Original scientific paper

TEACHING LANGUAGES FOR MEDICAL PURPOSES WITH TECHNOLOGY: WHAT TO TAKE TO THE DIGITAL CLASSROOM

Irina Markovina, Varvara Krasilnikova

Sechenov University, Moscow, Russia
E-Mail: markovina_i_yu@staff.sechenov.ru krasilnikova_v_g@staff.sechenov.ru

Abstract. *The article focuses on the experience of online language learning in the time of the COVID-19 pandemic at Sechenov University (Moscow, Russia). Due to the differences in accepted professional communication practices in medical sphere in Russia and abroad there is a need of commenting, propagation and constant focusing on the part of the instructor. The aim of this research was to obtain a clear and a detailed picture of medical students' attitude towards the change in the mode of delivery in teaching languages for medical purposes, which occurred during the lockdown and triggered a sudden shift in the roles. We analyzed the technologies used, the alterations to the academic content, modes of delivery, and the student's attitude towards ESP/EMP employing mainly a quantitative methodology of gathering and analyzing data. The survey of the students showed that, though there is a strong preference in favor of technology use and more independent learning, they fully understand the role of the instructor in the process.*

Key words: *ESP/EMP, technology, online learning, communication skills*

1. INTRODUCTION

The foreign language, due to its meta-disciplinarity, is a unique subject where methods of teaching and the selection of academic content are largely governed by the age of the students, their needs and previous competences. When it comes to English for medical purposes in Russia, it means that at the basic level the students need the skills enabling them to understand the professional text properly and retract necessary information from it (Марковина, Ширинян 2012): listen to a lecture, read a textbook or an article, take notes, identify, understand and express the main idea, supporting details, comparison and contrast, stance, arguments, references, cause and effect. These skills are provided for all first-year medical students within a compulsory language course. In senior years, they need the skills which would support participating in clinical and research conferences: applying for participation in a research conference, writing and submitting research articles, reading and summarizing articles in a foreign language, understanding and completing hospital charts, understanding and writing letters of reference, discharge letters, taking a history,

examining the patient, discussing diagnosis, explaining investigations, treatment, effects of medication, etc. These routine jobs involved in professional communication are entangled by the difference in accepted communication practices in Russia and abroad, which require commenting, propagation and constant focusing on the part of the instructor.

The COVID-19 pandemic and the following lockdown led universities all over the world to rethink modes of delivery for a number of subjects, including the foreign language, in terms of use of technologies which allow for continuing of learning in isolation. While the issue of the influence on the pandemic on the modes of delivery in foreign language teaching required further investigation, there is already some feedback on the use of technology in language teaching ranging from reviews of online training courses on teaching English online (Codreanu 2020) to the use of technologies by ESP practitioners in specific countries (Constantinou, Papadima-Sophocleous 2020), suggestions for professional development (Constantinou, Papadima-Sophocleous 2020), challenges of online language learning (Krishnan et al. 2020), the effect of developed blended learning model on learning outcomes (Syahri et al 2020), motivation for online language learning (Prasangani 2020), and the attitude of the students to online language learning (Tamayo-Maggi 2020).

The papers mentioned here show a spectrum of attitudes to online teaching and learning varying across the nations and probably from university to university but the authors generally agree that online methodology and resources should be well integrated with the traditional classroom learning to fit the students' needs.

Thus, the aim of this research is to obtain a clear and a detailed picture of medical students' attitude towards the change in the mode of delivery in teaching languages for medical purposes, which occurred during the lockdown. The transfer to online classes occurred overnight revealing sensitive gaps in the students' readiness to study all the subjects of university curriculum online.

2. MATERIALS AND METHODS

The study mainly employed a quantitative methodology of gathering and analyzing data. The tool used for the data collection was an online questionnaire administered using Google Forms for students. The questionnaire contained 11 open-ended questions that were compiled based on literature review, and interviews with the students and the faculty members (see Appendix 1).

The respondents were the students of the program "Translation for medical purposes". The questionnaire was completed in Russian. By January 30, 2021 there were 100 completed questionnaires returned.

