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ONLINE SPACE AS A REPOSITORY OF LEARNING RESOURCES FOR STUDENTS' KNOWLEDGE AND SKILLS CONSOLIDATION AND INDIVIDUAL PRACTICE

MA thesis

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ABSTRACT

The aim of the present action research was to distribute the classroom by the means of MIRO online space as a repository of learning resources, as well as to explore the use of some selected computer-assisted language learning tools, such as: DailyDictation.com, AptisWeb Listening Test to support Grade 9 students in preparation towards their state exam in English as a foreign language. The sample consisted of nineteen Grade 9 students from a vocational school in Latvia and covered the time period of three months. The data collection methods included questionnaires with open-ended questions and multiple-choice questions, as well as teacher's self-reflection diary. The results showed that the repository of learning resources on the basis of MIRO online environment somewhat contributed to language as well as self-regulated learning skills' development in the students, however, it would be hard to claim to which extent exactly did it make a positive effect on the learners' performance at the state exam.

Key words: online learning space, computer-assisted language learning, English as the foreign language, study support, SMART pedagogy, distributed classroom.

CONTENTS

INTRODUCTION

In a foreign language classroom, it is not uncommon to find students with varying levels of language competence, to a lesser or greater extent, within the same group of learners. The class is hardly ever homogenous in their linguistic abilities, despite the fact that many students have actually studied alongside each other for a number of years in a row. Therefore, the teacher faces the challenge of differentiating the classwork according to the differing abilities of his/her students, striving to meet the learning needs of each of them. Whereas the commercial language schools would solve the situation differently, by placing weaker students at lower levels and stronger ones at the higher levels, this is never an option for a state school. In a way, it serves for the better, as the students become accustomed to being part of multi-level groups, however, it also has its drawbacks and challenges most commonly dealt with in form of task differentiation or, sometimes, leaving the student with extra homework to do on their own.

According to the Latvian education system, the schoolchildren are subjected to centralised state examinations upon completion of the lower secondary level (9th Grade), as well as upon completion of the higher secondary level (12th Grade). English as a foreign language subject being one of the mandatory subjects to take to pass on to the next level of education, the teachers of English have an additional responsibility in bringing out the best possible their students are capable of when preparing for these exams.

Last year, when I was allocated a 9th Grade I had never taught before, my immediate thought was precisely about how I was going to deal with the potential variance in levels of language competence in my learners. Having started an inspiring Masters programme in Educational Technology, I decided to make use of the newly-gained knowledge and take up an action research project involving technology as an aid to this challenge I was expecting to face. This is how the idea of creating an online learning space emerged – a virtual repository of resources accessible to the students anytime, anyplace, to help them practice and consolidate their knowledge and skills outside our regular classes of English, which were scheduled three times a week. Moreover, keeping in mind that it is likely that there will be temporary absences throughout the year, due to either illnesses, or any other study-related

matters of ultimate importance, like concerts, competitions, rehearsals, etc., the idea proved to be highly useful.

The online learning space for the repository was created on the basis of MIRO visual workspace (https://miro.com). The teaching content available in the online learning space was intended to supplement the teaching methods and learning materials employed in the traditional classroom setting throughout the year, therefore, the learning that took place became a blended one, where both face-to-face and online environments served the common goal of improving English as a foreign language students' skills, in order to better prepare them for the state examinations at the end of the school year.

The research method adopted in this study is action research, as defined by Ebbutt (1985: 156 quoted in Cohen, Manion, and Morrison, 2007: 297): "a systematic study that combines action and reflection with the intention of improving practice". Cohen, Manion, and Morrison (2007: 297) pointed out that the scope of action research as a method covers a wide range of areas; therefore, to narrow down the scope, I would emphasize that for the purpose of this research, the focus will be on "continuing professional development of teachers" and own teaching skills improvement within the context of SMART pedagogy (Daniela, 2019; Daniela 2020) and rapid and ubiquitous increase of access to technological tools also in education.

1. THEORETICAL OVERVIEW

The purpose of this chapter is to introduce the main terminology: "distributed classroom", "online learning space", "interactive whiteboard", "blended learning", "SMART pedagogy", "tinkering", "self-regulated learning", as well as to provide a theoretical grounding for the further discussion of the results. The reasons behind the researcher's choices made in favour of one tool over the other would also be explained.

In the age of technological transformation, when many millions of students at schools are " 'digital natives' of the digital language of computers, video games and the Internet" (Prensky, 2001b), taking for granted the accessibility of technologies around them in various forms and shapes, the teachers understand the necessity of integrating technology into their classes, not to disregard the potential it gives. Prensky (2009) advocated for "digital wisdom"

for the future, to enhance the human capabilities with the resourceful potential only the meaningful use of technology may bring.

Gütl and Chang (2008) drew attention to the necessity of adapting educational approaches appropriate to the needs posed by the 21st century, which, among others, seeks skills of learners' independence in the learning process and their preparedness to embrace lifelong learning "in an uncertain world, characterized by rapid developing and ever-changing political, social, economical, technological and environmental situations, learning becomes a day-by-day routine over the life cycle" (2008: 50-51). Gütl and Chang's research focused on ecosystem-based theoretical models for learning in environments of 21st century, labelled as E-learning 2.0, suitable for the generation who "use technology as a tool everywhere, and at any time for every purpose" (ibid.). They described this generation as "experienced multi-taskers using several media simultaneously for communication, learning and entertainment" (ibid.). Gütl and Chang (2008: 52) are convinced that, to meet the modern educational needs, the learners must have control "over the learning process and the learning tools", at least partially.

In attempt to explore the potential of the technological innovations of the recent past in its application to the learning needs of today, this research project was begun. The first step to take to empower my learners and encourage individual language knowledge and skills consolidation and practice was to find an online learning space, or simply an online space to be able to store learning resources in for later asynchronous use.

An "online learning space" is an environment where learning occurs and which, according to Xie et al. (2022: 73), allows "resource sharing, teacher support, analysis and evaluation, as well as education management". Such space also has the potential of providing "important support for improving the quality of teacher-student interactions" (Xie et al., 2022: 71). Moreover, introducing such a tool that would essentially result in blended learning integration in my teaching helped me to ensure that the weaker students (and/or those frequently absent) would not be left without support. As there are a number of tools available with functionalities overlapping the ones that MIRO visual workspace has, a choice among many had to be made.

Most importantly, the tool had to have the functionalities of document upload and storage, hyperlink embedding and visual organization of all this material into categories to be

accessible by the students from any browser online. Virtual environments such as SpatialChat and GatherTown were considered. During the preparatory phase I was tinkering with GatherTown, SpatialChat, and MIRO online collaborative canvas. By "tinkering" here I mean the following: experimenting with the chosen tools by the means of exploring latent functionalities of these tools in the process of the tool concretisation, as elaborated by Bardone, Mõttus, and Eradze (2024). Availability and accessibility of the materials anytime and anyplace where an Internet connection could be established was the priority for me in making the choice of the tool to use. Eventually, I stopped at MIRO because it had proven to be the most reliable and affordable option to use, as it was also free of charge and accessible to unlimited number of users, unlike SpatialChat or GatherTown. Once I started pasting in the objects that were supposed to embed websites and links into external sources, I faced issues of unexpected embedded content loss. Because of that, the functionality of "locking" the uploaded elements to ensure that they would not move around the space, nor unexpectedly disappear from its surface was extremely useful and MIRO efficiently satisfied this need.

Aside from embedding and uploading the resources to the MIRO online space, I wanted to have a human face in the environment to make it livelier, hence, I have decided on the idea of having an avatar of myself made by the help of Pixton Comic and Avatar Maker (https://www.pixton.com), greeting my students from the online whiteboard, that would be a substitution for a possible video introduction, had the video recording feature been in-built at the time of launching this MIRO project, which was not the case back in autumn 2022.

MIRO is also called an interactive whiteboard. Ng, Ting, Lam, & Liu, 2020; Sweeney, Beger, & Reid, 2021 in Davidson-Shivers and Rand (2023: 1009) defined "interactive whiteboard" / "slide show" / "collaborative canvas" tools as "online interactive shared digital screens for writing and sketching, to which multimedia, audio, and images can be added during collaborative assignments". The tool, indeed, was originally developed for business use and not specifically for educational settings, allowing possibilities of collaboration between teams and individuals for registered users. The research participants of this project, however, were not required to create their own login accounts and to share their personal information with the developer, therefore, some of the features embedded in MIRO were inaccessible, like, the chat and the comments section, for example. The chat and the comments would allow real-time collaboration, which was not of ultimate necessity for this

particular project. It could be summed up that the online space initially created for synchronous and asynchronous business collaborative purposes was adopted for the blended learning purposes by a teacher to meet the educational needs of her learners.

