a good result when the relatively small size of the sample is taken into consideration. Loadings of all the features are listed in Table 2.

Table 2. Results of factor analysis

Item	Factor 1	Factor 2	Factor 3	Factor 4
1) New technologies allow for more effective teaching of foreign languages than traditional methods.	-0.65	0.03	0.07	0.01
2) Distance teaching is more comfortable than direct face-to-face communication.	-0.67	0.20	0.10	-0.19
3) Face-to-face communication is the most effective form of contact with the student. Skype should be used only when this is not possible.	0.75	0.01	0.06	-0.29

4) Distance learning cannot fully replace direct face-to-face contact with a student.	0.75	0.08	0.27	-0.05
5) When learning a foreign language direct face-to-face contact with a student is the best solution.	0.84	0.04	-0.08	-0.11
6) I think I am a good teacher.	0.15	0.79	-0.03	0.22
7) I think that my students are satisfied with my teaching.	0.01	0.91	0.11	-0.15
8) My classes are interesting.	-0.13	0.86	0.05	0.25
9) I think that sooner or later new technologies will replace human teachers.	-0.20	-0.23	0.72	0.12
10) It is not possible to teach foreign languages well without using new technologies.	0.24	0.06	0.62	-0.25
11) I try to develop my IT skills in order to become a better teacher.	0.03	0.21	0.68	0.23
12) I try to introduce various innovations aimed at improving the quality of distance learning.	0.11	0.34	0.79	0.04
13) I can solve the technical problems that arise in the course of computer-assisted learning.	0.04	0.08	0.01	0.91
14) I am proficient in new technologies.	-0.27	0.10	0.09	0.83
Cronbach's α	0.79	0.84	0.73	0.85

Notes. Loadings above 0.6 are highlighted in bold.

The first factor (items 1-5) relates to the participants' conviction that direct face-to-face communication is an essential component of a successful teaching process and cannot be fully replaced by distance-bridging technologies. The second factor (items 6-8) reflects the participants' beliefs about being a good teacher. The third factor (items 9-12) reflects the participants' innovative attitudes and their conviction that incorporating new technologies into language teaching is useful. Finally, the fourth factor (items 11-12) corresponds to participants' self-perceived level of IT competence. The four factors are also not highly correlated with one another (the only significant correlation occurs between Factor 1 and Factor 4 (r=-0.19, p<0.05)), which demonstrates that they should be considered independent. In every case, the value of Cronbach's α was >0.7, indicating that each factor refers to a single unidimensional construct.

Further analysis examined correlation between selected variables. The principal aim was to assess to what extent the teachers' opinions about Skype are influenced by such factors as gender, age or length of professional experience. The results are presented in Table 3 below.

Table 3. Summary of selected correlations

	How do you assess the usefulness of Skype in your work and capabilities of this tool?	Factor 1 (conviction that direct face-to- face communication is an essential component of a successful teaching process)	Factor 2 (beliefs about being a good teacher)	Factor 3 (innovative attitudes)	Factor 4 (self- perceived level of IT competence)
Gender	-0.21*	0.53***	0.08	0.22*	-0.12
Age	0.16	-0.17	-0.13	0.12	-0.33***
How long have you been teaching?	-0.01	0.01	0.28**	0.05	-0.22*
How long have you been teaching with Skype?	0.18*	-0.17	-0.16	-0.01	-0.33***
How do you assess the usefulness of Skype in your work and capabilities of this tool?	1.00	-0.38***	-0.12	-0.24**	-0.06
Factor 1	-0.38***	1.00	-0.01	0.05	-0.19*
Factor 2	-0.12	-0.01	1.00	0.14	0.17
Factor 3	-0.24**	0.05	0.13	1.00	0.08
Factor 4	-0.06	-0.19*	0.17	0.08	1.00

Notes. Correlations marked with * were significant at the p<0.05 level.

Correlations marked with ** were significant at the p<0.01 level.

Correlations marked with *** were significant at the p<0.001 level.

Female participants were coded as '1', male participants as '0'.

As presented above, the teachers' opinions on the usefulness of Skype in language learning correlated significantly with four variables: gender, the length of teaching experience using Skype, and Factors 1 and 3. The first correlation (r=-0.21) indicates that male participants rated the usefulness of Skype higher than female teachers. This tendency is confirmed by the correlation between gender and Factor 1 (r=0.53), which indicates a clear relationship between gender and the conviction that direct face-to-face communication is an essential component of a successful teaching process. A t-test confirmed that female teachers are more attached to traditional ways of working with learners which they prefer to distance learning (M_{female}=2.71, M_{male}=1.84, t(122)=6.86, p<0.001). The second significant correlation with the length of teaching experience using Skype (r=0.18) suggests that the participants' opinion on the usefulness of this program increases with time, but this trend is not a particularly strong one. The third correlation, with Factor 1 (r=-0.38), indicates that people who prefer direct contact with the learner rate their pedagogical experiences with Skypemediated teaching lower. The fourth correlation with Factor 3 indicates the fact that people

who are more open to innovations and more inclined to believe that it is beneficial to incorporate new technologies into language teaching rate Skype's potential lower than others.

As far as the remaining significant correlations are concerned, the correlation between the length of professional experience and Factor 2 (r=0.28) indicates that teachers who have been performing their job longer than others are much more self-confident as far as their competences are concerned. The three remaining significant correlations, which occur between Factor 4 and participant age (r=-0.33), the length of professional experience (r=-0.22), and the length of professional experience in using Skype (r=-0.33) indicate that the older and more experienced study participants displayed lower self-perceived levels of IT competence. Finally, it is important to underline that participant age and length of teaching experience did not significantly influence their assessment of Skype.

The final stage of the analysis tested the overall effectiveness of the predictors through multiple regression analysis. The strongest correlation coefficient among the predictors occurred between gender and Factor 1 (r=0.53). However, as the absence of large correlations between the predictors does not necessarily rule out multicollinearity, additional diagnostics (VIF and tolerance statistics) were conducted. The values obtained (VIF values ranging from 1.12 to 1.96, tolerance values ranging from 0.51 to 0.89) showed that multicollinearity was not an issue of concern. Therefore, linear regression was conducted using the eight variables previously mentioned (gender, age, length of professional experience, length of professional experience using Skype, Factors 1-4) as independent variables and participants' opinions on the usefulness of Skype in distance learning as the dependent variable. This yielded a significant model, F(7, 116)=4.81, p<0.001, r=0.47, r²=0.23. Detailed data are presented in Table 4.

Table 4. Results of multiple regression analysis

Item	β	SE	В	t	p
Factor 1	-0.93	0.25	-0.38	-3.66	< 0.001
Factor 3	-0.92	0.34	-0.23	-2.71	< 0.01

Notes. Estimated Constant Term is -13.50, ß is unstandardized Beta, SE is standard error, B is standardized Beta

As presented above, two variables, Factor 1 (participants' conviction that direct face-to-face communication is an essential component of a successful teaching process) and Factor 3 (participants' innovative attitudes), made a significant independent contribution to the explained variance. The remaining six variables were not significant predictors. The analysis

confirmed the key roles of Factor 1 and Factor 3 in building participants' opinion on the usefulness of Skype in foreign language distance learning.

4. Discussion

As it was discovered, most of the participants declared that they teach more than one foreign language. This is increasingly common nowadays when teachers need to have wider competences, as well show higher versatility and adaptability to meet the demands of the job market. What is also interesting is that most of them work in two or more institutions. This kind of situation may be caused by the relatively low remuneration in the Polish educational sector, which forces teachers to look for additional sources of income.

In the author's opinion, the most intriguing finding is the fact that female language teachers appear to be more convinced than males that computer-mediated learning cannot replace direct contact with the learner. The issue of the relationship between gender and learner attitudes to distance learning has already been investigated in several studies which mainly concentrated on such phenomena as users' patterns of interaction, perception of social status, relationship building, forms of participation, and level of satisfaction, among others (Rovai & Baker, 2005, Johnson, 2011, González-Gómez *et al.*, 2012). Their findings suggest distinctive differences in the way members of both sexes engage in this particular form of educational experience. The study described in this paper clearly shows that these differences are also discernable in teachers.

The correlation analysis between the teachers' opinions on the usefulness of Skype in language learning and Factor 3 (reflecting participants' innovative attitudes) leads to another surprising conclusion. It highlights the fact that people who are more open to innovation and more inclined to believe that it is beneficial to incorporate new technologies into language teaching rate Skype's potential lower than others. This conclusion may appear to run counter to expectations, as logically one would assume that it would be this group of people who would perceive Skype in a more positive light than others. However, regression analysis confirms that for each unit increase in level of conviction concerning the positive impact of innovations in language teaching, participants showed a 0.92 decrease in opinion on the usefulness of Skype in distance language learning, whereas, intuitively, one would tend to assume the opposite. It could be hypothesized that this tendency was in some way influenced by the significant relationship between gender and Factor 3 (r=0.22). However, a Sobel/Aroian test showed that gender has no mediation effect in the relationship between the two variables (Z=-1.63, p=0.10). The negative beta value of Factor 3 may stem from the fact

that participants who perceive themselves to be more innovative and more open to the idea of making new media an integral part of the classroom experience at the same time show more awareness of the weaknesses of Skype, such as lack of direct contact with the learner or technical limitations.

Finally, having analyzed the teachers' opinions about the usefulness of Skype in conducting private language lessons, one can conclude that many people still consider presence at a distance to be radically different (in a negative sense) from physical presence. In fact, not fewer than 60 teachers taking part in the research considered the lack of direct contact with the learner as a negative aspect of videoconferencing. Answers provided to the questions relating to the use of webcam are also interesting. They demonstrate that visual contact between the teacher and their learner, which constitutes a particularly important component of face-to-face communication in traditional classroom settings, does not seem to be necessary while conducting online lessons. However, one has to take into consideration the fact that teachers refrain from using the webcam not only as a result of their preferences; it frequently stems from insufficient bandwidth.

5. Conclusions

As shown by the study, Skype is, on the whole, judged by teachers as a valuable tool in distance language learning. Its use in teaching, nevertheless, appears to have some limitations, which stem from various factors, such as weaknesses in the IT infrastructure (e.g. interrupted connections), lack of some functions (e.g. supervising the content of the learner's screen) or the specific nature of contact with the interlocutor (the lack of possibility of interaction in a common space). A considerable number of the critical opinions expressed by the participants of the study may be considered as referring to distance learning in general, where every single user is confined to their individual workplace. Most likely this is the argument which explains why even if Skype allows multiple simultaneous conversations it appears to be considered as a tool best suited to individual lessons, rather than group teaching. Conducting classes by means of a VoIP service for a larger number of participants is problematic as far as management is concerned (it may be difficult to, for instance, control discipline) as well as due to technical issues (e.g. learners' voices superimposing on one another may impede communication within the group). On the other hand, it should be underlined that some problems can be eliminated by the use of appropriate software and hardware (plugins, extensions, Figureics tablet, etc.). However, the fact that many teachers do not seem to be aware of the existence of, or willing to use, tools which could help them improve the quality of their work is problematic. The need for constant self-improvement as far as CALL is concerned and the ability to find and implement new solutions is clear in this case.

This study provided the opportunity to determine only some of the factors which influence language teachers' opinions about Skype. Overall, the study presents Skype as a tool which is used relatively universally in online foreign language teaching rather than being reserved for only a small group of people who are fluent in technology or represent the *digital native* generation.

References

- Develotte, C., Guichon, N., & Vincent, C. (2010). The use of the webcam for teaching a foreign language in a desktop videoconferencing environment. *ReCALL*, 22(3), 293-312.
- Eakin, A. (2012). The use of SKYPE in the World language classroom and its effects on participation and collaboration. *The TFLTA Journal*, *3*, 20-33.
- Godwin-Jones, R. (2005). Emerging technologies: Skype and podcasting: Disruptive technologies for language learning. *Language Learning & Technology*, 9(3), 9-12.
- González-Gómez, F., Guardiola, J., Rodríguez, Ó., & Alonso, M. (2012). Gender differences in e-learning satisfaction. *Computers & Education*, 58(1), 283-290.
- Goodfellow, R., Jefferys, I., Milest, T., & Shirra, T. (1996). Face-to-face language learning at a distance? A study of a videoconference try-out. *ReCALL*, 8(2), 5-16.
- Hampel, R., & Stickler, U. (2012). The use of videoconferencing to support multimodal interaction in an online language classroom. *ReCALL*, 24(2), 116-137.
- Hashemi, M., & Azizinezhad, M. (2011). The capabilities of Oovoo and Skype for language education. *Procedia Social and Behavioral Sciences*, 28, 50-53.
- Jauregi, K., & Bañados, E. (2008). Virtual interaction through video-web communication: A step towards enriching and internationalizing language learning programs. *ReCALL*, 20(2), 183-207.
- Johnson, R. (2011). Gender differences in e-learning: Communication, social presence, and learning outcomes. *Journal of Organizational and End User Computing*, 23(1), 79-94.
- Jones, R. (2004). The problem of context in Computer Mediated Communication. In P. Levine & R. Scollon (Eds.), *Discourse & Technology Multimodal Discourse Analysis* (pp. 20-33). Washington DC: Georgetown University Press.
- Lamy, M., & Hampel, R. (2007). *Online Communication in Language Learning and Teaching*. Basingstoke: Palgrave Macmillan.
- Lee, L. (2007). One to one desktop videoconferencing for developing oral skills: Prospects in perspective. In R. O'Dowd (Ed.), *Online Intercultural Exchange* (pp. 281-286). Clevedon: Multilingual Matters.
- Licoppe, C., & Relieu, M. (2007). Présentation. Réseaux, 144(5), 9-22.
- O'Dowd, R. (2006). The use of videoconferencing and e-mail as mediators of intercultural student EthnoFigurey. In J. Belz & S. Thorne (Eds.), *Computer-mediated Intercultural Foreign Language Education* (pp. 86-120). Boston: Heinle and Heinle.

- Oviatt, S., Coulston, R., & Lunsford, R. (2004). When do we interact multimodally? *Proceedings of the 6th International Conference on Multimodal Interfaces ICMI '04*, 129-136.
- Putkiewicz, E. (2005). Korepetycje szara strefa edukacji. Analizy i Opinie, 1-7.
- Rovai, A., & Baker, J. (2005). Gender differences in online learning: Sense of community, perceived learning, and interpersonal interactions. *The Quarterly Review of Distance Education*, 6(1), 31-44.
- Ruhleder, K., & Jordan, B. (2001). Co-constructing non-mutual realities: Delay-generated trouble in distributed interaction. *Computer Supported Cooperative Work (CSCW)*, 10(1), 113-138.
- Taillefer, L., & Munoz-Luna, R. (2014). Developing oral skills through Skype: A language project analysis. *Procedia Social and Behavioral Sciences*, 141, 260-264.
- Tian, J., & Wang, Y. (2010). Taking language learning outside the classroom: Learners' perspectives of eTandem learning via Skype. *Innovation in Language Learning and Teaching*, 4(3), 181-197.
- Wang, Y. (2004). Supporting synchronous distance language learning with desktop videoconferencing. *Language Learning & Technology*, 8(3), 90-121.
- Wang, Y. (2006). Negotiation of meaning in desktop videoconferencing-supported distance language learning. *ReCALL*, 18(1), 122-145.
- Wang, Y. (2007). Task design in videoconferencing-supported Distance Language Learning. *CALICO Journal*, 24(3), 591-630.
- Weissberg, J. (1999). Présences à distance. Paris: L'Harmattan.
- Zähner, C., Fauverge, A., & Wong, J. (2000). Task-Based Language Learning via audiovisual networks. In M. Warschauer & R. Kern (Eds.), *Network-Based Language Teaching: Concepts and Practice* (pp. 186-203). Cambridge: Cambridge University Press.

WHAT THE GOOD (DIGITAL) LANGUAGE LEARNER CAN TEACH US?

by Anna Turula

Pedagogical University, ul. Karmelicka 41, 31-128 Kraków, Poland anna.turula @ gmail.com

Abstract

The article revisits the question of the good language learner, with special regard to the contemporary digital learner of English as a foreign language. It focuses on the learner who can certainly be called *successful* based on the considerably high level of language proficiency s/he has reached (B2-C1). The question considered here – with reference to good learner studies of the 1970s – is to what extent such successful learners of English can actually be called "good language learners" as described in research to-date. In particular, it is interesting to investigate whether such learners effectively utilise the "plethora of creative routes for digital language learning" (Oxford and Lyn 2011: 157) available today.

