A Comparative Study of Students' Performance and Perception in Asynchronous and Blended Language Learning Environments
(A Case Study of a Russian University)

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Abstract

Nowadays, with the rapid development of technology, online learning is becoming an inevitable educational method and educational alternative to face-to-face classes, especially for those who cannot attend classes on a regular basis. Online learning environments trend can be categorized into asynchronous, synchronous and hybrid/blended-learning environments. The paper presents a comparative study of two e-learning experiments for English as a Foreign language (EFL) study in a Russian university. One course (Eng1) provided real-time offline student-teacher interaction followed by asynchronous activities. During the pandemics lockdown, faced with some technical problems such as lack of powerful computers, microphones, headphones and stable internet connection to provide synchronous e-learning, the university had to resort to asynchronous-only activities. It became obvious that Eng1 didn't cover the EFL syllabus. Collaborative work resulted in a course designed on university Moodle platform (Eng2). Research methods were observation, students' performance analysis and a survey questionnaire administered to 510 students total in three groups: Eng1, Eng2 and both. The courses were evaluated and compared in terms of interactivity, variability, audio content quality, time consumption, technical support, etc. The findings revealed that asynchronous-only language learning was quite beneficial for foreign language learners, especially to improve grammatical and lexical competence, receptive skills such as reading and listening with some limitations on productive skills training. The main advantage of asynchronous-only environment is that it is not time bound and a learner can work on his own pace. On the other hand, these limitations could be scaffolded by synchronous sessions.

Keywords: Online learning, Blended-learning, Asynchronous learning, EFL

1 Introduction and Literature Review

The development of Web 2.0 technology introduced the affordance of the Internet and generated a special interest in distance education, and renewed research in heutagogy, the term being described back in 2000 by Stewart Hase and Chris Kenyon, 2001. All submissions must be original, not presented at other conferences, published elsewhere or submitted for publication. The official language of the submissions is English, and spelling must be consistent with the Concise Oxford Dictionary or a corresponding dictionary.

In fact, heutagogy further extends the andragogical approach and has the potential to become a theory of distance education. Distant education brings about new concerns regarding the management of the online environment such as the necessity to adopt new teaching methods, the issue of learners' engagement, motivation, self-discipline and autonomy and the problem of interaction in three dimensions (learner-instructor, learner-learner, learner-content) which is undoubtedly the most critical one (Cicillini and Salusso, 2019). A heutagogical learning environment facilitates development of capable learners and emphasizes both the development of learner competencies as well as development of the learner's capability and capacity to learn, that is active and autonomous learner-content interaction. Distance education and heutagogy have the same target audience in common: mature adult learners (Blaschke, 2012). The current COVID-19 crisis has witnessed the situation when many universities came up with distant language learning solutions. It's necessary to distinguish the two approaches: one is emergency remote teaching to compound the deficiency in many language instructors' preparation and support to teach online which allowed teachers and students to just stay connected and engaged while they work from

their homes, the other is online courses which have the benefit of being designed and developed in advance, with dedicated structure and support in place (Russell, 2010). Depending on the form of interaction there are three types of organization. The five key ingredients in a blended/hybrid learning program include live events (tutor-led instruction), self-paced learning and assessment, collaboration, and performance support materials (Rezaee and Ahmadzadeh, 2012). Some of the disadvantages of synchronous education can be the need of the availability of students at a given time and the necessary availability of a good bandwidth Internet (Perveen, 2016).

Asynchronous learning is the most adopted method for online education because learners can learn anywhere, anytime, whatever they need, adjusting their individual achievement.. Asynchronous online learning happens when students take instructions from and complete tasks in learning programs that are not delivered in real time or by a person. Asynchronous environments can provide students with readily available input in the form of audio/video lectures, Powerpoint presentations, articles, external links but are not limited to these. Asynchronous e-learning can be challenging as only a carefully devised set of strategies can keep students engaged and interested in this sort of learning environment to facilitate motivation, confidence, participation, problem solving, analytical and higher order thinking skills (Perveen, 2016). When it comes to second or foreign language learning, an indispensable component in the acquisition process is the opportunity for spontaneous exchange. Therefore, it is critical to explore ways of incorporating the benefits of all that is online education without compromising the vital aspects of quality language education (Farina and Selmo, 2018). Asynchronous tools have been viewed as affording greater opportunity for reflection on one's own ideas, as well as on comments made by others. It has been suggested that bulletin boards and forums promote the production of more syntactically complex language and more words (Rezaee, 2012) to develop writing skills. The challenge is to organize polite unmoderated communication in an online asynchronous untutored university course and incorporate speaking activities. The idea of present paper is to compare two university courses: one - blended learning environment, the other is asynchronous course based on some factors, such as construct students' learning materials and environment to target particular students; and interact with their students by monitoring the online presence of them and supplying them with continuous feedback (El-Seoud et al., 2014). The main criteria in assessing two courses was learner satisfaction. Learner satisfaction refers to attitudes, perceptions and expectation of learners toward a specific mode of learning. Researchers have stated that learners tend to be satisfied when their expectations of the learning environment, design of a course, teaching practices and learner achievement are met (Gyamfi and Sukseemuang, 2018).