According to Graham and Halverson (2023: 1162), "blended learning" could be roughly defined as "the strategic combination of online and in-person learning". While there have been a variety of blends explored at all educational levels since the global pandemic outbreak in 2019 (ibid.), Graham and Halverson differentiate between "blended learning" and "bichronous online learning", the latter being a combination of synchronous as well as asynchronous instruction, whereas the former, blended form, traditionally had the synchronous element taking place in-person instead of online (ibid.). My research group had their regular classes taking place synchronously, in-person, thrice a week in a regular classroom, but the asynchronous learning part realised individually, online, in form of extra English practice outside of the regular lesson hours. Nonetheless, in the course of the project, the repository was used also during some of the regular lesson hours as well, in a computer lab. Regardless of this fact, each student was using the repository at their own individual learning pace. The asynchronous element was definitely an advantageous feature that allowed the freedom for the students to access the resources anyplace, anytime and the teacher knew that the students were given the opportunity to learn anyplace, anytime, even when they were not physically present in the classroom, during a scheduled lesson. Whether the students chose to use this opportunity or not is already another question; such choice was and always will be outside of teacher's locus of control, since involves individual will and determination of the learner to pursue an activity outside the class time.

MIRO study support tool is an attempt to leverage classroom distribution across time (asynchronicity) and space (remoteness). Joyner and Isbell (2021) described ways in which classroom experience could be distributed with the help of a time and space matrix (see Figure 1). Synchronous, face-to-face classes were put on the one side of the spectrum, while asynchronous, remote classes – on the other side of the spectrum, everything in between these two extremes being seen as subject to exploration (Joyner and Isbell, 2021: 29). The quadrant of my attention was the asynchronous remote (AR) quadrant. Joyner and Isbell (2021: 34) describe this quadrant as typical to MOOC courses:

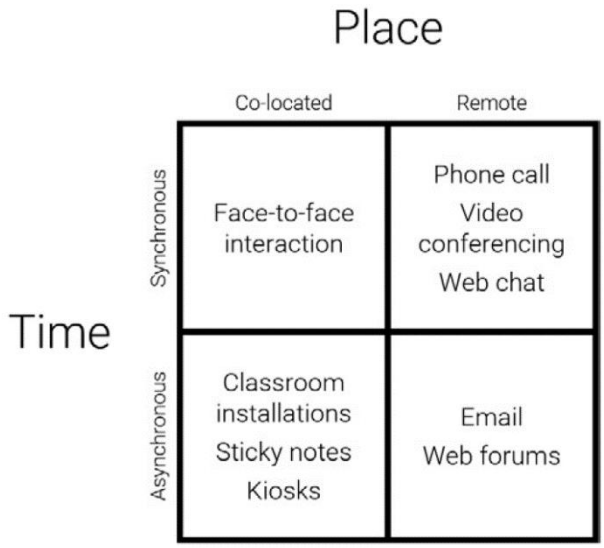

Figure 1 – The Time/ Space Matrix as to Joyner and Isbell (2021: 32)

> "Whether students are cohorted with shared deadlines or allowed to pursue the course in a purely self-paced model, these sorts of courses build heavily on material that is persistently available via the internet, breaking the necessity for synchronous or co-located interactions. The AR quadrant is not absent from traditional education, however; the very notion of homework can be viewed as leveraging asynchronous remote environments: the teacher asynchronously provides directions to the student to complete later in their own space. As technology has taken on a greater and greater role in traditional education, asynchronous remote interactions have become more significant: even in classes that meet in person, teachers may use learning management systems to post announcements, collect homework, and return grades, shifting more of the classroom administration into the asynchronous and remote sphere."

As the result of "classroom distribution" introduction to my teaching, the learning process has transformed into technology-enhanced one. With this I strived to implement some of SMART pedagogy principles into my teaching practice, where students' participation in the learning process was being viewed as active and self-directed, as described by Daniela (2019: 16):

S – smart (in the sense of intellectual smartness), social

M – meta-cognitively developed and motivated

A – anywhere, anytime

R – rapidly changing

T – technology enhanced

The SMART term seeks to characterize the pedagogical principles which are appropriate for a technology-enhanced environment (Daniela, 2019:11). Borawska-Kalbarczyk, Tołwińska, and Korzeniecka-Bondar (2019: 24) define "smart pedagogy" as "a process of creating a school learning environment with high temporal and spatial flexibility, which involves students' cognitive autonomy, collaboration between (...) the student and the teacher, and making use of varied digital technologies". As smart technologies have become a ubiquitous phenomenon characteristic to the contemporary urban society, adapting automatically and changing behaviour to suit their environment, sensing things with technological sensors, providing data to analyse, and, eventually, drawing conclusions from the data obtained (Daniela, 2019: 12), education, too, should not be wary of technological enhancement, provided that the teaching and learning processes are enhanced in a meaningful way.

The SMART pedagogy model in the opinion of Borawska-Kalbarczyk, Tołwińska, and Korzeniecka-Bondar (2019: 31) does not equate with "spicing the lesson up with attractive methods or digital media", but "rather involves the transformation of the teacher's mental awareness", by which the authors imply redefinition of the teacher's and student's roles (ibid.). The revision of the roles becomes necessary in view of the ongoing technological changes we have been experiencing for the past decades, where transmitting new content "at a specific time and place proves to be ineffective in the face of the need to constantly and quickly change skills and adapt information" (ibid.). Since with the rise of the Internet the information has become easily accessible and the teacher is being no longer the sole source of knowledge, the change in the teacher-student relationship becomes inevitable, with the preferable role of the teacher being "a guide in the student's search for, organization, and use of knowledge" (ibid.: 32).

The teacher's role shifting more to the role of a guide and facilitator of student's learning, self-regulation skills come to the forefront. Zimmerman (2002: 65) outlined:

> "Although teachers also need to know a student's strengths and limitations in learning, their goal should be to empower their students to become self-aware of these differences. If a student fails to understand some aspect if a lesson in a class, he or she must possess the self-awareness and strategic knowledge to take corrective action."

For such empowerment, there should be tools at student's hand to leverage their weaknesses up to the expected standard of their age group. MIRO study support and the computer-assisted language learning tools embedded there could become this lever that would bring empowerment to weaker students, as well as to the students who continuously seek out challenges on their learning journey, provided that they allocate time to their individual practice as regularly as possible. In this way the students, by preplanned individual practice, not only can become stronger in their subject knowledge and skills, but also develop useful self-regulation skills that would be later transferable to also other domains of their life.

The aim of this research was to distribute the classroom by creating a repository of resources, in other words, an equivalent to an electronic library, for my Grade 9 students to use for their individual practice outside of our regular classes that would forward and consolidate their knowledge and skills in the English language also outside the classroom. The asynchronous and remote quadrant from Joyner and Isbell (2021: 32) time/ space matrix that differentiated the spectrums of synchronicity and co-location was applied.

This research project poses the following research questions:

1) How does an online learning space using MIRO supports students' learning in preparation for their Grade 9 state exam in English as a foreign language?

2) How computer-assisted language learning tools aid Grade 9 students in preparation for their Grade 9 exam?

In order to answer the questions, the following research objectives were outlined:

- to study the theoretical literature about online learning space use (challenges & opportunities) in (foreign language) education;
- to implement MIRO in own teaching practice both as classwork and homework tool;
- to collect empirical data from the students for analysis by means of Google Forms questionnaires;
- to fill in self-reflection diary entries;
- to analyse the data collected;
- to make conclusions from the data collected;
- to indicate the areas of further research (challenges & opportunities).

2. METHOD

In the following section I am going to describe the method I used for my present research which was action research. Action research is "a small-scale intervention in the functioning of the real world and a close examination of the effects of such an intervention" as defined by Cohen and Manion (1994: 186 in Cohen, Manion, and Morrison, 2007: 297). Zuber-Skerrit (1996: 3 in Cohen, Manion, and Morrison, 2007: 303) characterized action research as emancipatory, collaborative, critical, and self-critical inquiry by the practitioners who tackle "a major problem or issue or concern in their own practice" (ibid.). Habermas (1984, 1987, 1990 in Cohen, Manion, and Morrison, 2007: 303) noted that action research practice is "necessarily dialogical" and interpersonal rather than monological and individual. All these features of action research made it the best option for me to choose when undertaking this research project. Indeed, I have identified an issue that required a solution – occasional temporary absences of students throughout the year during scheduled regular classes, as well as potential variance in levels of language competence in my learners – and planned out a strategy to mitigate the negative effects; taking up this strategy changed the usual teaching and learning pattern of a regular classroom and, having engaged my students in this change of practice, I collected feedback from them; therefore, the dialogic and collaborative nature of such activities was straightforward.

Data collection tools to use were students' feedback surveys on the tools used as well as the teacher's self-reflection diary entries. The surveys collected answers by the means of open-ended questions to provide space for students' own phrasing of their experience, instead of feeding in them with pre-fabricated suppositions of the researcher.

The research participants were nineteen Grade 9 students studying at a vocational school of arts in Latvia. The studies took place in the face-to-face mode, so there was no particular need to refer to technology during the study process. Nevertheless, since the repository was created, it was tried out also during scheduled in-person lessons in the school's computer lab. Students' parents' had signed an informed consent agreeing that their children participate in the present research.

In the subchapters below I comment in greater detail on the sample, as well as on data collection tools and procedure and on data analysis principles and procedure adopted in my current research.

