

Journal of Languages for Specific Purposes (JLSP)

Edited by the *Research Group for Communication in Business and Foreign Languages (RGCBFL)* within the *Research Centre for Competitiveness and Sustainable Development (RCCSD)* and the *Department of International Business*,
Faculty of Economic Sciences, University of Oradea

Acknowledgements:

Special thanks for support and advice
to the Deans of the Faculty of Economic Sciences, University of Oradea:
Professor Dr. Habil. Adriana Giurgiu, (Dean: 2012-2016), initiator of this project,
Professor Dr. Habil. Alina Bădulescu, (Dean: 2016-2024) and
Professor Dr. Habil. Claudia Diana Sabău-Popa (Dean since 2024).



**EDITURA
UNIVERSITĂȚII
DIN ORADEA**

**ISSN print 2359 – 9103
ISSN online 2359 – 8921
ISSN-L 2359 – 8921**

The **Journal of Languages for Specific Purposes (JLSP)** is an open access journal and publishes studies on **Applied Modern Languages (English, French, German and Italian)** and Language teaching at academic levels of specialization for various professions or fields of activity.

The purpose of this journal is to create a communication platform for foreign language teachers with academic activity in non– philological fields and it aims to facilitate exchange and sharing of experience and ideas. Given the specificity of their intermediate status, between philology and various fields of specialty, these teachers – researchers at the same time – need their own forum to express the aforementioned dichotomy and pluralism. It is this role that the journal wants to assume, offering its contributors help in their didactic activity, through the exchange of experience between academics. At the same time, the journal shall provide these specialists, besides new perspectives, a large recognition and professional prestige for the research work they undertake.

The studies published in the **Journal of Languages for Specific Purposes** fall into one of the following **categories**: state-of-art articles, methodological studies, conceptual articles, original research reports, case studies, book reviews - under one of the journal's **sections**: Language studies, Applied Modern Languages, Teaching Languages for Specific Purposes, Professional Communication. All papers submitted to JLSP undergo a process of **double-blind peer review**.

JLSP is presently indexed in the following databases and catalogues:

- Index Copernicus ICI Journals Master List
- ERIH PLUS
- EBSCO's Education Source
- Ulrich's Periodicals Directory
- Directory of Open Access Journals (DOAJ)
- Directory of Research Journals Indexing (DRJI)
- SCPIO
- Google Scholar
- Open Academic Journal Index
- Elektronische Zeitschriftenbibliothek
- WorldCat
- The Linguist List
- Advanced Science Index
- Scientific Indexing Services
- Academic Resource Index – ResearchBib
- International Institute of Organized Research (I2OR)
- Polska Bibliografia Naukowa

Editor in Chief

Dr. Ioana Claudia HOREA

Assistant Editor

Dr. Andrea HAMBURG

Editorial Board

Dr. Cristina Laura ABRUDAN

Dr. Rodica BOGDAN

Dr. Andra Teodora CATARIG

Dr. Felicia CONSTANTIN

Dr. Anamaria Mirabela POP

Dr. Adina SĂCĂRA – ONIȚA

Dr. Monica Ariana SIM

Scientific Board

Dr. Deb REISINGER

Duke University – Durham – USA

Dr. Mary RISNER

University of Florida – Gainesville, Florida – USA

Dr. Kathleen STEIN-SMITH

Fairleigh Dickinson University – New Jersey – USA

Dr. Rafał SZUBERT

University of Wrocław – Wrocław – Poland

JLSP Editorial Review Board for the thirteenth issue – March 2026

- Dr. Husain ABDULHAY - Payame Noor University - Qom – Iran
- Dr. Kamila AMMOUR – Mouloud Mammeri University – Tizi-ouzou – Algeria
- Dr. Louiza BELAID – Ibn Khaldoun University – Tiaret – Algeria
- Dr. Emily BELTRAN – Technological University of the Philippines – Dasmariñas City, Cavite – Philippines
- Dr. Rachid BENDRAOU – Faculty of Languages, Letters and Arts – Ibn Tofail University – Kenitra – Morocco
- Dr. Onorina BOTEZAT – Bucharest University of Economic Studies – Bucharest – Romania
- Dr. Olivia CHIROBOCEA-TUDOR – Ovidius University of Constanța – Constanța – Romania
- Dr. Elena Ramona CIORTESCU – “Alexandru Ioan Cuza” University – Iași – Romania
- Dr. Monica-Iuliana CONDRUZ-BACESCU – Bucharest University of Economic Studies – Bucharest – Romania
- Dr. Amela ĆURKOVIĆ – University of Zenica – Zenica – Bosnia and Herzegovina
- Dr. Ramadan EYYAM – Eastern Mediterranean University – Famagusta – North Cyprus
- Dr. Mojca KOMPARA LUKANČIČ – University of Maribor – Slovenia
- Dr. Andrea HAMBURG – University of Oradea – Oradea – Romania
- Dr. Gabriella HILD – University of Pécs Medical School – Pécs – Hungary
- Dr. Ioana-Claudia HOREA – University of Oradea – Oradea – Romania
- Dr. Juan LI – Shandong Jiaotong University – Jinan – China
- Dr. Alan Reed LIBERT – University of Newcastle – Callaghan – Australia
- Dr. Manjola LIKAJ – Armed Forces Academy, Ministry of Defense & Albanian University – Tirana – Albania
- Dr. Almina LISIČIĆ-HEDŽIĆ – University of Zenica – Bosnia and Herzegovina
- Dr. Marina OLGA – National Research University Higher School of Economics – Moscow – Russian Federation
- Dr. Edward OWUSU – Sunyani Technical University – Sunyani – Ghana
- Dr. Sanja RADANOVIĆ – University of Banja Luka – Bosnia and Herzegovina
- Dr. Cheikh SERIOU – University of Ghardaia – Ghardaia – Algeria
- Dr. Huanan SU – University of the Cordilleras – Baguio City – Philippines
- Dr. Oana URSU – “Alexandru Ioan Cuza” University – Iași – Romania

TABLE OF CONTENTS

AUTHORS	TITLES	PAGES
Nouzha Yasmina Soulimane-Benhabib Sanaa Nait-Tahar Imane Nedjar	THE IMPORTANCE OF ESP TRAINING IN ENHANCING TEACHER PROFESSIONAL DEVELOPMENT AT ESSAT-TLEMCEM	7-18
Ioana Claudia Horea Cristian Dorin Horea	SCIENTIFIC ENGLISH AS A SEMIOTIC SYSTEM: THE CASE OF PHYSICS TERMINOLOGY	19-30
Asma Merine Faïçal Fatmi	FROM LANGUAGE TO CULTURE: RETHINKING ENGLISH FOR SPECIFIC PURPOSES FOR A DIVERSE WORLD	31-51
Judit Szalai-Szolcsányi Kata Eklics Vilmos Warta	ENHANCING EMPHATIC COMMUNICATION THROUGH SIMULATION: THE ROLE OF EMPATHY MAPS AND SIMULATED PATIENT FEEDBACK IN MEDICAL TRAINING	53-68
Sanda Katavić-Čaušić Dubravka Kuna	THE ROLE OF DIGITAL PORTFOLIOS IN EMPLOYABILITY-FOCUSED ESP COURSE	69-81
Ouafa Ouarniki Houda Boumediene	SCAFFOLDING STRATEGIES IN EMI BIOLOGY CLASSROOMS: A MIXED-METHODS CASE STUDY	83-96
Barkat Turqui Mirela Alhasani (Dubali)	LEVERAGING SCIENTIFIC ENGLISH FOR EMI TO ICL TRANSITION: THE CASE OF ECONOMIC SCIENCES IN HIGHER EDUCATION SETTINGS	97-113