The answer to the questions above was sought in a two-partite study carried out in October-December 2014 among 106 first-year students of the English Studies programme at the Pedagogical University in Cracow, Poland. In the first part of the study all the participants filled in a survey (N=106) whose purpose was to discover typical online language learning routines of the respondents. Subsequently, 16 study participants, randomly sampled from the main pool, took part in semi-structured interviews. The interviews were aimed at examining the nature of the online routines reported in the survey and confronting them with selected characteristics of good language learners identified in the early studies (Rubin 1975; Stern 1975) as well as the more contemporary studies into good digital language learning reported by Oxford and Lin (2011).

The results of both parts of the study give a number of insights into how the participants of the study augment their language education with the use of the new media as well as show areas in which they still need the assistance of the (digital) teacher. As a result, it is argued here that while the respondents are good digital language learners from whom we may learn, there are still important things to be taught to them, with particular regard to developing digital learner autonomy, closely connected to a whole range of digital language learning strategies (Oxford and Lin 2011) and multiliteracies (Pegrum 2009).

Keywords: good language learner; learner competence; multiliteracies

1. Introduction

Learning from those who know/can is both an old maxim and a well-known educational technique called modelling. Modelling, a part of the socially-mediated implicit-learning

models, is also called observational or vicarious learning (Bandura 1977). Such learning involves paying attention to the observed model, noting and retaining the details of his/her behaviour and reproducing these details in one's own actions. Good learner studies (Rubin 1975, Stern 1975, to mention the best known research attempts in this area) as well as learning/learner strategy investigations (O'Malley and Chamot 1990, Oxford 1990, among others) are all closely related to the idea of modelling. They stem from the belief that success in language learning is less a matter of special predispositions and more a question of mastering a set of effective educational routines. Such routines, called strategies, are sought and identified in those learners who are exceptional in how they approach language learning and how effective they are in it; in *good* language learners. The most recent examples of research in this area (Oxford and Lin 2011) complete the model by adding strategies connected with digital language learning.

All models of this kind – presented both in the early as well the more contemporary publications on the good language learner – are a combination of *real* human characteristics identified in a vast body of research to-date. However, when aggregated, all these good-learner features create a model which seems extreme and, as such, difficult to follow *in toto*. This is why it is always interesting to confront such idealised models with reality.

The present study is an attempt at such a confrontation: it seeks to find out to what extent a fairly *successful* language learner – the one who has reached a considerably high level of language proficiency (B2/C1) – can be called a *good* language learner in the sense that s/he adheres to the model. The paper starts by setting the background through reporting on the classic good learner studies (Rubin 1975 and Stern 1975) and their follow-up: the research strategies used by language learners, both traditionally-understood (O'Malley and Chamot 1990; Chamot 2005) and digital ones. In relation to the latter type of learner, the article considers the characteristics of a good language learner vis à vis the competences needed in the contemporary digitalised world (Oxford and Lin 2011; as well as Kramsch 2006 and Pegrum 2009). Situated within such a context is the study of the online language learning routines of 106 potentially good language learners. The article describes the study, discusses the results and puts forward some conclusions.

2. Background to the study

2.1. Good language learner studies

Before considering how reality lives up to the model, it seems necessary to introduce the latter, tracing it back to the first general good language learner studies, the ones by Rubin (1975) and Stern (1975). Their findings are summarised in Table 1.

Table 1. The good language learner (Turula 2010: 132)

Rubin (1975)	Stern (1975)
Good learners make intelligent guesses	Good learners are active.
about language.	Good learners are tolerant towards the language
 Good learners are willing to 	and its users.
communicate and do so in spite of	Good learners experiment with the language.
language limitations.	Good learners plan and monitor their
 Good learners are free of inhibitions. 	performance.
Good learners take charge of their	Good learners practise willingly.
learning and seek opportunities to practice.	Good learners are good and ardent communicators.
Good learners are able to monitor their	Good learners pay attention to meaning.
performance.	Good learners develop their understanding of
Good learners pay attention to form and	language as a system.
to meaning.	

Based on the two studies, as well as ample subsequent research cited in Chamot (2005), we can define the good language learner as somebody who is: active; uninhibited in front of the teacher (frequently asks for clarification) or other language users; an effective communicator who relies on their current knowledge, both linguistic and general, when facing interaction problems; a good strategy user – able to plan and monitor their performance as well as skilled in mnemonics. As regards the last characteristic, Chamot (2005) makes an important observation: it is not the size of the strategic repertoire that draws the line between successful and unsuccessful learners; the difference is qualitative in nature. To use Chamot's words (2005: 116, my emphasis), "good language learners are skilled at matching strategies to the task they were working on whereas less successful language learners apparently do not have the *metacognitive* knowledge about the task requirements needed to select appropriate strategies".

2.2. Good learning in the digital era

Today's good language learner needs to be considered in the context of the contemporary world, both the real and the virtual. What kind of learners are the representatives of the net generation? How, if at all, do the good language learners of the 21^{st} century – who are part of this generation – fit into the model delineated in the previous millennium? First, the questions

will be considered in relation to the characteristics described in the previous section: being active, uninhibited and risk taking; good communication skills; knowledge and use of strategies, mostly metacognitive ones. Then the article will refer to research into how "the Digital Age has changed the characteristics of the language learners themselves" (Oxford and Lin 2011: 157).

Some researchers (Strauss and Howe 2000; Twenge 2006) agree that the present generation, called the millennials, are generally confident, tolerant and open-minded. As a result of their Web 2.0 experience, they are also community-oriented, which leads to new lifestyles that capitalise on and reinforce their confidence, open-mindedness and a certain degree of risk-taking typical of the millennials; new lifestyles based on sharing seen in car pooling, couch-surfing, etc. In addition to such forms of collaborative consumption, the new, sharing, economy of today accommodates modern ways of language learning: in tandem, through social networking. This is a context that seems a suitable habitat as well as a truly formative experience for the good language learner, who is to be active, uninhibited and ready to take risks.

When it comes to good communication skills, the connectivity of the globalised networked world of the Internet augurs well for a variety of interactions, either interpersonal or with a variety of texts, in languages other than one's mother tongue. In the digital domain the means of communication is frequently English and the online interlocutors are likely to be its non-native speakers. They usually have different agendas and connect in ways that often require more than communicative competence understood as the ability to make one's meaning effectively and fluently. As Kramsch (2006: 250) points out, "communication in the global age", with its complexity, its multicultural quality, its variety of discourses, "requires competences other than mere efficiency." These competences include the following (after Kramsch 2006):

- producing and being able to understand complex language to render all shades of meaning;
- treating grammar as a choice of structures enabling such meaning making;
- tolerating ambiguity in intercultural dialogue.

Such competences require going beyond everyday language use, into all different varieties of discourse. As these varieties are typical of the Internet, its users – the contemporary good language learners – have a great chance of acquiring and developing symbolic competence.

Finally, when it comes to the use of metacognitive strategies, the new media offer an array of tools whose affordances allow to plan, organise and monitor one's learning. In this

sense, the digital world assists the contemporary language learner in his/her use of metacognitive learning strategies. It also reinforces other indirect strategies: the affective ones, by providing new types of motivation (including the motivation of belonging; Sade 2011), and social strategies, as the main characteristic of learning online is its interactivity. As a result, in addition to reinforcing one group of strategies, the digital world has the potential to simultaneously induce the development of other personal ways of boosting one's learning effectiveness. The latter will include: collaborative strategies, including the ability to organise other people into effective communities of inquiry and to motivate them (and oneself) to persevere with learning – an ability akin to what Thompson (2013) calls tummelling; strategies supporting learning with and from others such as effective ways of finding and evaluating information, including the one construed through multimodal discourse. Such strategies are a function of abilities called multiliteracies (Pegrum 2009), including search, information, participatory, multimodal and other literacies. Consequently, the good language learner of today will be the one using the new media to reinforce his/her use of traditionally understood strategies as well as to develop a new set of competences and related strategies.

Such learning strategies of the good digital language learner, presented in Oxford and Lin (2011), actually go hand in hand with all the three areas of learner competence delineated earlier in this section. Using the net to "[reverse] the situation of insufficient exposure to authentic discourse in the target language" (Oxford and Lin 2011: 162) is well situated within the context of sharing economy, accommodating, among others, tandem language learning. The ability to cope with variety – "[r]esolving confusion about which digital programme to use" (Oxford and Lin 2011: 158); but also dealing effectively with plethora of resources, genres and registers – is a characteristic of both the good digital language learner and an effective global communicator (cf. Kramsch 2006). Similarly, (i) "[o]vercoming a sense of lack of community in digital language learning" (Oxford and Lin 2011: 164) coincides with the skill to build a community through chat and forum discussions (Thompson 2013); (ii) "[t]ranscending affective inadequacies of distance or completely independent digital learning" (Oxford and Lin 2011: 164) can be carried out through different self/community-motivation strategies (Sade 2011); (iii) "[c]ompensating for missing guidance in distance or completely independent digital learning" (Oxford and Lin 2011: 165) is implemented by the application of digital tools enabling planning, monitoring and evaluation.

In addition to the above, Oxford and Lin (2011: 159-162) mention four more challenges and related strategies:

- hypertext path construction good language learners have and apply high metacomprehension skills, considering semantic relations and not screen position or hyperlink interest;
- 2) reducing design-induced 'extraneous' cognitive load the strategies applied boil down to noticing differences between key information and distracting information and mentally setting the latter aside and concentrating on the former;
- 3) managing significant 'intrinsic' cognitive load good language learners rely on chunking and organising information into meaningful streams;
- 4) coping with unhelpful pressures towards excessive speed and multitasking the strategy is to resist the pressure by applying metacognitive strategies of planning, organising etc.

The question that needs to be asked and resolved is whether and to what extent the *real* digital language learner, *potentially* good in the sense of the language proficiency s/he reached, lives up to the ideal presented in sections 2.1 and 2.2. And, more importantly, how the Internet helps him/her translate the ideal into practical ways conducive to effective language learning; ways which teachers as well as other learners can learn from him/her. The answers to these questions were sought in a study described in Section 3.

3. What the good digital language learner can teach us – the study

3.1. The aims and context of the study

Examining all the nine groups of strategies described – based on the research to date – by Oxford and Lin (2011) is an ongoing multifaceted research project, whose scope goes beyond a single article. For the sake of the present text, a part of it is going to be described; the one concentrating on selected strategies of a good digital language learner. The questions that are going to be asked – and, potentially, resolved in this study – are:

- (i) How good are the subjects of the study at resolving confusion with online variety?
- (ii) Do they reverse the situation of insufficient exposure to authentic discourse in TL?
- (iii) Do they overcome the sense of lack of online community and missing teacher guidance?

In order to find the answer to these questions, a two-partite study was carried out in autumn 2014. Its subjects were 8 groups of first-year students of the English Studies programme at the Pedagogical University in Cracow, Poland. The group composition was the result of purposive sampling: all respondents were the so called millennials and digital natives (born in the years 1994-1995) as well as *potentially* good learners of English as a foreign

language. This potential was assumed based on the fact that all of them passed their grammar school leaving exams in English on the level B2-C1. The group contained 106 persons, 78 females and 28 males, the gender proportion being typical of the study programme in question.

3.2. Results and findings

3.2.1. The survey

The aim of the first part of the study was to reach an overall understanding of the studied learners' EFL online routines, based on quantitative data. The 106 respondents answered questions in a three-section anonymous survey (cf. Appendix 1), in which they were asked

- (i) if the school-independent use of the Internet had helped them reach their high level of proficiency in English (106 affirmative answers);
- (ii) what kind of activities they thought had been the most beneficial for them in this respect;
- (iii) how the online potential, which proved so advantageous in their case, could be exploited in class.

The questions were related to the following characteristics of the good language learner as defined by Rubin (1975) and Stern (1975): being pro-active, willing and independent in one's pursuit of practice, seeking opportunities for learning. They were also connected with the strategies investigated: coping with online variety; reversing the insufficient exposure to TL discourse; and dealing with the sense of community and lack of teacher guidance.

Answers to parts (ii) and (iii) of the survey, in which the respondents rated the answers provided on a 6-point Likert scale (1=not helpful at all; 6=very helpful), are presented in Figures 1 and 2.

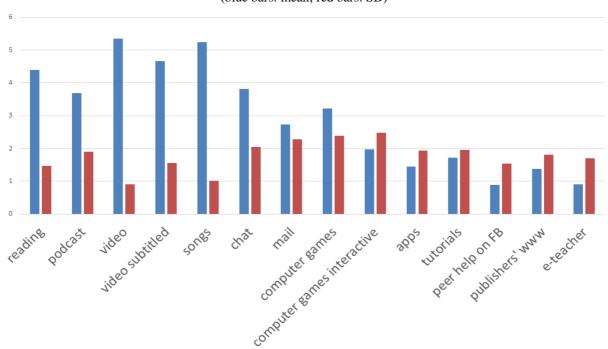


Figure 1. How the respondents use the online tools and resources (blue bars: mean; red bars: SD)

As can be seen in Figure 1, the digital language learners see the Internet as a place to practise their EFL receptive skills, especially reading (including subtitles in videos and instructions in computer games), and listening (videos, podcasts, songs). In this area the rating for most of the resources is above 4 (with the exception of podcasts, which seem the least popular), with SD measures being low and indicating that the respondents are generally quite similar in their preferences. Productive skills are practised online much less frequently, with chat being the most popular way of communicating in English. Interactive computer games are an interesting case: with their mean below two and a very high SD measure, they show that while the majority rank them low, there is a group (37 respondents, 24 males, 13 females) who think interacting with other players in English has been really advantageous to their language skills. Finally, there are small groups of (i) users of learning apps and tutorials, as well as (ii) those who learned from the materials made available on publishers' websites or (iii) owing to their teacher who used digital tools and resources (e-teacher). The option that ranked the lowest is collaborative peer-to-peer language learning via social media (experienced by 28 respondents and ranked as positive or rather positive by 11).

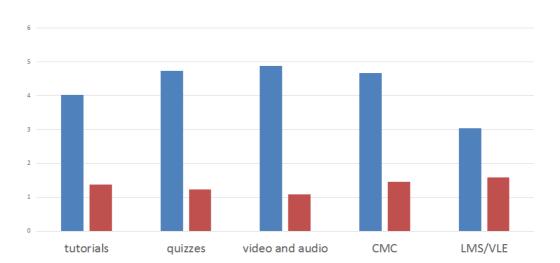


Figure 2. What the respondents think should happen at school in the digital age (blue bars: mean; red bars: SD)

When it comes to what, according to the group studied, should be exploited in schools (Figure 2), the respondents rank the highest what they have benefited from themselves: practising receptive skills (mostly listening) online (4.88; SD: 1.08). However, in addition to this, they want what they seem to lack in their own out-of-school digital learning routines: practice in productive skills (CMC, interaction; 4.66, SD: 1.46) as well as quizzes, tutorials and learning in online classrooms.

3.2.2. The interviews

The second part of the study was aimed at deepening the understanding of the routines of the respondents reported in the survey and at investigating the quality of their massive exposure to the digital input in English transpiring from the quantitative data. In other words, it was interesting to know *what* the respondents read, watch and listen to in English as well as *how* and *how often* they do it. This part of the study was based on a structured interview (15-30 minutes each; cf. Appendix 2 for the questions). The other questions of this interview pertained to whether and to what extent the respondents know the educational potential of the digital world (learning apps), especially as regards the FL learning classics: words and grammar. In the latter case, the interview also concentrated on whether the respondents are familiar with selected areas of grammar as well as metalanguage used to talk about these areas. All this aimed at determining if the *potentially good* language learners were proficient users of the three groups of digital strategies – coping with online variety; reversing the

insufficient exposure to TL discourse; and dealing with the sense of community and lack of teacher guidance. It was also important to find out if the respondents were well prepared for the participative learning in the digital world, including their symbolic competence.

The participants of this part of the study were chosen randomly from each of the 8 groups surveyed, 8 males and 8 females (a male and a female from each group). Based on their self-report, the time they spend online daily is between 1 and 9hrs (mean=3.75h).

