

Using E-Learning to Practise Use of English Exercises with EFL Students

Bakalářská práce

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Katedra anglického jazyka





Zadání bakalářské práce

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Bakalářská práce se zaměřuje na využití školních i autentických materiálů k procvičení gramatiky a slovní zásoby, a to jak v on-line, tak tištěné podobě. Cílem práce je zjistit, která ze dvou podob cvičení vede k lepším výsledkům EFL studentů. Teoretická část se zaměřuje na specifiku slovní zásoby a gramatiky a typy cvičení. V praktické části budou analyzovány výsledky studentů.

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Anotace

Tato bakalářská práce se zabývá tématem používání e-learningu k procvičování gramatiky a slovní zásoby s EFL studenty. Teze zmiňuje filozofické základy e-learningu a popisuje využítí a význam technologie ve výuce anglického jazyka. V praktické části bylo využito e-learningu ve třech úrovních jednoho předmětu "Practical Language": PR3BE, PR4BE a PR5BE. Provedený výzkum měl za cíl zjistit, jakou zkušenost mají studenti s kvízy zaměřenými na gramatiku a slovní zásobu. Dále byl tento výzkum zaměřen na jejich motivaci kvízy využívat. Během popisu a analýzy dat získaných z kvízů je v této práci zpět odkazováno na teoretickou část. Ta popisuje několik dalších způsobů, jak přistupovat k výuce anglického jazyka s pomocí moderní technologie.

Klíčová slova: Computer aided language learning, technology enhanced language learning, systém řízení výuky, e-learning, Moodle, behaviorismus, drill and practice, kvízy, případová studie, gramatika a slovní zásoba

Annotation

This bachelor thesis focuses on the topic of using e-learning to practise Use of English with EFL students. The thesis mentions the philosophical underpinnings of e-learning and describes the uses and importance of importance of technology in English learning. The research conducted was to discover how well students do in e-learning Use of English quizzes at three different course levels: PR3BE, PR4BE and PR5BE. A further aim was to find out to what extent the students were motivated to (re)attempt them. This bachelor thesis tries to answer such questions while referring back to the theoretical part where it describes multiple approaches that are used in English learning with technology.

Key words: Computer aided language learning, technology enhanced language learning, learning management system, e-learning, Moodle, behaviourism, drill and practice, quizzes, case study, Use of English

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List of abbreviations

CALL – Computer Aided Language Learning

TELL – Technology Enhanced Language Learning

LMS – Learning Management System

CAE - Certificate in Advanced English

EFL – English as a Foreign Language

TUL – Technical University of Liberec

PR3BE – The third semester of a compulsory five-semester practical language course for undergraduates of English

PR4BE – The fourth semester of a compulsory five-semester practical language course for undergraduates of English

PR5BE – The fifth semester of a compulsory five-semester practical language course for undergraduates of English

Bb – Blackboard (learning management system, like Moodle, with the difference that it is not free to use)

Introduction

When I was participating in the compulsory English courses at the TUL, only few of them had teachers who would use technology to noticeably facilitate learning in students' perspective, one of them is the thesis supervisor, Nicola Karásková. The majority of English teachers at TUL would have only resources in their e-learning courses, i.e. learning materials to be read, without any interaction whatsoever. It was clear to me that such teachers see technology as a hurdle and do not have any motivation creating something interactive such as quizzes. That is why I decided in the first chapter of this thesis to focus on theories underpinning approaches to learning with technology. In the first chapter, I start by explaining models of computer assisted language learning and mention the various roles that can play in language learning and technology. The notion of digital competence and how it relates to communicative competence with an overview of how computer assisted language learning has transformed into technology enhanced language learning will be mentioned, too. After that, I narrow things down to learning management systems and its theoretical underpinning, and move on to Moodle, then I discuss one case study that was researching efficiency of e-learning, which is very similar to this research. In the thesis I am not focusing exactly on how efficient e-learning is, but how well are students doing in e-learning quizzes. This means: what their average score is, their improvement overall while attempting them, and how many times they usually (re)attempt them, if they do so at all. In the conclusion I discuss the results as a whole. Following this discussion I state whether or not e-learning (online) guizzes can be recommended, and, if so, under what circumstances.

1 Theoretical part

1.1 Computer assisted language learning

The term "Computer Aided Language Learning" (CALL) can be understood in different ways depending on which model it is being used. For example, it may be a model created by an education researcher Warschauer, or his critique Bax. When comparing their models, the Warschauer's develops into 'phases' whereas Bax's into 'approaches' (Walker and White 2013, 1).

Both Warschauer and Bax in their models have the same amount phases/approaches. In Warschauer's model, the first phase is called 'structural CALL'. It focuses on achieving accuracy by applying drill and practice methods, as regards my research, this would be the case with **grammar and vocabulary, or Use of English**. Bax mostly agreed with Warschauer's first phase but gave it in his own first approach a different name, 'restricted CALL'. He did so because the type of questions, tasks, responses, and feedback tend to be closed, that is, users would get to see the kind of feedback that was already prepared for them depending on their score. Bax further stated that the approach is essentially a historical artefact which finds way less use now than before. Walker and Aisha argued that his statement was not true in 2003 and in 2013 due to the developments was true concurrent **Assessment for Learning** (AfL) and smartphones; their learning apps featured and still feature such 'closed' tasks' (Walker and White 2013, 1–2).

The second phase of Warschauer's model is called 'communicative CALL'. It suggests that constructing knowledge about language happens in the learner's mind, unlike in the first phase. Since the second phase is not relevant to this research it will not be further specified.

The third and the last phase is called 'integrative' by Warschauer and 'integrated' by Bax. Although both terms for the models are quite similar, their meanings are not.

Warschauer's model includes 'multimedia and the internet', i.e. applications which were (in the earliest 21 century) still tied to desktop based computers. On the other hand, Bax in his model expects devices that are 'very different in shape and size from their current manifestation' (Bax 2003, 23). Bax believes that 'integrated CALL' will truly take place when the technology achieve full normalization and 'CALL' becomes a meaningless construct due to the fact that technology is essential in both everyday life and teaching. Walker and Aisha argue that in some parts we have already reached Bax's third stage because digital devices really became at least a part of everyday life. Nevertheless they also argue that, in teaching, technology is not truly helpful for every teacher. Some teachers feel that they still need to learn about technology. The very existence of the book 'Technology Enhanced Language Learning: connecting theory and practice' hints that technology is still seen as something atypical from ordinary teaching and learning (Walker and White 2013, 2).

1.2 Tutor, tutee, and tool models

A model of the roles that technology can play in learning, was introduced by Taylor in 1980. Despite being four decades old this model is certainly still useful. His argument was that the computer could play one of the three principal roles in learning; tutor, tutee, tool (Walker and White 2013, 3).

The 'tutor' role describes the computer teaching the learner, e.g. adaptive tutoring systems or drill-and-practice applications. The knowledge is stored in the machine and from there it is delivered to the learner in small chunks with frequent reinforcements. The learning theory behind it is the Behaviourist paradigm, work of psychologists such as Skinner (Walker and White 2013, 3).

Although it is clear that there is more to learning a language than just knowing vocabulary and the rules of grammar, drill-and-practice programs still have their purpose. They help learners, for example, to revise and also give them reassurance. When such activities are available "in a mobile form", learners can use them independently during short blocks of time, e.g. when sitting on the bus. Some

authoring programs – softwares that allow for the creation of interactive programs ('YourDictionary' 2020) – can be used by teachers to create various interactive exercises, such as multiple-choice, short answer questions, gap-filling, etc. Authoring software gives teachers opportunity to create many activities that learners can access wherever they want, be it school, car, bus or study centre. Due to the fact these activities are in a digital form they do not need to be stored or reproduced in a physical form (Walker and White 2013, 3).

In the second role, 'tutee', the learner teaches the computer. The learner constructs knowledge, many times via trial and error, and then gives it to the computer. This principle is based on the constructivist paradigm that stems from the work of Piaget. He believed that learning occurs via experience and a process of accommodation and assimilation, which the learner has to go through. Papert (1993, as cited in Walker and White 2013, 4), who developed the theory, argued that the learning experience is the strongest when learners are involved in its making. He also believed that learners should create a product, teach or explain to others.

The third and the final role in the Taylor's model is a computer as 'tool'. This role is broad and used in any context whenever technology is the means by which a task is achieved. There is no specific requirement like the computer teaching or the computer being taught. Examples of technology used in this role may look like this: a word-processing program (when writing an essay) or editing-software to create a video. From them, it is rather the writing or editing that makes learning easier instead of the use of technology (Walker and White 2013, 4).

1.3 Communicative and digital competence

Even though, within digital environments, communication and interaction occur daily, learners need to be able not only to use language appropriately but also manage the technology. After the moment when Simpson (2005, as cited in Walker and White 2013, 7) talked about 'electronic communicative competence', Walker (2007) introduced a model of 'ICT competence' and argued that technology does not focus

only on communication. In this thesis, instead of ICT competence, we will use a term 'digital competence' (Walker and White 2013, 7).

Both of the aforementioned Simpson and Walker models stem from communicative competence that was formulated by Canale and Swain. This competence consists of four elements (Walker and White 2013, 7): linguistic, sociolinguistic, discourse and strategic competence. These are defined below.

Linguistic competence is the ability to be able to understand how language works, and how, for example, to fit sounds together so they have a clear meaning. One who is able to achieve linguistic competence can also put words into grammatical sentences (Walker and White 2013, 7).

Sociolinguistic competence answers how to use language in context. With this competence, one is aware what words or phrases are appropriate in any given situation; one also knows how to achieve the desired communicative purpose (Walker and White 2013, 7).

Discourse competence focuses on being able to create and use larger pieces of language to create texts or conduct conversations (Walker and White 2013, 7).

Finally, with **strategic competence** one can manage and navigate communication to repair communication breakdowns. Additionally, one is able to work around unfamiliar areas of language (Walker and White 2013, 7).

As with communicative competence, the model of digital competence also consists of four elements. These are: procedural competence, socio-digital competence, digital discourse competence and strategic competence (Walker and White 2013, 8). Again, each is described below.

Procedural competence is about manipulating the technology. To be more specific, it explains how to use both hardware and applications. For example, how to turn on and off a specific device. It also can be described as the "basic skill" of digital competence. IT training courses focus especially on this aspect of competence. However, answering

only to a question "how" does not suffice; digital competence requires more. There is also a need to explain questions such as "when" and "why" (Walker and White 2013, 8).