Andi Xhaferi	STUDENTS' PERCEPTIONS OF DIGITAL TOOLS IN PHARMACY ESP EDUCATION- A STUDY CONDUCTED IN NORTH MACEDONIA	115-125
Biljana Ivanovska Gzim Xhaferri	DIREKT ODER HÖFLICH? KULTURBEDINGTE UNTERSCHIEDE IM KOMMUNIKATIONSVERHALTEN DER GERMANISTIKSTUDIERENDEN IN NORDMAZEDONIEN [DIRECT OR POLITE? CULTURALLY CONDITIONED DIFFERENCES IN THE COMMUNICATIVE BEHAVIOR OF GERMAN STUDIES STUDENTS IN NORTH MACEDONIA]	127-141
Andrea Hamburg	<i>BUCHBESPRECHUNG [BOOK REVIEW]</i> AMELA ĆURKOVIĆ / ALMINA LISIČIĆ-HEDŽIĆ: ERFOLGREICHE GESCHÄFTS-KORRESPONDENZ AUF DEUTSCH, LEHR- UND ÜBUNGSBUCH — [AMELA ĆURKOVIĆ / ALMINA LISIČIĆ-HEDŽIĆ: SUCCESSFUL BUSINESS CORRESPONDENCE IN GERMAN, TEXT- AND EXERCISEBOOK]	143-145
Andrea Hamburg	<i>BOOK REVIEW</i> BURÇAK ÇAĞLA GARIPAĞAOĞLU (Ed.) NEED FOR A NEW PARADIGM IN EDUCATION. FROM THE NEWTONIAN PARADIGM TO THE QUANTUM PARADIGM	147-150
Ioana Claudia Horea	<i>BOOK REVIEW</i> MONICA ARIANA SIM'S ALLEGORIC APPROACH TO ECONOMICS	151-155
Kathleen Stein-Smith	<i>BOOK REVIEW</i> ON PROMOTING DIVERSITY, ETHICS, AND LEADERSHIP IN BUSINESS ENGLISH: STRATEGIES FOR EFFECTIVE COMMUNICATION	157-159

THE IMPORTANCE OF ESP TRAINING IN ENHANCING TEACHER PROFESSIONAL DEVELOPMENT AT ESSAT-TLEMCCEN

Nouzha Yasmina Soulimane-Benhabib¹, Sanaa Nait-Tahar², Imane Nedjar³

^{1,2,3}Higher School of Applied Sciences (ESSA)-Tlemcen, Algeria

¹yasmina-nouzha.soulimane@essa-tlemcen.dz,

¹benhabibsoulimanenouzha@gmail.com,

²sana.naittahar@essa-tlemcen.dz, sanaitahar@gmail.com,

³imane.nedjar@essa-tlemcen.dz, alzaouti@yahoo.fr

Abstract: *To enhance international collaboration and develop academic programs, the Higher School of Applied Sciences in Tlemcen conducted a quantitative survey involving 75 teachers from diverse disciplines. Using a simple random sampling method, the study aimed to identify specific support and training needs to enhance teaching practices, promote student engagement, and encourage participation in international research initiatives. The structured questionnaire focused on required support for joint research projects, opportunities for academic exchange, and priorities for professional development, particularly in digital competencies. The survey also investigated the impact of cross-cultural exposure and language learning on pedagogical innovation. Results showed that 82% of respondents prioritised institutional support for establishing an international research partnership. In comparison 76% emphasised the need to strengthen English for Specific Purposes (ESP) skills to facilitate academic mobility and global research collaboration. Participants highlighted the necessity for targeted training in academic writing, professional communication, and discipline-specific teaching methodologies. The study underscores the pivotal role of ESP mastery in scientific publishing, international conference participation, and effective engagement with global research communities. Developing ESP proficiency is essential for advancing professional growth and increasing the school's international visibility. The findings recommend integrating ESP-focused training programs with sustained exposure to English in professional contexts to support continuous academic development and achieve the institution's internationalisation objectives.*

Keywords: *International Collaboration; Professional Development; English for Specific Purposes; Academic Exchange; teaching methods; Teacher Training.*

1. Introduction

According to the Ministry of Higher Education and Scientific Research, the Preparatory School of Sciences and Techniques in Tlemcen was established in 2009 by the Ministry of Higher Education and Scientific Research as part of a national initiative. Its main objective is to offer scientific and technical training to students who have a good level in the baccalaureate exam. In 2016, the institution **underwent a restructuring process** and became the Higher School of Applied Sciences, Tlemcen, with a focus on research in applied sciences, including mathematics, physics, and chemistry. The school provides programs in various

disciplines, including electrical engineering, automation, industrial engineering, and recently electronics.

This paper examines the perspectives of both teachers at the Higher School of Applied Sciences in Tlemcen (ESSAT) regarding their professional development and their role in enhancing the institution's international academic reputation. As Avalos (2011) points out, "Teacher professional development is a long-term process that includes regular opportunities and experiences planned systematically to promote growth and development in the profession." According to him, professional development for teachers should be seen as a continuous and structured process designed to foster their growth and development in the profession. (Avalos, 2011:12)

The report highlights the benefits of engaging with varied educational models, mentioning that such experiences enhance their teaching practices and offer students broader academic perspectives. These results provide a basis for developing the school's future strategies, focused on improving educational standards, fostering global research partnerships, and advancing training in English for Specific Purposes (ESP). Within this framework, the present study seeks to address two key questions: **To what extent does ESP training contribute to the professional development of teachers at the Higher School of Applied Sciences, Tlemcen and how can ESP training enhance the capacity of teachers to strengthen the international academic reputation of the institution?**

Through these questions, the report emphasizes the key role of ESP in providing teachers with the linguistic and pedagogical skills that foster their professional development and enhance the institution's international reputation.

2. Overview of Educational Setting at ESSAT

At the Higher School of Applied Sciences in Tlemcen, training in professional development and English for Specific Purposes (ESP) plays a crucial role in improving the quality of education and preparing teachers for international opportunities. The report emphasized the importance of equipping the school with the necessary tools and resources to participate in international research collaborations, enhance teaching methods, and promote their involvement through innovative approaches.

Additionally, ESP training plays a vital role in improving communication skills, particularly in academic and professional contexts, which are crucial for teachers. Crystal (2003) has emphasized the importance of the English language in modern society. Cook explained that English is highly required for scientific writing and reading, "English is a requirement for scientific writing and reading: Few scientists can make a proper contribution to their field without having access to English, either in person or through the translation of one kind or another.(Cook, 2008: 200). Indeed, English plays a crucial role in modern society; moreover, it is indispensable for scientific communication, since researchers need access to it either directly or through translation in order to contribute effectively to their fields. This paper explores the current initiatives, the needs identified through surveys, and the opportunities for growth in professional development and ESP training at ESSAT, aiming to align the institution with international standards and promote a dynamic academic environment.

Moreover, ESP training helps improve language skills needed for academic and professional success. For students, learning academic English and technical communication is essential in their studies when competing in the global job market. Sifakis, N.C. (2003) claims that ‘It is important to remember that the ESP domain is characterized by a wide diversity—different learners, different classes, different needs, different syllabi, and different teachers’. (Sifakis, 2003:195) For teachers, it improves their ability to teach in English, communicate with native speakers, take part in research projects, and create materials for diverse learners. The status of ESP today is seen as important and needs more awareness. Moreover, ESP is characterized by diversity in learners, needs, and teaching contexts, while its practice enhances teachers’ skills and highlights the need for greater awareness of its importance. According to Robinson (1991)

“ESP is now regarded as a specific activity involving education, preparation and practice, and it covers three key areas of knowledge, namely, pedagogy, language, and the This is because ESP courses are normally goal-oriented and aimed at equipping learners with skills they need for academic purposes or workplace purposes; this would then enable them to comprehend and communicate more efficiently in their respective language environment. He added in this sense, “Another notable feature of ESP courses is that they are conducted over a short period of time. This means that their objectives are clearly specified and involve collaboration and negotiation with all those who are involved in the course, that is, organizers, teachers, sponsors and learners.” (Robinson, 1991:3)

In fact, ESP is a goal-oriented activity combining pedagogy, language, and subject knowledge, designed to equip learners with academic or workplace skills; moreover, its courses are short, clearly defined, and require collaboration among all stakeholders. The growing need for ESP training supports ESSAT’s goal of preparing teachers to participate in international academic exchanges, research, and professional networks.