When asked what they read, watch and listen to online as well as how often (in the past two weeks: 3=every day or almost every day; 2=several times; 1=once or twice; 0=never), they reported the frequency of the routines shown in Figures 3-5.

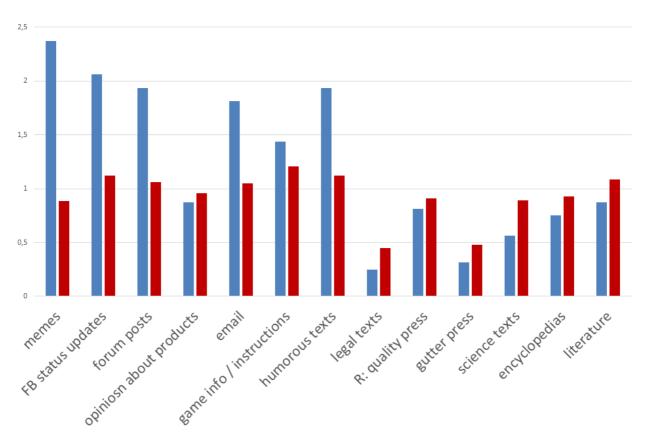


Figure 3. What they read (blue bars: mean; red bars: SD)

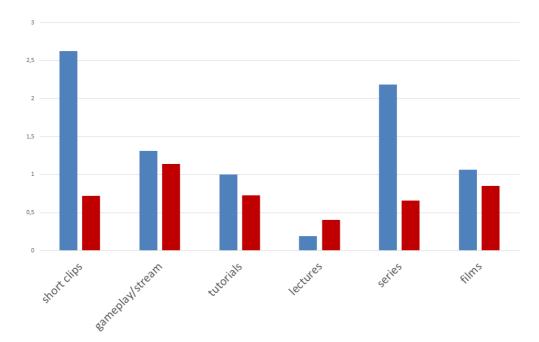


Figure 4. What they watch (blue bars: mean; red bars: SD)

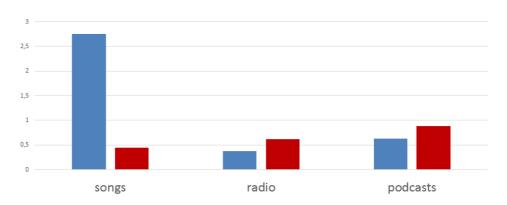


Figure 5. What they listen to (blue bars: mean; red bars: SD)

The values shown in Figures 3-5 demonstrate that the respondents expose themselves to texts characterised by a variety of forms on the one hand and, on the other, a certain uniformity of register. All the reported genres popular with the group – memes, FB updates, forum posts, humorous texts, emails, short video clips, TV series, lyrics of songs – use informal or semi-formal English as a means of expression. Other genres – and their typical registers – are underrepresented: academic English (lectures, tutorials, science texts – 3 respondents on a regular basis); legal English (0 respondents on a regular basis); different kinds of English expository prose, including *belle lettres* (4 respondents on a regular basis) and newspapers (press – 3 respondents on a regular basis).

As for the digital learning of words and grammar (Figures 6 and 7), 2 out of the 16 interviewees report using learning apps dedicated specifically to vocabulary practice

(*Memrise*, *fiszki*); another 4 mention using online dictionaries for this purpose. The number for grammar is even lower: 3 people use sites with interactive tests. The question of whether they would like to know such digital tools gained 9 affirmative answers for vocabulary and 7 – for grammar. When asked how they learn these building blocks of language, the respondents report a range of traditional (offline) routines. For words, they include: learning from vocabulary lists (9), rewriting (4), using mnemonics (4: colour coding – 2; associations – 2), exposure / not learning (3); in the case of grammar learning, the main routines are: the rules-and-drill way (9), exposure / not learning (6), rote learning (2), using mnemonics (graphic representation on timeline – 1). None of the respondents reported using any applications to plan, monitor or evaluate their language learning.

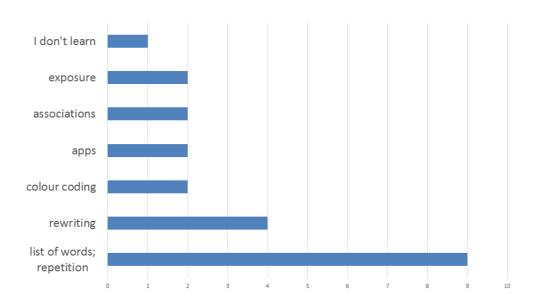


Figure 6. How they learn words

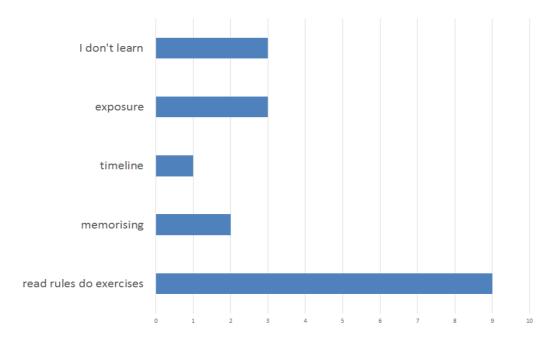


Figure 7. How they learn grammar

Additionally, the 16 respondents were asked to complete a structure recognition test in which the respondents' knowledge of selected grammatical constructions as well as the relevant metalanguage were checked. The test consisted of 8 questions, each of which required indicating *all* examples of a chosen structure (e.g. modal verbs; for all 8 categories, cf. Figure 8). The maximum score for each question was 4 points. The results (mean scores and SD values) are presented in Figure 8. The aim of this part of the interview was to offer yet another insight into how the respondents cope with discourse variety as well as the metalanguage of grammar explanation, should they need to understand it without the teacher's assistance.

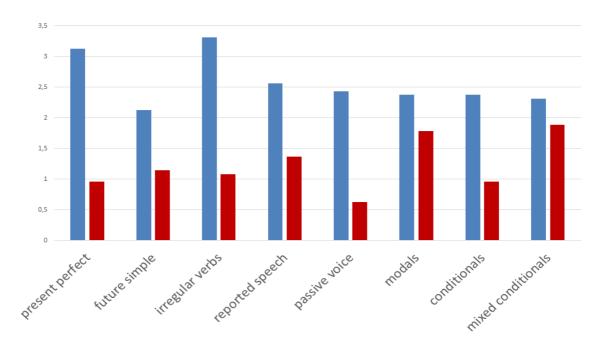


Figure 8. Recognition of grammatical structures (blue bars: mean; red bars: SD)

As it is shown in Figure 8, the best recognised constructions are the Present Perfect tense and the irregular verbs. The correct recognition ratio for other structures is generally above 50%, with the Future Simple tense ranging the lowest. Based on the SD values, the greatest differences in score were noted for modals and mixed conditionals. When it comes to the most problematic tokens in selected types of structures (Table 2), the largest number of errors were made as regards usage that can be labelled as less prototypical: the BE *have got* mistakenly recognised as the Present Perfect tense; the less frequent *shall* future (as opposed to the *will* future); indirect speech with less frequently used reporting verbs; and catentative passive.

Table 2. What they don't / mis- recognise

Type	Token
Present Perfect	They've got a house in the country.
Future Simple	You shall not pass!
Reported speech	He demanded to be told the truth.
Passive voice	He got fired.

4. Discussion

Before the data are discussed in relation to the research questions, one potentially important finding needs to be highlighted. Based on the learning routines self-reported and evaluated by the 106 respondents, it seems that – considering their proficiency level, which they claim they owe to their extensive Internet use – they should be called *the Krashen Generation*. This

remark refers to Krashen's (1985/2004) Comprehensible Input Hypothesis, in the light of which being exposed to comprehensible input is enough to effectively acquire a foreign language. This impression is gained from Figure 1, which can be divided into the receptive routines, which the respondents value highly as conducive to EFL learning, and the productive routines, which enjoy a considerably lower popularity. The reasons of such a status quo being of less importance here, based on facts alone we can note that the 106 digital learners think they owe their considerably high proficiency levels to input rather than output. This observation is further reinforced by the data from the interviews. First of all, a notable number of the 16 respondents admit that they actually do not learn words or grammar (3 and 6, respectively). This acquisition-rather-than-learning is also seen in the results of the structure-recognition test: the constructions that pose greater problems are the ones whose frequency in input is low. As a result, they are less known by those who learn mainly / only through exposure. All this shows that – at least to a certain extent – we may need to talk about digital language acquisition rather than learning (Krashen 1985). This issue, however, seems to need a more in-depth study and is not going to be considered here beyond the observation made in this paragraph, and boiling down to noting that online input tops output in the respondents' evaluations of digital routines conducive to effective language learning.

When it comes to the research questions, a number of answers can be given based on the data obtained in both parts of the study. However, these answers are far from straightforward.

The first and quite an important finding of the study is that the *potentially good* digital language learner is close to the model of the good learner delineated by Rubin (1975) and Stern (1975). Based on all the different school-independent ways (Figure 1) in which the 106 respondents digitally augment their language learning experience, we can say that these learners are definitely active (Stern 1975) in their pursuit of opportunities to use the foreign language (Rubin 1975) independently of the teacher. As a result of this self-reliance, it is quite possible that they are regularly on their own while making sense of language as a system of form-meaning pairings (Rubin 1975, Stern 1975). If they do this falling back on intelligent guesses (Rubin 1975) and experimenting (Stern 1975), they are definitely successful, considering their language level. In this sense they are certainly capable of successfully overcoming the missing teacher guidance (Research Question iii).

The assumption above is confirmed by another important observation following from the data gathered, namely, that the respondents are fairly self-aware. Moreover, they are conscious not only of what helps them to learn but also what their digital practice lacks. When we examine their recommendations as to how schools should exploit the potential of the new media (Figure 2), we can see that what they advocate is not only the result of transfer of training (their own ample practice in receptive skills) but also of a reflection on what is missing in their independent learning (online language production). In other words, even if they *are* 'the Krashen Generation' in terms of their learning experience, they seem to be more input/output-balanced in how they perceive effective language education. This indicates a certain capacity for detachment and reflection characteristic of good learners (Rubin 1975, Stern 1975, Chamot 2005).

Such a capacity as well as being pro-active and independent in one's learning are typical of autonomous language learners, whose characteristics generally coincide with those of good language learners (Turula 2010). However, before we add learner autonomy to the description of the respondents of the present study, it is good to reflect upon the quality of this autonomy. Such a reflection needs to be accommodated within the current discussion of learner autonomy (Little 2002 and 2004, Murray 2014) and its shift from independence to interdependence; from learning understood as an individual intellectual pursuit carried out in self-access centres to language education in which one learns from and with peers and is both self- and other-regulated. If we look at the online routines of the 106 good digital language learners, we cannot escape the impression that they treat the Internet as a massive self-access centre. This perception is based on the prevalence of input over output practices – the latter more commonly associated with interaction than the former – self-reported in the survey. There is also another source of the impression that independence prevails over interdependence in the group studied. Only 28 out of the 106 surveyed admitted to having social learning experience (peer help on FB), and this experience was positive for only 11 out of these respondents. This may show that when it comes to overcoming the sense of lack of online community (Research Question iii), the group studied lacks in strategies typical of good digital language learners. What seems optimistic is that in their recommendations for school practice, the 106 learners surveyed rank Computer-Mediated Communication quite high. This, however, is what they think they might have capitalised on rather than where they are in terms of their learner autonomy understood as interdependence.

Continuing along the lines of interdependence and, what follows, effective online communication – which seems a must in the globalised context of the Internet – it appears that the group under investigation does not fully live up to the model of symbolic competence described, based on Kramsch (2006) in Section 2.2. The already-noted lack of practice in online interaction notwithstanding, the group seem slightly deficient in what Kramsch (2006)

sees as a *sine qua non* of intercultural communication: the ability to produce and understand a variety of complex meanings rendered through complex language in diverse discourses. While the group's massive exposure to online text is a fact (survey results), the input, as demonstrated in the interviews, is quite monotonously informal, making it difficult – if not impossible, as shown in the structure-recognition test – for the group to produce and understand rarer discourses or less prototypical form-meaning pairings. In other words, while in terms of quantity they generally reverse the situation of insufficient exposure to authentic discourse in TL, the quality of this exposure is far from what one would expect in the intercultural world (Research Question ii). Consequently, the group do not appear to demonstrate sufficient skills in dealing with online variety (Research Question i).

Along the very same lines of resolving confusion with online variety, the respondents' language learning know-how is rather disappointing. They may be millennials and digital natives based on their birth certificates; and they, most certainly, are tech-comfy: proficient in their use of the present first-need new media (social networks, basic CMC tools). What they do not seem to be is tech-savvy (Pegrum 2009): knowledgeable as regards the educational power of the digital world, with its variety of tools and their affordances to be used based on one's learning needs. The evidence for the claim above can be found in the interviews, whose participants are virtually unaware of how to digitally boost their learning, on both the cognitive and metacognitive levels. Very few respondents use digital tools for learning the basic elements of language. Instead, they tend to fall back on study techniques that are most traditional, in the pejorative sense of the word (list of words for vocabulary learning; the rules-and-drill for grammar practice). When it comes to the digital augmentation of language learning as regards its planning, monitoring and evaluation, 16 respondents have nothing to report. In summation, as regards the know-how of online learning apps, they cannot be described as good digital language learners (Research Question i).

5. Conclusions

In conclusion, the group under investigation can generally be described as *good digital* language learners: millennials, whose multifaceted online presence accommodates successful, self-regulated, language education. As a result, the *digital* language learners whose routines were investigated in the present study can be described as *good*, with the meaning of the word similar to the one delineated in the studies of the past (Rubin 1975 and Stern 1975): active and independent in their language pursuits; and also, to a considerable extent, by Oxford and Lin (2011): able to overcome the missing teacher guidance as well as generally capable of

reversing the insufficient exposure to TL and – up to a point – of dealing with online variety. What seems to be missing in their repertoire of strategies is coping with the lack of community; reversing the insufficient exposure to language *production*; as well as coping with varieties of discourse other than the informal register or familiarity with online language learning apps.

In the light of the above the good digital language learners studied offer us, the teachers, a lesson in two different areas. First of all, they show a model which we may popularise among other learners: a model of a self-sufficient and pro-active online learner. At the same time, however, they – directly (survey responses) or indirectly (survey and interview results) – pinpoint areas in which we should provide language learning know-how: learning through computer-mediated communication; giving structure (digital or not) to language education through the use of indirect strategies, metacognitive (learning planning, direction and management) as well as affective (curating motivation) and social (digital learner autonomy which stems from interdependence as well as independence); learning through exposure to discourses whose variety goes beyond the informal language of everyday online interaction. And this seems to be the most important lesson to be learned from the 106 good digital language learners involved in the present study.

Acknowledgements

I would like to thank the 106 students of the English Studies Dept. of the Pedagogical University in Cracow for taking part in the study.

References

Bandura, A. (1977). Social Learning Theory. Oxford: Prentice-Hall.

Chamot, A. U. (2005). Language learning strategy instruction: current issues and research. *Annual Review of Applied Linguistics*, 25, pp. 112-130.

Howe, N., & Strauss, W. (2000). Millennials Rising: The Next Great Generation. New York: Vintage Books.

Kramsch, C. (2006). From Communicative Competence to Symbolic Competence. *The Modern Language Journal*, 90(2), 249-252.

Krashen, S. (1985). The Input Hypothesis. Issues and implications. London: Longman.

Krashen, S. (2004). Applying the Comprehension Hypothesis. Some Suggestions. London: Prentice Hall.

Little, D. (2002). Learner autonomy and second/foreign language learning. In: *The Guide to Good Practice for Learning and Teaching in Languages, Linguistics and Area Studies*. University of Southampton: LTSN Subject Centre for Languages, Linguistics and Area Studies. https://www.llas.ac.uk/resources/gpg/1409; access 30 Nov 2015.

