EMI and immersive language teaching at Technical Tertiary School of Ukraine: Readiness of students and teachers assessment

Yuliia Baklazhenko

DOI: 10.18355/XL.2024.17.01.06

Abstract

The article develops the topic of EMI and immersive language learning in the context of the readiness of the participants of the educational process to implement this approach in a non-native language environment. The background to this implementation in the context of the newly-established state policy of English development in universities and the draft law on the use of the English language in Ukraine is described, stressing the new stage of relevance of the topic. In order to assess the readiness for EMI introduction in the universities, a survey of students (n=1383) and teachers (n=86) of Igor Sikorsky Kyiv Polytechnic Institute was held. The topics of the survey were 1) assessment of the current state of language proficiency and instruction (including self-assessment of proficiency in EGP and ESP, satisfaction with the current state of instruction); 2) assessment of the possibility and benefits of EMI introduction (readiness and eagerness to this introduction, benefits for the language, Majors instruction as well as future employment; 3) preferred parts of instruction that can be organized within EMI approach; 4) recommendations and opinions given by the participants of the survey regarding introduction of EMI in the university. The survey results present the starting point for the potential deployment of the EMI immersion approach at higher educational institutions.

Key words: immersive learning, ESP, EMI, tertiary schools

Introduction

The method of immersive learning, or immersion, first developed by Canadian teachers in the twentieth century, can be understood as "foreign language learning integrated with teaching other academic/professional subjects for providing students with the best means of acquiring their target language for professional communication" (Walker & Tedick, 2000 in Tarnopolsky, 2013). As put by Tarnopolsky, "if teaching content absolutely dominates, we have English as a medium of instruction only and not something that is purposefully and systematically taught. This situation emerges when we are teaching some other subject through EFL in a university course on such a subject – and here the term "immersion" is much more suitable since no conscious focus on language is suggested by the term itself" (Tarnopolsky, 2013: 6). That is why, in our understanding, the term "immersion" and EMI (English as a medium for instruction) can be used in the same meaning, as in both cases English acts solely as a means of teaching, and not as the subject matter of learning.

Over the last decades, the method of immersion or EMI approach has been the focus of attention of many researchers. This is mostly due to its undoubtful benefits and potential to simultaneously develop content knowledge and language skills, as well as to contribute to globalised learning and making a higher educational institution visible on a global scale. Language in immersion or EMI is not the target of instruction but rather a tool for learning the content. In this way, an environment for natural language development and acquisition is created apart from forming competences in majors. Thus, immersion or EMI incorporates authentic language use, exposing students to real-world applications of the language within the context of the subject matter. Students use the language to explore, understand, and express ideas related to the being taught. Simultaneously, immersion, subject or EMI,

interdisciplinary learning, as students engage with content from various disciplines while using the target language. This, in turn, helps improve critical thinking skills, problem-solving abilities, and overall academic achievement.

Lately, a change in the understanding of the term *immersive learning* happened, shifting the focus from the natural language environment (using authentic teaching materials and the language learned as a means of communication during the lessons) to using technology to create virtual or augmented realities, incorporating multimodality and specifically-generated scenarios. In the latter understanding, immersive learning is studied by Dengel et al. (2021), Gaspar et al. (2020), Goebel and Sonntag (2017). However, we will use the term in its first meaning in this article, regardless of whether the technical means were involved.

In our research, we will discover how the attitudes towards the implementation of immersive learning and EMI may be found and analysed before the deployment of these approaches at tertiary schools.

Methodology

The survey uses both qualitative and quantitative research methods. Qualitative research methods provide insight into the development and the current state of immersive learning and EMI at tertiary schools in Ukraine, as well as the potential and challenges of its utilization. Quantitative methods of data analysis were used to process the results of the survey held in 2023 among students and teachers of Igor Sikorsky Kyiv Polytechnic Institute.

Background

Effective implementation of any kind of educational technology, approach, method or even means of teaching should be based on preliminary research of the background to such implementation and the readiness of the participants of the process. These preparatory surveys are the basis for further developments and the grounds for discussing whether the action should be taken. The questionnaire designed for teachers and students of Kyiv Polytechnic Institute aimed to assess their readiness to introduce immersive learning and EMI in the university.

