Being at the Forefront of Change- on the Necessity of Integrating AI Tools in Business English Courses

Eleonora Bâcă
"Ovidius" University of Constanta, Faculty of Letters, Romania
eleonorabaca@yahoo.com

Abstract

The present research is a needs-analysis approach given a possible large-scale introduction of AI-learning systems and AI-based teaching, adapted to Business English courses. Creating an adaptive learning medium to provide students with personalized learning content matched to their anticipated learning advantages is essential for present academic education. Our contribution to the existing literary perspective is based on a survey that presents students' opinions regarding how AI-powered technologies can be efficiently used for language learning and teaching. For this purpose, we designed a survey and collected information concerning students' experience and perception of AI tools, the aspects of these systems that students favor, students' engagement and motivation to use AI tools, their personal preferences and adaptability, and the foreseen long-term impact of these systems on their professional lives and education.

Key words: integrating AI tools, AI language teaching and learning, Business English, needs-analysis, AI in BE courses
J.E.L. classification Z13

1. Introduction

The large-scale use of AI, cloud technology, the analysis and storage of considerable amounts of data, and the invention of the Internet of Things, inevitably bring on our horizon mental and technological revolution. In addition to skills related to their future professional field of activity, students need to acquire knowledge and skills related to incorporating and using data analysis in their future profession, as well as to manage to transfer their skills across the content of various disciplines. This entire adaptation and the refocusing process requires a considerable amount of personal involvement, on the one hand, and considerable logistic support from the educational system and the teaching staff, on the other.

The departure from traditional forms of teaching was perfected years ago, through the adoption of blended learning systems, which introduced various learning platforms such as Moodle, Teams, Webex, Google Meet, dedicated to synchronous or asynchronous forms of teaching. The advantages, as analyzed by researchers are numerous ranging from accessibility, affordability, flexibility resources-management, and self-empowerment (A. Popescu, 2020, p. 458).

AI language learning is a multi-faceted and complex type of experience that can come in different forms: with learning platforms (Duolingo, Rosetta Stone, Babel)- offering personalized flexible learning structures and instant feedback to learners; chatbots (ChatGPT, Claude 3, Gemini) can create conversational practices based on real-life scenarios; language assessment tools (Grammarly or Language Tool) with grammar, spelling, and writing suggestions; virtual classroom platforms with AI-integrated features very useful in collaborative projects, with embedded speech recognition, natural language processing, or sentiment analysis capacities; language translation tools in context (Google Translate or DeepL), useful with complex documents; pronunciation training and personalized learning paths, recommending specific resources to correspond to individual learning purposes; data analytics tools that can measure both the effectiveness of the strategies being used and the learners' progress over time, enabling both instructors and students to optimize their resources and overcome their difficulties.

The Artificial Intelligence teaching system which can used in Business English courses integrates a computer-aided English teaching tool that provides an adaptive learning medium meant to offer students personalized learning content tailored to their previsioned learning benefits. For teachers, it reduces the burden of teaching, on the one hand, and gives a more targeted approach to students' needs.

The rationale for incorporating AI tools in teaching Business English is based on the expectations that these tools can greatly enhance the learning experience for students because AI can create personalized learning ways based on individual features. It can enhance strengths and help identify and overcome weaknesses in a record period by providing real-time feedback on tasks. This personalized approach allows students to progress at their own pace in a shorter time. Moreover, providing real-time feedback on given tasks is a significant advantage. Students' responses can be analyzed from a more comprehensive point of view in terms of grammar, vocabulary usage, pronunciation, style, etc.

The immediate feedback given helps identify and correct errors leading to a faster improvement of language achievements. For both instructors and students AI can generate detailed reports on students' performance over time. Intellectual growth can be easily monitored and decisions on future goals can be better grounded and justified.

In terms of BE teaching necessities, AI can generate various interactive simulations, immersing students in meaningful language practice on given case studies, chatbots can simulate real-life conversations for students or with students, helping build confidence and develop necessary communication skills in a safe and supportive environment. For instructors, AI-powered analytics tools can generate valuable insights into students' performance and learning patterns over time and make useful comparisons and analogies allowing instructors to spot easier areas of improvement and adjustment of teaching methods. Courses can thus become more effective while students become more motivated to participate and more aware of their progress and learning goals.