2.1. Sample

Since the aim of this research was to create a repository of resources for my Grade 9 students to use for their individual practice outside of our regular classes that would support their studies in class, my sample choice made in favour of nineteen Grade 9 students studying at a vocational school of arts in Latvia, gender distribution being five boys and fourteen girls, as the research participants for this study should be evident. The vocational arts profile of the group researched was classical music performance, though this fact did not affect Grade 9 curriculum in English as a Foreign Language subject and the end exam.

The strongest motivation to support particularly this group of students of mine was in the fact that they had to take their state exam at the end of the year and they were a new group for me to teach, so, to ensure that none is left behind and all successfully pass the exam, I have developed this study support system. The proficiency level of the class was supposed to be intermediate and by the end of the year the exam level they were to take corresponded to the Common European Reference for Languages framework's B1 level of skills and knowledge.

Since the students of Grade 9, being around 15-16 years old, are still underaged, my students' parents' had signed an informed consent agreeing that their children participate in the present research by using selected digital tools and submit their feedback that would be later used in a thesis anonymously and in an aggregated form.

2.2. Data Collection Tools and Procedure

Data collection tools I used for this action research were students' feedback surveys on the tools applied as well as the teacher's self-reflection diary entries. The surveys collected answers by the means of open-ended questions to provide space for students' own phrasing of their experience, instead of feeding in them with pre-fabricated suppositions of the researcher.

Moreover, I have collected my learners' opinions in free form on technology use in the classroom – smartphone use as well as computer use to get an overall vision of their attitudes towards technology implementation into the regular learning process. The tools that facilitated this data collection were Google Forms as well as online post-it wall Padlet.

As mentioned in the Introduction section, several regular classes took place in the computer lab, so that the students could have the chance to get acquainted with MIRO visual workspace tool under supervision of the teacher who designed the space with all its embedded resources, as well as to ensure that everyone in the group tries it out, even if chooses not to do so at home, in form of initially envisaged study support.

The timeframe of this research was February – April 2023 and it involved three classes in the computer lab on 13 February, on 20 February, and on 27 February), followed by three additional classes in the computer lab on 3 April, 17 April, and on 24 April.

All this was preceded by a preparatory phase started in autumn 2023 and continued through winter 2023/2024, during which I was tinkering with different virtual environments (GatherTown, SpatialChat, MIRO) in order to establish which one would suit my needs best. Having stopped at MIRO visual workspace eventually, I uploaded the links to have the embedded material visually separated into spaces, according to language skills (Reading, Listening, Speaking, Writing) mostly, but not only. Figure 2 shows the interface of the study support in MIRO visual workspace tool that was developed especially for this research purposes.

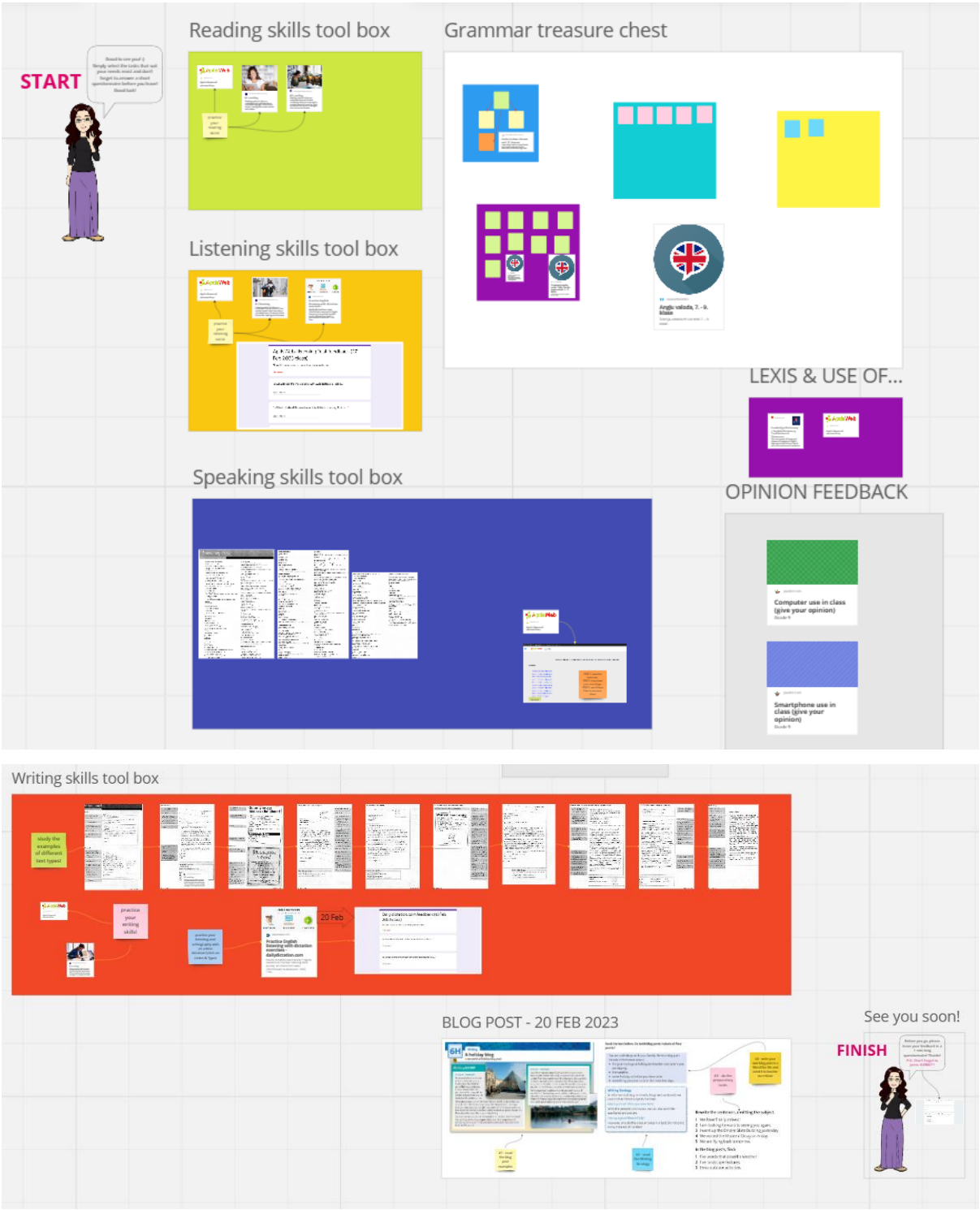

Figure 2 – Study Support for Grade 9 interface in MIRO visual workspace

Since the repository was created, it was tried out also during scheduled in-person lessons in the school's computer lab. The main cluster of classes took place in February:

- 1st visit to the computer lab: DailyDictation.com tool on 13 February 2023
- 2nd visit to the computer lab: Blog post task on 20 February 2023
- 3rd visit to the computer lab: AptisWeb Listening Test on 27 February 2023

March was given for self-study, but in April, a decision to book three more classes in the computer lab was made, as I was seeing that the students targeted in my research did not actively engage in final questionnaire filling which was requested from them upon every entry to the repository. In no way did MIRO allow me to trace my students' time spent doing the activities in the repository – I could not see which hyperlinks did each of them click on and how often did each of them access the resources I stored there. I should also add that my students were using MIRO as one-time users, without registering accounts, though their registration in MIRO would not grant me access to the aforementioned preferable activity tracing data anyway.

The two first computer lab-held classes in April were self-regulated learning and questionnaire completion (combined with other study debts completion and assignment submission) and one class was an entirely new class developed with Mentimeter tool and job interviews role-play based on authentic job adverts available on the Internet that corresponded to the arts profile of the group; this wasn't initially planned and was in no way embedded into MIRO, hence was not described in detail here, though, in the end, it proved to be a good decision to have.

2.2.1. DailyDictation.com tool (1st visit to the computer lab): procedure

The class was conducted in the computer lab on 13th February 2023, its overall length was 40 minutes, the number of students present was 18 out of 19. Approximately 30 minutes of the class time was devoted to using the DailyDictation.com tool, when the students trained their listening skills, orthography, as well as lexis in context related to the topic of technology and language proceeding with the activity at their own speed, hence, asynchronously, despite everyone using the same webpage at the same time. The task everyone was engaged in was level-appropriate for the students (intermediate): IELTS Cambridge 17 - Test 2 - Part 4 - Listen & Type | IELTS Listening (dailydictation.com), full text available in Appendix 3, copied from: IELTS Cambridge 17 - Test 2 - Part 4 - Listen & Read | IELTS Listening

(dailydictation.com). The students had a possibility to navigate the speed of the recording, as well as the amount of times to play it, which was limitless. They also had the possibility to see the correct answer, if answered incorrectly, which disappeared straight away, had they chosen not to skip the correction but do it themselves manually. A possibility of translation was offered by the means of the inbuilt Google translator.