The questions were centered around the novel practice of online learning including the software used for online classes, digital tools, the advantages and limitations of online language classes, the suitability of online classes for the acquisition of communication skills, The proportion of oral and written activities, the changes of the students' attitude to learning the language, the conclusions about the feasibility of online learning the language, and the preferred course structure and mode of communication. The respondents were offered several options to choose and could also leave their comments.

3. RESULTS

The absolute leader among the applications used for communication by 100% students and teachers was ZOOM. As optional applications tried a single time, students mentioned Google Meet and Skype (6% each), Yandex Telemost (3%), Google Hangouts and Google Classroom (1% each) (Table 1).

As for digital tools used at an online lesson, students selected screensharing function (92%), chatroom 70%, Google Classroom 68%, listening to recordings during the conference 67%, watching video during the conference 62 %, breakout rooms 56%, using whiteboard 44%, Google Documents 38% (Table 2).

When asked about the changes in the amount of face-to-face online learning, more than a half of the students believed that the number of oral (63%) and written (57%) assignments done in class remained unchanged as compared to offline leaning (Table 3).

Much in the same way, more than a half of the students reported no changes in the scope of oral or written homework (57% and 56%, respectively) (Table 4).

The skills more easily acquired online were ranged by the students the following way: first came active listening (36%), then writing (34%), speaking (23%), and reading (7%) (Table 5).

The changes in the attitude towards learning after the online experience were described by the students in the following way: 64% admitted they could better manage their time while learning online, 46% started feeling more responsible as the result depended entirely on themselves, 27% felt less responsible as there was no immediate contact with the teacher, only 6% believed that online classes were keeping them from managing their time properly (Table 6). The students also commented that learning became more comfortable as they could join the class from any spot with internet connection, their attendance had improved, they had less fear of speaking the foreign language. There was also an alarming comment that "some teachers started to be less responsible about marking the students' papers".

The most important advantage of learning/teaching the foreign language online was seen by the students as an opportunity of making a screenshot of the assignment and using it while preparing for the next lesson (78%). The next valuable option, in the students' opinion was seeing the corrections in their papers immediately on the screen (46%), 43% saw as an advantage the opportunity to compare their own papers and the papers of other students, 39% marked the opportunity to simultaneously edit the same document and see the alterations at once, 35% saw as an advantage the opportunity to record a part of a lesson or the whole lesson, 34% the opportunity to learn the language with a native speaker, 19% valued the opportunity of marking out the text for reading right on the screen, and 5% admitted that they have never done anything of the above (Table 7).

The students commented on the advantages of online learning the following way: "I don't have to waste time commuting", "I can quickly make a summary of the lecture on my computer", "I can join the class at any time whereas when I had to come to the lecture room, I was always late and often missed classes".

As for the limitations of online learning and teaching, the students believed that the principal one was bad connection (42%) closely followed by inability to concentrate when learning at home (37%) and having to concentrate more on the technical side of preparation (35%), 26% pointed out that it was rather difficult to ask the teacher questions or ask for explanation, 15% chose as a limitation the inability of their counterparts to use digital tools properly, 5.1% expressed an opinion that foreign language cannot be learned online (Table

8). Among the comments, there were regrets that some teachers used free ZOOM accounts, which did not allow for full functionality, but the majority of comments were that the shortcomings were easy to overcome.

When asked to select true or false statements about learning the foreign language online, 61% of students chose "learning the language online is a logical result of the development of technology", 55% "learning the foreign language online gives a lot of new exciting opportunities", 35% "it is more difficult to learn the foreign language online than offline", almost equal number (33%) believed that "it is easier to learn the foreign language online than offline", and only 5% considered that "the foreign language cannot be learnt online" (Table 9).

As the preferred mode of learning the foreign language 27% of the students chose MOOC + doing assignments in Google Classroom + learning online with a teacher, 22% preferred MOOC + doing assignments in Google Classroom + learning offline with a teacher, 20% preferred Google Classroom + learning online with a teacher, and 13.1% (13) - Google Classroom + learning offline with a teacher. Learning the language offline with a teacher, learning the language online with a teacher, MOOC + learning the language online with a teacher each was preferred by 5% of students each (Table 10).