2. Literature review

Various industries, including education, have been in continuous change under the impulse of technological development. Student information systems and learning management systems are in perpetual expansion and improvement, becoming more complex and elaborate to serve tasks such as assignment distribution, scheduling administration, communication, and student progress tracking (Watson & Watson, 2007, p. 32)

Following technological changes and the evolving needs of students in professional occupations, research on the use of AI in education has enjoyed great interest and a favorable ground for the integration of AI tools in BE courses. Intelligent- learning systems and computer-assisted tutoring orientate traditional systems toward a more personalized learning experience and training sessions based on the individual features of each student. (Owoc et al, 2021, p. 9). AI tools incorporated in BE courses add more flexibility, and versatility to the learning materials. They allow to be reused, easily shared and can be opened to collaborative development between the members of the learning community. Teachers have access to valuable resources that they can use in their professional practice and be aligned with the latest educational practices.

The future is here, and it is here to stay for good! In 2017 it was announced that AI systems were able to learn any spoken language and the predictions were that the number of virtual assistants and chatbots would increase as people start relying heavily on AI, the process becoming so widespread and subtle that AI will become natural (Kite-Powell, 2017). The usage in 2020 imposed more extensive and refined ways of utilizing AI in language teaching and learning such as assisting researchers in recognizing natural language processes, and combining AI with flipped learning in blended courses to improve language learning results while students are reported to feel more positive about learning English. AI can assist practitioners in teaching-related issues, and speech assessment is made feasible with the use of AI (Ali, 2020, p. 5). Starting with 2022, virtual language environments have been developed, using AI, to actively engage students and assist in language learning (Nguyen et al, 2023, p. 12145). Equipped with an unprecedented ability to process impressive amounts of data, elaborate complex patterns, and personalized insights, Chat GPT, an AI-power model, attracted the attention of educators in opening new paths for education and research

(Hong, 2023, p.38), (Fitria, 2023, p. 46). In 2024, this has become an everyday interaction and AI is commonly used to speed up language acquisition.

A further step in this new era of flexible and adaptive learning is marked by the integration of AI tools, which come with a range of technologies such as natural language processing, machine learning, and data analytics. Instructors are offered for the first time the possibility to access vast amounts of data, combine, and analyze to tailor their recommendations to students. In this context, we notice advantages such as personalized learning, interactive language practice, real-time feedback, context curation, and performance analytics.

Blended forms of learning bring a plus to the educational process in terms of time, learning form flexibility, place flexibility, and rhythm of learning; however, drawbacks can be listed such as students' lack of time management skills, (Popescu A., 2020, p. 460), to which lack of technical expertise in using AI technology can be added.

The promise of a more efficient system of education advanced by AI comes with several challenges and concerns- ethical concerns about privacy, security, and data ownership, which require an effort to develop transparent policies and solid safeguards to protect users and secure the appropriate use of AI technologies. Despite the apparent ease of accessibility and inclusiveness of such systems, there are still disparities in access to digital technologies, internet connectivity issues, and a lack of knowledge concerning their usage (Ayuns et al, 2024, p. 17), (Werfhorst et al, 2022, p. 4), (Heeks, R., 2022, p. 700). Interdisciplinary teams and pedagogical integration between educators, technologists, and curriculum specialists are needed to ensure the effective integration of AI technologies backed by professional development programs. At the same time, AI is unable to replace the human touch of teaching, therefore, the right balance between the two needs to be defined. Human educators motivate and provide emotional support and adequate mentorship in their interpersonal with students.

3. Research methodology

Starting from the idea that academic study involves a double-edged relationship between student and professor, we investigated the opinions of our students concerning the increase in the amount of AI technologies in our BE courses. A quantitative method of data collection was used, we designed a survey using a custom-constructed Microsoft Forms Questionnaire, and 105 students (aged 19 to 23), enrolled at the Faculty of Economic Sciences, Ovidius University of Constanta participated. The survey included both open and closed-response questions, and students were free to skip any items they did not feel comfortable with. The questions investigated students' experience and perception of AI tools, the aspects of these systems that students favor, students' engagement and motivation to use AI tools, their personal preferences and adaptability, and the foreseen long-term impact of these systems on their professional lives and education. All responses were anonymous.