Socio-digital competence is about appropriateness. It asks what is appropriate in different social contexts and knowledge domains while taking into consideration both technology and language. For example, with a social media (Facebook, or Twitter), one could ask: "Is it good for business communication? If so, under what conditions?". There can be numerous answers due to many hidden details such as: type of business, relationship with the business, or purpose of the communication. Therefore, there is no definite answer for all contexts. Moreover, when there is a need for how to control a specific feature, say, privacy settings, in terms of knowing functionality of each setting, one would require procedural competence. On the other hand, in order for one to understand appropriateness of each setting, socio-digital competence would be required. To conclude, socio-digital competence embraces both technological and communicative competence, i.e. how these competencies overlap (Walker and White 2013, 8).

Digital discourse competence, according to Walker and White (2013, 9), is "the ability to manage an extended task, possibly using several applications and / or types of equipment.". It can be more specified as: the ability to record, edit, publish a video, or write a blog post with photographs. This task is not initially easy, and requires some skill and technical knowledge. Digital discourse competence refers to the use of technology for extended tasks. It must be noted that the tasks of the competence necessarily require communicative discourse competence, regardless of how much digital discourse competence a user has. When writing this thesis, I needed digital discourse competence to edit each paragraph, make each heading, and create and insert images with tables, but I also needed communicative discourse competence so I could structure the text properly, and use language forms appropriately section by section (Walker and White 2013, 9).

Strategic competence, or, "the ability to repair problems and work around the gaps in technological knowledge and skills" (Walker and White 2013, 9), does not mean possession of advanced ICT skills. It is more about being able to think of alternative routes and options. When tasks need to be completed while using technology in terms of communication effectively, the suggestion is to solve problems that are both digital and communicative. By digital it would mean say, switching channels or recovering a deleted document; and by communicative it can be contacting a specific person by email (Walker and White 2013, 9). In the case of my research, the situation would be when a student sees a mistake in one of the online quizzes he or she has attempted.

1.4 From CALL to TELL

Even though Warschauer's model is relevant in its essence and partly relevant to this thesis, Walker and Aisha prefer Bax's notion of 'approach' instead of 'phase'. The reason is that approaches may co-exist, no matter how the tools may change. A phase, however, suggests a process or development over time. I have therefore opted use the term 'approach' in this thesis

Technology Enhanced Language Learning (TELL) came after CALL and introduced new ideas. Regarding the differences between CALL and TELL, TELL does not use technology as assisting language learning, but as part of the environment where language exists and is used. TELL includes a wider range of devices than just a computer. These include phones, tablets, and game consoles. Although it may seem that all of these devices are normalized in daily life, it is still not the case in every language classroom (Walker and White 2013, 9–10).

The table below shows the main differences between CALL and TELL and how they relate to each other, even in terms of psychology.

Approach	Structural/ restricted CALL	Communicative CALL/Open CALL	Integrative CALL	TELL
Technology	From mainframe to mobile	PCs	Multimedia, internet	Mobile devices, tablets, multiplayer
				games,

				virtual worlds
English-teaching paradigm	Grammar- translation and audio-lingual	Communicative language teaching	Content-based ESP/ EAP	Communication, interaction
View of language	Structural (a formal structural system)	Cognitive (a mentally constructed system)	Socio-cognitive (developed in social interaction)	Structural, cognitive, socio-cognitive, adaptable
Principal use of technology	Drill and practice	Communicative exercises	Authentic discourse	Normalized
Principal objective	Accuracy	Fluency	Agency	Autonomy within community
View of learning	Behaviourism	Constructivism	Social constructivism/situat ed learning	Connectivism
Role of technology	Tutor	Tutee	Mediatonal tool	Environment, resource

Table 1 From CALL to TELL (taken from Walker and White, 2013)

With reference to table 1, the quizzes that are described in the practical part are heavily based on structural/restricted CALL with a small proportion of TELL. In terms of technology, it is confirmed from the questionnaire (p. 53) that students use only a PC, but also other devices. From the English-teaching paradigm perspective, it is definitely the first phase of CALL, since the focus is on grammar and vocabulary. The view of language, (even though the text of the quizzes is from authentic native-speaker sources), is still structural (structural CALL). The principal use of technology is clearly drill and practice, since each quiz can be retaken any number of times. The principal objective is accuracy; Use of English exercises cannot achieve more, such as assess communicative competence. The view of learning is behaviourism, and the role of technology is both tutor and tutee due to a fact students contacted the quiz designer to add alternatives into the system.

1.5 E-learning

Even though e-learning as a virtual environment can be seen rather complex for some users, there is no reason to make it so. Holmes and Garder provide a very easy definition which is easy to grasp: "online access to learning resources, anywhere and anytime" (Holmes and Gardner 2006, 14).

1.5.1 Learning experiences and communication

Holmes and Gardner (2006, 14) state that e-learning is the means of new opportunities for not only educators but also learners. I can concur wholeheartedly. As a learner, I never had an opportunity, apart from e-learning, to prepare myself well for a credit test. The fact that I was well prepared applied only to some courses since not many teachers decided to use the faculty's e-learning's facilities to their full extent. As a result, I found myself doing far more in courses that had also e-learning activities rather than just resources. It seems, at least from my experience, that e-learning activities encourage learners to be active even outside the classroom.

Holmes and Gardner (2006, 14) comment that in some areas, because of e-learning, there were concerns about students not being present at schools or universities. Fortunately, lacking face-to-face style of teaching is not the case in the TUL since most of the students have to be present in the class. Therefore, in the context of this research, the function of e-learning at some, obviously not full, level fits the process of **blended learning**. Blended learning can be defined as "a combination of technology and classroom instruction in a flexible approach to learning that recognises the benefits of delivering some training and assessment online but also uses other modes to make up a complete training programme which can improve learning outcomes and/or save costs" (Bañados 2006, 534). As regards my research, one could argue whether combination of having face-to-face classes with voluntarily doing quizzes on e-learning platform was enough to be considered as a blended learning.

Interaction in e-learning is managed by 'asynchronous' communication, i.e. communication that is not happening at the same time on both sides. A simple example

would be an e-mail. In e-learning, a teacher can create a post in the course forum, and the very same post would be sent as an e-mail to everyone who is assigned to the course, making the communication for a teacher extremely easy. The only downside is that students cannot reply to such an e-mail from their e-mail webpage but have to visit the course forum and reply there. (Thankfully, what is needed is only one click and login information). The student's post in the course forum would be seen by, again, everyone from the course, even the teacher; in fact, teacher gets an e-mail of his/her post, and the very same scenario happens to a student. It must be noted that exactly this method, creating a post in the course forum, was used to remind the PRBE students to attempt the quizzes I had transferred onto Moodle. 'Synchronous' tools are also a thing in e-learning, e.g. chat rooms and shared whiteboards. In the context of this research these were not required and therefore, not used.

1.5.2 Learning management systems

Learning management systems (LMS), managed learning environments (MLE) or integrated learning systems (ILS), in this case their online or internet-based version, are to deliver teaching programmes. The main point of such systems is that someone can fill a course with content since LMSs provide shells to populate it. The course creator can also choose from a range of delivery methods. These systems support access to resource materials, interaction with the lecturer and collaboration with peers. There are certain distinctions between online and offline versions of such systems. When using online versions, the tutors are in general allowed to 'author' the virtual learning environments where students work (Holmes and Gardner 2006, 26-27). The offline version of the systems have downloadable content and offline training resources, which eliminates problems with unstable connection (Pappas 2018). Even though many LMSs charge their customers high fees, e.g. Blackboard and SAP SuccessFactors, there are still alternatives that provide a similar experience, just not that wide ranging, for entirely free (Pappas 2014). According to site Capterra, free learning management systems were the most popular ones, that is Edmodo and Moodle (Capterra 2018). Moodle is used in our university and; therefore, also for this research. On the other side, free LMSs do not offer features such as: working offline, and defining user roles (Chaudhari 2017).

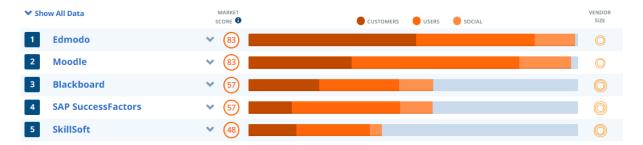


Figure 1 Top 5 Most Popular LMS (taken from Capterra, 2018)

1.5.3 Challenges and opportunities

E-learning environments require that course management design procedures and protocols are to be well-built first before shifting the teaching emphasis towards student engagement and peer support. Because of this, there is a need for leadership from school managers that would promote e-learning as a platform where teachers can considerably enhance learning for their students. Introducing e-learning can significantly increase burdens on teaching staff due to the time commitment needed to create new materials. It must be noted that for some teachers this may be applied only initially. Enthusiastic students may burden teaching staff who find out that they have to communicate with students not only via e-mail but also discussion forums (not to be mentioned checking students' status by monitoring) and also give them online support when they demand it (Holmes and Gardner 2006, 31-32). In my research, my supervisor showed her support by sending me e-mails which asked how is the process of putting quizzes online going and I, on the other hand, tried to support her by asking whether she wants to put another quiz on e-learning. With this bidirectional support we managed to add many quizzes to four courses in total (PR3BE, PR4BE, PR5BE, ASMT for PR5BE). However, Mrs Karásková and I did not have any problem with too many enthusiastic students, as Holmes and Gardner stated above. It was quite the opposite, we had a problem getting students to communicate with us.

To have a successful integration it is best to ensure that everyone in teaching staff has enough of their own motivation to enhance the learning of their students. At the same time, it is essential to support structures and resources that would allow practice without having to sacrifice more time than would be necessary (Holmes and Gardner 2006, 33).

1.6 The theoretical underpinning of e-learning

The most important limitations of traditional learning are the fixed times and locations for learning. In e-learning there is a synergy between advances in **information and communication technologies** (ICT) and twenty-first century learning needs or skills. This means that ICT develops due to the learning needs or skills and vice versa. For an example, webcam developments were not meant for educationalists, and yet teachers still found a way to embrace and use webcams within learning contexts. The opposite is the case with the development of a more effective screen-reader packages; these were driven by the communication and educational needs of the partially sighted. While e-learning's main roots may be technology itself, this does not mean the use of ICT has no theoretical underpinning. The concepts of e-learning emerged from, and built on a range of different traditions and fields; these are not only the field of education itself, but also those of psychology, computer-science and sociology. (Holmes and Gardner 2006, 77).

In considering e-learning, it is important not only to consider the technology but also the theoretical framework in which it operates. The main approaches in education are: Behaviourism, Cognitivism, Socio-constructivism, and Communal-constructivism

These are each explained briefly below.