- Little, D. (2004). Constructing a theory of learner autonomy: some steps along the way. In K. Mäkinen, P. Kaikkonen, & V. Kohonen (eds), *Future Perspectives in Foreign Language Education* (pp. 15-25). Oulu: Publications of the Faculty of Education in Oulu University 101.
- Murray, G. (2014). The social dimensions of learner autonomy and self regulated learning. *Studies in Self-Access Learning Journal*, 5(4), 320–341.
- O'Malley, J. M. and Chamot, A. U. (1990). *Learning Strategies in Second Language Acquisition*. Cambridge: Cambridge University Press
- Oxford, R. (1990). Language Learning Strategies. What Every Teacher Should Know. New York: Newbury House.
- Oxford, R. L. & Lin, C-Y. (2011). Autonomous learners in digital realms: Exploring strategies for effective digital language learning. In B. Morrison (ed.), *Independent Language Learning: Building on Experience*, Seeking New Perspectives (pp. 157-171). Hong Kong: Hong Kong University Press.
- Pegrum, M. (2009) From Blogs to Bombs: The Future of Digital Technologies in Education. Perth: University of Western Australia Press.
- Rubin, J. (1975). What the good language learner can teach us. TESOL Quarterly 9, 41-51.
- Sade, L. A. (2011). Emerging selves, language learning and motivation through the lens of chaos. In G. Murray,
 X. Gao, & T. Lamb (eds), *Identity, Motivation and Autonomy in Language Learning* (pp. 42–56).
 Bristol, UK: Multilingual Matters.
- Stern, H. H. (1975). What can we learn from the good language learner? *Canadian Modern Language Review*, 31, 304-318.
- Thompson, C. (2013). Smarter than You Think: How Technology is Changing Our Minds for the Better. New York: Penguin Press.
- Turula, A. (2010). *Teaching English as a Foreign Language. From Theory to Practice ... and All the Way Back.*Częstochowa: Wydawnictwo Wyższej Szkoły Lingwistycznej.
- Twenge, J. (2006). Generation Me. New York: Free Press (Simon & Schuster).

Appendix 1. The survey¹

1) Do you think surfing the Internet helped you learn English? YES / NO

2) If the answer to Question 1 is YES, how far did you benefit from the different ways of using the net listed below? (Please evaluate each action on a 1-6 scale, where 0=not at all; 6=considerably)

1. I read texts in English online.	1 2 3 4 5 6
2. I listened to English podcasts.	123456
3. I watched English films online (incl. TV series, documentaries, TEDtalks etc.).	123456
4. I watched English films (as above) with English subtitles.	1 2 3 4 5 6
5. I listened to music with English lyrics.	123456
6. I chatted in English online (various CMC tools).	123456
7. I exchanged emails in English.	1 2 3 4 5 6
8. I played computer games with English instructions.	123456
9. I played interactive (PvP) computer games in English.	123456
10. I used online / mobile apps for learning English (Duolingo, e-fiszki etc.).	1 2 3 4 5 6
11. I watched English grammar tutorials (on Youtube, etc.).	123456
12. I learned English collaboratively, seeking peer support on social media.	123456
13. I used English learning activities available on different publishers' websites.	1 2 3 4 5 6
14. My teacher taught English the blended way – we had an online classroom.	123456
15. Other (please specify)	123456

3) How can the Internet be used for learning English at school? (Please evaluate each action on a 1-6 scale, where 1=not useful at all; 6=very useful)

1. To learn words and grammar from video-tutorials made by the teacher.	1 2 3 4 5 6
2. To learn grammar by doing a lot of interactive quizzes.	1 2 3 4 5 6
3. To read and listen to authentic text, recommended by the teacher.	1 2 3 4 5 6
4. To communicate, in speaking and writing: the teacher should suggest ways / organise exchanges or tandem learning.	1 2 3 4 5 6
5. To practice all language skills in a VLE set up by the teacher.	1 2 3 4 5 6
6. Other (please specify)	1 2 3 4 5 6

age ...; gender ...; result on advanced Matura² ...

_

¹ The survey was carried out in Polish – the native tongue of the respondents.

² Polish grammar school leaving exam

Appendix 2.: The interview³

- 1) How many times during the last 2 weeks did you read something in English online?
- 2) What did you read? (choose from the list):
 - meme
 - comic strip
 - social media status updates
 - forum discussion
 - product evaluation
 - email
 - · computer game instructions
 - joke
 - terms of use
 - press article (spreadsheet)
 - press article (tabloid)
 - encyclopaedia entry
 - belle lettres
 - other, please specify.
- 3) How many times during the last 2 weeks did you watch something in English online?
- 4) What did you watch? (chose from the list):
 - a short clip
 - gameplay / streaming
 - a tutorial
 - a lecture / talk
 - an episode of a series
 - a film
 - other, please specify.
- 5) How many times during the last 2 weeks did you listen to something in English online?
- 6) What did you listen to? (chose from the list):
 - a song with English lyrics
 - a radio programme in English
 - a podcast
 - other, please specify.
- 7) How many times during the last 2 weeks did you play a computer game with English instructions?
- 8) How many times during the last 2 weeks did you play an interactive (PvP) computer game in which you communicated with others in English?
- 9) How many times during the last 2 weeks did you chat online in English?
- 10) How many times during the last 2 weeks did you email somebody in English?
- 11) How much time do you spend online daily?
- 12) What are your preferred ways of vocabulary learning?
- 13) Do you know online / mobile apps which help learn vocabulary?
- 14) What are your preferred ways of learning grammar?

³ The interview was carried out in Polish – the native tongue of the respondents

- Do you know online / mobile apps which help learn grammar? 15)
- In each point identify the grammatical structure in question. It may appear 1-4 times. Don't guess if 16) you don't know, admit it.

Present Perfect 1)

- a) She was being taken to hospital
- b) They've been here awhile.
- c) He is said to have been sick.

- d) They've got a house in the country.
- **Future Simple**
- a) We're going to London tomorrow
- b) You shall not pass!
- c) I'll write to you soon.
- d) If you'll do the dishes, I'm willing to take care of the coffee for both of us.
- Irregular verb
- a) He drove slowly because of the weather. b) You lied to me.
 - e) I don't know.

e) I don't know.

c) You would need a hand.

e) I don't know.

- d) I don't ask questions.
- Reported speech a) He demanded to be told the truth.
- b) He said I was stupid.
- c) 'Don't worry,' she said.

- d) I wish I were somewhere else.
- e) I don't know.
- Passive voice
- a) She is being interviewed as we speak. powerful.
- b) He got fired. d) Stop being silly.
- c) You're believed to be very e) I don't know.

- **Modal verb**
- a) I have been told you're waiting.
- b) They are to be here soon.
- c) We ought to be leaving now. e) I don't know.
- d) She is able to do that, don't worry.
- **Conditional sentence**
- a) If you know her, why don't you ask her out?
- b) He will come unless he doesn't want to see her.
- c) You will pass as long as you get 60% of the answers correct.
- d) If I were you, I would have gone to that party.
- e) I don't know.

Mixed conditional

- a) If I were you I would have accepted his proposal.
- b) If he had learned more, he would be at university now.
- c) Should you want my help, just ask.
- d) If you finish, you can go.
- e) I don't know.

SAME TIME SAME PLACE: DO MALL CLASSROOMS EXIST?

by Jason Byrne

Tokai University,

4-1-1 Kitakaname, Hiratsuka-shi, Kanagawa 259-1292, Japan bj979562 @ tsc.u-tokai.ac.jp

Abstract

This paper seeks to help clarify whether Mobile-Assisted Language Learning (MALL) is primarily an independent self-study activity or whether MALL classrooms exist. The research hypothesised that a large number of users frequently using specific MALL apps, at the same time and in the same city location, may indicate the existence of MALL classrooms. The research makes use of big data, in the form of Google Analytics data, collected from two EFL learning mobile apps. The data was gathered over a five month period, in 2015, from more than 6,000 cities worldwide. The research, in doing so, opens a sociological window into the world of MALL, providing a sample of actual user behaviour. The results strongly suggest that independent study is almost certainly the main form of MALL activity. However, the research also concludes that MALL classroom-driven activity may exist in some cities.

Keywords: CALL; English Language Teaching; MALL; Mobile Learning; TEFL

1. Introduction

Franklin (2011) questioned whether society was at a tipping point, where exposure to mobile learning would literally go viral. While the mobile world has evidently exploded since 2011, mobile learning does still seem to be a work in progress. Almost every adult student and teacher in the developed world, and large swathes of the developing world, are quite likely to have a mobile device. Given this, are mobile devices being used in language learning classrooms? Do Mobile-Assisted Language Learning (MALL) classrooms exist? Or, is MALL solely an independent self-study activity?

Moreno & Vermeulen (2015) noted that while there are as many as 80,000 language learning apps available, very few designed by educators or academics. Kim & Kwon (2012) stated that mobile learning apps offered excellent opportunities for personal learner-centred study, but required improvements in providing interactive collaborative tasks. To some extent Ahmad & Farrukh's (2015) research counters this criticism, as they note the social networking possibilities provided by commercial apps. However, Ahmad & Farrukh (2015) do not really overcome the perception that while apps are wonderful any time, anywhere

independent study tools, they are probably not really suited to the specific context of the communicative classroom. Furthermore, while it is reasonable to assume many teachers and adult students will have a mobile phone in their pocket, it is likely most would rarely, if ever, consider using it as a classroom tool.

This paper analyses the extent to which mobile apps are being used for solo or geolocated group activities, such as classroom learning. It starts from the premises that if MALL apps are being used within a classroom or group settings, then we should find repeating clusters of users from the same cities using MALL apps during the same time periods.

The results could lead to four potential conclusions. Firstly, if no geographical and time based clusters of an app's users are found in the same cities using the app at the same time, then either the WIFI and mobile networks are switched off in all classrooms worldwide, or the app is evidently not being used in a traditional physical classroom setting with traditional shared group activities. In terms of general MALL classroom usage, the data will provide compelling supportive evidence that MALL is not, as yet, a common classroom activity. Secondly, a group of users using the same app, in the same city, at the same time, could be considered a coincidence. Thirdly, if such coincidences are proven to be relatively rare, yet analysis of the results shows repeated occurrences in specific locations with a degree of frequency, then it may suggest a likely level of co-ordination and control. In fact, it might suggest potential evidence of teacher-driven classroom or group activity usage. Fourthly, rather than teacher-controlled activity, the results might actually be indicating viral social behaviour. In the end, it is likely that this research can either strongly support the notion that MALL is an independent study activity or possibly suggest that MALL classrooms have moved beyond the teacher-researcher niche environs and into normal usage.

2. Methods

This is quantitative research, based on Google Analytics data, retrieved from two popular English language learning mobile apps. In a broad cross section of academic fields, researchers have now used Google Analytics as a data source. For example, Crutzen, Roosjen & Poelman (2012) used Google Analytics in their research into public health, Fang (2007) and Hess (2012) into improving library online services, and Hasan, Morris & Probets (2009) into analysing e-commerce sites.

The core data, retrieved from Google Analytics, was for the five month period from July 28, 2015 to December 27, 2015. The data included a large number of cases where the location was not set. It was decided to clean the data, removing these cases, as they could not

provide useful information. The author is the co-app developer responsible for implementing the Google Analytics API and maintaining the app analytic data. The use of Google Analytics for the gathering of data is mentioned prominently in the apps' publicly available privacy statement and end user legal agreement (EULA).

The apps with cleaned data used in this research (see Table 1) covered two different areas of English study and are designed to work with all learning levels from beginner to advanced. The apps were used by about 187,000 users who had roughly 500,000 sessions over the 5 month period mentioned above (Google Analytics, n.d.). It should be stated that none of the apps was designed for classroom usage. However, it seems likely that, given the free content and levelling flexibility, they would be useful to a teacher who had created a mobile classroom environment. At the very least, the apps would have provided solid ongoing filler activities for a MALL or blended learning environment. For the purposes of user anonymity, in this study, the niche focus of the apps shall not be stated, the operating system shall not be stated, and the apps shall be referred to as Red App and Blue App.

Table 1. The apps usage over five months

Apps	Total Users	Total Sessions
Red	99,569	316,695
Blue	87,996	197,708

Peak Hour Units

1 peak hour = 10 + users per city per hour

The unit of ten or more users per city per hour was chosen to represent peak periods of significant usage. The author reasoned that if the unit chosen was too small, it was highly likely that two or three users from a city could, by pure chance, choose a similar time to use the app. Equally, the author reasoned that in wealthier environments, a class size of ten might be possible and it was likely that such students would have their own devices. In more typical classroom environments, it seemed likely that students would share devices in pairs or small groups. Therefore, a class size of 20-40 students might be accommodated by as few as ten devices.

Solo Hour Units

1 solo hour unit = 1 user per city per hour

One user per city per hour is an approximate measure of independent study, although, in some cases, it is possible that several users are sharing one device, but will appear as one user in the data.

The research also involved certain other technical and ethical methodological considerations that have been placed in Notes. In summary, the names of small cities have been shielded from public view, the use of one city in the data required special attention and further investigation, while technically there were some potential irregularities that needed to be explained (see Notes 1, 2 and 3 for further review).

3. Results

An enormous amount of data was retrieved. Both of the selected apps were actually used in every local time slot available during the five month period; that is 24 hours a day for 153 days. Red App (see Table 2) provided 209,470 records for sets of users active in local time and city combinations. It was used in 220 countries and 5,851 cities. Interestingly, it was used as a solo hour unit on 158,979 occasions representing 75.9% of all records. On 550 occasions (0.26%), usage could be defined as a peak hour unit; ten or more users per city per hour. Blue App provided similar raw results. This included 175,310 local time and city combination records. This showed that 82.65% of users were the only user in the city during the hour of use. Peak hour users occurred on rare occasions at 0.06% of times. Blue App was used in 215 countries and 6,424 cities over the period.

Table 2. Hourly location records.

	Records	Records				
Apps	Total	10+ users	1 user	Cities	Countries	Time slots (Max 3,672)
Red	209,470	550	158,979	5,851	220	3,672
Blue	175,310	99	144,898	6,424	215	3,672

Looking at the occurrences of peak hour units for Red App, the data shows that this actually only occurred in 14 cities. Table 3 indicates almost half of these peak hour occurrences were in one city, Addis Ababa, and 84.7% of cases occurred in just three cities, Addis Ababa, Navoi and Yangon. The largest number of users per hour (26) was in La Victoria, but a range of 10-13 users was the norm.

Table 3. Occurrences of 10+ user per hour cities for Red App

City	Frequency	Users Per Occurrence	5 Month User Total	City Population	Country
Addis Ababa	249	10-16	4223	$2,646,000^1$	Ethiopia
Ashgabat	19	10-13	2625	$1,031,992^2$	Turkmenistan
Bangalore	2	10	1990	4,301,3261	India
Caracas	1	10	109	2,104,4231	Venezuela
****	1	11	13	<10,000	USA
La Victoria	7	12-26	161	190,218 ²	Peru
Lagos	5	10-11	3588	$21,324,000^2$	Nigeria
Mumbai	1	10	1367	11,978,450 ¹	India
Navoi	63	10-18	3608	138,0821	Uzbekistan
New Delhi	18	10-11	2644	9,879,1721	India
Port Louis	1	10	42	150,353 ¹	Mauritius
Quezon City	18	10-12	2635	$2,761,720^1$	Philippines
Tashkent	11	10-13	2966	2,137,2181	Uzbekistan
Yangon	154	10-16	5,287	5,209,5411	Myanmar

Sources:

Figure 1 shows the frequency of peak hour units in Addis Ababa. Addis Ababa was selected for analysis due to the high frequency (249 cases) of peak hour units. The figure shows high frequency peak hours occur during daytime regular working hours. There are no

^{1.} United Nations statistics division - demographic and social statistics (2014).

^{2.} List of towns and cities with 100,000 or more inhabitants (2015).

^{*****} Please see Note 1.

¹ Please see Note 1 for reasons why one city name has been shielded.

outlying cases, usage takes place between 5 am and 9 pm with zero occurrences during the night.