Like in many technical higher educational institutions in Ukraine, the ESP approach is the prominent approach to teaching the English language used within the university (Tarnopolsky, 2018). Starting from the third year of study (for some specialities, even earlier), students begin to dwell on the peculiarities of English for the purposes of their profession. However, higher educational institutions often face difficulties with the implementation of ESP. Antonenko (2020) mentions the absence of a national ESP curriculum in Ukraine, as well as generally accepted criteria in content, methodology, course organization, assessment, and learning outcomes, as the main reasons for the lack of consistency in ESP syllabuses in terms of structure and content which leads to failure to fully meet the requirements of the employment market. It should be noted that this approach can present an additional load on educators to design specially tailored English teaching materials, textbooks, lesson plans, and assessment means due to the scarcity of such materials from well-established publishers in special fields (e.g. Natural Sciences, Formal and Applied Sciences, etc.). Another problem associated with ESP is the lack of time devoted to teaching the discipline (Babushko & Solovey, 2020) due to ESP's somewhat 'secondary' status in a curriculum compared to Major disciplines, as often perceived by the students. This also entails the problem of motivation and lack of enthusiasm based on the subjective belief that it is impossible to achieve any solid results within the little time devoted to ESP. A way to increase the outcomes of language learning may lie in shifting the focus from language learning itself to using the language as the medium of instruction or an immersive approach.

The potential of immersive learning has long been the focus of attention. Recent research (Hao & Zhao, 2021) stresses the positive effect of its application on developing a good learning attitude, consolidating academic achievements, autonomous learning ability, and improving listening, speaking, reading, and writing abilities. In Ukraine, the first scientifically described and experimentally tested positive results were presented by Tarnopolsky, V. Momot, S. Kozhushko, Z. Kornieva et al. back in 2008 (cited in Tarnopolsky et al., 2008). Some publications from scholars of other Ukrainian HEI appear in periodicals stressing the importance of the immersion method and presenting the results of its implementation (mostly partial, though, within only some disciplines) (Babushko & Solovey, 2020; Vernyhora, 2016). This is explained by the fact that previously, higher education institutions had the right by law to decide on teaching the subjects in English, but only on condition that all students who study the relevant subjects are proficient in English. This fluency among all the participants in the education process was difficult and impossible to attain.

The new wave of interest in the topic and its relevance in Ukraine is connected with the development of conceptual state policy on English language use in universities (2019). The scope of this state policy covers teaching English as a foreign language, in particular English for professional purposes (ESP), teaching professional disciplines in English as a component of the Ukrainian-language program (EMI-u) and provision of a full educational program in English for foreign students (English as Medium of Instruction for Foreigners – EMI-f). According to the strategy, active implementation of EMI in universities will contribute to such positive results as:

- internationalization of universities thanks to greater academic mobility of staff and students in Ukraine
- strengthening of the international profile for scientific research in Ukraine due to increased opportunities for teachers to share their work at international events and through academic publications in English
- increasing the potential in Ukraine to attract international staff and students (with financial benefits for the universities they provide)
- greater academic and professional opportunities for staff and students
- greater access to graduates of double degree programs
- increased student access to modern and technologically advanced resources in English, which can be viewed freely on the Internet (often through international universities)
- graduates who are proficient in the English language within their field of expertise are better able to contribute to the labour market
- on a global scale, employing graduates who are fluent in English can help companies become more competitive at the national level and outside Ukraine (State Policy on the English Language, 2019).

Adoption of the state policy was followed by another important event in the development of English language teaching in Ukraine – approving the draft law of Ukraine, "On the use of the English language in Ukraine" (2023), which will release the universities from the beforementioned bound to only teach disciplines in English provided all students are fluent in this language. The universities, by the draft law, will enjoy the right to offer instruction in most disciplines in English regardless of their English proficiency level.

It is against this background that the survey of the attitudes and readiness towards EMI implementation in one of the biggest universities of Ukraine was implemented. The aim of the survey is to assess the current state of the English level instruction, the

readiness and eagerness of the participants to engage in the EMI model, the connection between the level of proficiency and such eagerness, as well as opinions of the participants on the possible changes.