5. DISCUSSION

Blended language learning experience at Sechenov university was not a deliberate choice but rather the effect of the pandemic. Although there had been efforts to integrate a LMOOC into the course in the framework of "flipped classroom" the idea of face-to-face communication with the students through an online service, let alone fully online learning, had never been put forward.

Currently existing delivery models for online language learning - formal online language courses; virtual worlds; LMOOCs (Language Massive Open Online Courses); online language learning communities; and mobile apps for language learning (Hockly 2015) – though undoubtedly cost-effective, have a number of limitations.

Its heavy reliance on tests in progress assessment (formal online language courses, LMOOCs, mobile apps), or lack of assessment (virtual worlds, online language learning communities). In the ideal world, the former would lead to the acquisition of "standardized" speech patterns applicable in a limited number of situations, which definitely will not promote free communication, the latter – to picking up speech patterns from counterparts in communication which may be understandable but incorrect or running counter social and professional conventions.

From the student's perspective, online learning demands clear motivation, good time management skills and responsibility. In the medical student's busy routine, motivation can easily be inhibited by more pressing challenges, as for responsibility and time management skills, the survey showed that the students do not consider them to be their strong points: 46% of students admit feeling more responsible after the experience of online learning as the result depends entirely on themselves, but 27% (about 1/3) feel less responsible as there is no immediate contact with the teacher; 64% of students admit they can better manage their time, 6% say they cannot manage their time, for 30% of students the situation has not changed.

With this in mind, the course looked very much like "old wine in new bottles" (Bates 2015), face-to face communication was held as a ZOOM conference (the choice of both the instructors and the students) supplemented by doing written assignments in Google Classroom. Zoom was

chosen due to its wide functionality and user-friendly interface. Both media allowed for effective communication but excluded immediate contact between the people taking part in the process. Unfortunately, sometimes it was impossible to make the most of the all-important tools: only 70% of students had an experience of using breakout rooms (indispensable when roleplaying, or performing any individual task in small groups online).

On the part of the students, there is an expectation of multi-component (blended) learning with a strong preference (57%) of ZOOM face-to-face classes.

6. CONCLUSION

Integration of learning with technology is definitely subject-specific and goal-specific. Learning a foreign language independently is acceptable if there is no need for certification and the only goal the student is planning to achieve is communication limited to speech understanding. Since learning a foreign language for medical purposes implies not only understandable and grammatically correct speech but also sticking to certain social and professional conventions it demands continuous participation of an instructor whose role is permanent assessment of the students' activities, explaining mistakes and making them another useful tool of learning.

As online teaching seems to have become an integral part of university educational process, we find the data obtained in this survey both important and useful. Based on the data obtained in this paper, we have started to design professional development programs for the faculty that focus on particular digital skills mentioned by the survey participants. This will help to bridge the gaps, which hinder online activities at language classes. Another idea is that some of the subjects of medical translation program will be digitalized as the students find this form of learning more efficient, which is a positive outcome of the changes brought by the current COVID-19 pandemic.

REFERENCES

Bates, A.W. 2015. Teaching in a Digital Age https://opentextbc.ca/teachinginadigitalage

Codreanu, F 2020. Teaching English Online: From Course to Practice, ATN: Languages for specific purposes, vol. 20, nr. 3/2020 pp.29-37

Constantinou, E.K., Papadima-Sophocleous, S., 2020. The Use of Digital Technology in ESP: Current Practices and Suggestions for ESP Teacher Education, The Journal of Teaching English for Specific and Academic Purposes Vol. 8, No1, Special Issue, 2020, pp. 17-29

Krishnan, I.A., Ching, H.S., Ramalingam, S.J., Maruthai, E., Kandasamy, P., De Melo, G., Munian, S., Ling, W.W., 2020. Challenges of Learning English in 21st Century: Online vs. Traditional During Covid-19 Malaysian Journal of Social Sciences and Humanities (MJSSH), Volume 5, Issue 9, 2020, pp. 1 – 15

Prasangani, K.S.N., 2020. Motivation to Learn English via Online during Novel COVID 19 Period, GARI International Journal of Multidisciplinary Research Vol. 6, Issue 2. 2020, pp. 05 - 14