Through this paper, we analyse the current situation of professional development and ESP training at the school, examining the needs highlighted by teachers. By doing so, the Higher School aims to provide a comprehensive framework for boosting teaching excellence, increasing research productivity, and preparing teachers to effectively engage in the professional world. This effort involves aligning the school’s initiatives with global educational best practices while providing assistance in language proficiency, innovative teaching methods, and international cooperation. From the perspective Global Education Charter, the Maastricht Global Education Declaration (2002) states;

“Global education is education that opens people’s eyes and minds to the realities of the globalised world and awakens them to bring about a world of greater justice, equity and Human Rights for all. Global education is understood to encompass Development Education, Human Rights Education, Education for Sustainability, Education for Peace and Conflict Prevention and Intercultural Education; being the global dimension of Education for Citizenship”. (The Maastricht Global Education Declaration, 2002:11)

Moreover, global education raises awareness of global realities and fosters justice, equity, and human rights by integrating sustainability, peace, intercultural understanding, and citizenship education.

3. Teaching ESP at the Higher School of Applied Sciences

Improving teaching quality and enhancing training in English for Specific Purposes (ESP) is essential. As Dudley-Evans and St John (1998) state that ESP “is defined to meet specific needs of the learner, makes use of the underlying methodology and activities of the discipline it serves, and is centered on the language, skills, discourse, and genres appropriate to these activities.” (Dudley-Evans and St John (1998: 4–5). Thus, ESP is designed to address learners’ specific needs by drawing on the methods of their field and focusing on the relevant language and skills.

As the global educational environment becomes more interconnected, ESSAT acknowledges the significance of empowering lecturers with the necessary tools and knowledge to engage in international research partnerships, implement innovative teaching methods, and connect effectively with students in a dynamic academic setting. Likewise, students’ proficiency in academic English and their capability to communicate in professional environments are vital for their success in higher education and the global market.

4. Case Study

This research study aims to investigate the role of ESP skills in enhancing teachers’ professional development at the Higher School of Applied Sciences, Tlemcen. To ensure an understanding of the educational context, teachers from various academic levels (preparatory cycle and second cycle) participated in this study. Their opinions were collected through surveys, providing valuable feedback on pedagogical approaches, student engagement, and the general quality of learning.

4.1. Context and Participants

In this investigation, we collected answers from 61 teachers at the Higher School of Applied Sciences in Tlemcen. They were asked to complete the questionnaire via a Google form. The form includes a questionnaire designed for teachers. The aim of this questionnaire is to identify the specific needs of the teachers and determine the objectives related to the program, international collaboration, and training. As Oppenheim, 1992 emphasizes, as Creswell (2014) asserts, “The survey is one of the most popular research instruments, as it allows the researcher to collect data from a large sample in a systematic way, making it particularly useful in educational research.” (Creswell, 2014:376) This highlights the importance of questionnaire construction to ensure relevant and reliable data collection.

4.2. Data Collection

Based on the results obtained from the teacher survey, we gathered interesting and pertinent data concerning the engagement of educators and learners in professional training and academic contexts. As Patton (2002) asserts, “What gets measured gets valued; what gets measured and fed back gets improved.” This reveals the importance of structured data in understanding best practices and supporting continuous improvement in education.

4.2.1. Teacher’s Survey

The Higher School of Applied Sciences in Tlemcen conducted a survey to better understand the needs and preferences of its teachers in relation to program

development, international collaboration, and digital literacy training. This survey aimed to determine the types of training and support that teachers require to improve their teaching methods in ESP, engage more effectively with students, and participate in international research collaborations. These align with findings in Algeria where “a noticeable discrepancy between teachers’ overall digital literacy and their digital literacy within the CBA” has been observed, attributed to an “outdated curriculum which places minimal emphasis on digital competencies.” (Hassani & Meharèt, 2024: 155) The following findings emphasise the elements where support and development are most needed, as well as the opportunities participants hope to explore through exchange programs and digital skills programs.

4.2.2. International Collaboration and Mobility

4.2.2.1 What support, especially in ESP, enables collaboration in international research?"

The majority of participants emphasized the importance of improving their skills in two areas: learning new technologies and adopting innovative teaching methods, with the objective of enhancing teaching practices and aligning with modern educational standards. A significant 80% expressed interest in staying updated with emerging technologies, while 78.3% stressed adopting new pedagogical approaches to achieve better student engagement and quality education. Regarding joint research projects with international partners, most of the 60 responses indicated a need for support, particularly in ESP-related skills such as academic writing and project preparation, reflecting the objective of strengthening international collaboration. Furthermore, many participants emphasized the importance of access to physico-chemical analysis platforms, in line with the objective of ensuring reliable and high-quality research outcomes.

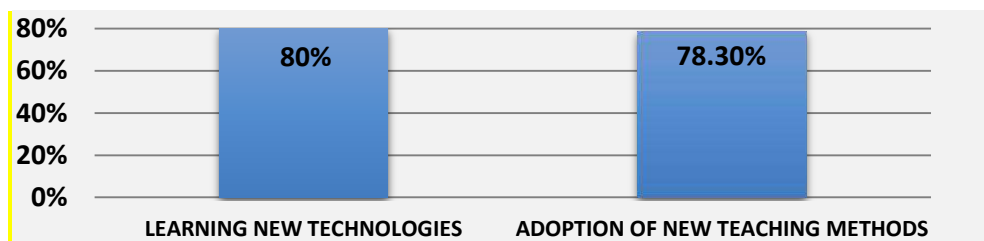


Figure 1. Enhancing ESP Teaching through Technology and Pedagogical Innovation

4.2.2.2. What opportunities would you like to explore during exchange programs with foreign universities?

Improving ESP skills is considered essential for successful participation in global academic exchanges, as it facilitates professional communication, collaborative research, and meaningful contributions in international settings. The aim is to identify the main opportunities that lecturers seek during exchange programs with foreign universities. Among the 59 responses, participants expressed a strong interest in a range of opportunities during exchange programs with foreign universities. The most commonly cited opportunities were scientific collaboration

(86.7%) and funding for joint research projects (76.7%). Respondents also showed interest in attending conferences (72.9%), participating in workshops (71.2%), and undertaking short-term teaching assignments (66.1%). Additionally, some respondents also expressed interest in long-term training programs aimed at improving their academic and research skills. Overall, these responses indicate a strong interest in international exchange programs, particularly in scientific partnership and joint research funding, followed by participation in conferences, workshops, and short-term teaching assignments.

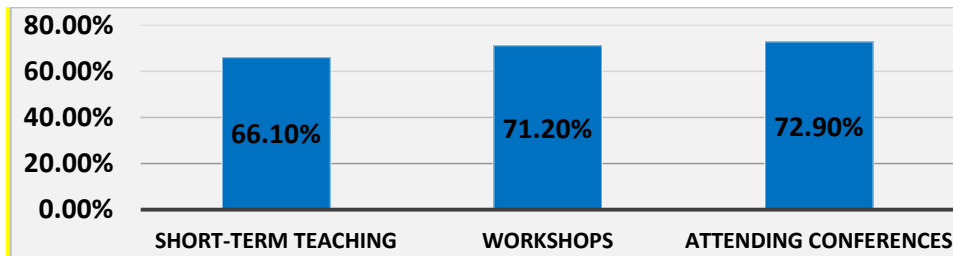


Figure 2. Enhancing Exchange Program Participation through ESP Training

4.2.2.3. Exposure to different cultures and educational practices can enhance ESP teaching methods.

The objective of this analysis is to examine how international exposure contributes to enhancing ESP teaching practices. The responses further suggest that exposure to diverse cultural perspectives and educational practices can enhance teaching methods by fostering more inclusive, adaptable, and engaging learning environments with a total of 59 responses. This enables lecturers to engage more effectively with students from diverse backgrounds, and enriches the educational experience for both teachers and students. Thus, international exposure is not only an opportunity for mobility but also a powerful means of enriching ESP teaching and student engagement.