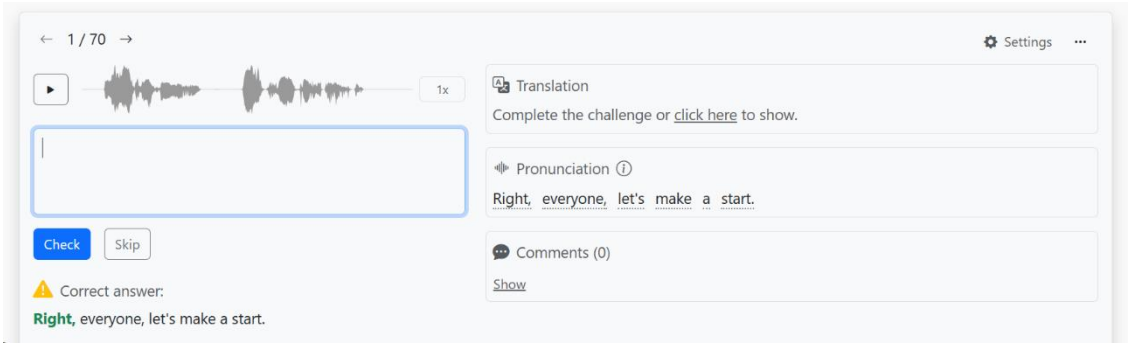

Figure 3 – DailyDictation.com interface as seen by the students at the beginning of the task

For task completion, individual earphones or headphones were required, of which the students were informed in advance. Almost everybody did bring their own earphones or headphones, however, some unexpected consequences did also occur that, eventually, made changes to the technology use in the classroom as originally envisaged by the teacher.

The unintended consequences were the following: many brought the headphones or earphones that were wireless and required a Bluetooth connection, hence faced issues when connecting them to a school computer. Eventually, a quick-fix was maintained: those students who could not connect their earphones or headphones switched from the computer to completing the task on their phones. Some others just kept the volume on, however, they were not numerous, so no cacophony occurred. One of my students came up with a curious quick-fix solution: instead of increasing the volume, he took the computer processor from the ground on his lap, which was not too comfortable, obviously, when writing with the right hand and holding the processor with the left hand, but a solution fair enough for him it was. Searching for the solutions and coming up with the aforementioned ones, obviously, took time and resulted in less time left for the students to complete the task, hence the low task completion rate; the exact numbers with regard to who stopped where weren't purposefully collected, however, only one out of present 18 finished the task completely by the end of the class. The task, clearly, was too long to fit 30 minutes and the technical hindrances should

have also been taken into consideration. Additionally, the low task completion rate might have also occurred when using the feature offered by the programme allowing the certain recording to be played an infinite number of times, so a teacher in no way could have predicted the amount of time necessary for each student to complete. Moreover, at the beginning of the task, one student switched to a different task available on the same task page by some curious logic, ignoring the actual task and clicking on the "next task" button, so that, too, was a time-waster. All this, indeed, shows the challenges that should be anticipated when planning technology integration in the lesson plan.

2.2.2. Blog post task (2nd visit to the computer lab): procedure

The second time the class took place in the computer lab was on 20th February 2023, its overall length being 40 minutes, the number of students present was 15 out of 19. This time the students who hadn't managed to submit the Google Forms feedback on the DailyDictation.com task were asked to do so immediately. This class time was also devoted to exploring the functionalities of MIRO and I was available for my students to help to explore how to navigate the environment and to access the resources embedded in this online virtual workspace.

The class procedure was as follows: for the first 10 minutes, the homework text on the topic of online etiquette (netiquette) was discussed in groups of 3 to 4 people, answering the questions of (1) "What for do we need netiquette?" and (2) "Which are my top 5 rules of netiquette to remember?". As the group discussion took place, the teacher monitored the activity by walking from one group to another, listening to and providing comments/ immediate language corrections, where needed. The task went somewhat beyond the initially planned 10 minutes' limit, since the students got very much engaged in the discussions and the teacher was reluctant to interrupt such an exciting activity. How did the fact of being in a computer lab influence such a common speaking activity? The availability of computers allowed the students to open the electronic text document and use it as a point of reference during their discussion. Many, actually, used this opportunity, since practically nobody had the text printed out (this homework was sent out by the teacher electronically).

The second stage of the task was the revision of the blog post genre on the basis of two blog post examples – the students had to access the lesson materials through the MIRO board; they were instructed by the teacher to, firstly, log into e-klase (a learning management system used in Latvia), secondly, to find the link to the board in their electronic timetable, and, thirdly, to open it and scroll down up till they see the frame titled "20_FEB_BLOG_POST_CLASS". In that frame the screenshots of lesson tasks were pasted, accompanied by the step-by-step instructions written on the sticky notes nearby. So, the students knew what they had to do; they just had to read and proceed with the tasks at their own speed. Time wasn't allocated for this stage, taking into account individual differences among the students. Here again, the teacher's role was to monitor the self-regulated learning activity of the students, after having explained what to do.

The third stage of the lesson centred around the practice task, when the students had to create their own blog post text in a Word Document file and, upon completion, send it to the teacher via e-klase. If the student did not complete the task by the end of the class, he/ she was allowed to send it to the teacher later the same day, but not later than the next day. With regard to the feedback, it was provided a few days later, in form of comments to the Word Documents sent back via e-klase. As it could be seen from this description, this school learning management system provided the functionality of file exchange between the learner and the teacher, otherwise unavailable in MIRO with no registered account.

The students weren't requested to fill in any kind of feedback questionnaires this time.

2.2.3. AptisWeb Listening Test (3rd visit to the computer lab): procedure

The third time the class took place in the computer lab was on 27th February 2023, its overall length being 40 minutes as usual, the number of students present counting 16 out of 19. The students accessed the AptisWeb Test task from the MIRO board and were instructed to proceed individually. It was a listening-focused lesson that engaged every single student in the group. Despite being reminded of the connectivity issues with the wireless headphones/earphones, some still did not have proper headphones/earphones with them to use. Once more, the smartphones at hand and low volume in the computers was the solution to opt for.

The simulated AptisWeb Listening test consisted of seventeen short recordings that could be played only twice each. The test taker was allowed the freedom of deciding on how long should the pauses between the playbacks be. There were multiple-choice answers given, so the task was fairly easy for the test taker – to read and listen attentively, and, eventually, to select the most appropriate answer option. There was one unintended consequence that I could not predict and immediately resolve – as all the answers were supposed to be registered in the programme and appeared at the very end, several students were surprised to discover that some answers were marked as wrong, while they were sure that the options they picked were correct. The only immediate quick-fix solution I could think of was asking the students to take screenshots and forward them to me via e-klase for later correction.

2.3. Data Analysis Principles and Procedure

I intend to analyse the data collected by the following means: first, I would describe the procedure of each of the classes held in the computer lab, forty minutes long each, next, I would comment on the feedback collected from my students with regard to each particular class, and, finally, I would list my students' opinions on the two types of gadgets used – the smartphones and the computers.

The first visit to the computer lab aimed at online dictation tool exploration by using the DailyDictation.com tool. At the end of the class, the students had to complete an anonymous mini questionnaire with three open-ended questions in Google Forms. The questionnaire questions are visible in Appendix 1.

The second visit to the computer lab targeted listening skills development and practice, the tool in focus being the AptisWeb Listening Test. Again, upon completion of the tasks, the students were asked to finish three open-ended questions and submit them anonymously using the same Google Forms. Please see Appendix 1 for the questions.

At the end of the action research, the students were encouraged to complete the final questionnaire that combined both closed and open-ended questions, available in Appendix 1. This time the answers were no longer collected anonymously, mainly, for the teacher not to lose track of the submissions. With anonymity, it is hard to distinguish which students to approach, therefore, taking this measure is a must to avoid further misunderstandings.

What comes to the MIRO study support environment, the space was organized in a way that allowed to group the embedded materials in toolboxes of skills: Reading, Listening, Speaking, and Writing. The full list of materials embedded in my MIRO study support with exact hyperlinks can be found in Appendix 2, however, I would like to elaborate a bit on the contents here too.

The main sources used in this project were:

1) LearnEnglish website by British Council – self-study materials intended for CEFR B1 learners (some upper-intermediate B2-level self-study materials were suggested for the students too, but only for those who felt they would like to do more challenging tasks). The evident benefit of such tasks was the immediate feedback the learners could receive upon completing the tasks.
2) AptisWeb General Exam Page – a webpage not linked to any specific organisation intended for practicing for the APTIS English as a foreign language exams across all skills.
3) DailyDictation.com – an excellent tool that gives instantaneous orthographic feedback to self-study learners, an initiative realised by an individual from Vietnam. It contains an impressive variety of recordings of different difficulty levels, tapescripts included.

Additionally, extra grammar material was accessed by the means of the following websites:

4) Solutions Student's Site Intermediate, 3rd edition and Solution Student's Site Pre-intermediate, 3rd edition – Oxford University Press-created platform supporting the topics of the printed "Solutions 3rd edition" EFL learning materials series with additional computer-assisted learning tasks;
5) Uzdevumi.lv – an educational platform targeting the educational needs of Latvian schools, providing theoretical explanations, tables, and computer-assisted learning tasks for the subject of English as a foreign language.

In addition, scans of selected pages from two printed books were uploaded: "Oxford Exam Excellence" and "Solutions Intermediate, 3rd edition, Student's Book".

Most importantly, should this study be replicated, any of the aforementioned resources could be supplemented and modified according to the teacher's preference and specific group's needs, as well as following curriculum changes, if such occur.