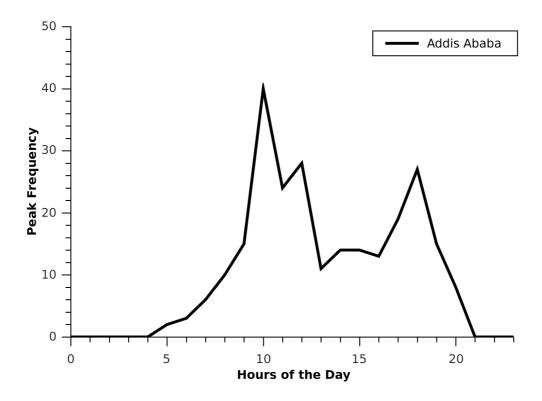


Figure 1. Red App frequency of peak hours in Addis Ababa

Looking at the occurrences of peak hours per city for Blue App, as shown in Table 4, the data indicated that such peaks only occurred in four cities. Over half of these occurrences were in the Uzbek city of Navoi, and more than 90% of cases occurred in Uzbekistan. The largest number of users per hour was 21, but a range of 10-15 users was the norm. Please note the name of one city was withheld (see Note 1).

Table 4. Occurrences of 10+ user per hour cities for Blue App

City	Frequency	Users	per 5 Month User Total	City Population	Country
		Occurrence			
Bratislava	2	10	2,225	416,489 ¹	Slovakia
****	5	12-21	30	<100,000	Czech Republic
Navoi	55	10-15	3,616	138,0821	Uzbekistan

Tashkent	37	10-15	3,608	2,137,218	Uzbekistan
----------	----	-------	-------	-----------	------------

Sources:

1. United Nations statistics division - demographic and social statistics (2014).

When comparing the frequency of peak hours for the city of Navoi for both Red App and Blue App (see Figure 2), there was a similarity in usage patterns. Over the 5 month period, Red App had 63 peak hour units, while Blue App had 55 peak hour units. During the hours of the day, the occurrence or non-occurrence of peak hour units for either app seem to match to a significant degree. For example, there are zero night-time occurrences and the frequent peak usage starts and ends within a range of an hour between each other. The largest clusters of peak activity for both apps are 7 pm and 8 pm.

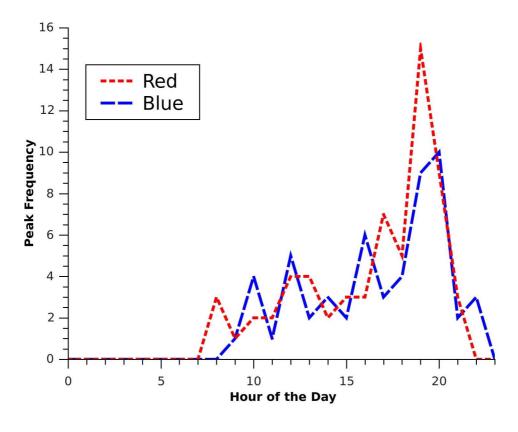


Figure 2. Red App & Blue App frequency of peak hours in Navoi, Uzbekistan

4. Discussion

The results lean towards the idea that the MALL classroom is still in its infancy. The evidence, based on over 187,000 users from an admittedly limited app pool, suggests MALL self-study is the norm, while some tentative conclusions can be drawn in favour of the

^{*****} Please see Note 1.

existence of MALL classrooms and teacher driven activity. It is quite likely that there are innovative MALL teachers and school districts around the world and promisingly they seem to exist in rather unexpected locations across Africa, Asia, Europe and the Americas.

However, the vast majority of user sessions, 75.9% for Red App and 82.65% for Blue App, were solo hour units and appear quite likely to have been people undertaking independent study. The users were literally the only users or devices in their cities using the apps during that hour of the day, strongly suggesting self-study activity. Indeed, in only 16 cities, and significantly under 0.5% of records, were there suggestions of potential classroom activity. Furthermore, only three cities (Addis Ababa, Navoi and Yangon) showed signs of what might be described long-term frequent activity. Others, such as Caracas, La Victoria, and Port Louis, may possibly have had teachers experimenting with MALL (or at least the two apps). It is difficult to understand how that, for example, 11 out of 13 Red App users in the name withheld American city with a population under 10,000 (see Table 3) decided to use Red App between 9:00 and 9:59 on a Friday morning without some social connection between them. Although there probably is a social connection, it is as likely that these one-off results may be the consequence of viral social media activity as classroom activity.

When we focused on Addis Ababa and looked at the distribution of peak hour unit usage across the day, we clearly saw a daytime pattern. The highest frequency of peak hour units was between 9am and 7pm, an activity pattern that is consistent with school usage. Furthermore, the strongest peak hour unit activity was between 10 am and 1 pm which potentially indicates classroom activity. A second peak occurs between 5 pm and 7 pm, which could suggest homework or after-school club activity.

The city of Navoi presents interesting findings. Navoi has a population of around 138,000 people with approximately 3,600 users of each app. Apparently, devices representing 2.6% of the population of the city of Navoi have used both the Red App and Blue App. The data cannot confirm if it is the same 2.6% of the population using both apps, and consequently around 5.2% of the population could have used the apps. However, devices may have been factory reset, cookies deleted and apps uninstalled and reinstalled, all activities that could inflate the user data (please see Note 3). However, that said, the users of both apps in Navoi seem to dovetail very neatly. Furthermore, a significant proportion of a city population using two specific apps or a high proportion of devices in a city being reset regularly while retaining the same specific educational apps are results not seen in the data anywhere else in the world. Consequently, it is difficult to imagine that in either scenario, it is not connected to organised, institution-orientated, educational usage. However, the density of peak usage, when ten or

more users of both apps were active was in the evening, with peaks at 7 pm and 8 pm respectively. This does not support MALL classroom activity, but could support the activity of library-based Self-Access Language Learning (SALL), which according to Nazarov (2015) is being promoted in the Navoi area, and indeed nationwide by a 2012 Presidential initiative. Moreover, according to Nazarov (2015), schools in Navoi are encouraging learner autonomy and new teaching practices. In this case, the research actually points towards organised, scaffolded, independent study as a form of MALL class or homework activity².

It is very interesting that so many of the potential MALL classrooms are in developing nations. Generally, there is seen to be a digital divide favouring the developed world, but, in this instance, it appears that the developing nations may possibly be taking the lead in MALL classroom development. Are the teachers from the developing world the innovators of the coming MALL revolution? While not relevant to the research topic at hand, it will prove an interesting issue for future studies. Equally, the author suspects qualitative MALL fieldwork conducted in Addis Ababa (Ethiopia), Navoi (Uzbekistan), and Yangon (Myanmar) may yield fruitful results.

Finally, if MALL classrooms do exist in Addis Ababa, Navoi and Yangon, then why not London, New York, Paris or Tokyo? Since the results are based on only two apps in a market of approximately 80,000 (Moreno & Vermeulen, 2015), it is very likely that there is a growing community of MALL teachers and it is only a matter of time before they exist in a classroom near you.

Notes

1. Measures to provide anonymity

Several measures were taken to ensure app user anonymity through obfuscation of the data sources. The researcher respects the confidentiality and anonymity of the app users and does not wish to identify specific schools, teachers or students. To be clear, most of the cities highlighted in this research have very large populations in relation to their app user-base, and consequently the researcher believes that no reliable connection could be made between the research and specific app users. However, in an abundance of caution, the names of cities with populations under 100,000 were removed from the findings and replaced with ***** in Table 3 and Table 4. The actual population sizes of these cities were approximated, to prevent identification, to under 10,000 and under 100,000 respectively. Additionally, the researcher has created about 100 language learning apps and will neither publicly confirm nor deny the two titles of the apps, referred to as Red App and Blue App in this study. Furthermore, the author will not confirm the participating apps' operating systems, be that Android, Blackberry, Chrome, iOS or Windows.

² Please see Note 2 for details of why Navoi has remained unshielded in this study.

2. Navoi

Navoi, Uzbekistan, has a city population of 138,000 and regional population of approximately one million inhabitants. It is quite possible that some of the regional data has been included in Google Analytics as city data. It is not uncommon for city and regional boundaries to vary based on cultural, political and technical considerations. It is quite possible that this can lead to discrepancies in the presumed size of a population. However, whether Navoi has 2.5-5.2% or 0.25-0.52% of its population using the Red and Blue apps, there are clear signs of potential MALL classroom usage. It seems Navoi is involved in a potentially region-wide MALL and/or Self Access Language Learning (SALL) programme. The researcher, upon investigation, has found that Navoi is publicising its work in the area of self-access facilities and teacher pedagogy (Nazarov, 2015), and this publicly promoted activity provides a logical explanation for the strength of data in the area. The researcher would suggest that the scale of the project would involve tens of teachers, thousands of students and probably school administrative and even city or regional administrative participation. Given the size of the project, individual teachers and students are provided with a high degree of anonymity, their activities are absorbed into the larger pool of collective city-wide data. It is highly unlikely that work on this scale has gone unnoticed at the local and regional level, and therefore this research will only be revealing that which is already known to the local community; the national government is promoting self-access digital language education and consequently some teachers are probably encouraging some students to use mobile or tablet devices to study English. Indeed, this research may provide independent verification of what they have achieved. Since this general SALL activity is publicly being promoted, and this research's findings appear to support their efforts, the author decided to keep the name of the city unshielded. This decision was taken as there is no way to connect any device user in Navoi to the data collected in this study, given the apps themselves, and the operating system, have not been disclosed.

3. Users

The term *user* is ambiguous. According to Analytics Help (n.d.), Google Analytics tags each device with a unique, randomised ID. The ID is considered to reference a unique user. However, the system is not perfect. For example, if an app is uninstalled and reinstalled then the device will be given a new ID and counted as a new user. In addition, one user as counted by Google Analytics could actually be four students working on one device. We are unable to see this form of activity in the data.

References

- Ahmad, A., & Farrukh, F. (2015). Significance of social applications on a mobile phone for English task-based language learning. *Teaching English with Technology*, 15(2), 94-105.
- Analytics Help, (n.d.). Retrieved December 29, 2015 from Google: https://support.google.com/analytics/answer/6083676?hl=en
- Crutzen, R., Roosjen, J. L., & Poelman, J. (2012). Using Google Analytics as a process evaluation method for Internet-delivered interventions: An example on sexual health. *Health Promotion International*, 28(1), 36-42.
- Fang, W. (2007). Using Google Analytics for improving library website content and design: A case study. Library Philosophy and Practice, 9(2), 1-17.

- Franklin, T. (2011). Mobile learning: At the tipping point. *Turkish Online Journal of Educational Technology*, 10(4), 261-275.
- Google Analytics, (n.d.). Retrieved December 29, 2015 from Google: https://www.google.com/analytics
- Hasan, L., Morris, A., & Probets, S. (2009). Using Google Analytics to evaluate the usability of e-commerce sites. In M. Kurosu (Ed.), *Human Centered Design* (pp. 697-706). Heidelberg: Springer-Verlag.
- Hess, K. (2012). Discovering digital library user behavior with Google Analytics. Code4Lib Journal, 17.
- Kim, H., & Kwon, Y. (2012). Exploring smartphone applications for effective mobile-assisted language learning. *Multimedia-Assisted Language Learning*, 15(1), 31-57.
- List of towns and cities with 100,000 or more inhabitants (2015). Retrieved January 1, 2016 from Wikipedia: https://en.wikipedia.org/wiki/List_of_towns_and_cities_with_100,000_or_more_inhabitants
- Moreno, A. I., & Vermeulen, A. (2015). Profiling a MALL app for English oral practice a case study. *Journal of Universal Computer Science*, 21(10), 1339-1361.
- Nazarov, U. R. (2015). *Course work: Management of self-access facilities at secondary school*. Retrieved from http://library.ziyonet.uz/ru/book/download/24233
- United Nations statistics division demographic and social statistics. (2014). *Demographic Yearbook 2014*. New York: The United Nations. Retrieved January 1, 2016, from http://unstats.un.org/unsd/demographic/products/dyb/dyb2.htm

FLIPPED ESL TEACHER PROFESSIONAL DEVELOPMENT: EMBRACING CHANGE TO REMAIN RELEVANT

by Rafiza Abdul Razak, Dalwinder Kaur, Siti Hajar Halili and Zahri Ramlan

University of Malaya, 50603, Kuala Lumpur rafiza @ um.edu.my, siti_hajar @ um.edu.my, zahriramlan @ gmail.com

Abstract

Many traditional professional development programs that are initiated to equip ESL teachers with knowledge and skills have been futile for numerous reasons. This paper addresses a gap in the recent research of ESL teachers' professional development. Literature has revealed many shortcomings of the traditional and online professional development programs that are widely conducted; thus, an implementation framework of flipped professional development program is proposed in this paper, based on Malaysian educational practices. Integrated theories of Zone Proximal Teacher Development (ZPTD) and revised Bloom's Taxonomy are adapted in designing the Flipped Teacher Professional Development (FiT-PD). The implementation of the FiT-PD program is conducted in the four Train-to-Learn (TL) stages; remembering and understanding (TL-1) conducted in face-to face mode, applying and analysis (TL-2) conducted via online, evaluation (TL-3) conducted in face-to-face mode and finally creating (TL-4) conducted via online. Thus, the paper recommends an implementation framework of flipped teacher professional development. The recommendations assist educational policymakers to strategize better planning and organize flipped professional teacher professional development (Fit-PD) for ESL teachers.

Keywords: ESL teacher; professional development; flipped learning

1. Introduction

Hazri, Nordin, Reena & Abdul Rashid (2011) pointed out that professional development, which was previously thought of as a short-term process, has now improved by leaps and bounds and is deemed as a long-term and ongoing process that promotes growth and development of the teaching profession. In line with this, a special committee set up in 1995 by the Ministry of Education of Malaysia has been assigned to look into the professional development of teachers, and one of the recommendations made was to encourage teachers to attend in-service courses (Mohd. Sofi Ali, 2002). Recently, Education Director General of Malaysia said that to realize the country's aspirations, initiatives manifested to train and improve the skills of teachers through continuous professional development are needed (cited in *New Straits Time Online*, 2014). Among the significant aspects that maintain teacher

professional development in Malaysia are continuous professional development and inservice training (In-SeT) (Hazri et al., 2011).

All Malaysian teachers are required to fulfill and document 42 hours (7 days) of professional development programs per year so that their content knowledge, pedagogical skills and soft skills can be improved (Ministry of Education, 2009). The Ministry of Education (MOE) claims that the 42 hours of professional development which may include workshops, conferences, trainings, and seminars are school-based (Kabilan & Kasthuri, 2013). However, studies have shown that the professional development programs in Malaysia are mostly cascade-type (top-down approach), and they do not bring benefit to the teachers; thus, the teachers are dissatisfied (Kabilan, 2004; Kabilan, Vethamani & Chee, 2008). Teachers need to attend any professional development program that is dictated by the MOE (Kabilan & Kasthuri, 2013). Another study conducted in the local setting also shows that besides shortage of time, unsupportive working environment holds teachers back from learning and attempting new pedagogies in their classrooms (Thang et al., 2009). ESL teachers in Malaysia express their frustration over lack of opportunities in voicing out their needs for professional development programs that are relevant to their field and interests (Kabilan and Kasthuri, 2013; Mukundan and Khandehroo, 2009; Khandehroo, Mukundan and Alavi, 2011).

Indisputably, professional development for ESL teachers can take many forms. Birman, Desimone, Porter and Garet (2000) stated that professional development falls under two basic categories: (i) traditional professional development and (ii) reform-type professional development. The traditional professional development uses 'one-shot' workshops as a medium to equip teachers with the knowledge and skills they need; workshops, which are undeniably the most common type of professional development, receive most criticisms among all (Garet, Porter, Desimone, Birman, & Kwang, 2001). Guskey (1986) elaborated that this type of professional development which was introduced during the post-depression era implied a gap in teacher skills and knowledge. Several researchers have shown evidence on the failure of such 'one-shot' workshops (Fullan & Stiegelbauer, 1991; Johnson, 1989; Lovitt & Clarke, 1988).

Apart from workshops, other forms of traditional professional development that share the same features as workshops include institutes, courses and conferences (Garet et al., 2001; Little, 1993) as well as district training, out-of-district training and post-graduate courses (Desimone, Porter, Garet, Yoon & Birman, 2002). These traditional forms of professional development are usually conducted by leaders with expertise in their respective fields (Garet

et al., 2001). However, Boyle, While and Boyle (2004) pointed out to the fact that teachers learn about topics that are irrelevant to them by passively listening to these experts. These traditional forms are also criticized for failing to spur a change in teachers' competence and teaching practice (Boyle et al., 2004; Day & Sachs, 2004; Desimone, 2011; Hawley & Valli, 1999; Kwakman, 2003; Loucks-Horsley, Hewson, Love, & Stiles, 1998). The ineffectiveness of these traditional forms of professional development has brought out the drive for more research on professional development (Clarke & Hollingsworth, 2002). As a consequence, an alternative to the traditional form is the 'reform' form of professional development which includes programs such as mentoring and coaching (Garet et al., 2001).