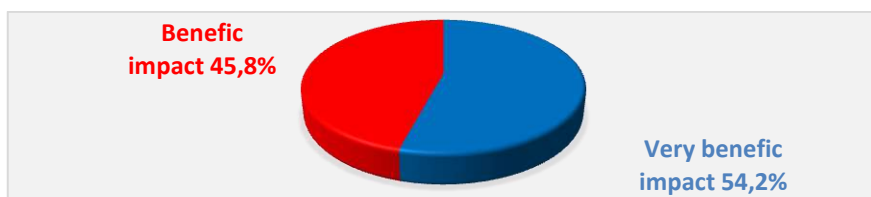


Figure 3. Cultural and Educational Diversity on ESP Teaching

4.2.3. Training and Professional Development

4.2.3.1. What type of training would be most useful to you?

The objective of this analysis is to identify the types of training most useful for enhancing teaching practices. Among 61 participants, the majority (96.7%) emphasized the importance of practical training, showing a clear preference for applied methods over theoretical ones. Other key areas of interest included oral communication (72.1%), technical language proficiency (72.1%), and academic writing skills (47.5%). Overall, the findings highlight the need for training initiatives

that prioritize practical application and communication competencies essential for effective teaching.

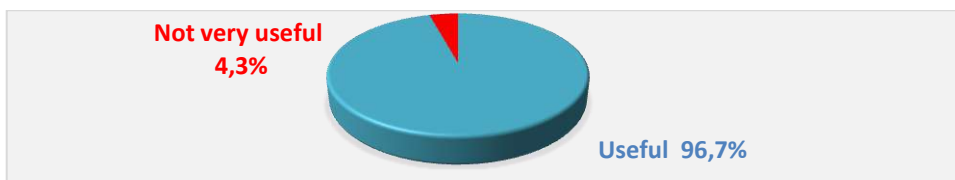


Figure 4. Useful Training Areas for Professional Development

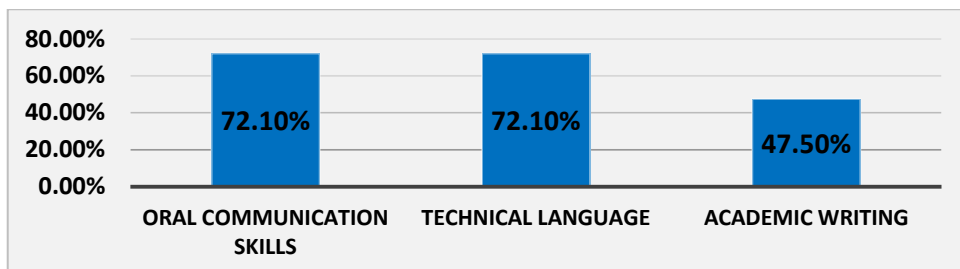


Figure 5. ESP Skills Needed for Professional Development

The majority of participants emphasised practical training to enhance their teaching, favoring suitable methods. Communication skills, technical language, and academic writing were also identified as important areas for development.

4.2.3.2. Would you be interested in receiving training on the following topics?

The objective of this analysis is to determine lecturers' priorities for training topics that support academic and professional development. Based on 59 responses, research methodologies (78%), academic writing (71.2%), publishing in international journals (69.5%), and communication (49.2%) were identified as the most valuable areas. Several participants also highlighted the importance of ESP training to improve academic communication in international research contexts and to increase publication opportunities in high-impact journals. Overall, the findings confirm that ESP is not only essential for teaching but also plays a central role in strengthening research, collaboration, and international visibility.

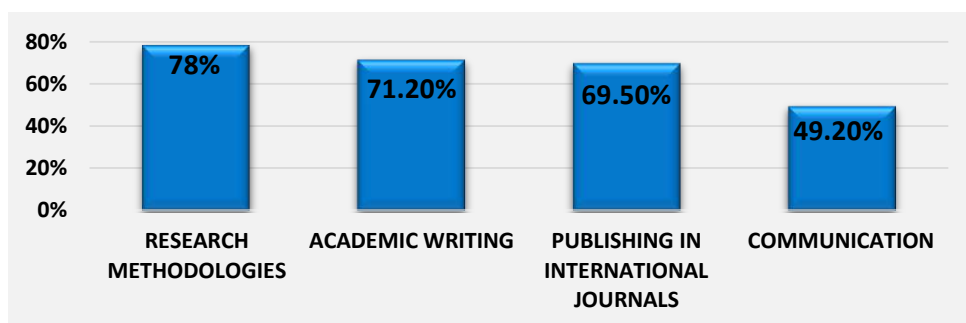


Figure 6. Enhancing Research Skills through ESP

4.2.3.3. What types of digital literacy training would you find most valuable?

This analysis seeks to highlight the areas of digital literacy training that lecturers consider most valuable. From 58 responses, the highest priorities were online learning platforms (82.8%), virtual classrooms (62.1%), and online assessment tools (46.6%). Additionally, participants placed strong value on research methodologies (78%), academic writing (71.2%), publishing in international journals (69.5%), and communication (49.2%). These findings emphasize the dual importance of digital literacy and ESP training in equipping lecturers to engage in international research, publish in global journals, and communicate effectively in their professional fields.

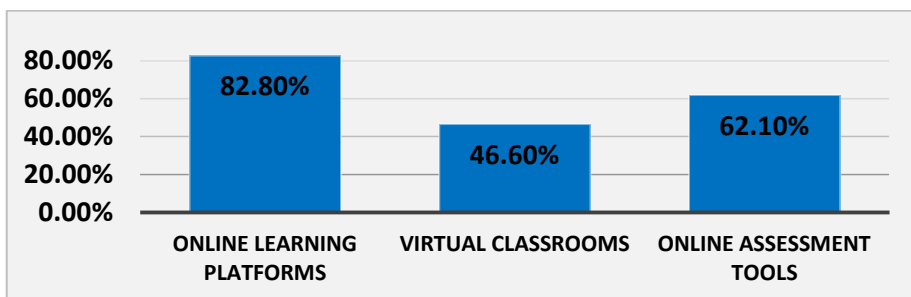


Figure 7. Valuable Digital Literacy Training for Enhanced Teaching and Research

By integrating ESP training into these initiatives, the institution can better equip lecturers to engage in international research, publish in global academic journals, and communicate effectively within their professional domains. These recommendations aim to support teachers' efforts toward more effective and innovative educational strategies.

5. Data Analysis

The findings from the teacher survey conducted at the Higher School of Applied Sciences in Tlemcen reveal a strong need for professional development in key areas such as technological integration, pedagogical innovation, and international collaboration. The responses indicate that many lecturers are interested in enhancing their English for Specific Purposes (ESP) competencies, particularly in ways that are practical and directly relevant to their teaching and research responsibilities.

One of the major findings collected from the data is the demand for targeted ESP training that focuses on improving academic communication skills, including writing for publication, presenting research findings, and participating in international scholarly discourse. As Boudersa asserts, "ESP teachers are supposed to teach not only the English language, but they are required to teach the English language through specific-field(s) content," (Boudersa 2021:5) reinforcing the importance of specialized ESP training. Such training is not only seen as a tool for professional development but also as a strategic necessity for increasing global engagement and institutional visibility. Furthermore, the lecturers expressed a strong interest in opportunities that allow for exposure to diverse educational systems and cultural practices. They view international partnerships, academic exchanges, and

attendance at global conferences as valuable means of enriching their own teaching practices and fostering student motivation and engagement.

The data also highlights the importance of institutional support mechanisms. These include access to modern research platforms and facilities, digital literacy programs, and interesting structures that recognise and reward excellence in teaching and research. Without adequate infrastructure and continuous training, efforts to internationalize and modernize teaching practices may remain limited. Moving forward, it is essential for the institution to implement aligning training programs with international standards, fostering interdisciplinary collaboration, and ensuring that staff has the tools and support needed to innovate and excel in their fields.