3. RESULTS

3.1. Feedback collected on DailyDictation.com tool

The students had to complete a short three-questions long Google Forms feedback questionnaire towards the end of the lesson. Aside this questionnaire, I noted some immediate oral responses from the students, to record their reactions during our first class at the computer lab: for instance, when asked "How was it [i.e. the activity]?" the only student who finished it all confirmed that it was not difficult, but required a lot to do, which is something he already got used to when studying at this school, hence his reception of the activity was acceptant, though also neutral, in a way – neither excited, nor bored. Another student expressed an opinion that was not so neutral and formal, with a tone close to disappointment, assuming that there's plenty of dull and monotonous work ahead: "oh, is that it, teacher – just writing down what we hear, is that it?" Regardless of the variety of reactions, I believe it to be still a useful task to have for my students to become better aware of own language skills, as it offered them instant bite-sized feedback, at their own speed, without rushing them forward, nor pulling them back; an illustrative example for this rise in awareness would be one student's exclamation that he found out that he didn't know English after all (though I would rather say he didn't know English as well as he thought he knew it, of course, since orthography and accuracy in the language is only one of the aspects of the language). To sum up these reactions: the dictation task had definitely drawn attention to the "accuracy" versus "fluency" distinction; proving to the students, that also those who were confident and fluent speakers of the language needed to brush up on their accuracy skills, especially in relation to orthography.

13 responses out of possible 18 were submitted by the means of Google Forms. Unfortunately, the anonymous nature of submissions disallowed the teacher to approach those who haven't made their submissions, which is a certain drawback of not including the compulsory name line. This aspect was taken into account in the final questionnaire form to avoid the evident confusion.

The first question responses included the ability to relisten to the recordings multiple times in a row, the fact that the "task was divided into several small parts" (which was, in fact,

a multitude of sentence-long or even half-sentence-long segments, amounting to 70 altogether, which perplexed some in the group), the ability to "see the correct answer after each exercise" and to "see your mistakes and fix them". Some noted the ease of completing the task: "you could do it quite fast" and "it was Easy to write the answers in the box". Regardless of the ease, however, in the same group there were students who noted the opposite to what their classmates said in the first question when answering the second question about the drawbacks of the task: "i write horribly with a keyboard", "there were too many recordings" and "it had too many recordings and I couldn't finish it all", "70?!" – the last answer implied the bewilderment with the amount of relatively short segments that the whole online dictation was divided into. Clearly, the inability to manage to complete the task within the given time limits of 30 minutes brought about some dissatisfaction in the group.

When picking the text for this task, I was aware that it might be too long, however, I did not want to resort to shorter and, oftentimes, more simplistic texts, but wanted to pick a text that would have more of a value in its own and the message it had. I also noticed that the content was not paid much attention to by the students, as became evident in the next class when playing the dictation recording in full to the same group of learners; evidently, that happened because it is hard to focus simultaneously on the form and accuracy, as well as try to grasp the content and general message when listening and relistening to information in small chunks and for the first time. Curiously, the last two answers were rather contradictory, one of the respondents claiming that the drawback was that "it was too easy" and the other one – that "it was a little difficult". The issue with pronunciation was also brought up – one respondent mentioned that he/ she "disliked the moments when [he/ she] couldn't understand the speaker" and, at the same time, one acknowledged that "the pronunciation is very clear and understandable", which only proves that the issue described is rather subjective.

The third question, about what could be done differently in the future, invited the students' personal reflection on their performance. Some answered with the "I don't know" and "i would not change anything" statements, while some claimed that they "would take headphones" along, or "read more carefully the tasks", or "pay attention to the correct writing and take [their] time", or would relisten to the recording several times before submitting the answers. One respondent admitted that the next time he/ she would "turn off the auto correct option on [his/ her] phone", which clearly proves how multifunctionalities in the modern

phones offer may come at cross purposes with other functions we use. Another respondent made a decision to "make the speaker use an american accent" since "a british accent may be confusing" – alas, it would not be quite possible, only if with separate words during the checking process in the inbuilt dictionary. Somebody from the group admitted that "would like to do [the task] in silence, because it is hard to concentrate when there is other sounds" – indeed from the comfort of own home this would be more than possible to achieve.

3.2. Feedback collected on AptisWeb Listening Test tool

On AptisWeb Listening Test tool 13 responses out of possible 16 were collected.

Going through the responses collected to each of these questions, I would say that among the positives the students mentioned: the "clear and understandable language" used in the recordings, availability of multiple answer options, good quality in the recordings, as well as the possibility to relisten to the audio. One respondent admitted that "there wasn't anything in particular that [he/ she] liked."

In the second question three respondents did not find any faults to mention (like: "There wasn't really anything that I disliked"). However, some more detailed feedback was provided too: some issues with audio playback were mentioned, as well as "the program skipped questions and then it was difficult to understand which ones you had already answered", "that sometimes I accidentally pressed the wrong button", "bad audio quality", and that "I couldn't see the correct answers in the end". The last answer poses a significant problem, since, indeed, having completed all the listening test tasks myself, I concluded that five answers did not work properly and gave a "wrong" mark no matter the option chosen. This, indeed, was a technical hindrance a teacher could not resolve since wasn't the one behind the development of the programme. This unexpected consequence is something to consider when using the ready-made tasks available on the Internet. A quick-fix solution to apply would be to ask the students to take a print screen of their results table and later on compare the tables sent with own answer sheet and discuss together the answers at the next class. My students voiced some issues that were of surprise to me, since, for example, I did not notice the skipping of the questions issue. Unfortunately, the anonymity of the survey as

well as the lack of a follow-up question to provide more details on the issue disallowed me to investigate the issue in more detail.

A seemingly paradoxical situation was with regard to the audio quality that was subjectively evaluated by some participants as "good" as well as "bad", I would characterize as "quite good" and attribute the issues possibly resulting from the earlier mentioned problem of not having appropriate headphones or earphones along. The quality of the sound, no doubt, depends largely on the gadgets being used which are, in most of the cases, adjustable to each user's individual needs.

In their answers to the third question, three claimed that they would not change anything, while most of the participants (eight, to be more precise) expressed the will of paying more attention and staying more focused on the task (like: "I would read the question several times before listening to the excercise"). Other answers included taking headphones along and preferring the dark mode over the white one. I believe that this last self-reflection prompting survey question was beneficial for the students to gain awareness of own practices during test-taking and, hopefully, would, indeed, result in changed behaviour during similar listening examinations to come.

3.3. Feedback collected from the final questionnaire

This last questionnaire comprised two open-ended questions and two questions with options to mark. This was the final questionnaire every student was asked to complete. In order to ensure each student completes it only once, the questionnaire was not anonymous – the student's name was required for working reasons and, indeed, all 19 answers were submitted, resulting in a 100% response rate of this given questionnaire.

- Question 1: "What tasks have you practiced today? Please tick all options that apply" (see the table in Figure 4 below for the statistics collected).

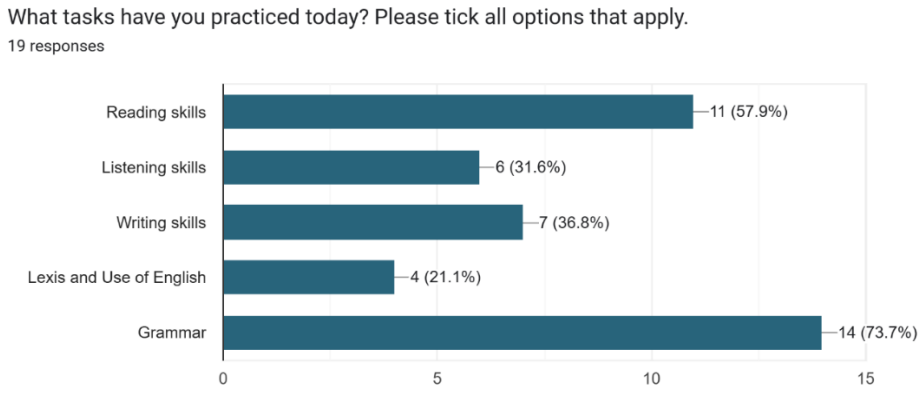

Figure 4 – Student feedback to the final questionnaire Question 1

- Question 2: "The most useful thing I have learnt today is..." – an open-ended question for own answers to provide.

The answers to this question included new words, synonyms, grammar, correct way of spelling. Sometimes the answers were more explicit, like: "I learnt new ways and phrases for debating and arguing with other people", "the english dictionary is very wide, you can learn new words every day!", and "With these tasks I very well repeated my knowledge of grammar. I understood that the reading tasks should be read carefully and, if necessary, several times in order to be able to complete the tasks as correctly as possible". Some answers were quite unclear and definitely in need of further elaboration, like: "when to use the right words" (what is understood by the "right" words?), or "I need to say 'those days'." (what is the context for that? Evidently, the confusion occurs with the student referring to some particular context that is unknown for the reader). Two answers denied noticing any usefulness in the tasks – "nothing", "not really anything" and "I dont know".

- Question 3: "Is there anything you searched for and could not find today? Can you give an example?" – an open-ended question for own answers to provide.