1.6.1 Behaviourism

Behaviourism from the three main theoretical frameworks underpinning the education and e-learning is potentially the oldest and most widely understood. The most well-known proponents of this approach are the psychologists from twentieth

century such as: Ivan Pavlov, Burrhus Frederic Skinner, Edward Lee Thorndike and John Broadus Watson. Watson was the one who coined the term and most likely from all other behaviourists was the most radical one. He strongly opposed the notion that a person's mind and consciousness could be used as a focus for explaining behaviour. "In essence, classical behaviourism argues that certain stimuli will produce specific reactions in a human or animal; the classic example being Pavlov's dogs, which salivated at the sound of a bell that heralded feeding time. The 'operant' version of behaviourism predicts that with sufficient repetition of an experience, specific behaviours can be 'taught' by reinforcing the desired behaviours with appropriate stimuli." (Holmes and Gardner 2006, 80)

Behaviourist influences on learning can be most clearly seen in the theories associated with applied behaviour analysis (ABA) approaches to autism-related conditions in children (Holmes and Gardner 2006, 80).

In other places in learning, behaviourist approaches tend to be disapproved of due to the absence of a learner-centred dimension to pedagogy. What is used instead is something akin to an automated response. However, that does not mean drill and practice approaches do not have their place in e-learning environment. For example, 'quick wins' like doing revision for examination with multiple-choice tests are appropriate (in the research case it would be quizzes). Tutorials can be also framed as behaviourist. They can be seen in parts where it is important to understand something fundamental, e.g. before attempting assessment, by giving focused questions. If students fail the tutorial, do not get enough answers correct, they will go through the tutorial paces again. When a tutorial is well made it provides students extension work, i.e. additional tutorial/s, external source/s or reference/s. The behaviourist 'rewards' tend to include progress into the next stage with positive feedback. On the other hand, the 'sanctions' lead to repeating the process or doing additional task/s (Holmes and Gardner 2006, 80–81).

1.6.2 Cognitivism

The most important theorists who first developed cognitivism have been:

- Jean Piaget
- Jerome Bruner
- Lev Vygotsky

The last two were mainly important because their initial work stood in opposition to behaviourist theories (Holmes and Gardner 2006, 81).

1.6.2.1 Piaget

Cognitivism focuses on the mind and the learning process of the brain, making it an antithesis to behaviourism. The theory is divided into developmental stages. Each of the stage describes readiness of learners for a particular type of learning. Even though Piaget's developmental stages were heavily criticized for their fixed age ranges and also for seemingly denying the possibility of learners being able to achieve any skill outside the linear progression, Piaget's work still has its place in educational theory (Holmes and Gardner 2006, 81).

1.6.2.2 Bruner

As with Piaget's model, Bruner's was based on a series of steps which increased learning capability. Learners, in a manner of staircase, climbed the stairs. Some of the capabilities depend on consolidation of other people before they can be taken solely by learners (Holmes and Gardner 2006, 82).

1.6.2.3 Vygotsky

Arguably one of the most important cognitive theorists is Vygotsky. It is due to a fact that his work is primarily linked to constructivist theories which dominate in contemporary educational practice. His theoretical approach is, again, linked to developmental stages; however, the number of these stages is only two. When comparing Vygotsky's model to the one of Piaget's, the latter focuses on learner having

a specific level of development before they can learn in that mode. On the other hand, the former measures what is the potential for learners to do at any particular time (Holmes and Gardner 2006, 83).

1.6.3 Socio-constructivism

Concept of socio-constructivism, according to Holmes and Gardner, is "the need for assistance from a more knowledgeable other, in which the learners 'construct' their own knowledge, skills or understanding from their own observational and reasoning capabilities". This means that between the interaction of learners and environment there are other people in order to help. Such other people may be tutors, or learners, too (Holmes and Gardner 2006, 83–84).

1.6.4 Communal constructivism

When one contributes to the learning of the collective, it is highly likely that it benefits the individual as well. This is how Salomon and Perkins depict communal constructivism. Communal constructivism denotes an expansion. In e-learning, such an expansion provides the learners with necessary tools to create learning for not only themselves, but also others (Holmes and Gardner 2006, 85).

1.7 Moodle

Being free open source learning management system, Moodle enables its users to create engaging online learning experiences. Rice prefers the phrase "online learning experiences" over "online courses" because it signifies sequence of, e.g., webpages, images, animations, and even a quiz put online. Even though e-mail or bulletin communication among the teacher and student can be interesting aspect of Moodle, there is much more to be offered via online learning in Moodle (Rice 2015, 1).

The name Moodle gives its users an insight about the approaches to e-learning it uses (Rice 2015, 1). One of the most appropriate ways to describe it is to cite Moodle's original definition from Moodle documentation, and it states:

"The word Moodle was originally an acronym for Modular Object-Oriented Dynamic Learning Environment, which is mostly useful to programmers and education theorists. It's also a verb that describes the process of lazily meandering through something, doing things as it occurs to you to do them, an enjoyable tinkering that often leads to insight and creativity. As such it applies both to the way Moodle was developed, and to the way a student or teacher might approach studying or teaching an online course. Anyone who uses Moodle is a Moodler." (Moodle 2013)

1.7.1 Difference between an activity and a resource

The course material on Moodle is either an activity or a resource. A resource would be an item that can be viewed, listened to or to be downloaded. Here are a few examples:

- A file to be downloaded
- A link to a specific webpage with content
- A video to be watched

An activity is an item that users can interact with, or that lets users to interact with others (students, teachers). Examples are:

- An assignment
- A forum
- A wiki
- A quiz

While activities tend to be graded, resources not quite (Rice 2015, 143).

1.7.2 Evaluating students with quizzes

Rice (2015, 241) says that Moodle offers flexibility in terms of building a quiz by giving an option of inputting any valid HTML code. This may be true, but many teachers in Moodle, even IT students, will in most cases probably not use such a feature just because they do not need to.

Quizzes or tests on paper are considered to be major events, at least in instructor-lead courses, and because of this they require a considerable amount of time before being ready to be attempted by students. Especially post-processes such as grading can be a noticeable burden for teachers. In Moodle everything mentioned can be faster if the creator of quizzes/tests is experienced enough, especially when it comes to grading (Rice 2015, 241).

Quizzes can be used as a check, for example whether students actually read a required assignment or not. Unlike in typical quizzes/tests on paper, on Moodle there is an option of giving students shuffled questions each time they attempt a quiz. If necessary it is also possible to make the quiz/es available during a certain period of time (Rice 2015, 241). Unfortunately, in the case of this research, an option to shuffle questions in quizzes could not be used due to a fact Use of English exercises need to have coherent text.

Other reason to give students a quiz is to help them practise, for example certain aspect of a language such as grammar or vocabulary. The ideal setting of a quiz would be infinite attempts, so students would reattempt it until they get the necessary points. A quiz like this functions not only as a practice but also as a learning material (Rice 2015, 241).

1.7.3 Question types

Despite Moodle offering many types of questions such as calculated simple, calculated multichoice, essay, matching, numerical, true/false etc., there were only few that were found appropriate to use in Use of English quizzes, which are: description, embedded answers (cloze), multiple choice and short answer. In the following list, the most relevant questions are explained (Rice 2015, 259).

• Description: this is not an actual question because it displays whatever is entered. An example of where to use it would be at the beginning of each page to tell students what to do, what to be careful on etc. This kind of information

could be put in other questions. The reason why the description question exists is simply clarity.

- Multiple choice: this is a question which allows a student to select one or multiple answers. Even though it is recommended for teachers to set when multiple choice has more than two correct answers negative points for incorrect one, it is not relevant in this research, since the only multiple choice that was used was that of only one correct answer, where only positive points are taken into consideration. Moodle does not allow giving students negative points for incorrect answer; the minimum is zero.
- Short answer: in this question a student is expected to give his answer to a blank field. A student's answer can be a number, text or both. It should be noted that for a numeric answer there can be an acceptable error. E.g. when the correct answer is 5, student would still get a point for answering 4 or 6.
- Embedded answers (cloze): this question offers teacher to write a text with answers inserted into the text. Most of the inserted answers were already explained: multiple-choice, fill-in-the-blank (e.g. short answer) and numeric answers.

1.8 How effective is e-learning in teaching English?

Just before entering a practical part of this thesis, I will summarize the most important parts concerning its method of one very similar study that was taken in a year 2014.

The study took place in the Departments of English at Colleges of Sciences and Arts (Boys and Girls) of King Khalid University (KKU), Al-Namas Campuses in Saudi Arabia investigated the current state of e-learning (in their case **Blackboard** {Bb}, not Moodle), which spanned over a period of three years (Al-maqtri 2014, 652).

Participants of such a study were attending these courses: Writing, Reading, Study Skills, Vocabulary Building, and Phonetics and Translation. The study; therefore, was limited to such subjects (Al-maqtri 2014, 652).

The data were collected via observations, questionnaires and interviews (Al-maqtri 2014, 652)

Observations were of unstructured nature and studied explicitly students' behaviour which was measured via students' interaction with e-learning online activities. Those activities were: assignments, quizzes, and also interaction, e.g. with attendance list, announcements, course plans, e-mails etc. (Al-maqtri 2014, 653)

The data were collected mostly after classes when teachers were checking students' participations in quizzes, assignments etc. The observation was considered only for male subjects because the college was divided into male and female parts (Al-maqtri 2014, 653).

The questionnaires' purpose was to find out students' attitude and opinion on elearning regarding its effectiveness as a teaching and learning mode and how they evaluate their experience with it. The questionnaires were made into two versions, one for students (this time of both sex) and other for teachers (Al-maqtri 2014, 653–54).

Both versions of questionnaires consisted of 20 closed questions with a space at the end of the sheet. Students could add there any ideas they felt were not included in the closed list (Al-maqtri 2014, 653–54).

As for the questionnaire samples, there were four of them: male teachers (ten subjects), male students (twenty subjects), female teachers (six subjects), female students (twenty subjects). The greater number of male teachers was due to unavailability of their counterparts (Al-maqtri 2014, 653–54).

During interviews, students were asked to informally answer questions such as: "What do you think of online learning?". The purpose of interviews was to confirm data obtained from observations and questionnaires; however, as in observation part, only male subjects could be taken into the interview (Al-magtri 2014, 654).

The objectives of the study were:

- 1. Finding out what students and teachers think of e-learning, namely Blackboard.
- 2. Assessing the current state of e-teaching/learning in the English departments.
- 3. Identifying the areas of strengths and weaknesses of Blackboard.
- 4. Making known to the concerned of these strengths and weaknesses.
- 5. Depending on the results, conclude with suggestions and recommendations.