In conclusion, the survey results show a clear direction for creating a more dynamic, internationally connected, and professionally strong academic community at the Higher School in Tlemcen.

6. Discussion

The teacher survey conducted at the Higher School of Applied Sciences in Tlemcen reveals a strong need for professional development in key areas such as technological integration, pedagogical innovation; and international collaboration. The responses indicate that many lecturers are interested in enhancing their English for Specific Purposes (ESP) competencies, particularly in ways that are practical and relevant to their teaching and research responsibilities.

First, the strong interest expressed by teachers in practical training (96.7%) shows a clear preference for applied approaches rather than purely theoretical ones. This suggests that professional development programs should focus on active learning methods, such as workshops, conferences, and collaborative projects, to better meet lecturers' needs. Practical training is important not only for improving classroom teaching but also for enhancing teachers' ability to participate in international research.

Second, the focus on ESP-related skills such as oral communication, technical language, and academic writing highlights the importance of English in both teaching and research. Teachers see English proficiency as a bridge to international collaboration, access to global knowledge, and participation in exchanges. This aligns earlier studies that highlight ESP as central to preparing academics for global engagement.

Third, teachers expressed strong interest in international collaboration and mobility. They prioritised scientific partnerships, joint research funding, and participation in conferences and workshops. Exposure to different educational systems and cultures was also regarded as a way to improve teaching methods and increase student motivation.

Fourth, the survey highlighted the growing role of digital literacy in teaching and research. Teachers were interested in training on online platforms, virtual classrooms, assessment tools, and strategies for publishing in international journals. This reflects the increasing digitalization of higher education and the need for lecturers to use technology effectively.

Finally, the results point to the need for institutional support. Teachers stressed the importance of access to research facilities, scientific platforms, and programs that recognize and reward academic excellence. Without this support, it is difficult for

teachers to fully engage in international research or adopt innovative teaching practices.

Overall, the findings highlight that while ESSAT has made progress, gaps remain. Strengthening ESP training, investing in digital literacy, and expanding international partnerships are key strategies. Aligning teacher development with international standards will improve teaching quality and raise the school's reputation worldwide.

6.1. Recommendations/Teachers Survey at ESSA-Tlemcen

Based on the findings of this study, some key elements have been identified. The following suggestions of the teacher survey aim to identify the needs of the participants and to support the professional growth of the lecturers, with a particular emphasis on enhancing **ESP** competencies to facilitate international collaboration and effective communication in specialised fields.

- Establish a Research Support Office.
- Improve Access to Research Platforms and Facilities.
- Expand International Partnerships and Exchange Programs.
- Provide Practical ESP Training Focused on Communication and Research.
- Support Participation in International Conferences and Workshops.
- Implement Digital Literacy Training Programs.
- Promote Cultural Exchange and Interdisciplinary Collaboration.
- Develop ESP-Focused Academic Writing and Publishing Programs.
- Create Incentive Programs for Teaching and Research Excellence.
- Establish a Faculty Development Fund.

7. Conclusion

In conclusion, the data collected from the teacher survey at the Higher School of Applied Sciences in Tlemcen provides valuable insights into the needs and objectives. By using a well-structured questionnaire, we were able to systematically gather relevant information that highlights key areas for improvement in professional development, ESP training programs, and international collaboration. The findings emphasize the importance of equipping lecturers with the necessary skills and knowledge to engage in global academic and professional environments. Additionally, some answers point out the need for enhanced English language proficiency and exposure to intercultural communication, both essential for success in higher education and the global workforce. Regarding the first research question, the results indicate that ESP training significantly contributes to teacher professional development by improving linguistic competence, broadening teaching methodologies, and enhancing confidence in academic communication. Concerning the second question, the findings show that ESP training strengthens the institution's international academic reputation by enabling teachers to participate more actively in international conferences, publish in international journals, and engage in global research networks.

Moving forward, the results will serve as a foundation for shaping the higher school's future strategies, ensuring that lecturers are well-prepared to succeed in this competitive world. In the future, these results will help the Higher School plan better strategies. This will make sure that teachers are ready to succeed in a competitive world. By meeting the needs of the teachers, the school can grow into a stronger, more international, and high-quality institution. These actions will help

the school match international standards. A strong focus on teacher development is the key to future success.

References

- [1]. **Avalos, B.** (2011) 'Teacher professional development in *Teaching and Teacher Education* over ten years', *Teaching and Teacher Education*, 27(1), pp. 10–20.
- [2]. **Barnes, R.** (1995) *Successful study for degrees*. 2nd edn. London: Routledge.
- [3]. **Boudersa, N.** (2021) 'ESP Education in Algeria: A description of the teaching situation scenario with focus on problems, challenges and training', *International Arab Journal of English for Specific Purposes*, 1(1), pp. 1-15.
- [4]. **Byrne, J.** (1995) 'Disabilities in tertiary education', in Rowan, L. and McNamee, J. (eds.) *Voices of a margin*. Rockhampton: CQU Press, pp. 45–56.
- [5]. **Cook, V.** (2008) *Second language learning and language teaching*. London: Hodder Education.
- [6]. **Council of Europe** (2002) *Maastricht Global Education Declaration* \[Online]. Available at: <http://www.globaleducationeurope.net/> (Accessed: 15 September 2025).
- [7]. **Creswell, J.W.** (2014) *Research design: Qualitative, quantitative, and mixed methods approaches*. 4th edn. Thousand Oaks, CA: Sage Publications.
- [8]. **Crystal, D.** (2003) *English as a global language*. Cambridge: Cambridge University Press.
- [9]. **Danaher, P.** (ed.) (1998) *Beyond the Ferris wheel*. Rockhampton: CQU Press.
- [10]. **Doherty, N. and Delener, N.** (2001) 'Chaos theory: Marketing and management implications', *Journal of Marketing Theory and Practice*, 9(4), pp. 66–75.
- [11]. **Dudley-Evans, T. and St John, M.J.** (1998) *Developments in English for specific purposes: A multi-disciplinary approach*. Cambridge: Cambridge University Press.
- [12]. **Fisher, R., Ury, W. and Patton, B.** (1991) *Getting to yes: Negotiating an agreement without giving in*. 2nd edn. London: Century Business.
- [13]. **Fitzgerald, L.A. and van Eijnatten, F.M.** (1998) 'Letting go for control: The art of managing the chaotic enterprise', *The International Journal of Business Transformation*, 1(4), pp. 261–270.
- [14]. **Global Education Congress** (2002) *The Maastricht Global Education Declaration*. Europe-wide Global Education Congress, Maastricht, The Netherlands, 15–17 November \[Online]. Available at: <https://docslib.org/doc/12566994/the-maastricht-global-education-declaration> (Accessed: 15 September 2025).
- [15]. **Goldberg, J. and Markoczy, L.** (1998) *Complex rhetoric and simple games* \[Online]. Cranfield University. Available at: [<http://www.Cranfield.ac.za/public/cc/cc047/papers/complex/html>]([http://www](http://www.Cranfield.ac.za/public/cc/cc047/papers/complex/html)

w.Cranfield.ac.za/public/cc/cc047/papers/complex/html) (Accessed: 15 September 2025).

- [16]. **Hassani, A. and Meharèt, B.** (2024) 'Investigating teachers' digital literacy within the CBA in Algerian secondary schools', *Journal of Language Teaching*, 5(2), pp. 150–162.
- [17]. **McCarthy, P. and Hatcher, C.** (1996) *Speaking persuasively: Making the most of your presentations*. Sydney: Allen and Unwin.
- [18]. **Ministry of Higher Education and Scientific Research** – Algeria (no date) *ESSAT-Tlemcen official website* \[Online]. Available at: <https://essa-tlemcen.dz> (Accessed: 15 September 2025).
- [19]. **Patton, M.Q.** (2002) *Qualitative research and evaluation methods*. 3rd edn. Thousand Oaks, CA: Sage Publications.
- [20]. **Robinson, P.** (1991) *ESP today: A practitioner's guide*. Hemel Hempstead: Prentice Hall.
- [21]. **Sifakis, N.C.** (2003) 'Applying the adult education framework to ESP curriculum development: An integrative model', *English for Specific Purposes*, 22(2), pp. 195–211.