According to the answers collected, the majority of the respondents (ten participants) admitted that everything was easy to find and was understandable, apart from some unknown vocabulary: "I searched for some words that I didn't know what they mean", "I needed to look for some word meanings", "the meaning of the word *occur*", "no, but i did search for meaning of loathe and weep", "There was nothing that I had to look up, for example in the

reading assignments, if I didn't understand a word, I could understand its meaning from the context of the text". There was an answer drawing attention to come difficulties encountered, though, again, the information given was incomplete: "I didn't [know] what to do in few places, so i asked my friend to help, but he did not know too." – were they the technical difficulties encountered? Or were they the difficulties of phrasing of the task instructions? Now, after having collected these data, it could be merely a guess.

- Question 4: "How do you prefer to receive feedback? Please tick all options that apply" – a selection of options given to chose the answer(s) from (see the table in Figure 5 below for the statistics collected).

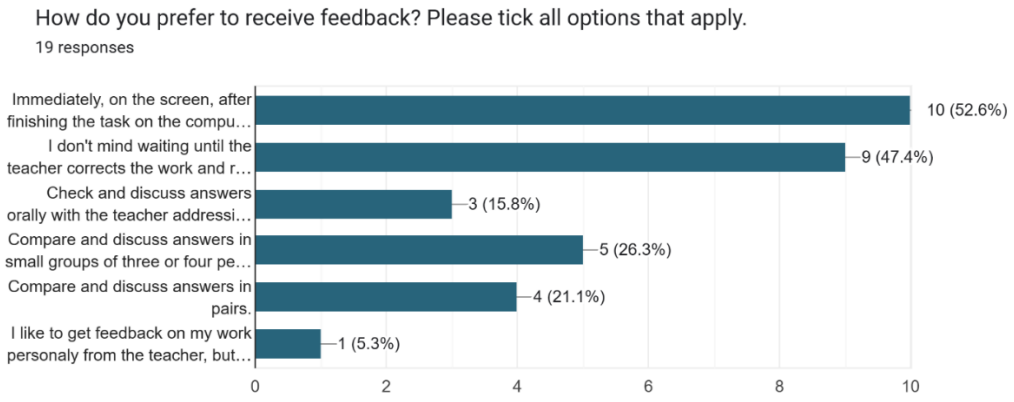

Figure 5 – Student feedback to the final questionnaire Question 4

The responses received in question 4 show that the image of impatient digital natives, as claimed by Prensky (2001a), does not quite correspond to everyone in the group: ten, or slightly more than a half of the respondents, indeed, marked the feedback preference option "immediately, on the screen, after finishing the task on the computer", however, 9, or slightly less than a half of the respondents "[did] not mind waiting until the teacher corrects the work and returns back it later with corrections".

3.4. Students' opinions on gadget use in the classroom

The tool to collect such feedback was Padlet. Time was allocated for this activity in one of the last classes in the computer lab. The students pasted their opinions anonymously on a given

Padlet board and, after teacher's approval, could see, read, and mark with a "like" symbol their classmates' contributions. The post commenting option was turned off this time.

3.4.1. Computer use in class – students' opinions

17 opinions were submitted to Padlet. Some opinions compared computers to smartphones, stating that "it is more convenient to use a computer than a smartphone".

Some students expressed a preference for a better regulation of technology-enhanced tasks: "I like using sometimes some tasks are too random and not regulated", which brings to the thought that the overabundance of choices may carry a distracting potential in itself. In fact, this supposition correlates/echoes with an opinion against technology use in class: "I do not like it! I like to learn without technologies – the standart way. It is much more understandable and it doesn't overcomplicate the learning process." This opinion was voted with three "likes", hence, it could be considered as being not a unique view, but a shared one.

Students expressed opposite opinions when answering this question. An interesting discussion started with one of the students who claimed that "computer use isn't effective in studies". Here is the full discussion: "No, computer use isn't effective in studies. I believe that computers only distract kids from learning subjects. Computers in school make kids want to play games on them, not study (taking from my experience). Instead teachers should focus on mainly using mobile websites for studies, so that its easier for students to use and more reliable for the teacher." I have asked the author of his opinion, to clarify what exactly was meant by the "mobile websites" – mobile apps? And would it mean that a smartphone is less distracting than a computer? Here is the follow-up reply sent in the same day: "Yes, i believe that since mobile phones are used by teenagers so much already, they just become neutral when they are asked to study from their smartphones. With computers on the other hand, there are so many new options and distractions for a student, that it becomes almost impossible to focus. I believe that computers should only be used if it is the only way". This is indeed a revelation to hear from a so-called "digital native" that a smartphone nowadays has become so common that is perceived as "neutral", while a computer is much more uncommon and, hence, potentially more distracting with the overabundance of functionalities it can offer. Very peculiar angle of view. In fact, I would rather tend to view a smartphone being potentially

more distracting with its endless games, apps, multifunctionalities, etc., and not the computer. It might depend on the experience of gadget use of a certain individual, though. If, say, one has developed a habit to associate computers with gaming activities, since that is the main function of the tool for that person, then, no doubt, the time when the same tool would be suggested for work purposes, the familiar association with gaming and fun pastime in that person most likely will be triggered.

3.4.2. Smartphone use in class – students' opinions

16 opinions altogether were submitted as Padlet posts. Most of the posts expressed a view in favor of using smartphones, some stressed that it should be done for educational purposes, however, some mentioned also other reasons why, in the opinion of the authors, smartphones should be allowed during classes, like this one: "phones should be used when it's needed, for example it's obligatory to answer messages or phone calls from parents, using internet to get more info on different interesting questions if techer is not able to answer them." Interestingly, the generation of the "digital natives" perceives to be entitled to be online and accessible to people outside the classroom, irrespective of whether it is lesson time or break time. This ever-connectedness is becoming a must and it is something that causes pupils' attention to split. The wish to have immediate access to the World Wide Web and what the outer world has to say on a chosen topic of interest signals that the pupils, in a way, are accustomed to and even seeking the multitasking mode, not really interested in keeping focus only on what the offline environment can offer. Now that is an interesting phrasing: "using internet to get more info on different interesting questions if techer is not able to answer them" – it does not specify whether the person is interested in finding information related or unrelated to the topic tackled in class. However, there was one more opinion, which argues for having the smartphone at hand: "I think we need to use the phones in class because sometimes teachers can not answer to some questions right" – this particular opinion implies that some schoolchildren wish to compare and verify the information they hear from the teacher with what they may find on the Internet. Indeed, it could be perceived as a appraisable attempt of critical evaluation of information, had the Internet not been full of sources with misleading information such student may easily come across. These responses above prove the

importance of taking such answers seriously and acting upon them – by talking over with the students why such strategies might often be ineffective and considering possibilities of enhancing own teaching practice while knowing that such practices from the part of the learners exist.

Some students acknowledged the distracting potential of technology: "I personally think that the use of phones when teacher has allowed it is benefitial to the learning of the material in class, but even though there are upsides to this there are also downsides for exmple it can be distracting if not managed properly and students can cheat if not monitored."

A peculiar view that gave more food for thought on generational differences was the one contrasting the media of information transfer – the Internet (the screen of a gadget) VS the book (the printed material): "i think, that phones should be used more often in class, because for some people it's easier to understand the class problem from the information in the internet than in the books." This respondent did not explicitly specify what exactly about the books was made more complicated, but, I suppose, it could cover such aspects as the layout and/ or the phrasing. A developed habit of consuming information from the screens in "digital natives' " generation is evident.

There was an opinion that viewed smartphone use in the classroom in a distrusting and sceptical way, namely: "I don't agree, all that phones do is distract students from the school work. Students won't just use their phones for information but they will use them for chatting and using them to not pay attention to the class. All that you can find in internet you can also just find in book!" Apparently, within the same group of learners, there is at least one who still finds perceiving information from a gadget screen more challenging than from a printed book.

Interestingly enough, one of the students mentioned that "Studies have shown that students who use their phones in class tend to have lower academic performance" – I wonder what kind of information did that student come across, what exactly did he/she read about such studies and such findings made.

3.5. Teacher-researcher's notes from the self-reflection diary

What I liked about the computer-enhanced language learning activities conducted in the computer lab was that every single one of the students was engaged every minute of the class

– they had no time to browse their phones nor talk to each other as each one was given a goal to complete on their own, at their own speed, so the usual fast-finishers could proceed faster, while the slow-finishers could take their time too. Nobody had to wait for a classmate to proceed collectively to the next point of the task; everyone was engaged and every single minute of the class well-used (with the exception to the initial stages of adjusting to the technology and dealing with the unintended consequences), while continuous audial language input was provided to the students with possibilities of repetition and at their own pace.

DailyDictation.com tool served as a sort of an exercise machine; it was quite behaviouristic in nature, the pattern being: (1) listen to the recording -> (2) write down the phrase -> (3) click on "Check!" button -> (4) if corrected, notice the underlined mistakes and correct/ or, if all correct, well done! -> (5) click on the "Next" button and repeat the sequence); if overdone, such excessive practice in "accuracy" might hinder "fluency" development of the language and lack the actual language practice in live, spontaneous communication with a human, therefore, these types of tasks that drill "accuracy" should always be supplemented with other pedagogical activities that would ensure balanced both "accuracy" and "fluency" development in the foreign language performance.