Scope and Limitations

The survey was held in spring 2023 among the students (n=1383) and teachers (n=86) of Igor Sikorskyi Kyiv Polytechnic Institute. All the participants gave their informed consent for their answers to be processed and analysed for the purposes of scientific research. The respondents were asked to answer Likert-scale questions and an open question regarding their opinions and proposals for implementing EMI. The poll of students was homogeneously presented by both female and male students, with a slightly bigger number of male students due to the traditionally higher popularity of technical disciplines among the latter. The respondents were from all years of study, as represented in Table 1.

Table 1: Characteristics of the students` poll of respondents

Sex	Male				Female		
%	56.7				43.3		
Year of study	1	2	3	4		5	6
%	28.5	26.2	19.1	17.9)	7.8	0.5

Teachers who took part in the questionnaire (n=88) were academics of technical departments of the university. It should be noted that language teachers did not participate in the research as the aim was to establish whether the lecturers from technical departments could provide EMI. The majority of teachers were men; the representation of teachers with different spans of work experience was relatively even (see Table 2).

Table 2: Characteristics of the teachers' poll of respondents

Sex	Male				Female		
%	61.4				38.6		
Years of experience	under 5	5-10	10-15	15-	20	20-25	Over 25
%	21.2	21.2	17.6	12.	9	17.6	21.2

This study, as any opinion poll, suffers from several limitations. First af all, despite the substantive number of respondents, especially students, these numbers do not account for all the students (about 20,000) and teachers (about 3,000) of the university. Moreover, the results may be limited by a degree of subjectivity. However, the survey gives a snapshot of the opinions and can be used for further analysis and decision-making.

Results

The survey can be divided into sections: 1) assessment of the current state of language proficiency and instruction (including self-assessment of proficiency in GE and ESP, satisfaction with the current state of instruction); 2) assessment of the possibility and benefits of EMI introduction (readiness and eagerness to this introduction, benefits for the language, major disciplines instruction as well as future employment; 3) preferred parts of instruction that can be organized within EMI approach; 4) recommendations and opinions given by the participants of the survey regarding introduction of EMI in the university.

The first part of the questionnaire dealt with the level of English proficiency of the participants (See Table 3). The respondents had to self-assess their level on a scale from 1 (low) to 5 (very high). It is worth noting that, according to the results, respondents' proficiency levels in both EGP and ESP do not differ greatly, which is a good indicator of well-rounded ESP instruction within the university. In general, almost 40% of students and 45% of teachers assessed their level of GE as rather high or very high, with the ESP figures - 22,5% (students) and 48,8% (teachers), respectively. Teachers assess their level of ESP to be even higher than GE - 48,8% compared to 45%.

Table 3: Self-assessment of proficiency in EGP and ESP by students and teachers

How do you	1 (low)	2	3	4	5 (very
assess your					high)
level of general					
English					
proficiency?					
Students, %	2.1	10.6	47.4	32.2	7.7
Teachers, %	2.3	10.5	43	32.6	11.6
How do you	1 (low)	2	3	4	5 (very
assess your					high)
level of ESP					
proficiency?					
Students, %	7.6	21.8	48.1	19.6	2.9
Teachers, %	4.7	10.5	36	37.2	11.6

Students were also asked to assess the instruction of ESP in general (Table 4). The results show that 57.2% of students are satisfied or very satisfied with the current method of instruction, with only 15% of respondents providing a rather negative assessment (very unsatisfied or unsatisfied).

Table 4: Assessment of satisfaction with the ESP instruction by students

Are you satisfied with the current ESP instruction?	1 (very unsatisfied)	2	3	4	5 (very satisfied)
Students, %	4.4	10.7	27.7	38.6	18.6

During the assessment of the possibility of EMI introduction, we can see that the number of students who welcome such changes (answers "yes" and "rather yes") is significantly higher than the number of those who are opposed (46.3%) compared to (46.5%). The corresponding numbers for the teacher poll turned out to be even higher (67%) to (46.5%). Yet another question was whether the respondents were ready for such changes. The numbers indicate that (22.7%) of students don't feel ready, while (46.2%) believe they are. The figures for the poll of teachers demonstrate an analogical distribution (46.2%) to (46.2

The respondents were asked to assess the positive effect of EMI on their proficiency in English, Majors and career opportunities. The expectations of the EMI benefits are high among both students and teachers. Thus, 83.2% of students and 74.4% of

educators believe it will improve their English language skills, almost 60% of students and 54.2% of teachers admit EMI's positive effect on their competences in Majors, and the overwhelming majority of 85.5% of students and 74.2% of teachers see potential EMI's positive impact of their careers (See Table 6).