Questions of the study were:

- 1) What do teachers and students think of online learning they are exposed to?
- 2) Are there any gender differences between the different samples?
- 3) Are the students motivated to learn via e-learning?
- 4) Do students involve in any malicious practicing in doing online activities?
- 5) What type of assessment is recommended to use in Blackboard?
- 6) Do all students have access to Internet connection at their homes?
- 7) How effective is e-learning in teaching English?

Results of the study's observation showed similar attempts (implication that students copied from each other) and an inadequate preparedness of students; even after teachers' good will of allowing a third attempt to do the assignment, some of the students eventually cheated or still failed (Al-maqtri 2014, 655–56).

The attendance was also investigated in this study and from the whole sample of students considerable number of them failed to take the test in time. The worst attendance in that regard was in Phonetics, 64 %, and the best one in Vocabulary Building., which was 96.4 % (Al-magtri 2014, 657).

As for the male teachers' answers to the questionnaire, most of them found e-learning enjoyable to work with, that is 80 %. When it came to a question whether or not they would prefer e-learning over face-to-face the number decreased to 60 %. Majority of the male teachers, 90 %, think that using e-learning is not a waste of time. More than 60 % think that students are not motivated to use online learning seriously. Everyone from the sample say that taking attendance is easier than with the traditional method.

All participants from the sample think that students cheat more than in the face-to-face environment. 70 % of the male teachers share the idea of e-learning becoming more dominant in the future. And finally, 80 % of the sample think that e-mode is easier to handle compared to the traditional one (Al-maqtri 2014, 658–61).

Everyone from the female sample of the teachers found e-learning both enjoyable to teach with and took it as a preferable option when it came to choosing between the two modes, e-mode and the traditional one (Al-magtri 2014, 661).

In the following, the study's conclusion, recommendation and suggestion will be listed.

1.8.1 The study's conclusion

Generally speaking, male and female teachers are in favour of e-learning mode (Almaqtri 2014, 667).

Female teachers and female students are both more positive to e-learning than their male counterparts (Al-maqtri 2014, 667).

Students seem to welcome e-learning mode; however, contradictions in their statements make appearance here and there, which indicates that they are not truly ready to deal positively with this mode of learning. On the other hand, as far as it fulfils their biased needs and whims, e-learning is welcome (Al-maqtri 2014, 667).

Giving students online assignments is not recommended for their bad performance done by cheating and procrastinating. As for quizzes, the students seem to do better, but it is not necessarily reflected in their performance. Nevertheless, quizzes can be recommended (Al-maqtri 2014, 667). From anecdotal evidence, students at the TUL in PRBE courses only rarely cheated. I don't know how much worse the students would have done in assignments, but it seems Al-maqtri was correct in assuming that students seem to do better in quizzes than in assignments when it comes to cheating.

Concerning other online related activities, the students are not motivated to do any, except for checking attendance and e-mails (Al-magtri 2014, 667).

Due to students' bad performance in the different e-learning activities, and according to teachers' evaluation in the questionnaires, students lack motivation to work with Bb as a mode of learning (Al-maqtri 2014, 667).

A big number of students do not have Internet connection and therefore the students are unable to fulfil the online requirements. However, when students have internet connection, English learning seem to improve as a result of using Bb online system (Almaqtri 2014, 667).

1.8.2 The study's recommendation

A more comprehensive and at a larger scale study needs to be conducted to evaluate the effectiveness of e-learning at different levels in these two colleges in particular and other colleges and departments at King Khalid University and at other universities (Almaqtri 2014, 667–68).

Another study should be undertaken to find out students' learning motivation in general (Al-maqtri 2014, 667–68).

Students' lack of motivation is to be given a considerable attention to find out its causes and effects (Al-maqtri 2014, 667–68).

1.8.3 The study's suggestion

Teachers should avoid giving assignments online. Quizzes could be a better alternative (Al-maqtri 2014, 668). It is with this suggestion from the study in mind that I have chosen to focus my research on the use of quizzes.

Authorities should pay attention that Internet connection reaches all students. Otherwise, adequate e-learning labs should be provided and used effectively and should accommodate the increasing number of students (Al-maqtri 2014, 668). Almaqtri's case study was carried out in 2011/2012 and there may have been problems with Internet connection. However, in 2019/2020 at the TUL, it was presumed that all students had Internet connection. While there was no research carried out into their

internet access, there was not a single complaints about students not being able to access quizzes online. It can be assumed that concerns about internet connection do not apply in the case of my research. Nevertheless, generally speaking, teachers should not overlook the fact that not all students have access to Internet.

Teachers should not overlook the fact that not all students have access to Internet (Almaqtri 2014, 668).

All concerned should consider that even in the availability of Internet, it sometimes fails and at other times it becomes slower (Al-maqtri 2014, 668). This sometimes happens even in 2019/2020 at the TUL, but not in a disturbing amount.

Those who are proposing to implement the full level of e-learning should not be over enthusiastic about that and should be cautious when taking such a step. Before taking such a decision, the target group should be tested if they are really motivated and up to the task (Al-maqtri 2014, 668). The TUL students wanted to pass the course {PR3BE, PR4BE, PR5BE}, quizzes were the idea of helping them.

If e-learning is to be prescribed fully, then it can be for distant learning and for those who are studying for higher degrees (Al-maqtri 2014, 668).

To conclude, the study, even though it disapproves of using assignments, encourages the usage of quizzes, i.e. supporting the idea of this research. Their main problem was a lack of motivation and cheating on students' part.

2 Practical part

Bearing in mind what the above mentioned case study recommended (quizzes) and knowing what could students show (procrastinating, cheating, poor results), I decided to initiate my own research.

The main focus of this research will be analysis of quizzes that students of courses PR5BE, PR4BE, and PR3BE attempted.

2.1 Motivation

Several factors provided the motivation for initiating this research. First and foremost, the most logical was technological advancement. As mentioned in the CALL part (p. 15), Bax anticipated that in future new devices in different shapes than Desktop PC and same/very similar by function would be invented. Indeed, nowadays students use such electronic devices (laptop, phone, tablet etc.) on daily basis and it seems that integrative CALL is slowly becoming reality. Even though this plays a huge role in this research it is not the most major one.

What also happened to be motivation was behaviour of some students who would ask their teacher Nicola Karásková, my thesis supervisor, for any extra work. Normally a teacher would have to think what to recommend to each student, but with reasonable amount of quizzes a teacher would not have to worry about recommending what to read and what to find in specific course books. Of course, if a student does not have a problem with Use of English, but Reading, they would anticipate a quiz that would stress only that. And that is why not only Use of English exercises were given to students but also Reading quizzes in addition with Listening quizzes that, too, have the same structure as in the final Credit Test.

The last and the most important reason to start this research was simply a course fail rate. Students had always a problem passing such courses. Having an opportunity to take online quizzes gave students plenty of opportunity to practice before the credit test was also an idea how to make sure that a teacher has a clear record of who did what; and students to have a clear overview of what they did successfully and what they did not, if they cared.

With the things mentioned, it had to be decided what kind of quizzes were to be the most numerous, that is, what was the biggest struggle for students in terms of English? The final credit test of each practical language course consisted mostly of three parts: Use of English, Reading, Listening; and sometimes also with an oral exam (Speaking). The supervisor of this thesis gave the students of PR4BE a survey that asked them to

put in order what parts of English gave them the most problems. The results of the survey clearly revealed that students were struggling with Grammar and Vocabulary, in other words, Use of English. The results of this survey are presented in figure 2 below. The survey consisted of one straightforward question and assumed that there are aspects of English which are difficult. It was available in PR4BE course, meaning only students who were in that very course could answer it. Normally, I would choose an external site to create a questionnaire, but for one question this was a more appropriate and less time-consuming way how to obtain data for this research.

It must be noted that even though clearly many students struggle with Speaking, twenty-two of them, there was no way of making any quiz that would improve such a skill; the same with the Writing. Therefore, the biggest emphasis went on Use of English exercises (Vocabulary and Grammar), lesson Reading and the least on Listening.

Speaking	Reading	Grammar	Listening	Writing	Vocabulary
22	16	26	9	17	32

Figure 2 Results of "What Aspects of English Are Most Difficult (for you)"

2.2 Quizzes

Quizzes are activities that are the main focus of this thesis. Their total number I put in courses PR3BE, PR4BE and PR5BE is thirty-two. The main purpose of such quizzes was to give students an opportunity to practice Use of English exercises. The ones that were used were based on CAE Use of English tests, so the students would always get a structure that would be familiar to them in the Credit Test. It should be mentioned that the number of quizzes that had a structure of Reading CAE test, was low, five in total, because of it the quiz designer and I did not want to use it for the research in this thesis and decided to focus solely on Use of English ones.

2.2.1 Visuals

Just before students would enter one of the quizzes they would see this (environment is PR5BE course):



Figure 3 Before Entering Online/Offline Quizzes of PR5BE pt1



Figure 4 Before Entering Online/Offline Quizzes of PR5BE pt2

How to Raise Kids Who are Smart about Money How to Raise Kids Who Are Smart About Money How to Raise Kids Who Are Smart About Money 11) How to Raise Kids Who are Smart about Money ORAL EXAM 12) Churchill: the Man who Saved the Free World Churchill: The Man Who Saved the Free World 12) Churchill: The Man who Saved the Free World Hidden from students Functions: Agreeing, disagreeing, giving an opinion

Figure 5 Before Entering Online/Offline Quizzes of PR5BE pt3

Next to each quiz there was available the original document – an icon with the letter W – with original the Use of English exercises. Each student could therefore choose between exercises to be printed on paper and those to be done online (quizzes). Also, each of the texts used in the exercises was one of a choice of topics used in an oral exam that PR5BE required.

The exercises, which are based on the CAE Use of English tests, were designed by the thesis supervisor Nicola Karásková. I, as a student of IT and English who carried out this research, transformed them into online quizzes. Each of the quizzes contains four type of exercises in total; these focus on the user's level of grammar, which are: Articles, Word Formation, Gap Filling, and Multiple Choice Vocabulary. Depending on the suitability of the text of each quiz, the order of each type of exercise differs. This is the user interface for the students who attempted the quizzes.