I was surprised at the unintended consequences of the same group of students not having proper earphones or headphones with them when they repeatedly were reminded of that and have also experienced issues with their wireless earphones/ headphones during the first visit to the computer lab; however, apparently, not every household had an equivalent of earphones/ headphones with a wire, so that might be the reason of facing repeatedly the same technical issue in the computer lab. Unfortunately, that was not something I could provide them with, hence severely required their personal engagement. Some other unintended consequences, such as incorrect feedback from the AptisWeb Listening Task were indeed unexpected and to somewhat annoying, since there was nothing neither the teacher, nor the students could do to solve the problems. The inability to get proper correction of the multiple-choice answers, indeed, undermines users' trust in technology and diminishes its usefulness.

To sum up the Results part, the data collected showed a variety of opinions, sometimes contradictory, sometimes unexpected to the researcher (like the example with verifying the information the students hear from the teacher with what they may find on the Internet). The MIRO study support could be seen as positively received rather than not, despite the fact that

the students did not allocate much time to own exploration of the MIRO-embedded resources outside the regular classes and, thus, had a rather minimal engagement with the tools. The group, having taken the state exam in May 2023 showed quite impressive results, achieving 90% score for the group average for the whole exam, with individual performance covering the range from 82% to 97%. Indeed, success in an exam is a combination of multiple factors, so by no means I would attribute it happening because of this intervention alone. It is hard to predict, what would the results be, had there been no online repository of learning resources created to support the students in their preparation process.

4. DISCUSSION

Current action research project sought answers to two research questions: (1) "How does an online learning space using MIRO supports students' learning in preparation for their Grade 9 state exam in English as a foreign language?" and (2) "How computer-assisted language learning tools aid Grade 9 students in preparation for their Grade 9 exam?" To find answers to these questions, the MIRO online space was used as a study support. As the data was collected from two perspectives, the learners' as well as the teachers' one, it allowed to approach the issue dialogically, which is central to the action research.

The qualitative feedback collected from the research participants showed that despite occasional technical issues and, sometimes, the lack of time to fully complete the task when in class, the students have definitely raised their self-awareness of their current state of own English language skills. Additionally, I believe, answering the questionnaires with follow-up questions afterwards encouraged them to think of strategies of how they could improve their performance in the future, some acknowledging the need not to rush, take time, be more attentive, reread the task, etc. All this, in my opinion, was an excellent exam rehearsal for them, satisfying Zimmerman's as well as Gütl and Chang's expressed need for student empowerment and the teacher taking the role of a guide and facilitator, allowing the student to develop "self-awareness and strategic knowledge to take corrective action" (Zimmerman, 2002: 65), when need be.

Turning to the teacher-researcher's perspective, a certain advantage of this intervention and computer-assisted language learning-supported classes was the ability of

each student to be engaged in the task every minute of the class, since they did not have to adapt to classmates' pace and did not have to wait for the teacher to come up and check or provide feedback, as it was immediately delivered. Indeed, a bit more than a half of the research participants evidently liked this opportunity, since ticked the questionnaire option in favour of immediate feedback on the screen in the final questionnaire.

Regarding potential research limitations, one of the study's limitations was not making it an experiment with a control group and an experimental group, but rather opting in favour of involving the whole class in the intervention. At least, all of the students had the chance to take part and improve their abilities. I also strongly believe that the self-regulatory activities in general helped the students to better prepare for the exams since, indeed, during the exam paper completion, there will be no one to help them and they would have to rely solely on their own understanding of the tasks, as well as apply their best strategies to reach the end goal of task completion.

Another research limitation was definitely in the fact that the students did not use the MIRO online learning space much outside of the classroom. Had the students been more responsive in this aspect, more than one answer per one student would have been collected and, possibly, some dynamics could have been traced in the way MIRO space was recognized as a support among the target audience. However, as I managed to collect only the minimum, which was the final questionnaire answered by each research participant only once, the collected survey data quantity was significantly less than I expected to collect.

This research could be continued by adopting a similar approach in lower Grades – be it in Grade 6, 7, or 8. As the contents for the repository are to be selected from the multitude of resources available rather freely on the Internet, the compilations could be made in a variety of age and learning needs-tailored forms. Most importantly, the online space, be it MIRO or any other tool available on the market, should fulfil a certain criteria to fit the needs: (1) be a reliable storage place of links and uploads; (2) be equally easily accessible as for the students, as for the teacher; (3) have the functionality of *Editing* allowed only for the teacher to prevent the students intentionally or unintentionally modifying the stored content; (4) ensure a feedback form embedded to reach out to the teacher with questions, suggestions, and reports on the use of the repository.

This intervention in form of action research attempted to distribute the classroom, spreading it beyond the traditional synchronicity and co-location. Upon the completion of the project, I can say that the repository of learning resources on the basis of MIRO online environment somewhat contributed to language as well as self-regulated learning skills' development in the students, however, it would be hard to claim to which extent exactly did it make a positive effect on the learners' performance at the state exam. Therefore, a study support as described in this thesis may or may not be continued in the future, depending on a certain group overall needs and language proficiency levels. What comes to self-regulated learning, it was of no primary importance here, being rather a consequence, rather than the focus in itself. Nevertheless, it could become a possible research perspective to investigate in the future, taking an online space as a repository of learning resources as a starting point.

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Overall, this has been a blissful period in my life and I am a bit sad that it has come to an end. I must acknowledge that all this experience, indeed, has been very much supportive of my personal as much as professional development and would remain a memorable chapter in my life. Thank you, University of Tartu! Thank you, Estonia!

AUTHOR'S DECLARATION

I hereby declare that I have written this thesis independently and that all contributions of other authors and supporters have been referenced. The thesis has been written in accordance with the requirements for graduation theses of the Institute of Education of the University of Tartu and is in compliance with good academic practices.

Marija Griņeviča

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APPENDICES

APPENDIX 1: Feedback questionnaires

1. Questionnaire questions on the DailyDictation.com tool:
   (a) What I liked the most in the online dictation task is…
   (b) What I disliked the most in the online dictation task is…
   (c) What I would do differently when completing the online dictation task is…
   The second visit to the computer lab targeted listening skills development and

2. Questionnaire questions on the AptisWeb Listening Test tool:
   (a) What I liked the most about AptisWeb Listening Test is…
   (b) What I disliked the most about AptisWeb Listening Test is…
   (c) What I would do differently when completing similar listening tests is…

3. The unabridged list of questions included in the final questionnaire:
   1. Name
   2. What tasks have you practiced today? Please tick all options that apply.
      - Reading skills
      - Listening skills
      - Writing skills
      - Lexis and Use of English
      - Grammar
   3. The most useful thing I have learnt today is…
   4. Is there anything you searched for and could not find today? Can you give an example?
   5. How do you prefer to receive feedback? Please tick all options that apply.
      - Immediately, on the screen, after finishing the task on the computer.
      - I don't mind waiting until the teacher corrects the work and returns back it later with corrections.
      - Check and discuss answers orally with the teacher addressing the whole class.

- Compare and discuss answers orally with the teacher addressing the whole class.
- Compare and discuss answers in small groups of three or four people.
- Compare and discuss answers in pairs.
- Other.

APPENDIX 2: MIRO Study Support contents

1. The *Reading skills toolbox* had the following sources embedded:
    - British Council LearnEnglish reading practice section for B1 CEFR level learners: https://learnenglish.britishcouncil.org/skills/reading/b1-reading
    - British Council LearnEnglish reading practice section for B2 CEFR level learners: https://learnenglish.britishcouncil.org/skills/reading/b2-reading
    - AptisWeb General Exam page with practice modules: https://aptisweb.com/aptis-exam-library/aptis-general
2. The *Listening skills toolbox* had the following sources embedded:
    - British Council LearnEnglish listening practice section for B1 CEFR level learners: https://learnenglish.britishcouncil.org/skills/listening/b1-listening
    - A selection of English Listening Exercises from DailyDictation.com IELTS Listening section: https://dailydictation.com/exercises/ielts-listening
    - AptisWeb General Exam page with practice modules: https://aptisweb.com/aptis-exam-library/aptis-general
    - AptisWeb Listening Test feedback by Google Forms questionnaire: https://docs.google.com/forms/d/e/1FAIpQLScblnJ_P-e6j3Z3Uc_CMGTbbEJ-7oZ4s0GVgRvj4l5Czr16_w/viewform
3. The *Speaking skills toolbox* had the following material embedded:
    - AptisWeb General Exam page with practice modules: https://aptisweb.com/aptis-exam-library/aptis-general
    - Speaking Bank pages 128–130, providing examples of common phrases to use supportive of different communicative situations from the book "Oxford Exam Excellence: Preparation for Secondary School Exams" (2006)
4. The *Writing skills toolbox* had the following material embedded:
    - AptisWeb General Exam page with practice modules: https://aptisweb.com/aptis-exam-library/aptis-general
    - British Council LearnEnglish writing practice section for B1 CEFR level learners: https://learnenglish.britishcouncil.org/skills/writing/b1-writing