Table 5: Assessment of willingness and readiness for EMI

Would you	1 (no)	2 (rather	3 (not	4 (rather	5 (yes)
welcome EMI for		not)	sure)	yes)	
Majors?					
Students, %	12.6	14	27	26.3	20
Teachers, %	9.4	7.1	16.5	32.9	34.1
Are you ready for	1 (no)	2 (rather	3 (not	4 (rather	5 (yes)
Majors to be		not)	sure)	yes)	
instructed in					
English?					
Students, %	11.2	11.5	17.1	26.4	33.8
Teachers, %	10.5	9.3	16.3	29.1	34.9

Table 6: Assessment of positive effects of EMI

Would EMI help improve your English proficiency?	1 (would hamper)	2	3	4	5 (would significantly help)
Students, %	1.8	5.6	9.3	42.1	41.1
Teachers, %	1.2	3.5	20.9	37.2	37.2
Would EMI help improve your proficiency in Majors?	1 (would hamper)	2	3	4	5 (would significantly help)
Students, %	4.6	16.3	19.1	34.8	25.1
Teachers, %	2.4	3.5	40	31.8	22.4
Would EMI for Majors help you find a good job/ your career development?	1 (would hamper)	2	3	4	5 (would significantly help)
Students, %	2.5	2.5	10.9	34.4	51.1
Teachers, %	0	2.3	24.4	45.3	27.9

The respondents were asked to express their opinion on the parts of the course that they would welcome to be delivered in English (see Table 7). Again, the opposing sides of the Likert scale – pairs 'yes' and 'rather yes' were taken as positive answers and 'no' and 'rather not' – as negative ones. Out of the options proposed, lectures seem to be the most appropriate way to introduce EMI (for 54.9% of students and 69.4% of teachers). As for the practice lessons, 42.6 percent of students and 63.9% of teachers would welcome their EMI realisation. The situation with the assessment tools (control papers and exams) differs. Here, the majority of students are opposed to EMI during control papers (44.2%) and exams (54.4%), while teachers are rather in favour of such assessments (62.4% and 61.9%, respectively).

The last part of the survey dealt with the opinions, suggestions, and recommendations towards the introduction of EMI in the university. Here are some of the opinions given by the students. Many of the answers were of a positive nature: "It would be great if students could choose the language of the disciplines instruction." "It would be nice if some disciplines were instructed in English at least partially to increase the level of language proficiency." "English language instruction will not be superfluous, especially for programmers."

Table 7: Opinions on the parts of the course to be delivered in English

Would you like to	1 (no)	2 (rather	3 (not	4 (rather	5 (yes)
use EMI in the		not)	sure)	yes)	
following parts of					
Major disciplines?					
- Lectures					
Students, %	11.7	10.4	23	28.6	26.3
Teachers, %	7.1	15.3	8.2	36.5	32.9
- Practice lessons/					
laboratory works					
Students, %	15.4	17.6	24.3	24.3	18.3
Teachers, %	7	17.4	11.6	30.2	33.7
Control papers					
Students, %	22.6	21.6	27.8	16.2	11.7
Teachers, %	11.8	11.8	14.1	31.8	30.6
Exams					
Students, %	32.4	22	25.3	11.2	9.1
Teachers, %	10.7	14.3	13.1	29.8	32.1

There were also opinions against EMI, mostly connected with the difficulties of implementation of EMI. "It seems to me that this has a bad effect on the study of the specialized subject." To overcome the difficulties, students suggest providing with more language lessons:

"It will make learning more difficult, if this is to be done, then more lessons of English are needed."