1) Fill in the gaps by adding the correct article – here, zero article is noted as "-", i.e. hyphen. Do not leave any spaces blank. (15 points)
I used to be senior software engineer at Google. Until they fired me for doing something unforgivable Something so controversial that it was number one news story for days. My crime: I wrote internal document that, among other things, suggested that men and women, on average, are different. Like I told you: Unforgivable.
politically progressive viewpoint, which is dominant at Google and in media, is that all disparities in society are due to injustices. Or, in this case, that gender gap in tech is solely due to some form of sexism. But is this true? politically correct answer is: yes. And Google acts accordingly. It treats men and women differently during hiring and promotion, holds official women-only events, and gives mandatory sensitivity training on how to combat alleged sexist bias.
THE CAN GET WITH A CONTRACT OF THE CONTRACT OF

Figure 6 Use of English Exercises: Correct Article

Of course, all of this makes sense if sexism is indeed the sole cause of the 1) (BALANCE	But what if men and women are not exactly the same? Then,
2) (SEX) is just one of many possible causes of the imbalance, and exclusionary programs	·
(PRODUCT) form of sexism. These practices actually increase tensions and m	nake some feel like Google cares more about their gender than
their programming 5) (ABLE).	
As an 6) (ENGINE) , when I'm faced with a problem, I want to solve it. So, I decided to	research the premise: that men and women are exactly the
same. I wrote my 7) (FIND) in a 10-page document titled, "Google's 8)	(IDEOLOGY) Echo Chamber." You can read it online. What did I
discover? That not all of the male-female disparity in tech may be the result of sexism. That at least so	ome of it may be attributed to men and women having different
goals for their careers and their lives. To cite just two examples: In the study, "Women, Careers, and V	Work-Life 9) (PREFER)," published in the British
Journal of 10) (GUIDE) and Counselling, the study's authors conclude that women acros	ss populations tend to look for more work-life balance, while men
tend to have a higher drive for status.	

Figure 7 Use of English Exercises: Correct Form

3) Read the following part of the text and write one word to fill each gap.(15 points).
According a study by Cal State Fullerton psychologist Richard Lippa, men, average, tend to be more interested in things, while women tend to be more
interested in people. These findings have been replicated many . They've actually been cited other researchers as a cause for the gender in
tech. In words, I didn't make this stuff
In fact, after my document came attack, evolutionary psychologist Geoffrey Miller said its "empirical claims are scientifically accurate." But Google disagreed.
Likereally disagreed. First, the company's newly appointed Vice President Diversity, Integrity, and Governance, Danielle Brown, posted a memo that said my
report "advanced incorrect assumptions gender." Google's CEO, Sundar Pichai, sent a memo to all employees saying that I "cross[ed] the line
advancing harmful gender stereotypes." This was, he added, " O.K." Then, he fired . By that point, much my shock, my document had
viral. News outlets were branding it an "anti-diversity manifesto".

Figure 8 Use of English Exercises: One Word

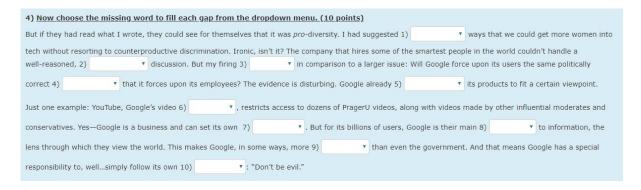


Figure 9 Use of English Exercises: Multichoice

The formatting of the text of PR5BE quizzes' exercises did not include boldness or italics, making it harder to orientate in the text. This issue was taken into consideration; therefore, in later quizzes, which were placed in the PR4BE and PR3BE courses, did not have this issue. These were visually much clearer for the students.

2.2.2 Exercises in the quizzes

Here I will describe each exercise used in the quizzes to avoid confusion.

In an exercise called "Articles", students are expected either to fill a blank space with typing a correct article (zero article is written as a hyphen, -) or choose the correct article from a multiple choice, the latter option was added to later quizzes.

In an exercise called "Word Formation", students are expected to rewrite the word in parentheses that is placed next to a blank space.

In an exercise called "Gap Filling", students are expected to write one word in each blank space. It should be noted that all required words in the blanks spaces are only functional/grammar words, i.e. words that do not refer to a semantic concept.

In an exercise called "Multiple Choice Vocabulary", or MC VB, students are expected to choose from each dropdown menu the most suitable word to fit in the gap.

2.3 Context of the research

2.3.1 Time of the research

The very first data that were obtained from the quizzes were on March of 2019 in the course called PR5BE (Practical Language of level five) and continuing onto levels lower that were PR4BE and PR3BE, the data of the latter were obtained on December of 2019 and January of 2020.

2.3.2 Participants of the research

The participants of the quizzes were students of the TUL. Everyone from the students attempted the quizzes of their own free will; there was no penalty for anyone who would not do the quizzes. However, to increase the number of such volunteers, the thesis supervisor and the author decided to give the students an additional 4 % towards the credit test if they would attempt all the quizzes in the required PRBE course.

2.4 Method of the research

As in the aforementioned study that took place in Saudi Arabia, here at the TUL, the methods that were applied were the same. The only difference was that there was no interview of the TUL students. These would have taken place in the summer semester 19/20, but the university was shut down on 10. 3. 2020. As a result, data was obtain from observation, and questionnaires.

2.4.1 Observation

This part will focus mainly on data obtained from quizzes that the students attempted. Also, it will include students' emails to the teacher concerning the quizzes. More information is available under the chapter: Results (2.6).

2.4.2 Questionnaires

This part of the research was to confirm results from observation and to find out specific information that could not be obtained from quizzes themselves. The first questionnaire was created for students of PR4BE course and then for students of PR3BE course.

2.5 Research question

Because the number of quizzes made for students is quite considerable, the research question focuses on how well on average students do in e-learning Use of English quizzes. In addition, to investigate students' motivation, the research question also focuses on what the students' drop rate in quizzes is. By the "student's drop rate" I mean how many students gave up on attempting all quizzes in a specific course. There are two research questions

- 1. How well do students do in e-learning Use of English quizzes at three different course levels: PR3BE, PR4BE and PR5BE?
- 2. What is the extent of their motivation to (re)attempt them in PRBE (PR3BE, PR4BE, PR5BE) courses?

2.6 Results

In this part I describe the results of each set of the quizzes that were used for the practical language courses. These start from PR5BE and conclude with PR3BE.

In the first part of each course, the analysis focuses on in what kind of exercises the students had the best and the worst score. I examine three aspects: if there is any improvement from quiz to quiz; who did all the quizzes; and how many students on average did the quizzes.

2.6.1 PR5BE (2019)

Students of this course had a chance to attempt 12 quizzes in total. Eleven of these were put on Moodle by the author of this thesis. If they attempted them, they would gain an additional 4 % towards the Credit Test. Even though the reward would make a difference in their final score of the credit test, not many tried doing even one quiz. This may imply a lack of motivation or simply not enough time. If we look at the table 2 below, we can see the overall results for each quiz in the course. Starting with the overall grade and following with how well the students did in each question, every score is in a percentage. There is also information how many students attempted each quiz. Even though the lowest number of students having attempted a single quiz is 15, the number saying how many did all of them is only thirteen (this number is not noted in the table). It seems that some of the students gave up on the quizzes for a specific reason and chose a different approach of preparing for the credit test. The additional table says how well students did on average in all the quizzes. Each number is not lower than 70 % and no one in those quizzes left answers completely empty (this data, too, cannot be seen in the table).

When compared in what kind of exercises students did best, in the first place would be Multiple Choice Vocabulary, followed by Articles, then Gap Filling and lastly Word Formation. The question is why they got the best score in Multiple Choice Vocabulary. Is it because luck was involved or the fact that multiple choice type of an exercise may be user-friendly and much more intuitive on e-learning than on paper?

Quiz	Grade	Articles	Word formation	Gap filling	MC VB	Students
1	75,66	75,93	69,24	76,27	80,60	20
2	68,32	73,67	64,20	66,67	66,80	20
3	70,66	67,80	74,40	66,67	77,20	19
4	69,36	72,20	57,80	67,40	79,40	19
5	72,88	71,67	73,80	72,07	75,00	17

6	73,38	66,30	71,90	83,33	69,13	18
7	68,88	76,90	71,90	66,25	63,10	17
8	73,00	66,67	71,30	70,80	87,50	18
9	73,60	80,87	68,70	69,33	74,00	16
10	79,42	78,60	79,30	78,60	80,93	15
11	79,06	80,87	74,00	80,47	79,30	16
12	74,30	78,00	76,00	66,50	74,50	16

73,21	74,12	71,05	72,03	75,62	17,58		
AVERAGE							

Table 2 Results of Students Who Took PR5BE Quizzes in 2019

2.7 Feedback from a student

One student of the PR5BE course wrote an e-mail to both quiz designer and the thesis author, thinking one of his answers in one quiz was actually correct. This is what he wrote: "Hello, I've just done the second quiz about boys and education. I think there should have been 1 more possibility in the gap filling exercise. I was supposed to fill it with 'it', but I believe that 'there' would work too." (Anonymous student, e-mail message to both quiz designer and thesis writer, February 22, 2019) The sentence, and the one before it (for the context), he was mentioning looked like this: "Compared with girls, boys earn lower grades, win fewer honors they're are far less likely to go to college. Boys are languishing academically, while girls are prospering. In an ever more knowledge-based economy, IT is not a recipe for a successful society." Where the capital "IT" was the word he was mentioning. His alternative "there" was not correct and a quiz designer made sure, the student would understand that by sending him an e-mail. Instead of adding "there" afterwards, we added "this" as it meant the same.

This was an example of how students can turn into a tutee (as mentioned in 1.2) and 'teach' a computer (in this case, a quiz) providing a new, alternative answer, which was not in the original. The course designer and creator of the quiz was a native speaker of English, which enabled her to easily assess what suggested alternatives were or were not possible. Unfortunately, the student this time was wrong and his answer could not be therefore added to the quiz.

2.7.1 PR4BE (2019)

Similarly to in the PR5BE course, students of the PR4BE course could also attempt twelve quizzes. Here there were different texts than those from PR5BE. However, only nine of the quizzes which had been created met the following two conditions: they were put on Moodle by the author of the thesis, and they had the same structure. Therefore, the analysis will concern only nine of the quizzes. As in PR5BE, students would gain an additional 4 % towards the credit test.

2.7.1.1 Analysis with comparison to PR5BE

All of the average data (in percentage) from PR4BE were higher than in PR5BE. The most noticeable change happened in the number of students that attempted the quizzes. This increased more than 200 %. The highest number of students attempting the quiz was 58, while the lowest was 50. The exercise the students had the best performance in was Articles, while in PR5BE it was Multiple Choice Vocabulary. On the other hand, the worst score from exercise that students achieved in was Word Formation. Even though students did better than in PR5BE, on average their score did not reach 80 % in any of the exercises.