SCIENTIFIC ENGLISH AS A SEMIOTIC SYSTEM: THE CASE OF PHYSICS TERMINOLOGY

Ioana Claudia Horea¹, Cristian Dorin Horea²

¹Department of International Business, Faculty of Economic Sciences, University of Oradea, Oradea, Romania

²Department of Physics, Faculty of Informatics and Science, University of Oradea, Oradea, Romania

¹ cristihorea@gmail.com

² ioanahorea@gmail.com

Abstract: *This paper investigates the semiotic and linguistic dimensions of specialized English in the field of physics, positioning scientific English as a multifaceted system that mediates knowledge construction, communication, and learning. The study aims to examine how terminology, metaphor, and symbolic representation interact in physics discourse to create precise yet cognitively accessible conceptual frameworks. Using a qualitative, corpus-informed approach, the analysis draws on examples from academic journal articles, textbooks, and didactic materials to illustrate the semiotic patterns that underpin key physics concepts such as energy, field, wave, particle, and quantum entanglement. Particular attention is given to the interplay between verbal language, mathematical notation, and visual representations, highlighting the multimodal nature of physics communication. The paper further explores the pedagogical implications of these semiotic features, demonstrating how awareness of terminology, metaphorical mappings, and symbolic structures can enhance the teaching of English for Specific Purposes (ESP) in physics, particularly for non-native speakers. In addition, the study addresses translational challenges, emphasizing how semiotic analysis can inform strategies for rendering specialized physics discourse across languages while preserving conceptual fidelity and precision. By integrating applied linguistics, semiotics, and translation studies, this research underscores the importance of a semiotically informed approach to both ESP instruction and scientific communication. The findings suggest that fostering semiotic and terminological awareness can improve learners' conceptual understanding, facilitate interdisciplinary collaboration, and support accurate translation of physics texts. This approach not only enhances pedagogical outcomes but also contributes to the clarity, accessibility, and global dissemination of scientific knowledge.*

Keywords: scientific English; physics terminology; ESP pedagogy; semiotics; translation; metaphor; multimodal discourse

1. Introduction

English has become the lingua franca of scientific research, functioning as the primary medium for disseminating knowledge, publishing findings, and facilitating international collaboration. Among scientific disciplines, physics exhibits a particularly complex linguistic profile due to its reliance on specialized terminology,

symbolic representation, and multimodal communication (Halliday & Martin, 1993). Despite the centrality of English in global physics discourse, there is limited research on the semiotic and applied linguistic dimensions of physics terminology and its implications for teaching and translation in English for Specific Purposes (ESP) contexts.

This study investigates scientific English in physics as a semiotic system that integrates linguistic, symbolic, and visual modes to convey precise conceptual meaning. The paper examines how terminology, metaphor, and discourse patterns function as mediating tools in teaching, learning, and translating physics. By analyzing a corpus of journal articles, textbooks, and instructional materials, the research identifies patterns of lexical, metaphorical, and symbolic usage that structure the understanding of key physics concepts.

The specific objectives of the study are as follows:

1. To describe how verbal, symbolic, and visual modes interact in physics English to create a coherent conceptual system.
2. To examine the role of metaphor and terminology in conveying abstract physical phenomena.
3. To assess the pedagogical and translational implications of semiotic features in physics discourse.

By foregrounding applied linguistic and pedagogical concerns, this paper contributes to the development of ESP strategies that enhance conceptual comprehension, translation accuracy, and effective communication in international physics contexts.

2. Theoretical Framework

2.1. Semiotics and Scientific Language

Semiotics provides a foundational lens for examining how scientific concepts are communicated and constructed through language. Following Peirce's (1931–1958) triadic model of the sign, which distinguishes between the representamen, object, and interpretant, scientific terminology can be understood as a structured system of signs mediating between observed phenomena and conceptual understanding. Eco (1976) further emphasizes that specialized language functions as a “cultural encyclopedia,” where meaning is shaped both by disciplinary conventions and by shared knowledge structures.

In physics, words, symbols, and diagrams function synergistically to represent abstract phenomena that often cannot be directly observed. Terms such as *field*, *wave*, and *quantum entanglement* are not merely lexical items; they act as semiotic instruments that structure reasoning, experimentation, and conceptualization. Understanding these semiotic dynamics is crucial for ESP pedagogy and translation, as learners and translators must interpret meaning across multiple modalities while maintaining disciplinary precision.

2.2. Language as a Cognitive and Epistemic Tool

From an applied linguistic perspective, language does not merely describe physical phenomena; it actively shapes conceptual understanding. Halliday and Martin (1993) argue that the lexicon, grammar, and discourse structures of scientific English constitute an epistemic system, enabling the construction and

communication of complex scientific knowledge. In physics, nominalization and lexical precision allow abstract concepts to be referenced efficiently, while metaphorical and symbolic forms facilitate cognitive access to otherwise intangible ideas.

Recent studies in ESP and scientific English have emphasized the importance of integrating semiotic and applied linguistic perspectives to understand disciplinary discourse. Hyland (2000) highlights that the linguistic structures of scientific writing are closely tied to rhetorical and cognitive functions, shaping how knowledge is presented and interpreted. Likewise, Flowerdew (2013) points out that specialized vocabulary and metaphorical language serve as mediating tools that allow learners and researchers to navigate complex scientific concepts.

2.3. Multimodality in Scientific Discourse

In the context of physics, Swales and Feak (2012) provide extensive examples of disciplinary discourse features, including nominalization, passive constructions, and hedging, which collectively contribute to the epistemic precision of scientific communication. These studies suggest that a deeper semiotic and linguistic analysis is necessary to fully understand the mechanisms by which terminology and multimodal resources convey meaning in specialized fields.

Scientific English in physics is inherently multimodal, integrating verbal, symbolic, and visual resources. Equations formalize quantitative relationships, diagrams and graphs illustrate spatial and functional relations, and verbal explanations contextualize and interpret these symbolic elements. This multimodal integration is a defining feature of physics discourse and an essential consideration for ESP instruction and translation (Lemke, 1998).

3. Terminology in Physics English

3.1. Lexical Precision and Nominalization

Physics relies on precise terminology to avoid ambiguity. Many technical terms originate from everyday English words but acquire highly specialized meanings in physics. For example, *spin* in quantum mechanics refers to an intrinsic property of particles rather than rotational motion, while *field* designates a region in which a force is exerted, extending beyond its everyday use. Nominalization allows processes and phenomena to be reified as concepts (*acceleration*, *momentum*, *entropy*), facilitating concise and formal discourse.

Several studies have specifically examined the vocabulary and conceptual structures in physics discourse. For instance, Paltridge (2002) investigates how nominalized forms and technical terms facilitate the compact expression of complex processes, while Biber and Gray (2016) analyze corpus-based evidence showing recurring collocational patterns in physics texts that reflect epistemic and cognitive constraints. Meanwhile, Jenkins (2014) emphasizes the role of metaphor in bridging abstract physical concepts with learners' prior knowledge, suggesting that careful integration of metaphorical and literal terminology can enhance both comprehension and retention. These findings underscore the importance of a systematic, corpus-informed approach to analyzing specialized English in physics, complementing the semiotic framework discussed in subtitle 2.

3.2. Conceptual Metaphors and Semiotic Mediation in Physics

Metaphors serve as cognitive tools that structure understanding of abstract phenomena. The term *wave-particle duality* exemplifies metaphorical mapping, allowing learners to conceptualize quantum behavior by drawing analogies with familiar physical entities. Similarly, *string vibration* in string theory leverages kinesthetic metaphor to represent complex multidimensional phenomena. Metaphors in physics are therefore not decorative; they are epistemically productive, enabling conceptual mediation and pedagogical scaffolding (Lakoff & Johnson, 1980).