It seems that students are somewhat unconfident about whether EMI will or will not hamper their understanding of the subject matter of Majors (as indicated by their reluctance to take exams and assessments in English). One hedging strategy proposed by students is EMI to be introduced within elective disciplines:

"I would like to attend Major and non-Major subjects instructed in English. I would consider this type of study as optional and only in an online format."

"The idea is good on the condition that the teaching in English will be exclusively for elective subjects."

Also, students stressed the importance of teacher's competence, experience and language proficiency:

"Teachers must have a high level of English for teaching. Their knowledge and pronunciation should be checked beforehand."

"I would like to try this with an example of a single, not very difficult subject in order to feel what it is like in practice because the difficulty of perceiving a discipline in English depends both on the complexity of the discipline itself and on the teacher."

"To be taught by native speakers."

Teachers were asked about the support they need for the preparation for their EMI courses. In general, the answers included a demand for English courses, methodological seminars, consultations, etc.: "Help with the translation of some

materials," "Some topical seminars", "Some additional courses to refresh the English language skills", "Consultations on the methodology of teaching Majors in English", "It is better to carry out such activities in a mixed form synchronously/asynchronously."

Discussion

The survey demonstrates similar results to the British Council research into the internationalisation of Ukrainian universities within the English language dimension. The latter was conducted among 15 Ukrainian universities with a poll of 153 teachers. As a result of testing the English proficiency level of teachers who are using or want to use EMI, it was found that 68 per cent reached or exceeded the threshold of B2, but only 22 per cent met the C1 benchmark suggested by the Ministry of Education. Simultaneously, teachers' self-assessment seemed to over-report language levels. However, most teachers are aware of their limitations and expressed a willingness to take English lessons, which corresponds with the results of our questionnaire. It was also concluded in the British Council research that "as EMI is adopted for more and more courses and there is a consequent demand for higher levels of English for both students and academics, the language proficiency limitations of ESP teachers are likely to be more exposed than they are at present" (Bolitho, West, 2017). This also corresponds to our findings that teachers and students require some additional language courses.

Assessing the general situation of EMI and ESP in Ukraine, the researchers reach the conclusion that "over the last 13 years, ESP has not been expanded or reformed, and EMI programmes have not been introduced on any large scale". Moreover, as for the capability to improve standards, it was also reported that "based on language proficiency alone, capability seems rather limited" (Bolitho, West, 2017).

Our research gives a deeper insight into the situation at Igor Sikorsky Kyiv Polytechnic Institute. It can be seen from the questionnaire that the level of proficiency as well as the willingness to introduce EMI differs greatly depending on the specialism of the educators and the faculty. Overall, the positive attitude and the desire to try EMI prevail, as the benefits of a good command of the language for the specialism seem obvious for most respondents. This presents a strong starting point, which, together with the required methodological support, could develop into EMI deployment in the university.

Conclusions

The benefits and potential of immersive learning and EMI for the universities are obvious not only from the perspective of academics and students but also with the view of the globalization of education and increasing competition of the universities on a global scale. Despite the fact that EMI introduction may create an additional workload on teachers and students, it will positively influence the development of their language proficiency and the university's standing in general.

Our survey results showed that most teachers and students of Igor Sikorsky Kyiv Polytechnic Institute are satisfied with the existing ESP approach to language teaching. However, they are not opposed to EMI deployment in the university. However, such an initiative should be taken cautiously by offering additional methodological and language training. Assessment of learning outcomes in English raises concerns among the students, so this issue should be properly addressed.

Today, EMI is not widely used in higher educational institutions of Ukraine. However, with the introduction of the Conceptual principles of state policy regarding the development of the English language in the field of higher education and the draft law on the use of the English language in Ukraine, we hope that the EMI will be promoted and baked up with the appropriate means.

Acknowledgement

The current research was implemented within the Commission on the Organization and Monitoring of English Language Education at Igor Sikorsky Kyiv Polytechnic Institute. The author expresses sincere gratitude to the Students Council of Igor Sikorskyi Kyiv Polytechnic Institute and the Methodological Council of Igor Sikorskyi Kyiv Polytechnic Institute for the help of the questionnaire dissemination among students and teachers of Igor Sikorskyi Kyiv Polytechnic Institute.