Syahri, I., Siagian, S., Simbolon, N., 2020. Learning Model Development Blended Learning English Advances in Social Science, Education and Humanities Research,

volume 488, Proceedings of the 5th Annual International Seminar on Transformative Education and Educational Leadership (AISTEEL 2020) pp.462-465

Tamayo-Maggi, M.R., Cajas-Quishpe, D.C., 2020. Students´ perceptions towards learning English online: An exploratory study at a Language Centre of an Ecuadorian University, Dominio de las Ciencias, Vol. 6, núm. 2, abril-junio 2020, pp. 659-675

Марковина И.Ю., Ширинян М.В. 2012: Марковина И.Ю., Ширинян М.В. Иностранный язык в неязыковом вузе на постдипломном этапе обучения: потребности и перспективы (на примере медицинских вузов)// Модернизация системы подготовки по иностранному языку в неязыковых вузах. – М.: Рема, 2012. – С. 54–61. (Вестн. Моск. гос.ун-та; вып. 12 (645). Сер. «Педагогические науки»)

APPENDIX 1

Table 1. Which applications, web-services or web-based platforms
were you using during the pandemic to learn the foreign language?

Choice options	Students' choice
ZOOM	100%
Google Meet	6%
Skype	6%
Yandex Telemost	3%
Google Hangouts	1%
Google Classroom	1%

Table 2. Which digital tools were you using to learn the foreign language?

Choice options	Students' choice
Screensharing	56%
Chatroom	70%
Google Classroom	68%
Listening to recordings during the conference	67%
Watching video during the conference	62%
Breakout rooms	56%
Whiteboard	44%
Google Documents	38%

Table 3. How did the scope of face-to-face work change after going online?

Choice options	Students' choice
No changes in the scope of written assignments	63%
No changes in the scope of oral assignments	57%
More oral assignments	27%
More written assignments	20%

Table 4. How did the scope of homework assignments changed after going online?

Choice options	Students' choice
No changes in the scope of written homework	57%
No changes in the scope of oral homework	56%
More written homework	36%
More oral homework	15%

Table 5. Which skills are more easily acquired online?

Choice options	Students' choice
Active listening	36%
Writing	34%
Speaking	23%
Reading	7%

Table 6. How did your attitude towards learning change after the online experience?

Choice options	Students' choice
I can better manage my time	64%
I started feeling more responsible as the result depends entirely on me	46%
I feel less responsible without immediate contact with the teacher	27%
I cannot manage my time	6%

Table 7. What are the advantages of learning a foreign language online?

Choice options	Students' choice
I can make a screenshot of the assignment and using it while preparing for the next lesson	78%
I can see immediately on the screen the corrections in my papers	46%
I can compare my papers and the papers of other students	43%
We can simultaneously edit the same document and see the alterations at once	39%
I can record a part of the lesson or the whole lesson	35%
I can learn the language with a native speaker based abroad	34%
The teacher can mark out the text for reading right on the screen	19%
I have never done anything of the abovementioned	5%

Table 8. What are the limitations of learning a foreign language online?

Choice options	Students' choice
Bad connection	42%
I cannot concentrate when learning at home	37%
I have to concentrate more on the technical side of preparation	35%
It is more difficult to ask the teacher questions or ask for explanation	26%
Other participants have difficulty using digital tools	15%
Foreign language cannot be learned online	5.1%

Table 9. Which statements about learning a foreign language online are true?

Choice options	Students' choice
Learning the language online is a logical result of the development of technology	61%
Learning the foreign language online gives a lot of new exciting opportunities	55%
It is more difficult to learn the foreign language online than offline	35%
It is easier to learn the foreign language online than offline	33%
Foreign language cannot be learnt online	5%

Table 10. In which mode would you prefer to learn the foreign language?

Choice options	Students' choice
MOOC + doing assignments in Google Classroom + learning online with a teacher	27%
MOOC + doing assignments in Google Classroom + learning offline with a teacher	22%
Google Classroom + learning online with a teacher	20%
Google Classroom + learning offline with a teacher	13%
MOOC + learning the language online with a teacher	5%
Learning the language offline with a teacher	5%
Learning the language online with a teacher	5%