In the PR4BE course, which takes place at the end of the second year, students tried to reattempt quizzes more often. In the other table, one can see that overall number of attempts was 60, meanwhile the average number of students was 53. This may imply that some of the quizzes functioned like drill and practise exercises. The highest number of attempts that students took was 3. The overall score could have been better if some students had submitted their score (it is not clear if such students only forgot

to click the submit button or just gave up without finishing the quiz), but this on average did not happen very often, the overall number of students not submitting their results was only 0,89.

Quiz	Grade	Articles	Word formation	Gap filling	MC VB	Students
1	82,28	76,60	84,53	84,07	82,00	58
2	81,76	85,53	84,93	72,10	80,90	56
3	69,46	69,80	59,70	73,33	72,90	54
4	74,44	81,40	65,40	75,67	79,20	55
5	77,92	79,20	75,33	79,30	78,60	52
6	75,50	72,00	78,20	77,20	72,30	54
7	73,58	82,20	62,27	76,00	78,30	51
8	82,92	86,80	88,87	79,07	75,80	50
9	78,00	76,92	78,17	76,73	79,55	50

77,32	78,94	75,27	77,05	77,73	53,33		
AVERAGE							

Table 3 Results of Students Who Took PR4BE Quizzes in 2019

Quiz	Attempts	Max attempts	Never submitted attempts				
1	66	3	0				
2	64	3	2				
3	66	3	0				
4	62	3	2				
5	57	3	1				
6	60	3	2				
7	57	3	1				
8	55	3	0				
9	53	2	0				
	60,00	2,89	0,89				
		AVERAGE					

Table 4 Results of Students Who Took PR4BE Quizzes in 2019 – Attempts

2.7.1.2 Questionnaire

The questionnaire for PR4BE students was created on 26. 7. 2018; however, it was given to students later in 2019. The questionnaire asked basic questions such as: sex of the participant, academic year they were currently completing, and whether or not they were retaking PR4BE course. After the basic questions, it aimed to find out the following about the participants themselves: how the students felt before English exams in general (nervous, normal, well, etc.); whether they preferred online exams to those on paper; how they liked to do their homework (on paper or online); how long they could wait for the test results without frustration;, and whether they tended to try to get the best score possible when doing quizzes. One can take a look at either the text below describing the answers that students submitted, or appendices (Appendix A).

The questionnaire was answered by 12 students, 75% of which were women. The majority of the students were completing their second year, while a minority was

completing their third or even fourth year. Most of these students were retaking the PR4BE course for a second time. The responses revealed that most of the students felt nervous before English exams. There was no clear majority of students regarding which form the exercises/quizzes took (online, on paper). Indeed, the proportion of students choosing between on paper, online, or both on paper and online homework was exactly equal (four, four, four). Most of the students did not mind waiting for the test results. Some of the students who did mind waiting were frustrated after a day, and few of them after a longer period of time (up to one week). The majority of the students said that they do not aim for a perfect score in quizzes. Exactly half of them, (three and three respectively) stated that they were either trying their best or trying without showing maximum effort.

2.7.2 PR3BE (2019)

The quizzes in PR3BE were originally for students who failed the PR4BE credit test in April 2018. As an incentive to take these quizzes everyone from PR4BE would get an additional 2 % towards the credit test they had previously failed if they attempted all PR3BE quizzes. Later, when a new semester started in September 2019, incoming PR3BE students would use the same quizzes in order to get the same benefit, in this case, an additional 2 % towards the credit test. The reason why students would get only 2 % instead of 4 % was due to the lower number of the quizzes. There were only four of them.

The overall grade from all quizzes was significantly lower mainly due to a fact that some students used the advantage of quizzes showing the correct results after submitting the attempt. A few students, whose names, for reasons of anonymity, will not be mentioned, submitted their empty answers and got zero points. Shortly after, they submitted their answers that were mostly correct, usually 80 – 100%. The number of students doing this was extremely low. With that being said, it still had an impact on overall grade.

PR3BE students did very differently in their quizzes compared to PR4BE students. In PR4BE, students had the least score from Word Formation exercise. Meanwhile in PR3BE it was the precise opposite; in that exercise they achieved not the worst, but the best score. Articles was the second most well scored exercise and then Multiple Choice Vocabulary with Gap Filling being the least well scored exercise. The specific results can be seen in the table below.

The student drop-out was very high. The first quiz was attempted by 41 students, while the last quiz only by 23 students. This may imply a lack of motivation which happened in the case study (Al-maqtri 2014), which took place in Saudi Arabia. This probably means that additional 2 % towards the credit did not bring enough motivation to some students.

Quiz	Grade	Articles	Word formation	Gap filling	MC VB	Students
1	52,8	56,9	59,5	29,3	65,5	41
2	57,1	61,6	73,4	35,8	53,2	35
3	50,72	57,13	45,93	46,80	52,10	26
4	62,54	69,00	70,80	54,13	57,30	23

55,79	61,16	62,41	41,51	57,03	31,25		
AVERAGE							

Table 5 Results of Students Who Took PR3BE Quizzes in 2019

Quiz	Attempts	Max attempts	Never submitted attempts
1	52	4	10
2	42	3	4
3	31	3	3
4	27	3	1

38,00	3,25	4,50				
AVERAGE						

Table 6 Results of Students Who Took PR3BE Quizzes in 2019 - Attempts

2.7.2.1 Questionnaire

In the PR3BE course, students were asked to take a questionnaire if they had attempted at least some of the PR3BE quizzes. The questionnaire contained these following 12 questions:

1) Are you male or female?; 2) What semester were you studying when you attempted the PR3BE quiz/zes?; 3) How old were you when you attempted the quiz/zes?; 4) Are you an ERASMUS student?; 5) When, in your view, you get poor results in a quiz, do you leave it or reattempt it?; 6) After the quiz was finished you received feedback. If your answer was marked as "incorrect" and you believe it was correct (or there is an alternative answer), did you consider contacting Nicola Karásková, the quiz designer?; 7.0) Have you done all the quizzes?; 7.1) If you didn't do all the quizzes, what was the reason? (Be honest).; 8) On what device(s) did you attempt the quiz/zes? (Click all options you used).; 9) What do you think about the time limit in the quizzes? (if you can't recall, it was 20 minutes); 10) If you did the quizzes late, what was the main reason?; 11) Did you appreciate the fact that every quiz had the same type of exercises?; 12) Order the types of exercises you liked doing the most in the quizzes (first means the most, fourth means the least). Here is an image showing each type of exercise to help you remember.

From the questionnaire's results: 82% of students who took the questionnaire were females (Figure 10). When students took the PR3BE quizzes, most of them were in 3rd semester (Figure 11). Participants of the questionnaire were aged mostly between 18 to 20 and 21 to 23 years (Figure 12). Only one of the students who took the quiz/zes was an ERASMUS student (Figure 13). 64 percent of the students reattempt the quiz, when they think they got poor results (Figure 14). Even though there was not a single person in PR3BE who would have contacted the quiz designer, Nicola Karásková, about alternatives in quizzes, the majority of students in the questionnaire answered that they **considered** contacting her (Figure 15). The majority of students when they tried attempting one quiz, eventually attempted all four (Figure 16). Most of the participants who did not do all the quizzes reasoned that they had to focus on other subjects (Figure 17). Students, in order to attempt the guizzes, used various devices; the most used ones were in this order: Laptop, Desktop PC, mobile phone and tablet (Figure 18). Concerning the quiz time limit, sixty-five percent of the students would keep it the same, and twenty-three would extend it (Figure 19). The main reason why the students attempted the quizzes late was that they say they tended to do things at the last minute (Figure 20). Most of the students appreciated the fact that every quiz had the same type of exercises (Figure 21). Students favoured the exercises in this order: putting the words in bracket in their correct form, choosing the correct article from each dropdown menu, choosing the right word from the dropdown menu, and filling in the gaps using ONE word only (Figure 22).

For more detailed information on each of these questions, please see the graphs below. They graphically represent the exact data taken from the questionnaire in response to each question.

1) Are you male or female?

17 odpovědí

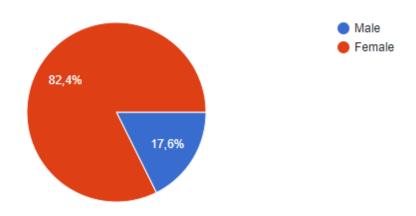


Figure 10 PR3BE Questionnaire – first question

2) What semester were you studying when you attempted the PR3BE quiz/zes? 17 odpovědí

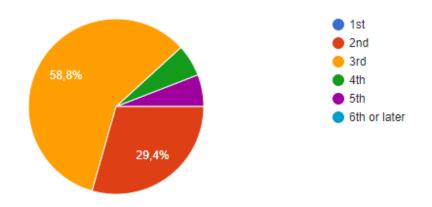


Figure 11 PR3BE Questionnaire – second question

How old were you when you attempted the quiz/zes?
 odpovědí

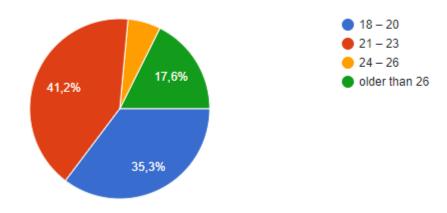


Figure 12 PR3BE Questionnaire – third question

4) Are you an ERASMUS student?

17 odpovědí

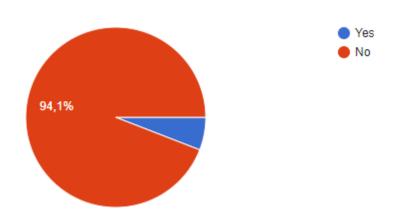


Figure 13 PR3BE Questionnaire – fourth question

5) When, in your view, you get poor results in a quiz, do you leave it or reattempt it? 17 odpovědí

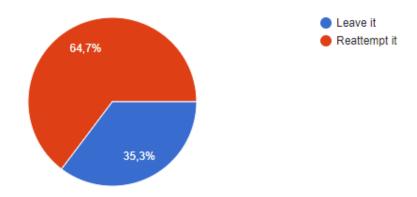


Figure 14 PR3BE Questionnaire – fifth question

6) After the quiz was finished you received feedback. If your answer was marked as "incorrect" and you believe it was correct (or there is an alternative answer), did you consider contacting Nicola Karásková, the quiz designer?

17 odpovědí

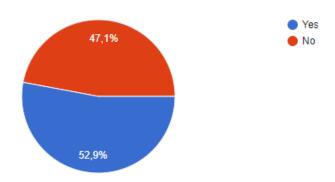


Figure 15 PR3BE Questionnaire – sixth question

7.0) Have you done all the quizzes?