2. Malaysian ESL teachers and professional development

ESL teachers in Malaysia have insisted upon professional development programs that are designed according to their needs (Kabilan et al., 2008). There are so many changes and variation made to policies that require ESL teachers in Malaysia to constantly improve or change their methodologies and teaching practice that, without embracing a professional change, they may suffer a burnout (Mukun & Khandehroo, 2009). Thus, professional development programs should be parallel with the changes that are made to the educational aims and policies for ESL in Malaysia (Khandehroo, Mukundan, & Zhinoos, 2011). Kabilan (2007) reported that issues related to policies of ESL have always been discussed by various stakeholders in Malaysia, which include politicians. Kabilan and Kasthuri (2013) also mentioned that the flip-flopping in teaching and learning policies in Malaysia has further aggravated matters related to teacher development. In their paper, they also expressed concerns about the new English curriculum that was introduced in 2002, known as English Language Curriculum for Primary Schools (KSSR). According to the authors, the curriculum may not be successfully implemented in schools if teachers' needs on their professional development are neglected. Therefore, as mentioned by previous studies, the ESL teachers in Malaysia call for professional development programs that are relevant to them and programs that are constantly reviewed for their effectiveness (Mukun & Khandehroo, 2009; Khandehroo, Mukundan, & Zhinoos, 2011).

In fact, Kabilan and Kasthuri (2013) who conducted a nationwide study of the process of identifying the professional development needs of ESL teachers in Malaysia have come up with a model that has 3 stages of professional development programs: (1) planning and development, (2) implementing professional development and engaging teachers, and (3) evaluating and enriching teachers' experiences and professional growth. Despite agreeing that

professional development programs should be voluntary, the ESL teachers apparently did not express concerns on 'self-initiated' or 'self-directed' professional development. Nevertheless, researchers asserted that ESL teachers should engage in self-initiated or self-directed professional development by collaborating with other teachers as it could fulfill the needs of their students as well as the school (Kohl, 2005; Kabilan and Kasthuri, 2013).

3. Issues and challenges in ESL teacher professional development

Many traditional (face-to-face) professional development programs that are initiated to equip teachers with knowledge and skills have been futile for numerous reasons (Fullan, 2001; Gordon, 2004; Tinoca, 2005; Wangsopawiro, 2012). Only mere 12 to 27 percent teachers have seen an improvement in their teaching after attending such professional development activities. Researchers stated that ESL teachers are not voluntarily participating, but are often mandated and obliged to attend the workshops where the programs are characterized by the 'one size fits all' approach, topics are totally unrelated and are too broad to be applied in classroom settings (Tinoca, 2005). They are unmotivated to participate as they are not equipped with platform or opportunities to express their needs and interests as well as the problems they face in the classroom (O'Brien, 1992, Wangsopawiro, 2012). Thus, they feel disconnected from the learning experience planned for them (O'Brien, 1992). The designers fail to fit in ESL teachers' practical knowledge in the process of developing the programs (Van Driel et al., 2001; Haney, Czerniak & Lumpe, 1996; Klinger, 2000; Wangsopawiro, 2012). Hence, professional development programs which emphasize on the lecturing strategy are very common and reflect a choice of methodology which is poor and not innovative (Gersten & Santoro, 2010; Radford 1998). Lynch (1997) advocated the ineffectiveness of traditional professional development programs since the ideas and strategies suggested during the programs are not implementable in reality.

The new reforms and ideas may sound innovative and interesting, but they can hardly be implemented in a real classroom setting, and this happens owing to lack of opportunities provided to teachers in experimenting the new reform themselves. Furthermore, Hayes (1997) and Hopkins (1986) identified time constraint and lack of incentives as major reasons preventing teachers from attending traditional professional development programs. However, Guskey and Kwang (2009) described the workshops as a waste of time and money as there is seldom a follow-up event to provide sustained support or to get feedback from teachers. They added that most of these workshops are poorly organized and tend to focus on unproven ideas. Bredeson (2002) pointed out that lack of time, money, and appropriate structure contributes to

the failure of a continuous learning opportunity for teachers to refine their knowledge and practice.

Nevertheless, similarly to traditional professional development, research conducted has shown that online teacher professional development (OTPD) presents a number of shortcomings and barriers (Dede et al., 2009; Ginsberg, Gray & Levin, 2004). Bransford et al. (2000) claimed that while training teachers, facilitators and researchers should move beyond the traditional professional development programs by finding new pedagogies that are offered by the implementation of Information and Communication Technologies. With the availability of a wide range of technological devices, OTPD programs have been proliferating (Brown & Green, 2003; Dede, 2006; Mandinach, 2005; O'Dwyer, Carey, & Kleiman, 2007; Reeves & Pedulla, 2011). Researchers asserted that a few of these OTPD courses have brought upon a remarkable progress in teacher knowledge as well as the quality of teaching and learning (Chitanana, 2012; Masters, DeKramer, O'Dwyer, Dash, & Russell, 2010). Taking into account the myriad of benefits OTPD offers (Brown& Green, 3003; Carter, 2004), OTPD was introduced to eliminate the barriers that were caused by traditional professional development programs (Jackson, 1999; Reeves & Pedulla, 2011). Roskos, Jarosewich, Lenhart, and Collins (2007) highlighted that OTPD has the potential of transforming professional development programs from 'now and then' to more frequent, consistent and continuous programs.

Capitalizing on the Internet as the prime vehicle and with emerging technologies, OTPD is a promising platform that is known to be convenient with an advantage of "anywhere anytime" access (Carter, 2004; Harlen & Doubler, 2004; Swenson & Curtis, 2003; Vrasidas & Zembylas, 2004). The Internet has revolutionized education by providing opportunities to access information (Glassman & Kang, 2012), and it has also provided a social platform for people to engage with one another (Boyd & Ellison, 2008). Thus, OTPD encompasses courses and learning opportunities via online interactions with other teachers or facilitators (Treacy, Kleiman, & Peterson, 2002); it is also a platform that supports collaboration among teachers in the virtual community (Chapman, Ramondt, & Smiley, 2005; Park, Oliver, Johnson, Graham & Oppong, 2007). Also, OTPD offers flexibility and support by helping teachers learn at their own convenience to the extent that they can even access resources that may not be locally available (Dede, Ketelhut, Whitehouse, & McCloskey (2009). In brief, Fishman et al. (2013) stated that OTPD offers professional development opportunities to teachers in rural and isolated areas by having courses at respective locations. To add on, a study conducted by Reeves and Li (2012) found that ESL teachers participating in OTPD have shown a favorable attitude towards online-mediated professional development programs. The same study reported that teachers are amply prepared for online-mediated professional development.

Despite the exponential growth of emerging technologies and the Internet, studies have shown that ESL teachers have used them to a limited extent (Rolando, Salvador, Souza & Luz, 2014). The analysis of collaborative activities on blogs has shown very little interest by teachers (Carvalho, 2011). Owing to the fact that technology such as the Internet is a huge part responsible for the delivery of online professional development programs, the computer skills of the trainers and teachers are of concern (Reeves & Li, 2012; Roskos et al., 2007); such concerns regarding the computer competency of teachers also exist in the literature of general online learning (Muilenberg & Berge; Tallent-Runnels et al., 2006). Rolando et al. (2014) cautioned that in spite of the exposure provided by researchers on the prospects of a social platform for educational benefits (Martin et al., 2011), it has failed to highlight the ways ESL teachers can make use of these social tools to find support in the professional development of their peers. Besides computer competence of participants, access to a computer with reliable Internet connection also provides a challenge towards implementing online professional development programs (Treacy, Kleaman & Peterson, 2002). Treacy et al. (2002) added that the primary benefit of online professional development which is to provide an 'anytime, anywhere' access to learning will be futile without reliable Internet connection.

4. Flipped learning in teacher professional development

"If we are to remain relevant, we must embrace change" (Slomanson, 2014).

The rationale of employing flipped learning in teacher professional development stems from flipped learning research in education programs. This is parallel with the features of effective professional development. Flipped learning, which is also referred as blended learning and hybrid learning, shifts direct instruction from a group learning space to an individual learning space (Bergmann & Sams, 2014; Mok, 2014; Slomanson, 2014). However, regardless of the fact that the video component is used in online, flipped, and blended learning, there is a clear distinction among them. Online learning is conducted virtually without the face-to-face component; blended learning, on the other hand, has the online component, but it is conducted during class time alongside face-to-face instruction (Allen, Seaman, & Garett, 2007).

In flipped learning, however, instruction that is traditionally conducted inside the classroom is flipped with whatever that used to be done outside the classroom (Baker, 2000), and this is also referred as "inverted classroom" (Lage & Platt, 2000). Traditional classrooms are not always successful as it is challenging to cater for diverse needs and abilities of the

students. Thus, in flipped learning, instructional videos are pre-recorded before class and uploaded for students to download whenever and wherever convenient for them (Jiang & Zhou, 2014; Mok, 2014). The aim of flipping the classroom is to maximize face-to-face time with students and instructional materials, be it videos, podcasts, or screen casts. This can be beneficial in increasing students' knowledge and understanding before class. For improved comprehension on a particular topic or module, they can watch the videos multiple times at their own pace (Bull, Fester, & Kjellstrom, 2012). Bergmann and Sams (2014) argued that it is not feasible to deliver instruction to a large group through a face-to-face meeting, and the best setup is the one in which the face-to-face time is used to help students understand the content. This is how students are able to reach higher levels of Bloom's Taxonomy (Gilboy, Heinerichs & Pazzaglia, 2015) as they are provided with opportunities to apply, analyze, synthesize, and evaluate knowledge they developed before class into their group learning environment (Jiang & Zhou, 2014). Through active engagement in learning, students eventually develop learner autonomy.

Since flipped learning has been proven to be advantageous in addressing diverse needs and promoting active learning, it is justifiable to try it in the teacher professional development programs. Nevertheless, blended professional development programs have been nascent recently. Belland et al. (2015) conducted a blended professional development to help teachers learn to provide one-to-one scaffolding during a problem-based learning unit. Their study incorporated three seminars which allocated for one hour and a half, one 8 hour workshop, and 4 weeks of online education activities.

Professional development programs that are based only on face-to-face activities lack sustainability (Dede et al., 2008; Holmes, Polhemus & Jennings, 2005). Alternatively, Owston, Wideman, Murphy, and Lupshenyuk (2008) pointed out that it is difficult to organize and maintain a virtual community through OTPD programs, and this is largely because participants lack trust, support and a sense of belonging in their virtual community of learning (Charalambos, Michalinos, & Chamberlain, 2004). Thus, experiencing the face-to-face component is no doubt significant in strengthening the bond among participants in a learning community, which calls for a blended professional development that would integrate both the face-to-face and the online component (Owston et al., 2008).

Literature supports the integration of both online and face-to-face components in teacher professional development; researchers and developers of the program can decide whether to flip it, blend it or even mix it. An effective professional development program is said to be coherent, has a content focus, is conducted in a longer duration, and promotes

active learning and collaboration (Desimone, 2009; Garet et al., 2001). A blended approach in a teacher professional program fits best the design of an effective teacher professional development (Owston et al., 2008). Owston et al. (2008) explained that blended professional development can be conducted in a longer duration as teachers do not have to leave their classrooms or schools to participate. It can fit into teachers' busy schedules by providing opportunities to go through the content at their own pace. Besides, by utilizing the online component, teachers can experience stronger social cohesion in their communities of practice (Dede et al., 2008; Lock, 2006). Owston et al. (2008) elaborated that there are many opportunities for collaboration as teachers can be involved in face-to-face sessions by applying their knowledge through 'hands-on' activities and later share feedback, thoughts and experience through the online component.

5. Theoretical framework

Vygotsky's Zone of Proximal Development approach has been advanced by Warford (2011) to educate teachers within the Zone of Proximal Teacher Development (ZPTD). Warford (2011) explained ZPTD as "the distance between what teacher trainees are able to do on their own and a proximal level that they are capable of attaining with the guidance and strategic mediation of an expert in the field" (p.253).

Amer (2006) explained that taking into consideration the current developments in the educational and psychological literature where students are more knowledgeable of and responsible for their own learning and thinking, the Revised Taxonomy (RT) was developed. In brief, there are two reasons behind the revision of OT (Anderson et al., 2001); besides the intention, it is also revised to attract the educators' attention back to it and at the same time to emphasize the value of the OT for being a taxonomy that can still be applicable in the recent days (Rohwer & Sloane, 1994).

Warford (2011) stressed that teacher education curriculum based on Vygotskyan approach should promote mediation between teachers' prior teaching experiences, their pedagogical knowledge and observation as well as their tacit beliefs about pedagogy. Having said this, instead of cramming teaching candidates with facts, trainees create their own meaning by utilizing the cultural tools espoused by Vygotsky's theory.

Bloom's Educational Objectives; remembering, understanding, applying, analyzing, evaluating and creating are well integrated with ZPTD in designing in-service teachers programs (Rolando, Salvador, Souza, Luz, 2014). As shown in Table 1, ZPTD starts with teachers' reflection (self-assistance) on their prior experiences and beliefs, and moves toward

experts' assistance (Tayebeh & Farid, 2011). Each stage progresses sequentially complying to Bloom's Educational Objectives.

Table 1. Adaptation of ZPTD and Bloom's Taxonomy into in-service teacher programs

ZPTD	Bloom's Taxonomy	Sample Interventionist Dynamic Assessments	Sample Interactionist Dynamic Assessments
I. Self-assistance [Stage II in ZPD (Gallimore & Tharp, 1990)]	-Remembering -Understanding	Preparing learning autobiographies, Responding to prompts about prior experiences	Discussion, sharing autobiographies, follow-up questions
II. Expert other assistance [Stage I in ZPD (Gallimore & Tharp, 1990)]	-Applying -Analyzing	Analysis of teaching practices (demonstrations, videos, field observation) Role-taking/playing Forced choice quizzes (written) WebQuests Cubing exercises	Leading questions and follow- up discussion Processing role plays Oral quizzes
III. Internalization	-Evaluating	Journaling Micro-teaching Candidate statement of teaching philosophy	Discussion, dialogic partners
IV. Recursion	-Creating	Journaling Clinical reflective reports: collecting information and making warranted claims for change On-line forum Role taking/playing	Discussion, sharing autobiographies, follow-up questions, post-observation conferencing. Processing role-plays

6. Implications and recommendations

Hinging on the concept of the classroom flip and using the theory of Bloom's Revised Taxonomy and ZPTD as the framework, this paper proposes the flipping concept in the professional development programs, thus introducing a Flipped Teacher Professional Development for ESL teachers (see Figure 1).

Daniels (2014) revealed that traditional professional development only provides pedagogical ideas and resources to teachers while leaving no time for design and implementation; thus, a flipped professional development idea was developed in Stillwater, Minnesota to emphasize on the design and development as well as the implementation of the curriculum via technology integration. Daniels further added that the flipped professional development can be conducted in a workshop setting provided that the coaching element is added to it. In this approach, the ESL teachers will watch the video tutorials to learn new

methodologies, get inspirations and ideas, and later discuss with the experts on developing those ideas; also, the experts facilitate the teachers; coach, scaffold, and provide guidance until the teachers manage to develop and implement the resources (Flanigan, 2013). The crux of this paper concerns supporting a flipped professional development program for ESL teachers.

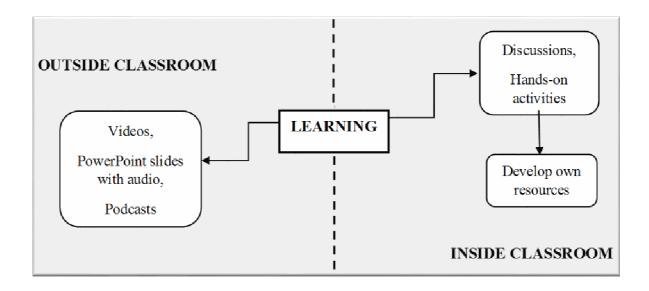


Figure 1. Flipped Teacher Professional Development (Fit-PD)

The proposed instructional plan as presented in Table 2 has been implemented in five selected primary schools. The online component is facilitated online whereas the face-to-face (F2F) component is planned to be conducted in the respective schools. The participants for this implementation phase are ESL teachers of the respective schools who are involved in a one-month training program.