4. Findings

Considering the difficult task of universities to do their best today to prepare professionals for tomorrow, we asked our students how they see the benefits of the interaction of AI tools in BE courses for their future careers or academic pursuits. The answers, apart from being an almost unanimous acknowledgment of the usefulness of AI technologies, included suggestions concerning the acquisition of necessary skills in future careers, learning vocabulary, even learning to communicate with AI, shortening time for various tasks, better connecting with technology, and understanding better the way it works, improved access to large amounts of data in a short time, AI provides templates which can be easily modified, according to the needs, AI is seen as a bridge between students and professors, it is important to evolve with technology, as it offers a better understanding of the systems and prepares for future career mobility.

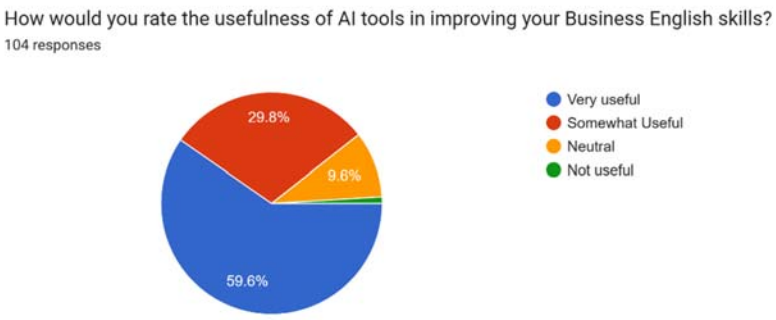
We also asked students if they consider that technology will play a significant role in language learning and education in the future. The 78 answers were unanimously positive and enthusiastic about the development of new technologies (better adapted to suit various needs, easier and better connectivity, availability of better access to information), it is worth mentioning that some of the positive answers were conditioned by the existence of human professors in the educational process,

who will be helped by AI technologies to perform better. The three negative answers to this question were concerned with the replacement of the human element and traditional teaching methods in this educational process which was introduced as a personal preference.

Students share valuable knowledge with us, and considering this, we asked them to suggest ways of improving the integration of AI tools in BE courses. Out of the answers we obtained several expressed the idea of using mainly AI tools for assignments, other suggestions concerned the optimization of the course content in terms of its accessibility, more AI-issued drills, AI to be used to increase the level of difficulty rapidly to avoid boredom, to initiate collaborative professor-student AI-based projects, AI tools to be used for remedial courses, and textbooks to be partly replaced by interactive apps. Since other studies indicated that in certain cases students' inclusion and access to the latest technology can still be an impediment, we asked students whether they can access the necessary technology (computers, internet connection, necessary devices) to effectively use AI in their studies, 93,3% of them opted for "yes". When asked about their experience with AI-driven language learning platforms, 80% of the respondents indicated that they are familiar with them, Duolingo being the most common option.

The second part of our survey was dedicated to students' perception of AI tools, they were asked to rate the usefulness of these in improving their BE skills. Out of 105 respondents, 59.6% consider it "very useful", 29.8% opted for "somewhat useful", 9.6% for "neutral", and 1% for "not useful". As you can see in *Figure no. 1*, the results indicate the interest of students in such forms of learning and their enthusiasm for the adoption of these systems.

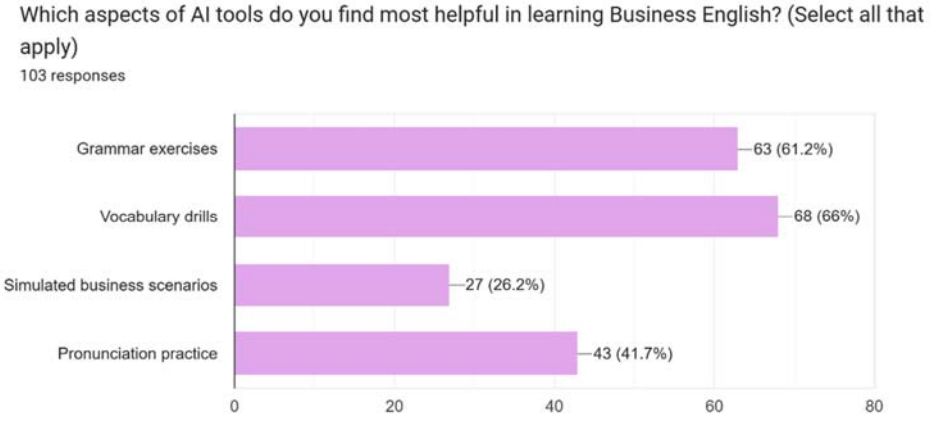
Figure no. 1 Indicating the usefulness of AI tools in improving BE skills