2 Methods and Setting

The setting for this comparative research was a university in Russia. Over 1500 first- and second-year students were required to use Eng1 program as a part of an English as a foreign language course for the 2019/20 academic year. The students had to take a placement test outside the program to know their proficiency level. The program falls into blended-learning environments category because it requires one face-to-face lesson a week followed by asynchronous activities ranging from vocabulary, grammar, reading, writing, pronunciation, listening to other tasks. The material was positioned as methodologically verified and copyright. The program designers reported exposing students to over 100 hours of learning content at each English language proficiency level. The students did some progress tests on the course and had a computer-based centralized achievement test at the end of semester.

Eng2 program was piloted on over 8 000 first- and second-year students for three months during pandemic lockdown period of 2019/20 academic year. The course appeared spontaneously when faced with some technical problems such as lack of powerful computers, microphones, headphones and stable internet connection to provide synchronous e-learning, the university had to

resort to asynchronous-only activities. It became obvious that Eng1 didn't cover the EFL syllabus. Collaborative work resulted in a spontaneous course designed on university Moodle platform. The course was based on the concentric principle to smoothly improve grammatical and lexical competence, reading, listening skills to guarantee a student's achievement success on each proficiency level. The variety of tasks was limited to the technical limitations of the Moodle platform, but the number of tasks was calculated to meet the curriculum needs to expose students to 8 hours of learning content weekly. At the end of the semester a survey questionnaire (with some Likert-scale evaluation questions and open questions) was administered to the students of two departments who are sure to fall into one of three groups: Eng1-only students, Eng2-only students and Eng1/Eng2 students to compare. We received 510 random answers with 60% being Eng2-only, 38% - Eng1/Eng2 students and 2% belonging to Eng1-only group. The range of A1 (37,5%), A2 (26,7%), B1 (25,9%), B2+ (10%) proficiency levels was representative. The students belonged to approximately the same age group 18-19-year-olds who can be called digital natives. Sex differences didn't contribute much to learning content evaluation. Both programs didn't contain any sensitive content, so this parameter wasn't taken into account.

3 Results and Discussion

The perceptions of 11 teachers who used Eng1 for six months indicated that the teachers had a moderate to low satisfaction with the usefulness, interest and effectiveness to improve students' communicative skills, grammatical and lexical competence.   However, the users appreciated the course from satisfactory to good. Among the positive sides they marked an opportunity to have face-to-face classes once a week, interactivity (4 out of 5), little exposure time to online activities on the platform (1-60+ minutes a week), the system of rewards (such as medals and statuses).
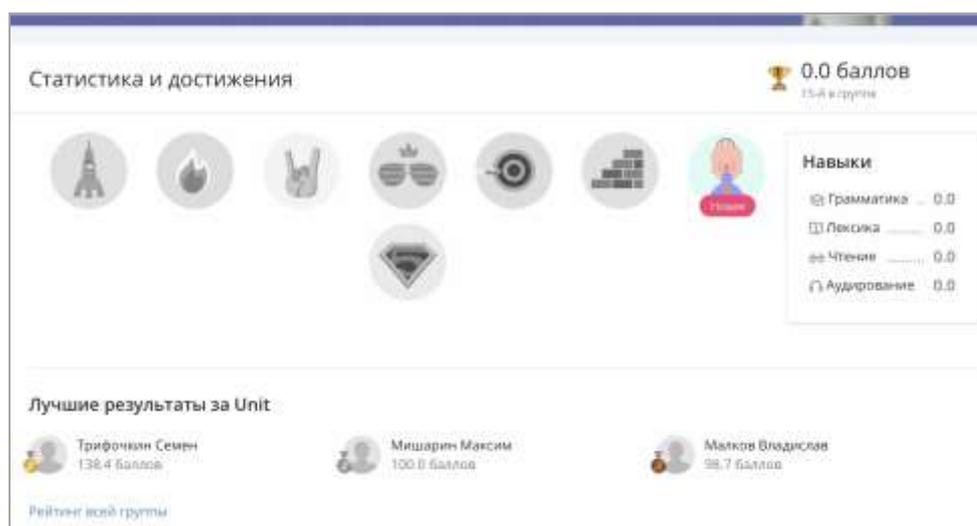

Figure 1. The interface of Eng1 platform showing statistics,
skills and best results for a unit

The problems can be summed up as follows: poor audio quality (3 out of 5), slow and reluctant technical support, no input materials, ignorance of distinction between A1 and A2 proficiency levels of Common European Framework of Reference, A0 materials are missing.