Bibliographic references

Antonenko, N. (2020) English for specific purposes: brief history. Innovation in upbringing. 11, 181-185. https://doi.org/10.35619/iiu.v1i11.215

Babushko, S., & Solovey, L. (2022). Implementation of professional specialism disciplines in English in higher educational institutes of Ukraine. Development of contemporary professional pedagogy in the context of globalization and integration Other processes. Materials of the XI International Scientific-Methodological Webseminar, 12-15

Bolitho, R. & West, R. (2017). The internationalisation of Ukrainian universities: the English language dimension. Kyiv: British Council. British Council.

Borg, S. (2019). The Impact of the English for Universities Project on ESP and EMI in Ukrainian Higher Education: Final Report.

Dearden, J. (2014). English as a Medium of Instruction – a growing global phenomenon. British Council.

Dengel, A., Buchner, J., Mulders, M. & Pirker, J. (2021). Beyond the Horizon: Integrating Immersive Learning Environments in the Everyday Classroom, 2021 7th International Conference of the Immersive Learning Research Network (iLRN). Eureka, CA, USA. 1-5, https://doi.org/10.23919/iLRN52045.2021.9459368.

Draftlaw 'On the Use of the English Language in Ukraine' (2023) No 9432 https://itd.rada.gov.ua/billInfo/Bills/Card/42201.

Gaspar, H., Morgado, L., Mamede, H. & al. (2020). Research priorities in immersive learning technology: the perspectives of the iLRN community. Virtual Reality 24, 319-341. https://doi.org/10.1007/s10055-019-00393-x

Goebel, G., & Sonntag, R. (2017). Experiences and acceptance of immersive learning arrangements in higher education. International Conference on ICT Management for Global Competitiveness and Economic Growth in Emerging Economies. Wrocław, Poland. 45-46

Hao, Y., Zhao, J., & Liang, K. (2021). Comparative Analysis of the Effect of Immersive English Teaching. International Journal of Emerging Technologies in Learning (iJET), 16(23), 98-110. https://doi.org/10.3991/ijet.v16i23.27825

The Concept Of English Development In Universities (2019). Ministry of Education and Science of Ukraine. https://mon.gov.ua/ua/news/mon-stvorilo-koncepciyurozvitku-anglijskoyi-v-universitetah-u-dodatku-riven-v1-obovyazkova-umova-vstupu-v2-vipusku-vikladannya-profilnih-disciplin-inozemnovu-ta-movni-skriningi.

Tarnopolsky, O. (2013). Content-Based Instruction, CLIL, and Immersion in Teaching ESP at Tertiary Schools in Non-English-Speaking Countries. Journal of ELT and Applied Linguistics (JELTAL), 1 (1). 1-10. https://api.semanticscholar.org/CorpusID:259257188

Tarnopolsky, O. (2018). Principled pragmatism, or well-grounded eclecticism: a new paradigm in teaching English as a foreign language at Ukrainian tertiary schools? Advanced Education, 5(10), 5-11. https://doi.org/10.20535/2410-8286.133270

Tarnopolskyi, O., V. Momot, S.P. Kozhushko, Kornieva, Z.M. et al. (2008). Immersive Method in English Language and Majors Teaching in Economics Higher Education Institutions (Metodika angloiazychnogo pogruzheniia v obuchenii

angliiskomy iazyky i spetsialnym distsiplinam v ekonomicheskih vuzah). Dnipropetrovsk, Ukraine.

Vernyhora, S. (2016). Teaching The Vocational Subjects In English At The Ukrainian Higher Education Institutions: Educational Experiment Or Today's Challenge (The Case Of Disciplines Of The Department Of Advertising And Public Relations Of Humanitarian Institute Of Borys Grinchenko Kyiv University). Integrated communications, 18-22.

Walker, C.L., & Tedick, D.J. (2000). The complexity of immersion education: Teachers, addresses and issues. Modern Language Journal, 1 (84), 931-940. https://doi.org/10.1111/0026-7902.00049

Words: 4492

Characters: 29 330 (16,3 standard pages)

Assoc. Prof. Yuliia Baklazhenko, PhD.

Department of Theory, Practice and Translation of the English Language National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"

Ukraine

ORCID: 0000-0002-9035-7737 yuliia.baklazhenko@gmail.com