17 odpovědí

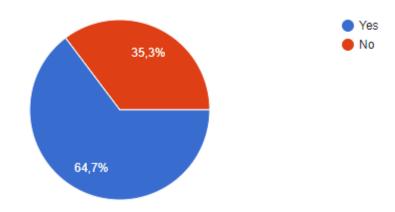


Figure 16 PR3BE Questionnaire – seventh question

7.1) If you didn't do all the quizzes, what was the reason? (Be honest). 6 odpovědí

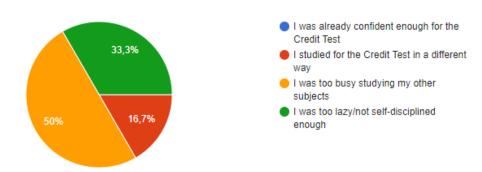


Figure 17 PR3BE Questionnaire – seventh, additional, question

8) On what device(s) did you attempt the quiz/zes? (Click all options you used).

17 odpovědí

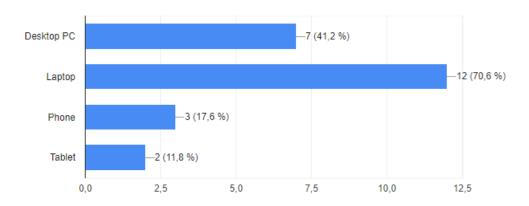


Figure 18 PR3BE Questionnaire – eight question

9) What do you think about the time limit in the quizzes? (if you can't recall, it was 20 minutes)

17 odpovědí

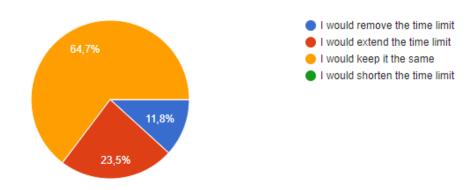


Figure 19 PR3BE Questionnaire - ninth question

If you did the quizzes late, what was the main reason?
 odpovědí



Figure 20 PR3BE Questionnaire – tenth question

An oversight on the part of the researcher meant that this question for a few days did not have a proper answer for students who did the quizzes on time.

11) Did you appreciate the fact that every quiz had the same type of exercises?

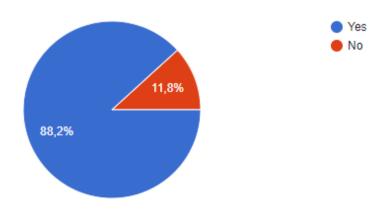


Figure 21 PR3BE Questionnaire - eleventh question

12) Order the types of exercises you liked doing the most in the quizzes (first means the most, fourth means the least). Here is an image showing each type of exercise to help you remember.

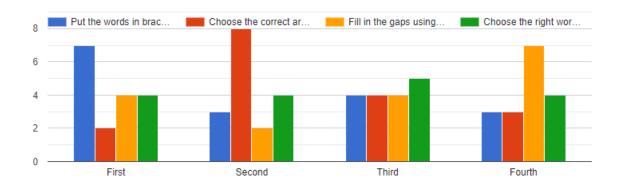


Figure 22 PR3BE Questionnaire - twelfth question

2.7.3 PR4BE (2020)

In March of 2020, at the beginning of a new summer semester, a different set of students of PR4BE course attempted the PR4BE quizzes. The reason why more of the results are included in this thesis is to check how the results compared. It should be noted that the PR4BE quizzes were left the same as in 2019, leaving the new students with the same experience.

Even though this time the overall grade of students was better by 2 percent, the order of exercises they performed the most well in was identical. That means, these students had the lowest ratio of points obtained from Word Formation, then Gap Filling, continuing with Multiple Choice Vocabulary, and ending with Articles. The number of students was almost identical, the overall number difference was approximately less by 2. Average number of attempts was higher by a number 5, meaning there were students who used the quizzes as drill and practice. The data for the PR4BE quizzes are recorded in the table below.

Quiz	Grade	Articles	Word formation	MC WB	Gap filling	Students
1	84,8	86,2	87,5	84	82	54
2	81,4	87,8	84,7	81,4	66,7	53
3	72,21	72,74	58,39	80,89	79,4	55
4	79,62	87,07	71,84	82,93	80,23	53
5	80,14	81,64	76,37	82,28	81,4	53
6	78,68	71,96	82,62	77,86	79,76	52
7	76,75	84,51	67,06	81,18	78,3	50
8	83	86,54	87,18	78,85	79,23	49
9	80,1	79,79	79,9	84,02	75,29	48

79.63	82.03	77.28	81.49	78.03	51.89			
	AVERAGE							

Table 7 Results of Students Who Took PR4BE in 2020

Quiz	Attempts	Max attempts
1	61	3
2	58	3
3	58	2
4	58	3
5	57	2
6	56	2
7	54	3
8	52	2
9	51	2

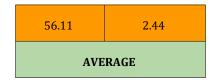


Table 8 Results of Students Who Took PR4BE in 2020 – Attempts

2.7.4 PR5BE (2020)

Students of PR5BE in 2020 had to do all PR5BE Use of English quizzes, and also, all PR5BE Mock Use of English Credit Tests. These mock tests were only three, but had a slightly different structure than the normal PR5BE Use of English quizzes. They were missing the article exercise and instead of it had one with the following rubric, (based on the pre-2015 CAE Exam),: "Think of one word only which can be used appropriately in all three sentences.". Also, there was another new exercise, sentence transformation, which asked students to complete the second sentence so it has the same meaning as the original. For better understanding one can take at the exercises below.

4) Think of one word only which can be	used appropriately in all three sentences.						
38)							
I think she's got a very good of succeeding as a musician because she's very talented.							
He took the job because it was his only	of earning a living.						
By, the two of us happened to be at the airpo	rt at exactly the same time.						

Figure 23 Use of English Mock Test – first different exercise

5) Complete the second sentence so that it word given.	has a similar meaning to the first sentence, using the word given. Do not change the
43)	
I've just noticed that the car has almost run out of peti	rol.
HARDLY	
I've just noticed that	left in the car.

Figure 24 Use of English Mock Test – second different exercise

The results from students that took the PR4BE quizzes in 2019, and later on newer students that attempted the same quizzes in 2020, proved that it is not necessary to analyse results from more than one year; however, if the research's goal was to be as precise as possible, it would have been done that way. With that being said, the only quizzes which are analysed in this section are Use of English Mock Tests.

The main difference between quizzes that were previously analysed and the Mock Tests that are now analysed is that the latter is not based on a single text on a specific topic. The text of each particular exercise in the Mock Test, unlike in the practice exercises, were unrelated. In the former it could be the reason why some students did only specific quizzes: the topic itself. With the Mock Tests however, students could not choose the topic, all they could see was "Mock Test" and what language skill it stresses (Use of English); therefore, all they could choose was only number of the Mock Test.

The motivation for students was exactly the same used as the one used for students of previous year, in this case, if they attempted all Mock Tests they would get an additional percentage toward the Credit Test. This was 4 %, and students had to attempt not only the Mock Tests but also PR5BE quizzes, which students from

previous years had done. It could be argued that the conditions for obtaining the 4% in 2020 were stricter. Students, due to the spread of corona virus, could not attend classes face to face, so instead, they were assigned more work online.

The upper part of the table below shows results from each Mock Test and the bottom part contains average of all table data visible to reader. All numbers in the table represent percentage. The columns of the table contain grades of the whole tests and each exercise, also, number of students attempting each test. All in all, the appearance is exactly the same as with the previous tables.

Quiz	Grade	MC VB	Gap filling	Word formation	One word in 3 sentences	Sentence transformation	Students	
1	53,42	57,83	52,33	59,4	72,4	29,63	53	
2	59,52	75	56,67	58,7	51	48	43	
3	58,74	69,08	59,87	58,8	51,8	45,38	44	
	57,23	67,3	56,29	58,97	58,4	41	46,67	
	AVERAGE							

Table 9 Results of Students Who Took Use of English Mock Tests of PR5BE in 2020

An analysis of results from the first Use of English Mock Test, some students, five in total, submitted answers either empty or all wrong with scores of 0 %. The reasons behind this may be: postponing doing the quiz, giving up the task or the course, unintentional submission, or cheating. This will be described later in this chapter. When students did the test in less than 30 minutes, they would usually have a score lesser than 70 %. Most of the students reattempted the test usually with enormous increase in percentage, e.g. from 50% into 80%, which, again, may imply cheating.

Cheating in this type of a quiz means that students would submit their answers, if any, in the quiz, only to check the right answers they would either remember or screenshot. The quizzes, in this case tests, were made in a way so the students were given an opportunity to know the correct answers after submitting them, so they would not

make the same mistake again. Five to seven students submitted their answers with a grade of 0 or close to 0 %. Some of them may have done this intentionally or by accident.

When it came to the second Mock Test, there were some differences in results compared to the first one. A few students, three in fact, did not submit their answers. There were noticeably fewer people attempting the test, 43 instead of 53, and overall, students got a bit better grade, by 6 percent.

In the last Mock Test only two students reattempted the test right away on the same day. Other people who reattempted it did it later, for example, 14 days later.

Overall, students were at least in one or more of these categories: those who gave up either on their first or second attempt, those who attempted each/most of the quizzes only once, those who attempted quizzes twice or thrice to get the most out of them, and those who attempted the quiz purposely fast to get to see the correct answers.

2.8 Time cost of putting quizzes onto Moodle

The time put into each quiz varied dependently on its length and complexity (e.g. multiple choice vocabulary exercise was more time consuming to create than gap filling one). An inexperienced teacher or student could be creating their first quiz for two or three hours but then after some experience, after having made one or more quizzes, it could take only one hour. This time is needed only to get the exercise onto Moodle. One would have to spend more time to design the quiz itself. Therefore, there should be a person, IT person or another teacher, who would help in this manner. Having only one teacher to manage/create a whole course that contains many quizzes may be extraordinarily time-consuming.

One could multiply the number of quizzes I put onto Moodle, that is 32, and multiply it by an average of 1,5 hours. (Some of the quizzes took me 1 hour, some 2 hours). The result would have been 48. This is just the approximate number of hours I had to spend on my research regarding only the quizzes' Moodle transformation.