- Writing Bank pages 131–140, providing examples of various writing genres from the book "Oxford Exam Excellence: Preparation for Secondary School Exams" (2006)
- A selection of English Listening Exercises from DailyDictation.com IELTS Listening section: https://dailydictation.com/exercises/ielts-listening
- DailyDictation.com tool feedback by Google Forms questionnaire: https://docs.google.com/forms/d/e/1FAIpQLScxlYSEnU-Bim2MhpfXxCFGSqbdTjBaZiKq8kqZOze6Z1ryyQ/viewform

5. The *Grammar treasure chest* had the following material embedded:

- **Conditionals**
  - "Conditionals: zero, first, and second" in British Council LearnEnglish grammar section for B1-B2 CEFR level learners: https://learnenglish.britishcouncil.org/grammar/b1-b2-grammar/conditionals-zero-first-second
  - "Verbs in time clauses and 'if' clauses" in British Council LearnEnglish grammar reference verbs section: https://learnenglish.britishcouncil.org/grammar/english-grammar-reference/verbs-time-clauses-if-clauses
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Pre-Intermediate, 3rd edition, Solutions Pre-Intermediate Grammar tasks: https://elt.oup.com/student/solutions/preint3rdedition/grammar/grammar_07_022e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Pre-Intermediate, 3rd edition, Solutions Pre-Intermediate Grammar tasks: https://elt.oup.com/student/solutions/preint3rdedition/grammar/grammar_08_012e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Intermediate, 3rd edition, Solutions Intermediate Grammar tasks: https://elt.oup.com/student/solutions/int3rdedition/grammar/grammar_05_012e?cc=lv&selLanguage=lv

- **Comparison**
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Pre-Intermediate, 3rd edition, Solutions Pre-Intermediate Grammar tasks: https://elt.oup.com/student/solutions/preint3rdedition/grammar/grammar_04_022e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Intermediate, 3rd edition, Solutions Intermediate Grammar tasks: https://elt.oup.com/student/solutions/int3rdedition/grammar/grammar_07_012e?cc=lv&selLanguage=lv
- **Future tenses**
  - "Future Continuous and Future Perfect" in British Council LearnEnglish grammar section for B1-B2 CEFR level learners: https://learnenglish.britishcouncil.org/grammar/b1-b2-grammar/future-continuous-future-perfect
  - "Future forms: 'will', 'be going to' and Present Continuous" in British Council LearnEnglish grammar section for B1-B2 CEFR level learners: https://learnenglish.britishcouncil.org/grammar/b1-b2-grammar/future-forms-will-be-going-present-continuous
  - "The future: degrees of certainty" in British Council LearnEnglish grammar section for B1-B2 CEFR level learners: https://learnenglish.britishcouncil.org/grammar/b1-b2-grammar/future-degrees-certainty
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Intermediate, 3rd edition, Solutions Intermediate Grammar tasks: https://elt.oup.com/student/solutions/int3rdedition/grammar/grammar_05_012e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Intermediate, 3rd edition, Solutions Intermediate Grammar tasks: https://elt.oup.com/student/solutions/int3rdedition/grammar/grammar_05_022e?cc=lv&selLanguage=lv

- **Past tenses**
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Intermediate, 3rd edition, Solutions Intermediate Grammar tasks: https://elt.oup.com/student/solutions/int3rdedition/grammar/grammar_02_012e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Intermediate, 3rd edition, Solutions Intermediate Grammar tasks: https://elt.oup.com/student/solutions/int3rdedition/grammar/grammar_02_022e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Intermediate, 3rd edition, Solutions Intermediate Grammar tasks: https://elt.oup.com/student/solutions/int3rdedition/grammar/grammar_04_012e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Intermediate, 3rd edition, Solutions Intermediate Grammar tasks: https://elt.oup.com/student/solutions/int3rdedition/grammar/grammar_04_022e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Pre-Intermediate, 3rd edition, Solutions Pre-Intermediate Grammar tasks: https://elt.oup.com/student/solutions/preint3rdedition/grammar/grammar_05_022e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Pre-Intermediate, 3rd edition, Solutions Pre-Intermediate Grammar tasks: https://elt.oup.com/student/solutions/preint3rdedition/grammar/grammar_05_012e?cc=lv&selLanguage=lv
  - Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Pre-Intermediate, 3rd edition, Solutions Pre-Intermediate Grammar tasks:

https://elt.oup.com/student/solutions/preint3rdedition/grammar/grammar_02_022e?cc=lv&selLanguage=lv

- Oxford University Press, English Language Teaching: Solutions Students' Site: Solutions Pre-Intermediate, 3rd edition, Solutions Pre-Intermediate Grammar tasks: https://elt.oup.com/student/solutions/preint3rdedition/grammar/grammar_09_012e?cc=lv&selLanguage=lv
- "Present Perfect Simple and Continuous" in British Council LearnEnglish grammar section for B1-B2 CEFR level learners: https://learnenglish.britishcouncil.org/grammar/b1-b2-grammar/present-perfect-simple-continuous
- Common Irregular verbs table (with translation into Latvian) provided by platform Uzdevumi.lv: https://www.uzdevumi.lv/p/anglu-valoda/7-9-klase/past-simple-85383/re-62d59529-e122-4a2e-97d1-d2cc8aee0db2
- "Present Perfect and Past Simple" practical tasks and theory explanation provided by platform Uzdevumi.lv: https://www.uzdevumi.lv/p/anglu-valoda/7-9-klase/present-perfect-and-past-simple-88062

- Grammar topics with practical tasks and theory explanation covering Grades 7 to 9 material provided by platform Uzdevumi.lv: https://www.uzdevumi.lv/p/anglu-valoda/7-9-klase

6. The *Lexis & Use of English* had the following material embedded:
   - AptisWeb General Exam page with practice modules: https://aptisweb.com/aptis-exam-library/aptis-general
   - Online Cambridge English Learner's Dictionary: https://dictionary.cambridge.org/
7. The *Opinion feedback* had the following links embedded:
   - A hyperlink to the "Computer use in class" Padlet opinion-collecting board: https://padlet.com/grinevica18/computer-use-in-class-give-your-opinion-zri6swgkcgqr1wet
   - A hyperlink to the "Smartphone use in class" Padlet opinion-collecting board: https://padlet.com/grinevica18/smartphone-use-in-class-give-your-opinion-56y0g3lci1c5bijt

APPENDIX 3: DailyDictation.com task transcript

Right, everyone, let's make a start.
Over the past few sessions,
we've been considering the reasons why some world languages are in decline,
and today I'm going to introduce another factor that affects languages,
and the speakers of those languages,
and that's technology, and, in particular, digital technology.
In order to illustrate its effect,
I'm going to focus on the Icelandic language,
which is spoken by around 321,000 people,
most of whom live in Iceland – an island in the North Atlantic Ocean.
The problem for this language is not the number of speakers,
even though this number is small.
Nor is it about losing words to other languages, such as English.
In fact, the vocabulary of Icelandic is continually increasing
because when speakers need a new word for something,
they tend to create one rather than borrowing from another language.
All this makes Icelandic quite a special language,
it's changed very little in the past millennium,
yet it can handle twenty-first-century concepts related to the use of computers and digital technology.
Take, for example, the word for web browser…
this is vafri in Icelandic,
which comes from the verb 'to wander'.
I can't think of a more appropriate term because that's exactly what you do mentally when you browse the internet.
Then there's an Icelandic word for podcast,
which is too hard to pronounce!
And so on.
Icelandic, then, is alive and growing, but – and it's a big but,

young Icelanders spend a great deal of time in the digital world
and this world is predominantly English.
Think about smartphones.
They didn't even exist until comparatively recently,
but today young people use them all the time to read books, watch TV or films,
play games, listen to music, and so on.
Obviously, this is a good thing in many respects because it promotes their bilingual skills,
but the extent of the influence of English in the virtual world is staggering
and it's all happening really fast.
For their parents and grandparents,
the change is less concerning because they already have their native-speaker skills in Icelandic.
But for young speakers –
Well, the outcome is a little troubling.
For example, teachers have found that playground conversations in Icelandic secondary schools
can be conducted entirely in English,
while teachers of much younger children have reported situations
where their classes find it easier to say what is in a picture using English, rather than Icelandic.
The very real and worrying consequence of all this
is that the young generation in Iceland is at risk of losing its mother tongue.
Of course, this is happening to other European languages too,
but while internet companies might be willing to offer, say, French options in their systems,
it's much harder for them to justify the expense of doing the same for a language
that has a population the size of a French town, such as Nice.
The other drawback of Icelandic is the grammar,
which is significantly more complex than in most languages.
At the moment, the tech giants are simply not interested in tackling this.
So, what is the Icelandic government doing about this?
Well, large sums of money are boing allocated to a language technology fund

that it is hoped will lead to the development of Icelandic sourced apps
and other social media and digital systems,
but clearly this is going to be an uphill struggle.
On the positive side,
they know that Icelandic is still the official language of education and government.
It has survived for well over a thousand years
and the experts predict that its future in this nation state is sound and will continue to be so.
However, there's no doubt that it's becoming an inevitable second choice in young people's lives.
This raises important questions.
When you consider how much of the past is tied up in a language,
will young Icelanders lose their sense of their own identity?
Another issue that concerns the government of Iceland is this.
If children are learning two languages through different routes,
neither of which they are fully fluent in,
will they be able to express themselves properly?

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