Source: data processed by the author

For a clearer image of those aspects, they particularly found relevant to their improvement, we asked our respondents to opt for the aspects of AI tools they consider most helpful in learning BE, (see *Figure no. 2*). Multiple choices could be ticked- the answers indicated that vocabulary drills, with 66%, and grammar drills with 61.2% are the leaders of this section, pronunciation practice 41.7% was next, while simulated business scenarios got 26%. The latest position occupied by business scenarios could be explained by the fact that most students who have more experience with chatbots, language learning platforms, and language translation or assessment tools have not experienced VR business scenarios (a hypothesis to be investigated).

Figure no. 2 Most helpful AI tools in learning BE

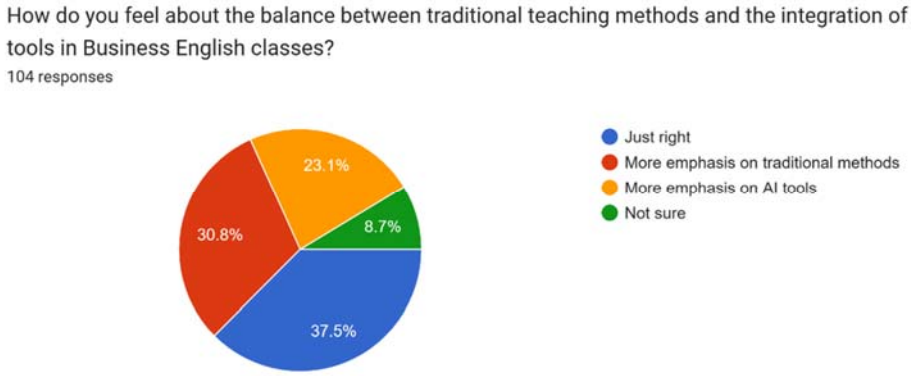


Source: data processed by the author

We further asked students to indicate whether they think that the integration of AI tools can enhance their engagement in BE courses. The answers received vary from" strongly agree"- 43.3%, to "strongly disagree"-2.9%.

When asked to indicate the right balance between traditional teaching methods and the integration of AI systems in BE courses (see *Figure no. 3*), 37.5% considered it to be "just right" the way it is, 30.8% requested more emphasis on traditional methods, 23% more emphasis on AI teaching, while almost 9% were biased.

Figure no. 3 Balance between traditional teaching methods and the integration of AI tools in BE courses



Source: data processed by the author

5. Conclusions

Since technological development has altered the traditional pattern of accumulating, processing, and transmitting knowledge between individuals both horizontally and vertically, accelerating and putting enormous pressure on individuals, it is obvious that to adapt to these new societal challenges, people must actively learn to accommodate them dynamically. AI is a promising tool in this respect, offering revolutionary methods to support and enhance student learning. Students' well-being and mental state security should not be neglected, and the tiredness levels have to be continuously monitored, part of this process falling into AI's task.

Future directions of development of AI in BE education show an impressive potential in several key components: better natural language understanding which will create more interactive learning experiences, adaptive learning ecosystems with entirely AI-driven platforms incorporating learning resources, assessments, and feedback reports; augmented reality and virtual reality which will come with entirely immersive learning experiences of real-world business case studies (in which students conduct virtual meetings, negotiate with business partners, engage in cross-cultural communication in realistic settings); collaborative learning spaces in virtual classrooms populated with AI chatbots and intelligent tutoring systems from which learners can connect to mentors, peers, professionals interested in learning and knowledge sharing. Overall, while promoting collaboration and growth among teachers, for students such systems bring a more dynamic and effective learning environment.