A significant part of students' complaints was connected to mistakes in the tasks which then resulted in total low score. Some students unwilling to get low scores sent feedback with screenshots to the teachers and tech support, but the limitations of platform End1 would not allow to correct the task and improve the score, so that after the update teachers had to assign the same task and students completed it one more time which affected students' motivation. Among common mistakes: the correct answer didn't count, but it was presented in key suggestions; with the first letter given the correct answer included it; for some tasks it was impossible to predict the word choice; the platform would not recognize the answer if the cursor was left in the middle of the sentence; some tasks didn't show the right statistics even if fully completed. Despite such a drawback as the presence of mistakes, students noted that it is important for them to see where the mistake was made and to be able to see the answers after completing the task.
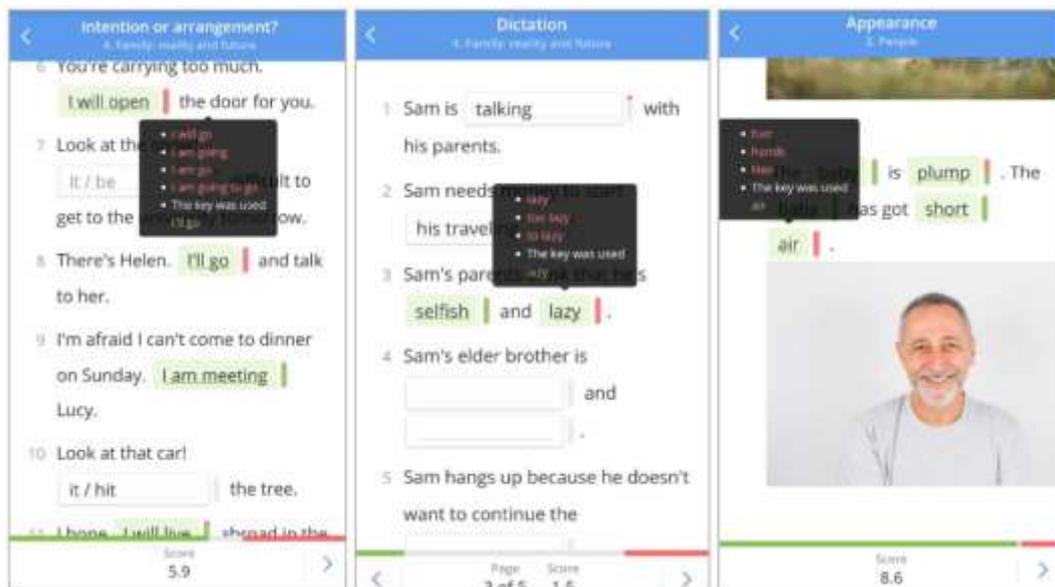

Figure 2. Mistakes on Eng1 platform found by students

It is noteworthy that what is highly appreciated by the students is regarded as a problem by a teacher. It became obvious that the students' exposure on the platform didn't correspond to English as a foreign language university curriculum plan. Since this program belonged to third-party developers the teachers couldn't control and interfere with the content. The information was reported to the developers for consideration without feedback.

Eng2 course was a response to remedy the drawbacks of Eng1: guarantee the clear distinction of levels, design the tasks according to vocabulary and grammar level profiles, develop and improve receptive skills because elimination of a tutor from assessing asynchronous activities restricts the opportunities for productive skills tasks. The figures to compare are given in Table 1.

There is obvious preference for Eng1 rather than Eng2 which can be accounted for by the time the learners spend on the platform and visual presentation and perception of the platform pictures. Among the things to improve in Eng2 are strategies to solve technical problems because the percentage of system failures is rather high. Next, we worked out a set of instructions to prepare and unify the organization of input materials in the form of Word documents and short videos. On the other hand, searching for an explanation is also a part of learning which is close to heutagogy.