The FiT-PD training begins with a face-to-face meeting with the teacher participants and this stage is basically trainer regulated. The two cognitive processes involved in this stage are remembering and understanding; participants recall their prior experiences and share their learning autobiographies.

Subsequently, they move to the online component where small, bite-sized chunks of online activities are utilized through trainer facilitation. At this stage, they apply and analyze teaching practices based on the proposed module. As the participants' confidence increases, they internalize their learning in a face-to-face meeting with other participants in which they go through the evaluation cognitive process.

Finally, the training ends with an online session where participants collaborate and share with one another through online learning platforms, and simultaneously, work together to create their own innovative methodologies.

Table 2. Proposed instructional strategy for FiT-PD

Implementation	Phases	Cognitive Processes	Proposed Activities
TL 1	Self Assistance	- Remembering	- Responding to prompts about prior experiences
(Face to face)		- Understanding	- Preparing and sharing learning autobiographies
			- Discussions
TL 2	Expert	- Applying	- Analysis of teaching practices based on the FiT-PD
(Online)	Assistance	- Analyzing	module
			- Leading questions and follow up
			- WebQuests
TL3	Internalization	- Evaluating	- Microteaching
(Face to face)			- Journaling
			- Statement of teaching philosophy
TL 4	Recursion	- Creating	- Online forums
(Online)			- Journaling

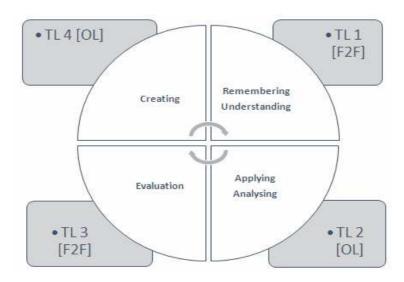


Figure 2 Implementation framework of FiT-PD

7. Conclusions

The implementation of the Flipped Teacher Professional Development (FiT-PD) program is conducted in four Train-to-Learn (TL) stages (Figure 2); remembering and understanding (TL-1) conducted in a face-to face mode, applying and analysis (TL-2) conducted online, evaluation (TL-3) conducted in a face-to-face mode and finally creating (TL-4) conducted online. Literature has revealed many shortcomings of the traditional and online professional

development programs that are widely conducted; thus, a flipped professional development program proposed in this study can be a viable solution.

Professional development programs are essential in maintaining teacher professionalism, and the approach of the program must constantly fit the demands of educational reforms. It is fundamental that ESL teachers are kept abreast with the everchanging teaching pedagogies that are brought by the integration of Information and Communication Technologies in education. ESL teachers have to adopt a different approach as it is the age of the young learners that makes it unfitting for the teaching of formal concepts. Thus, it is widely recognized that teachers' knowledge, skills, and practices are decisive in the success of any teaching career. Khandehroo et al. (2011) stated that there are very few descriptive research designs about the specific instructional skills that ESL teachers need professional development for. It is hoped that this paper will help educational policymakers to better plan and organize flipped professional teacher professional development (Fit-PD) for ESL teachers.

Acknowledgement

This work was supported by the Fundamental Research Grant Scheme (FRGS) Grant No. FP017-2014B from Malaysia Ministry of Education and also supported partly by COMSTECH-TWAS Joint Research Grants Programme. The administration and financial operation of TWAS is undertaken by UNESCO (UNESCO FR: 3240283415).

References

- Abell, S. K. (2008). PCK twenty years later: Does it remain a useful idea? *International Journal of Science Education*, 30, 1405-1416.
- Allen, I. E., Seaman, J., & Garrett, R. (2007). *Blending. The Extent and Promise of Blended Education in the United States*. Needham, MA: The Sloan Consortium. Retrieved 25 May 2014 from http://www.sloan-c.org/publications/survey/pdf/Blending_In.pdf
- Aly Amer (2006). Reflections on Bloom's Revised Taxonomy. *Electronic Journal of Research in Educational Psychology*, 8(4), 213-230.
- Ball, D., & Cohen, D. (1999). Developing practice, developing practitioners. In L. Darling-Hammond & G. Sykes (Eds,), *Teaching as the Learning Profession: Handbook of Policy and Practice* (pp. 3-32). San Francisco: Jossey-Bass Publishers.
- Belland, B. R., Burdo, R., & Gu, J. J. (2015). A blended professional development program to help a teacher learn to provide one-to-one scaffolding. *Journal of Science Teacher Education*, 26, 263-289.
- Bergmann, J., & Sams, A. (2014, May). Flipped learning: Gateway to student engagement: There's more to flipped learning than just asking students to watch videos at home and complete worksheets in class.

- Find out how to use the flipped model to take your teaching—and your students—to new places. *Learning & Leading with Technology*, 41(7), 18-23.
- Beyea, S., & Nicholl, L. (1998). Writing an integrative review. AORN Journal, 67(4), 877-80.
- Birman, B. F., Desimone, L., Porter, A. C., & Garet, M. S. (2000). Designing professional development that works. *Educational Leadership*, May 2000, 28-33.
- Borko, H. (2004) *Professional Development and Teacher Learning: Mapping the Terrain*. Retrieved 25 May 2014 from http://edr.sagepub.com/content/33/8/3.full.pdf.
- Boyle, Boyd, D. M., & Boyle, B., While, D., & Boyle, T. (2004). A longitudinal study of teacher change: What makes professional development effective? *Curriculum Journal*, 15(1), 45-68.
- Bredeson, P. V. (2002). The architecture of professional development: Materials, messages and meaning. International Journal of Educational Research, 37(8), 661-675.
- Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). How people learn: Brain, mind, experience, and school (Expanded E., p. 384). *Educational Researcher*, 33(8), pp. 3-15.
- Bull, G., Ferster, B., & Kjellstrom, W. (2012, August). Inventing the flipped classroom. *Learning & Leading with Technology*, 40(1), 10-11.
- Carvalho, J. D. S. (2011). *Networks and Communities: Teaching and Learning over the Internet*. Sao Paulo: Editora e Livraria Instituto Paulo Freire.
- Chapman, C., Ramondt, L., & Smiley, G. (2005). Strong community, deep learning: Exploring the link. *Innovations in Education and Teaching International*, 42(3), 217-230.
- Charalambos, V., Michalinos, Z., & Chamberlain, R. (2004). The design of online learning communities: Critical issues. *Educational Media International*, 41(2), 135-143.
- Chitanana, L. (2012). A constructivist approach to the design and delivery of an online professional development course: A case of the iLEARN online course. *International Journal of Instruction*, 5(1), 23-48.
- Clark, R. E. (1983). Reconsidering research on learning from media. *Review of Educational Research*, 53(4), 445-459.
- Clarke, D. J., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching and Teacher Education*, 18(8), 947-967.
- Comber, C. (2009). Survey of the Use of Learning Platforms/Virtual Learning Environments in Initial Teacher Education Institutions, Interim Report, March 2009. School of Education, University of Leicester: ITTE. Retrieved 25 May 2014 from http://dera.ioe.ac.uk/1773/1/Becta_LS_Report_August_2009_Final.docx.
- Day, C., Elliot, B., & Kingston, A. (2005). Reform, standards and teacher identity: Challenges of sustaining commitment. *Teaching and Teacher Education*. 21(5), 563-577.
- Daniels, K. (2014, April 18). The flip side of professional development. *Ed Surge*. Retrieved 25 May 2014 from https://www.edsurge.com/n/2014-04-18-the-flip-side-of-professional-development.
- Dean, J. (1991). Professional Development in School. Buckingham: Open University Press.
- Dede, C. (Ed.). (2006). Online Professional Development for Teachers: Emerging Models and Methods. Cambridge, MA: Harvard Education Press.
- Dede, C., Ketelhut, D. J., Whitehouse, P., & McCloskey, E. (2009). A research agenda for online teacher professional development. *Journal of Teacher Education*, 60(1), 8-19.

- Desimone, L., Porter, A. C., Garet, M. S., Yoon, K. S., & Birman, B. F. (2002). Effects of professional development on teachers' instruction: Results from a three-year longitudinal study. *Education Evaluation and Policy Analysis*, 24(2), 81-112.
- Desimone, L. (2009). Improving impact studies of teacher professional development: Toward better conceptualisations and measures. *Educational Researcher*, 38(3), 181-199.
- Desimone, L. (2011). A primer on effective professional development. Phi Delta Kappan, 92, 68-71.
- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers' College Record*, 103(6), 1013-1055.
- Ellison, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication*, 13(1), 210-230.
- Flanigan, R. L. (2013, June 11). 'Flipped PD' initiative boosts teachers' tech skills. *Education Week*, 33(1), 4.
- Fleet, A., & Patterson, C. (2001). Professional growth reconceptualized: Early childhood staff searching for meaning. *Early Childhood Research and Practice*, 3(2). Retrieved 25 May 2014 from http://ecrp.uiuc.edu/v3n2/fleet.html.
- Fisher, J. B., Schumaker, J. B., Culbertson, J., & Deshler, D. D. (2010). Effects of a computerized professional development program on teacher and student outcomes. *Journal of Teacher Education*, 61(4), 301-312.
- Fishman, B., Konstantopoulus, S., Kubitskey, B. W., Vath, R., Park, G., Johnson, H., & Edelson, D. C. (2013). Comparing the impact of online professional development in the context of curriculum implementation. *Journal of Teacher Education*. 64(5), 426-438.
- Fullan, M., Hill, P., & Crevola, C. (2006). Breakthrough. Thousand Oaks, CA: Corwin Press.
- Fullan, M. (1999). Change Forces: The Sequel. Bristol: Farmer Press.
- Fullan, M. & Hargreaves, A. (1996). What's Worth Fighting for in Your School. New York: Teachers College Press.
- Fullan, M. (1993). Change Forces: Probing the Depths of Educational Reform. Bristol: Farmer Press.
- Fullan, M., & Miles, M. B. (1992). Getting reform right: what works and what doesn't. *Phi Delta Kappan*, 73(10), 745-752.
- Fullan, M. (1991). The New Meaning of Educational Change. New York: Teachers College Press.
- Gall, M. D., Renchler, R. S. (1985). Effective staff development for teachers: A research-based model. (ERIC). College of Education, University of Oregon. In S. M. Wilson & J. Berne (1999), Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-209.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38(4), 915-945.
- Garmston, R. (1991). Staff developers as social architects. Educational Leadership, 49(3), 64-65.
- Gersten, R., & Santoro, L. E. (2010). Teacher study group: Impact of the professional development model on reading instruction and student outcomes in first grade classrooms. *American Educational Research Journal*, 47, 694-739.
- Glassman, M., & Kang, M. J. (2012). Intelligence in the internet age: The emergence and evolution of Open Source Intelligence (OSINT). *Computers in Human Behavior*, 28(2), 673-682.

- Gilboy, M., Heinrichs, S., Pazzaglia, G. (2015, January). Enhancing student engagement using the flipped classroom. *Journal of Nutrition Education and Behavior*, 47(1), 109-114.
- Goodall, J., Day, C., Lindsay, G., Muijs, D. & Harris, A. (August 2005). Evaluating the Impact of Continuing Professional Development (CPD). London: DfES.
- Goodson, I. (1997). 'Trendy theory' and teacher professionalism. In A. Hargreaves & R. Evans (Eds.), *Beyond Educational Reform: Bringing Teachers Back in* (pp. 29-43). Buckingham: Open University Press.
- Gordon, S. P. (2004). *Professional Development for School Improvement: Empowering Learning Communities*. Boston, MA: Pearson/ Allyn and Bacon.
- Greeno, J. G., Collins, A. M., & Resnick, L. B. (1996). Cognition and learning. In D. Berliner & R. Calfee (Eds.), *Handbook of Educational Psychology* (pp.15-46). New York: Macmillan.
- Griffin, G.A. (1983). Introduction: The work of staff development. In G.A. Griffin (Ed.), *Staff Development*, 82nd *Yearbook of the National Society for the Study of Education* (pp. 13-15). Chicago: University of Chicago Press.
- Gulati, S. (2008). Compulsory participation in online discussions: is this constructivism or normalization of learning? *Innovations in Education and Teaching International*, 45(2), 183-192.
- Guskey, T. (1986). Staff development and the process of teacher change. Educational Researcher, 15(5), 5-12.
- Guskey, T. R. (2000). Evaluating Professional Development. Thousand Oaks, CA: Corwin.
- Guskey, T. R. (2002a). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3/4), 381-391.
- Hammond, M. (2010). What the Literature Says about Continuing Professional Development and the Use of Learning Platforms in Schools and in Initial Teacher Education. BECTA. Retrieved 25 May 2014 from http://www.itte.org.uk/system/files/LP%2526CPD%20Lit%20Review(Final).doc.
- Haney, J. J, Czerniak, C. M, & Lumpe, A. T. (1996). Teacher beliefs and intentions regarding the belief of science education reform strands. *Journal of Research in Science Teaching*, 33, 971-993.
- Harootunian, B., & Yargar, G. P. (1980). Teachers' conceptions of their own success. Paper presented at the Annual Meeting of the American Educational Research Association. Boston, MA, April.
- Hawley, W. D., & Valli, L. (1999). The essentials of effective professional development. In L. Darling-Hammond
 & G. Sykes (Eds,), *Teaching as the Learning Profession: Handbook of Policy and Practice* (pp. 127-150). San Francisco: Jossey-Bass Publishers.
- Hayes, D. (Ed.) (1997). In-Service Teacher Development: International Perspectives. London: Prentice Hall.
- Helmer, J., Bartlett, C., Wolgemuth, J. R., & Lea, T. (2011). Coaching (and) commitment: Linking ongoing professional development, quality teaching and student outcomes. *Professional Development in Education*, 37(2), 197-211.
- Henderson, M. (2007). Sustaining online teacher professional development through community design. *Campus-Wide Information Systems*, 24(3), 162-173.
- Holmes, A., Polhemus, L., & Jennings, S. (2005). CATIE: A blended approach to situated professional development. *Journal of Educational Computing Research*, 32(4), 381-394.
- Hopkins, D. (Ed.) (1986). *In-Service Training and Educational Development: An International Survey*. London: Croom Helm.

- Huberman, M. (1995). Professional careers and professional development: Some interactions. In T. R. Guskey & M. Huberman (Eds.), *Professional Development in Education: New Paradigms and Practices* (pp. 122-142). New York: Teachers College Press.
- Jiang, X., Zhou, G. (2014, March). Theoretical research and instructional design of the flipped classroom. Applied Mechanics and Materials, 543-547, 4312-4315.
- Kleiman, G. M. (2004). *Meeting the Need for High Quality Teachers: E-Learning Solutions*. Retrieved 25 May 2014 from http://www.ed.gov/about/offices/list/os/technology/plan/2004/site/documents/KleimaneetingtheNeed.pd f.
- Klinger, D. (2000). Hierarchical linear modeling of students and school effects on academic achievement. Canadian Journal of Education, 25, 41-55.
- Kohl, G. A. (2005). The Professional Development Needs of K-12 ESL and Foreign Language Teachers: A Descriptive Study. North Carolina, United States of America: University of North Carolina.
- Kwakman, K. (2003). Factors affecting teachers' participation in professional learning activities. *Teaching and Teacher Education*, 19(2), 149-170.
- Lage, M. J., & Platt, G. J. (2000). The internet and the inverted classroom. *Journal of Economic Education*, 31(1), 30-43.
- Laughridge, Virginia J., (2011). The Relationship between Professional Development and Teacher Change in the Implementation of Instructional Strategies that Support Elementary Students' Science Textbook Reading.