Conclusion

As regards the first research question: How well do students do in e-learning Use of English quizzes at three different course levels: PR3BE, PR4BE and PR5BE? There seems to be some evidence that the students' performance in the quizzes may have depended not only on their Use of English knowledge but also on the text of the quizzes themselves. When one compares results from each set of quizzes, it is clear that average final grade differed in one case greatly. To specify, in both PR5BE (2019) and PR4BE (2019) the overall grade was almost the same, that is 73,21 and 77,32 %; however, in PR3BE (2019) it was 55,79 %. That may have been caused by students' submitting their results empty in order to get to see all correct answers. However, there is no specific data to confirm this. It would have to be obtained via an interview or a follow-up questionnaire. In the PR3BE (2020) Mock Tests, students had similar results to those obtained from the same course in 2019, so it may be argued that the texts themselves bear no relation to the results. It may also mean that students who are weaker at English do not get that far to attempt PR4BE and PR5BE quizzes. These could be some of the reasons why there may not be as many lower grades in later courses.

As regards the second research question: What is the extent of their motivation to (re)attempt them in PRBE (PR3BE, PR4BE, PR5BE) courses?". The results suggest that the motivation of students to (re)attempt the quizzes varied. In PR5BE (2019) course there were very few students who would reattempt the quizzes, maximum number of attempts was always two. In addition, the highest number of students attempting a quiz (from all the quizzes) was only twenty. On the other hand, when it came to other courses, PR4BE (2019) and PR3BE (2019), the number of students attempting a quiz was much higher compared to PR5BE (2019). Also, some students reattempted the quizzes not only once but also twice. This may imply that students in lower level of PRBE course don't need to be that motivated as those in PR5BE course. One could motivate PR5BE students by starting giving them more Use of English Mock Tests because they seem to have higher value for students than ordinary Use of

English quizzes. In PR5BE (2020), approximately 43 students attempted each Mock Test. However, only approximately 13 students attempted all quizzes in 2019. Overall, from the research data, I am unable to provide a clear answer to such a question, meaning a further research would have to be taken.

When comparing first half with the second half of each set of Use of English quizzes, the second half has always better grade average, but not by much. The maximum percentage increase was only by 3 %. Therefore, one should not expect much of a grade improvement in quizzes themselves because it seems to not be that present.

Something to note if one considers undertaking similar research. One factor which I was not able to influence was the potential for cheating. If one wants to use quizzes in the same way as it was done for this research, it should be noted that students may cheat due to the fact that they can see correct answers after submitting their own. Ideally the practice quizzes would be taken under test conditions in the university's language laboratory. Practically, though, there are limits to this option. Therefore, it is up to one how a researcher will set up their quizzes to compare results for future sets of students.

There are a few solutions that could mitigate the problem of cheating, and that is enabling a new attempt every, for example, two days. Students would appreciate the correct answers more, but there is still a possibility of them cheating, because they can simply take a screenshot. The best option is to show correct answers after moving the cursor, so the students would have to struggle if they decide to screenshot every one of them. At the moment, students who complete the quizzes can see all the correct answers at once.

Despite some shortcomings, such as the inability to prevent students from doing the quizzes completely unaided, the data gathered provided some rich information. It is clear that most students, especially in PR4BE (2020), liked doing all quizzes since the percentage who gave up in that specific course was only something over 10 %. It is also evident that some students do not reattempt quizzes only as a result of cheating

but to get better instead. What it confirms is the data from PR3BE (2019), where some of the students decided to reattempt the quizzes three times and one of them even four times. It supports one of the three main theoretical framework, behaviourism, which I mentioned in chapter 1.6.1. Behaviourism focuses on automated responses, i.e. drill and practice approaches.

Future Vision

If teachers in universities and schools get proper motivation, IT training and someone to help them with e-learning course management (be it another teacher, a student or a hired person from a company), then there will most likely be more courses in the future that also have significant number of interactive activities to help students prepare for the final test, or just simply pass the subject. Initially, making quizzes is highly time-consuming, but after designing them and putting them on a desired LMS, it is just their management that costs time. From the PR4BE questionnaire results, the majority of students used a laptop, a portable device. This number may increase in the future and doing quizzes could be possible almost anywhere, making them a highly flexible tool in helping students to master Use of English exercises which are used to assess whether students have achieved the necessary competence in grammar and vocabulary. While Reading and Writing are more difficult to practice and test online, the nature of Use of English tests lends itself extremely well, being practice on an online platform such as Moodle.

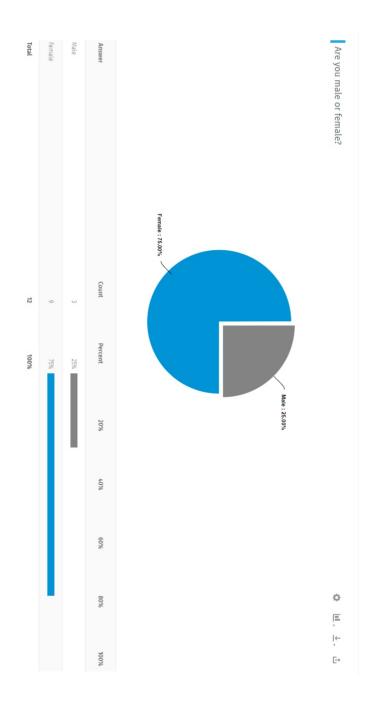
Finally, I want to say that I was not able to look at the students' results of the actual PRBE credit test/s to compare them with those they got in Use of English quizzes. Therefore I hope there will be a similar research that will try to take this into consideration, since it was beyond the scope of this bachelor research paper.

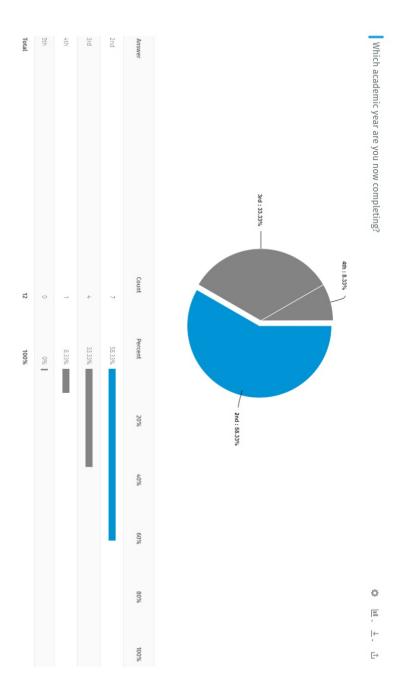
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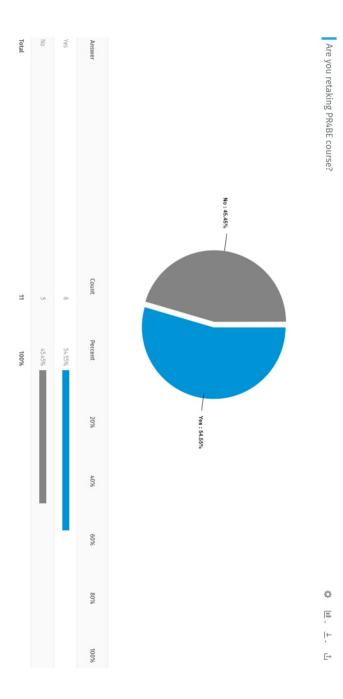
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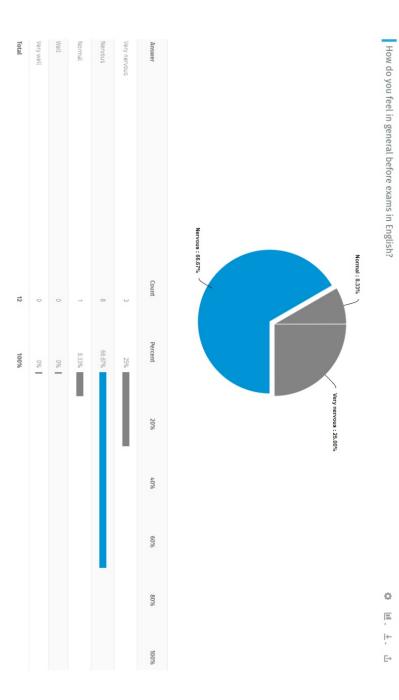
Appendices

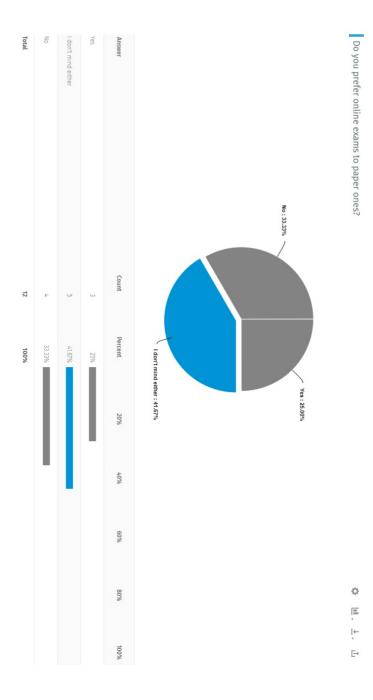
Appendix A: The answers of the PR4BE (2019) students who took the first questionnaire

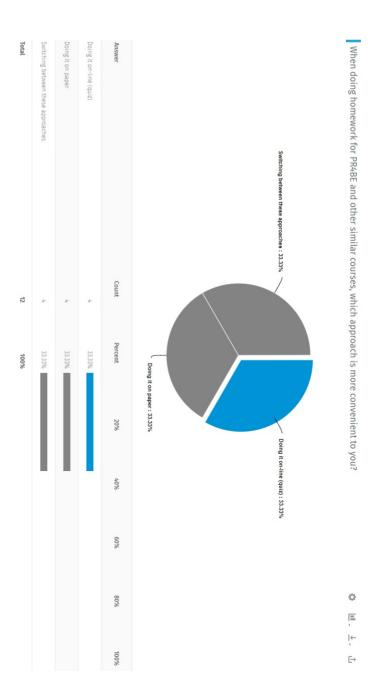








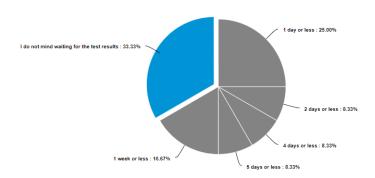






How long are you able to wait for the test results without frustration?

♦ <u>ш.</u> ↓. ∴



Answer	Count	Percent	20%	40%	60%	80%	100%
1 day or less	3	25%					
2 days or less	1	8.33%	_				
3 days or less	0	0%					
4 days or less	1	8.33%	_				
5 days or less	1	8.33%	_				
6 days or less	0	0%					
1 week or less	2	16.67%					
1 – 2 weeks or less	0	0%					
1 month or less	0	0%					
I do not mind waiting for the test results	4	33.33%					
Total	12	100%					