Physics terminology is inseparable from symbolic and visual representations. For instance, *vector*, *tensor*, and *operator* are terms whose meanings are instantiated through equations and diagrams. Effective ESP instruction requires learners to navigate this semiotic interface, understanding how verbal and symbolic forms complement each other to convey complete conceptual meaning.

4. Metaphor and Pedagogical Implications

4.1. Teaching Physics Terminology in ESP Contexts

The teaching of physics terminology in ESP contexts benefits from recognizing that specialized language functions as a semiotic system, where verbal, symbolic, and visual resources jointly convey meaning. Understanding the conceptual interactions among these modes provides the theoretical foundation for multimodal pedagogy, allowing learners to engage with terminology, diagrams, and symbolic notation as an integrated system rather than as isolated elements.

Multimodal approaches to ESP instruction have gained significant attention in recent years. For example, Holmes and Stubbs (2015) argue that the integration of verbal, symbolic, and visual resources in teaching scientific discourse allows learners to construct meaning more effectively, particularly when dealing with abstract concepts such as quantum mechanics or electromagnetism. Similarly, Cortes (2016) emphasizes the pedagogical value of combining diagrammatic analysis with targeted terminology instruction to scaffold understanding and improve disciplinary literacy. Such research highlights the potential of semiotic-aware ESP pedagogy, reinforcing the argument that multimodality is not merely a supplementary tool but a central feature of physics English teaching.

4.2. Developing Conceptual Awareness and Terminology Management

Incorporating metaphor analysis into ESP curricula enhances learners' conceptual awareness. For example, tracing the metaphorical extension of *field* from everyday contexts to electromagnetism clarifies abstract theoretical constructs. Similarly, understanding *quantum superposition* through layered visual and verbal representations supports cognitive accessibility.

Translating physics terminology involves more than substituting equivalent words. Translators must consider cultural, metaphorical, and semiotic dimensions to preserve meaning across languages. Semiotic analysis guides translators in navigating terms like *entanglement* or *quantum leap*, ensuring conceptual fidelity while avoiding misinterpretation. Terminology management tools and standardized glossaries can facilitate consistency and accuracy (Sager, 1990).

5. Research Methodology

5.1. Research Design and Data Collection

The study adopted a qualitative, corpus-informed approach to the analysis of specialized English in physics as a semiotic system. The research focused on the identification, classification, and interpretation of terminology, symbolic notation, and visual representations in physics discourse, with attention to their pedagogical and translational implications. The design was exploratory-descriptive, emphasizing the detection of recurrent patterns in lexical usage, metaphorical mappings, and multimodal integration.

The corpus consisted of approximately 50–60 sources, including academic journal articles in physics (e.g., *Physical Review Letters*, *European Journal of Physics*), university-level textbooks covering mechanics, thermodynamics, electromagnetism, and quantum physics, as well as instructional materials employed in ESP courses for physics students, such as lesson plans, exercises, and glossaries.

5.2 Analytical Procedure and Rationale

The methodology encompassed three interrelated analytical steps:

- **Identification and classification of specialized terminology:** Extraction of technical terms, including nominalizations, metaphorical expressions, and lexically ambiguous items. Terms were categorized by subdomain, covering mechanics, thermodynamics, electromagnetism, and quantum physics.
- **Analysis of multimodal representations:** Examination of the interaction between verbal terminology, mathematical symbols, formulas, and diagrams, with particular attention to how multimodal resources mediate conceptual understanding.
- **Analysis of pedagogical and translational implications:** Evaluation of terminology presentation in instructional contexts, identification of metaphorical and symbolic strategies supporting learner comprehension, and assessment of translation challenges, highlighting the importance of semiotic awareness in maintaining terminological precision and conceptual fidelity across languages.

This methodology allowed a systematic examination of specialized English in physics while maintaining attention to applied linguistic concerns, pedagogical strategies, and translation practices. Through the combination of corpus-based data, multimodal analysis, and semiotic interpretation, the study bridged theoretical insights and practical applications, providing a solid foundation for ESP instruction and cross-linguistic scientific communication.

6. Multimodal Discourse Analysis

6.1. Multimodal Resources

Equations encode relationships among physical quantities, often functioning as semiotic signs themselves. For instance, the Schrödinger equation represents a superposition of quantum states, integrating variables, operators, and constants in

a single formal structure. Learners must interpret these symbols in conjunction with verbal explanations to develop a complete understanding.

Diagrams and graphs serve as visual semiotic resources that complement terminology. Free-body diagrams, field lines, and phase-space plots translate abstract concepts into perceivable forms. Teaching strategies that integrate verbal, symbolic, and visual modes enhance comprehension and facilitate knowledge transfer.

Pedagogical Integration: Effective ESP instruction in physics emphasizes coordinated multimodal engagement. Activities may include annotating diagrams with terminology, interpreting equations through verbal paraphrase, and linking conceptual metaphors to symbolic representation. Such strategies improve learner autonomy and conceptual clarity.

6.2. Pedagogical Analysis

6.2.1. Conceptual and Semiotic Awareness

Pedagogical strategies should foreground the semiotic nature of terminology. Teaching exercises might involve mapping metaphorical structures, linking lexical items to symbolic notation, and analyzing diagrams in parallel with verbal explanations. Such approaches support deep conceptual understanding rather than rote memorization of vocabulary (Trimble, 1985).

Incorporating metaphor analysis into ESP curricula enhances learners' conceptual awareness. For example, tracing the metaphorical extension of *field* from everyday contexts to electromagnetism clarifies abstract theoretical constructs. Similarly, understanding *quantum superposition* through layered visual and verbal representations supports cognitive accessibility.

Physics discourse relies heavily on nominalization and lexical precision to convey abstract concepts succinctly. Terms such as *acceleration*, *momentum*, and *energy transfer* exemplify this nominalization, allowing for formal, concise expression in written texts. Analysis of nominalizations in academic articles can help learners recognize the patterns that structure scientific argumentation, improving reading comprehension and production in ESP contexts.

6.2.2. Practical Classroom Applications

To illustrate the pedagogical applications of semiotic and multimodal analysis, consider the teaching of *quantum superposition*. In instructional texts, the term is often introduced alongside both a verbal explanation and a visual representation of overlapping probability waves. By engaging learners in exercises that map the linguistic term to diagrams and symbolic notation, instructors can enhance conceptual clarity. Further, metaphorical descriptions such as “simultaneous states” or “wavefunction overlap” provide cognitive scaffolding, enabling students to link abstract phenomena to intuitive understandings. Similar approaches can be applied to teaching electromagnetism, where vector diagrams and field line illustrations accompany precise terminology to consolidate comprehension.

6.3. Examples of Terms and Classroom Activities

6.3.1. Lexical Awareness and Disambiguation

In teaching ESP for physics, it is essential to draw students' attention to the

differences between the specialized meaning of terms and their general English sense. For example:

- *Field* → in general English, it may mean “agricultural field” or “area of activity,” while in physics it refers to “a region in which a force is exerted” (e.g., electric field, magnetic field).

Semantic shift: highlights the shift from concrete or metaphorical spatial areas to abstract force-related regions.

- *Spin* → ordinarily “rotation” or “twirl,” but in quantum physics it denotes an intrinsic property of particles.

Conceptual abstraction: demonstrates that the term’s physical meaning is not literal rotation, emphasizing abstraction in quantum mechanics.

- *Work* → generally “labor” or “job,” but in physics it represents mechanical work $W = F \cdot d \cdot \cos \theta$.

Formalization: shows how a familiar concept is formalized mathematically in physics, moving from everyday action to precise measurement.

- *Power* → general English “ability” or “strength,” while in physics it denotes the rate at which work is done, $P = \frac{W}{t}$

Quantitative framing: links conceptual understanding with quantitative description.

- *Momentum* → commonly understood as “impetus” or “progress,” but in physics defined as a vector quantity, $\vec{p} = m \cdot \vec{v}$.

Vectorial specification: illustrates semantic narrowing and formalization in vectorial terms.

- *Resistance* → everyday sense of “opposition” or “refusal,” whereas in physics it refers to electrical resistance, $R = \frac{V}{I}$.