 Doctoral Theses, Student Research, and Creative Activity. University of Nebraska Lincoln. Retrieved 25 May 2014 from http://digitalcommons.unl.edu/dissertations/AAI3449904.
- Lave, J. & Wenger, F. (1991). Situated Learning: Legitimate Peripheral Participation. Cambridge, UK: Cambridge University Press.
- Lieberman, A. & Miller, L. (2001). Introduction. In A. Lieberman & L. Miller (Eds.) (2001). *Teachers Caught In The Action: Professional Development That Matters* (pp. i-vii). New York: Teachers College Press.
- Lock, J. V. (2006). A new image: Online communities to facilitate teacher professional development. *Journal of Technology and Teacher Education*, 14, 663-678..
- Loucks-Horsley, S. Hewson, P. W., Love, N., & Stiles, K. E. (1998). *Designing Professional Development for Teachers of Science and Mathematics*. Thousand Oaks, CA: Corwin Press.
- Lynch, S. (1997). Novice teachers' encounter with national science education reform: Entanglement or intelligence interconnections. *Journal of Research in Science Teaching*, 34(1), 3-17.
- Martin, S., Diaz, G., Sancristobal, E., Gil, R., Castro, M., & Peire, J. (2011). New technology trends in education: Seven years of forecasts and convergence. *Computers and Education*, 57(3), 1893-1906.
- Masters, J., Magidindekramer, R., O' Dwyer, L. M., Dash, S., & Russell, M. (2010). The effects of online professional development on fourth grade English language arts teachers' knowledge and instructional practices. *Journal of Educational Computing Research*, 43(3), 355-375.
- Means, B., Toyama, Y., Murphy, R. Bakia, M., Jones, K. (2009). Evaluation of Evidence-Based Practices in Online-Learning: A Meta-Analysis and Review of Online Learning Studies. Washington DC: U.S. Department of Education.
- Mok, H. (2014). Teaching tip: The flipped classroom. Journal of Information Systems Education, 25(1), 7-11.

- Motteram, G. (2006). 'Blended' education and the transformation of teachers: A long term case study in postgraduate UK Higher Education. *British Journal of Educational Technology*, 37(1), 17-30.
- Northrup, P., & Rasmussen, K. (1999). STEPS: Just-in-time EPSS professional development for educators. In B. Collis & R. Oliver (Eds.), *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications* 1999 (pp. 1644). Chesapeake, VA: AACE.
- O'Brien, T. (1992). Science inservice workshops that work for elementary teachers. *School Science and Mathematics*, 92(8), 422-426.
- O'Dwyer, L. M., Carey, R., & Kleiman, G. M. (2007). A study of the effectiveness of the Louisiana Algebra I online course. *Journal of Research on Technology in Education*, 39(3), 289-306.
- Oliver, R., Herrington, J., & Reeves, T. C. (2006). Creating authentic learning environments through blended learning approaches. In C. J. Bonk & C. R. Graham (Eds.), *The Handbook of Blended Learning: Global Perspectives, Local Designs* (pp. 502–514). San Francisco: Pfeiffer.
- Owston, R., Wideman, H., Murphy, J., & Lupshenyuk, D. (2008). Blended teacher professional development: A synthesis of three program evaluations. *Internet and Higher Education*. 11, 201-210.
- Owston, R. D., Sinclair, M., & Wideman, H. (2008). Blended learning for professional development: An evaluation of a program for middle school mathematics and science teachers. *Teachers College Record*, 110(5), 1033-1064.
- Park, S., Oliver, J. S., Johnson, T. S., Graham, P., & Oppong, N. K. (2007). Colleagues' roles in the professional development of teachers: Results from a research study of National Board certification. *Teaching and Teacher Education*, 23(4), 368-389.
- Powell, D. R., Diamond, K. E., Burchinal, M. R., & Koehler, M. J. (2010). Effects of an early literacy professional development intervention on head start teachers and children. *Journal of Education Psychology*, 102(2), 299-312.
- Radford, D. L. (1998). Transforming theory into practice: A model for professional development for science education reform. *Journal of Research in Science Teaching*, 35(1), 73-88.
- Rolando, L. G. R, Salvador, D. F, Souza, A. H. S, & Luz, M. R. M. P. (2014). Learning with their peers: using a virtual learning community to improve an in-service Biology teacher education program in Brazil. *Teaching and Teacher Education*, 44, 44-55.
- Slomanson, W. (2014, August). Blended learning: A flipped classroom experiment. *Journal of Legal Education*, 63(1), 93-102.
- Sparks, D. (1997). A new vision for staff development. *Principal*, 77(1), 20-22.
- Swenson, P., & Curtis, L. (2003). Hybrid courses plus: Blending F2F, online and handheld computer for effective learning. *Society for Information Technology and Teacher Education International 2003 Conference Proceedings* (pp. 520–523).
- Tayebeh, F., & Farid, G. (2011). Implication of Vygotsky's Zone of Proximal Development (ZPD) in teacher education: ZPTD and self-scaffolding. *International Conference on Education and Educational Psychology (ICEEPSY 2011)*, 29, 1549-1554.
- Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). *Teacher Professional Learning and Development: Best Evidence Synthesis Iteration (BES)*. Wellington: Ministry of Education.

- Tinoca, L. (2005). The Process of Teacher Change as a Consequence of Professional Development and its Impact on Student Learning. Dallas, Texas: National Association for Research in Science Teaching.
- Treacy, B., Kleiman, G., & Peterson, K. (2002). Successful online professional development. *Learning and Leading with Technology*, 30(1), 42-47. Retrieved 25 May 2014 from http://olms.noinc.com/olms/data/resource/1686/SuccessfulOnlinePD_.pdf.
- Van Driel, J. H., Beijaard, D., & Verloop, N. (2001). Professional development and reform in science education: The role of teachers' practice and knowledge. *Journal of Research in Science Teaching*, 38, 137-158.
- Warford, M. K. (2011). The zone of proximal teacher development. *Teaching and Teacher Education*, 27, 252-258.
- Wilson, S. M., & Berne, J. (1999). Teacher learning and the acquisition of professional knowledge: An examination of research on contemporary professional development. *Review of Research in Education*, 24, 173-210.
- Wongsopawiro, D. (2012). Examining Science Teachers' Pedagogical Content Knowledge in the Context of a Professional Development Program. Doctoral dissertation. Leiden: Leiden University.
- Yang, S. J. H., Chen, I. Y. L., Kinshuk, & Chen, N. (2007). Enhancing the quality of e-learning in virtual learning communities by finding quality learning content and trustworthy collaborators. *Educational Technology* & Society, 10(2), 84-95.

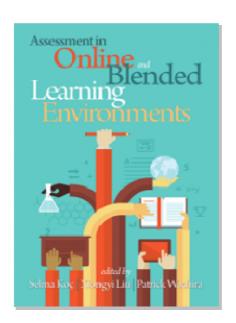
ASSESSMENT IN ONLINE AND BLENDED LEARNING ENVIRONMENTS

(Book Review)

by Ferit Kılıçkaya

Mehmet Akif Ersoy University

Department of Foreign Language Education, Burdur, Turkey
ferit.kilickaya @ gmail.com



Book etails:

Assessment in Online and Blended Learning Environments

Selma Koç, Xiongyi Liu, and Patrick Wachira (Eds.)

Information Age Publishing, Inc, Charlotte, NC, 2015, x + 308 pages

978-1-68123-044-3 (Paperback)

978-1-68123-045-0 (Hardcover)

978-1-68123-046-7 (ebook)

\$45 (Paperback)

1. Introduction

The expansion of online and blended learning environments allows students to enjoy a potentially better teaching and learning experience. As teaching and learning today are not limited to the walls of the classroom and most universities and schools provide learning

opportunities for their students through online and blended learning environments, assessment practices also gain much more importance (Stein & Graham, 2014). Thanks to the growing number of digital tools available on the Internet (Littlejohn & Pegler, 2007), we are no longer confined to traditional assessment practices, and it is possible to keep a balance between process and product-oriented assessment forms. However, what requires due attention is that the assessment practices to be conducted either online or in blended learning environments is that the selected digital tools for assessment should be geared towards the needs of the learners (Marsh, 2012). The great benefit of digital tools lies in the "provision of effective and efficient feedback that can be individualized" and "student interaction" (Irons, 2008, p. 92). It is, therefore, vital that researchers as well as teachers that have online and blended learning classes adopt appropriate assessment.

The book *Assessment in Online and Blended Learning Environments* edited by Selma Koç, Xiongyi Liu, and Patrick Wachira, with 2 sections and 15 chapters, aims to present both theoretical and practical information on how assessment in online and blended learning environments can be conducted.

2. Sections and chapters

Section I, "Online Learning and Assessment" includes 8 chapters In Chapter 1, 'The value of embedded formative assessment: An integral process in online learning environments implemented through advances in technology', Michelle Bakerson, Tracey Trottier, and Malinda Mansfield provide a rich overview of technologies for online embedded formative assessment, informing readers of several tools and as well as their uses such as Learning Management Systems, online authoring tools, and student feedback tools.

Chapter 2, 'Empowering learners to engage in authentic online assessment', deals with how authentic assessment can be achieved through a discussion of a 6-week online collaborative activity conducted with pre-service teachers, teachers, and academics. The authors, Jennifer V. Lock and Petrea Redmond, specifically focus on the role that authentic assessment practices play in online learning environments.

In Chapter 3, entitled 'Assessing technology-enhanced learning: A process-oriented approach', Philip Bonanno proposes a process-oriented model for assessing technology-enhanced learning, focusing on learning process and dimensions of interactions (domain, technology, and community.

In Chapter 4, 'Students as "assessors" and "assessees" in an era of social media', Grail Casey discusses the findings of a large study benefitting from action research. The findings

indicate that social media can be used to provide an interactive and positive learning and teaching experience for students and teachers alike.

Chapter 5, 'Assessment methods in online graduate courses', presents the findings of a study based on an exploratory, qualitative approach The author, Shijuan Liu, examines the assessment methods used in 22 online courses, leading to 21 large categories, some of which include projects, field reports, and peer editing.

Chapter 6, 'Online course dynamic design informed by student response and formative assessment', investigates a variety of techniques based on formative assessment. Thus, Marius Boboca focuses on how these techniques affect student interactivity in a dynamic course design that allows students to interact with their classmates as well as their teachers.

In Chapter 7, 'Using embedded audio feedback for formative assessment purposes in teaching about English language learners', Larisa A. Olesova and Luciana C. de Oliveir discuss the role of audio feedback in providing formative assessment in asynchronous online courses in a case study. The authors provide examples of audio feedback recorded using the software, Audacity and students' reports.

Chapter 8, 'Assessment strategy for self-paced online learning', aims to introduce an assessment strategy (ProperoTM) developed for self-paced online courses, including various formative and summative assessment content. Barbara E. Rowan and Walter D. Way also discuss how standards for educational and psychological testing contribute to the development of this assessment strategy.

Section II, "Blended learning and assessment" includes 8 chapters and begins with chapter 9. In Chapter 9, 'Student assessment in a blended learning environment: A triad approach', Norman Vaughan introduces a triad approach to investigate how blended learning and digital technologies can be used in assessment. In this approach, various assessment practices (self-reflection, peer feedback and teacher assessment) are integrated through a variety of tools such as online quizzes, portfolios, and wikis.

Chapter 10, 'Continuous formative assessment during blended and online instruction using cloud-based collaborative documents', employs synchronous collaborative cloud-base documents to investigate the effects of real-time formative assessments. The authors, Norman Herr, Mike Rivas, Tae Chang, John M. Reveles, Marty Tippens, Virginia Vandergon, Matthew A. d'Alessio, and Dorothy Nguyen-Graff, benefit from free web-based documents such as spreadsheets, presentations, and drawings and use several techniques such as online quiz-write and collaborative presentation.

In Chapter 11, 'Blended learning and assessment through dynamic digital portfolios: The e-scape approach', Kay Stables, Osnat Dagan, and Dan Davies introduce web-based performance portfolios developed through an e-scape project (e-solutions for creative assessment in portfolio environments) in several case studies. The use of portfolios is shown in different contexts such as classroom assessment and summative assessment for national assessments.

Chapter 12, 'Strategies for success: Using formative assessment to build skills and community in the blended classroom', written by Anupama Arora, Shari Evans, Catherine Gardner, Karen Gulbrandsen, and Jeannette E. Riley, reports findings from a longitudinal project on the integration of online tools into the classroom to investigate how digital tools can help formative assessment in blended learning environments.

In Chapter 13, 'Discussions in online and blended learning: A tool for peer assessment', David S. Stein and Constance E. Wanstreet discuss the peer assessment rubric developed to assess higher-order thinking in synchronous discussions.

Chapter 14, 'Criterion-referenced language assessment in blended environments', focuses on criterion-referenced testing in web-based and blended learning environments and introduces a learning management system, WebClass. The author, Wojciech Malec, describes the features of this web-based system that helps make testing more practical and effective.

In Chapter 15, 'Framework for assessment from an institutional perspective', Jean-Marc Wise and Tami Im introduce an institutional assessment framework, which includes three primary areas of performance (education, academia, and economy), three agents (student, instructor, and institution), and six core dimensions (certification, performance, facilitation, qualification, accreditation, and globalization).

3. Evaluation

The major strength of the book lies in the state-of-the-art discussions through qualitative studies on formative and summative assessment practices in online and blended learning environments. The chapters of the book not only provide theoretical background on types of assessment but also link the in-depth discussions to current practices in several online and blended learning projects, thus providing a good balance between theory and practice. For example, the chapter entitled 'Strategies for success: Using formative assessment to build skills and community in the blended classroom' describes how online tools such as online quizzes and discussion boards can be integrated into a literature course. It is clear that the

authors have strengthened the content of this book by making clearer references to research on assessment.

The digital tools introduced in several chapters do not require much in terms of technical knowledge and can be adopted by researchers and teachers willing to take some of the assessment practices outside of the classroom. Moreover, the implications and suggestions for further research can lead to some new ideas on the use of assessment practices.

Overall, the book proves to be an invaluable reading for researchers, teachers, and graduate students interested in implementing summative and formative assessment in online and blended learning environments. As most chapters include practical application of digital tools in assessment outside the classroom, those looking for studies with research and practice perspectives in assessment will find the book quite useful.

However, several points of criticism are also worth mentioning. The book does not have an index, making it difficult for readers to find the chapters and/or pages in which some specific terms are discussed. Moreover, it would be also useful to provide the definitions of important terms used throughout the chapters at the very beginning of the chapter. It would also have been beneficial to include a final chapter written by the editors at the end of the book so that the issues and findings discussed throughout the chapters would be outlined and combined, indicating future issues and trends regarding formative and summative assessment in online and blended learning environments.

References

Irons, A. (2008). Enhancing Learning through Formative Assessment and Feedback. New York: Routledge.

Littlejohn, A., & Pegler, C. (2007). Preparing for Blended e-Learning. New York: Routledge.

Marsh, D. (2012). *Blended Learning: Creating Learning Opportunities for Language Learners*. Cambridge: Cambridge University Press.

Stein, J., & Graham, C. R. (2014). Essentials for Blended Learning: A Standards-Based Guide. New York: Routledge.

Volume 16, Issue 3

FROM THE EDITOR	1
Jarosław Krajka	33
THE EFFECT OF TECHNOLOGY INTEGRATION ON HIGH SCHOOL STUDENTS' LITERACY ACHIEVEMENT	3
Kara Robinson	
KAHOOT IT OR NOT? CAN GAMES BE MOTIVATING IN LEARNING GRAMMAR?	. 17
Ewa Zarzycka-Piskorz	112
TEACHING A FOREIGN LANGUAGE IN A DESKTOP VIDEOCONFERENCING ENVIRONMENT Krzysztof Kotułs	37
WHAT THE GOOD (DIGITAL) LANGUAGE LEARNER CAN TEACH US?	20
Anna Turula	0 02,
SAME TIME SAME PLACE: DO MALL CLASSROOMS EXIST?	8 0 74
Intensityme	0000
FLIPPED ESS. TEACHER PROFESSIONAL DEVELOPMENT: EMBRACING CHANGE TO REMAIN RELEVANT	85
Rafiza Abdul Razak, Daiwinder Kaur, Siti Hajar Halili and Zahri Ramlan 💮 💆 💮 🧢 💮 💮 💮 💮	9000
ASSESSMENT IN ONLINE AND BLENDED LEARNING ENVIRONMENTS	103
(Book Review)	0000
Ferit Kiligkaya	0.00
26 Vo. 26 Vo. 26 Vo. 27 O. 27	L. Pop

Teaching English with Technology
July-2016