Table 1. The comparison of Eng1 and Eng2 platforms

	Eng1	Eng2
Logged in with a computer	61,50%	79%
Logged in with a mobile device	7,70%	0,50%
Didn't have any problems	61,50%	49,20%
Had to study a lot on their own	50,80%	63,10%
Time exposure:		
1-30 minutes a week	13,80%	5,10%
31-60 minutes	39%	16,40%
1 hour+	27,70%	25,10%
2 hours+	14,40%	28,70%
3 hours+	5,10%	24,60%
Tasks were useful for the final computer-based test:		
Yes	12,80%	19,50%
Rather yes than no	47,70%	55,40%
Interactivity (out of 5)	4	1
Quality of audio files (out of 5)	3	4
Which would you prefer		
Yes	30,8%	13,3%
Rather yes than no	24,1%	20%

Unfortunately, the interactivity can't be enhanced due to the platform capabilities and features.
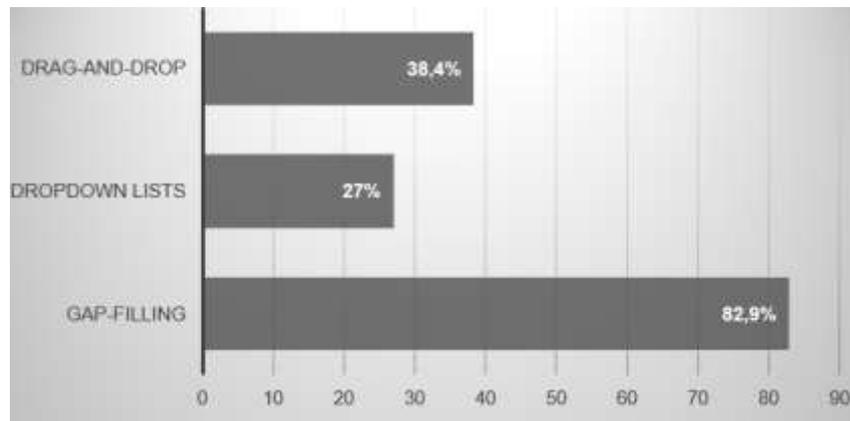
Figure 3. The most inconvenient types of tasks mentioned by students

We asked students which task they found the most poorly adapted to use. Students had both types of tasks: open gap-filling and banked gap-filling. However, while in an open gap task students are not given any words to choose from, in banked gap-filling tasks, the words removed from the text can be found before or after the text, and they simply needed to decide which word in the list of words after the text is suitable for which gap in the text, 82,9% of students reported any gap-filling tasks as the most uncomfortable ones. Students explained their frustration by incomprehensibility of instructions for given tasks as it wasn't clear enough what word form must be used for an answer. But we can state here that gap-filling being one of the most difficult tasks is an unwanted one at the same time. Also, 38,4% of students mentioned drag-and-drop type of tasks as uncomfortable. Here we may consider some technical problems, based on the incompleteness of the platform which doesn't allow to complete this type of task from mobile devices.

A positive achievement of Eng2 is its extended student exposure to English language content up to three hours a week. Despite the numerous complaints from the students we managed to design an extensive English as a foreign language course. The percentage of learners who admitted the role of Eng2 in their preparation outweighs that of Eng1. Objective results of the final computer-based test show a 17,6% -increase of students' performance after Eng2 completion in the end of the year.

On the whole, open question on Eng2 quality produced controversial answers from words of gratitude to strongly negative evaluations. The conclusion is for a distant language course to be beneficial it must have a mature adult learner with inner motivation, self-discipline and prospective goal.

We asked students to describe in a few words their feelings and moods during the pandemic lockdown and distance education and if they are willing to continue the education in online form. The results are presented in fig. 4. As can be seen 30,2% of students described the time during distance education as convenient, but the majority of students were not optimistic - the time appeared to be boring, useless, hard for them. Among others students used the words: unusual, depressively, unpleasant, uncomfortable, bearably, drearily, tediously, amorphic. As a result, 42,1% of students said no to distance education and 25,1% said rather no than yes.
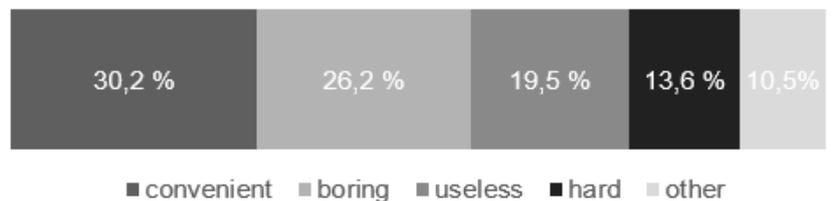
Figure 4. Moods and feelings during distance education

4 Conclusion

Online education is here to stay, and only through monitoring, evaluation and constant improvements, educational institutions will be able to ensure that they maintain and expand online offers for foreign language courses of high quality. The fact that students performed well during the final test is a good indicator of satisfaction. The results can be seen as an opportunity for necessary improvements, further development and important changes for courses to offer more effective online solutions.

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