An aspect not to be neglected in this high-tech system we are striving to develop is that in the complicated fabric of education, student well-being serves as the golden thread that connects the circumstances for successful learning. Just as a plant grows in good soil, a student's well-being serves as the foundation for effective learning. Furthermore, well-being goes beyond the classroom, influencing people's entire development and future achievement. Educators inspire students to cope with life's problems with resilience, empathy, and a sense of purpose. A healthy learning environment is achieved when students' well-being improves, and learning thrives, allowing them to attain their full potential and become lifelong learners, ready to embrace the world with open minds and hearts.

Despite the unanimous approval of using AI in educational settings, barriers can be foreseen in a certain amount of resistance to change, limited teacher training programs, and limited resources for technological infrastructure.

6. References

- Ali, Zuraina., 2020. Artificial Intelligence (AI): A Review of its Uses in Language Teaching and Learning. *IOP Conference Series: Materials Science and Engineering.* 769. 012043. 10.1088/1757-899X/769/1/012043.
- Ayuns Luz, Edwin Frank, Sheriffdeen Olayinka Kayode, 2024. *Digital Inequality: Examining the unequal access to digital technologies and the resulting disparities in opportunities, resources, and information.* https://www.researchgate.net/publication/378704510_Digital_Inequality_Examining_the_unequal_access_to_digital_technologies_and_the_resulting_disparities_in_opportunities_resources_and_information
- Heeks, R., 2022. Digital inequality beyond the digital divide: conceptualizing adverse digital incorporation in the global South. *Information Technology for Development*, *28*(4), 688–704. https://doi.org/10.1080/02681102.2022.2068492
- Herman G. van de Werfhorst, Emma Kessenich, Sara Geven, 2022. The digital divide in online education: Inequality in digital readiness of students and schools, *Computers and Education Open*, Volume 3,100100, ISSN 2666-5573, https://doi.org/10.1016/j.caeo.2022.100100
- Fitria, T. N. (2023). Artificial intelligence (AI) technology in Open AI Chat GPT application: a review of Chat GPT in writing English essay. *ELT J. English Lang. Teach.* 12, 44–58. https://doi.org/10.15294/elt.v12i1.64069
- Hong, W. C. H., 2023. The impact of Chat GPT on foreign language teaching and learning: opportunities in education and research. J. *Educ. Technol. Innov. 5*, 37–45. https://doi.org/10.61414/jeti.v5i1.103
- Kite-Powell J., 2017. The Role of Artificial Intelligence and Language. (online) *Forbes*. Available at: https://www.forbes.com/sites/jenniferhicks/2017/12/30/the-role-of-artificial-intelligence-and-language/, [Accessed 26.05.2024]
- Lizhen Shi, Arshad Muhammad Umer & Yanting Shi, 2023. Utilizing AI models to optimize blended teaching effectiveness in college-level English education, *Cogent Education*, 10:2, 2282804, DOI: 10.1080/2331186X.2023.2282804
- Nguyen, Long Quoc, and Ha Van Le, 2023. Enhancing L2 learners' lexical gains via Quizlet learning tool: the role of individual differences. *Education and Information Technologies* 28, pp 12143-12167. https://doi.org/10.1007/s10639-023-11673-0
- Owoc, M.L., Sawicka, A., Weichbroth, P., 2021. Artificial Intelligence Technologies in Education: Benefits, Challenges and Strategies of Implementation. In: Owoc, M.L., Pondel, M. (eds) Artificial Intelligence for Knowledge Management. AI4KM 2019. *IFIP Advances in Information and Communication Technology*, vol 599. Springer, Cham. https://doi.org/10.1007/978-3-030-85001-2_4

- Popescu, A., 2020. Essential Aspects of Blended Learning. *Ovidius University Annals. Economic Sciences Series, XX(2)*, pp. 456-462.
- William R. Watson, Sunnie Lee Watson., 2007. An argument for clarity: what are learning management systems, what are they not, and what should they become?, *TechTrends, 2007, 51(2),* pp.28-34.