Operationalization: demonstrates how general opposition is quantified in a specific physical context.

- *Potential well* → metaphorical in form (“well”), but denotes a precise energy configuration in classical and quantum mechanics.

Metaphorical grounding: highlights metaphorical imagery linked to formal energy concepts.

- *Flux* → general meaning “flow” or “change,” but in physics refers to the integral of a field across a surface (e.g., magnetic flux $\Phi = \int \vec{B} \cdot \vec{dA}$)

Mathematical abstraction: shows abstraction of motion into mathematical formalism, bridging conceptual and symbolic understanding.

Pedagogical activity

The instructor shall present terms with comparative examples: students identify the general meaning first, then the scientific meaning, and finally produce scientific sentences using the terms correctly. This activity can be combined with diagrams and symbols to consolidate understanding.

6.3.2. Metaphors and Visualization

In physics ESP instruction, many key terms describe abstract or counterintuitive phenomena, often expressed through metaphors, models, or symbolic representations. Terms such as wave, particle, superposition, and entanglement can be paired with visualizations, animations, or diagrams to help students connect verbal explanations with mathematical and conceptual representations.

For instance, superposition can be illustrated with a graphic showing two overlapping probability states, accompanied by verbal explanation and the mathematical representation: $|\psi\rangle = \alpha |0\rangle + \beta |1\rangle$

Other abstract or metaphorical terms can be similarly supported with targeted visualizations and pedagogical commentary:

- *Barrier (quantum tunneling)* → metaphor suggests obstruction, yet particles can penetrate it probabilistically.

Pedagogical insight: metaphor must be explicitly problematized to avoid classical misconceptions.

- *Orbitals* → unlike classical orbits, they represent probability distributions.

Visualization: electron density clouds rather than trajectories.

- *Wave packet* → combines everyday “packet” imagery with wave superposition.

Semiotic interest: hybrid metaphor linking discreteness and continuity.

- *Collapse (of the wave function)* → metaphorical verb implying physical destruction, whereas it signifies a change in knowledge state.

Teaching strategy: contrast linguistic metaphor with epistemic interpretation.

Pedagogical exercise:

Students complete tables linking each term to: its scientific definition, metaphorical analogy, mathematical symbol, and an application example. This enhances both conceptual understanding and ESP competence.

6.3.3. Nominalization and Discursive Coherence

Terms such as acceleration, momentum, energy transfer, angular velocity, quantization, stabilization, interaction, and propagation are nominalized to allow concise and formal scientific writing.

- *Acceleration* → expresses change in velocity as a measurable quantity.

Formalization: shows how dynamic processes can be represented as abstract nouns for precise scientific discourse.

- *Momentum* → expresses mass × velocity as a vector quantity.

Conceptual clarification: highlights the shift from everyday motion to an abstract, formalized concept suitable for theoretical reasoning.

- *Energy transfer* → describes the movement of energy between systems.

Discursive function: demonstrates how complex processes are nominalized for conciseness and coherence in scientific writing.

- *Angular velocity* → quantifies rotational speed of an object.

Formalization: encapsulates magnitude and direction in a single technical noun, integrating multiple aspects of a concept.

- *Quantization* → expresses theoretical constraints in quantum physics.

Conceptual clarification: links abstract theoretical principles to linguistic form, showing how scientific laws can be encoded in nouns.

- *Stabilization* → describes system stability in plasma or particle physics.

Discursive function: emphasizes outcomes over actions, reinforcing a formal and concise scientific style.

- *Interaction* → replaces verbal constructions (“particles interact”) with abstract relational nouns.

Discursive function: facilitates concise description of relationships, important for both ESP communication and scientific writing.

- *Propagation* → formalizes dynamic processes in wave physics.

Discursive function: combines action and concept in a single noun for efficient and coherent reference to processes.

Activity: Students first analyze sentences from scientific articles, highlighting nominalizations and reformulating them in more accessible language. As an extension, they transform clauses such as “the wave propagates through the medium” into “wave propagation through the medium,” reinforcing nominalization and discursive coherence.

7. Applied Translation Considerations

7.1. Enhancing Translation Accuracy through Semiotic Analysis

7.1.1 Challenges and Implications

Physics terminology often contains culturally or historically situated metaphors, which can pose challenges in cross-linguistic transfer. Translators must navigate these nuances carefully to avoid distorting conceptual meaning. Terms like spin, charge, or field may require adaptation in target languages to maintain disciplinary accuracy.

ESP textbooks and instructional resources should incorporate guidance for both learners and translators, highlighting terminology, metaphorical structures, and symbolic conventions. Such materials promote conceptual understanding, translational competence, and effective scientific communication, ensuring that metaphors and abstractions are interpreted correctly across languages.

7.1.2 Strategies for Semiotic-Aware Translation

A semiotic approach to translation emphasizes conceptual equivalence, multimodal interpretation, and glossary development. Translators benefit from understanding the interplay of verbal, symbolic, and visual forms, allowing them to produce texts that are accurate, readable, and pedagogically useful.

For example, the term spin in quantum mechanics can be misinterpreted in literal translation as rotational movement, potentially misleading learners or readers in other languages. Research by Gotti (2013) and Casas-Tost (2015) demonstrates that semiotic analysis, including attention to metaphorical and symbolic dimensions, improves translation accuracy by highlighting conceptual correspondences rather than relying solely on lexical equivalence.

Translators are thus encouraged to integrate multimodal cues from diagrams and equations, which often carry explanatory weight that complements verbal descriptions. This approach ensures terminological precision and preserves the pedagogical integrity of instructional materials, supporting both ESP teaching and accurate translation.

7.2. Translation and Disambiguation Activities

Here are just a few example of lexical elements that bring semantic challenges and some methods to tackle them.

7.2.1. Typical Translation Challenges

- *Charge* → can mean “fee” or “load” in general English, but in physics it refers to “electric charge.”

- *Potential* → general meaning “potential,” in physics “electric potential.”
- *Current* → “flow” can be ambiguous: electric current, water current, current of opinion.
- *State* → general meaning “condition” or “political entity,” in physics refers to a complete description of a system (quantum state).
- *Mode* → everyday “manner,” in physics a specific pattern of oscillation or vibration.
- *Coupling* → general “connection,” but in physics denotes interaction strength between systems or fields.
- *Degree of freedom* → idiomatic in English, but a precise count of independent variables in physics.

Translation risk: literal rendering may obscure conceptual meaning in the target language.

7.2.2. Pedagogical and Translation Strategies

Students or translators receive texts with these terms in different contexts and must choose the correct translation in the target language, justifying their choice based on scientific definition and discourse context. Suggested activities include:

- *Contrastive definition task:* students compare dictionary definitions with textbook definitions in both source and target languages.
- *Equation-led translation:* begin from formulas (e.g., $E = m \cdot c^2$, $\nabla \vec{E} = \frac{\rho}{\epsilon_0}$) and reconstruct verbal explanations in the target language.
- *Metaphor evaluation exercise:* identify which metaphors can be retained and which must be neutralized in translation.
- *Multimodal integration:* for terms such as vector, force diagram, or magnetic field lines, interpret verbal text, formulas, and diagrams simultaneously. Example: provide a paragraph with $\vec{F} = q \cdot \vec{v} \times \vec{B}$, a diagram, and verbal explanation; students translate the text and annotate the symbols.
- *Glossary development:* create a mini-bilingual glossary including general meaning, scientific meaning, mathematical symbol, and visual example to prevent confusion.

These exercises strengthen both conceptual understanding and ESP competence, ensuring accurate and pedagogically sound translation of physics terminology.

8. Conclusions

Scientific English in physics functions as a complex semiotic system that integrates verbal, symbolic, and visual resources to mediate conceptual understanding, teaching, and translation. This study emphasizes the centrality of terminology, metaphor, multimodal representation, and nominalization in structuring discourse and facilitating learning. Pedagogical strategies informed by semiotic analysis – such as comparative exercises, visualization of abstract phenomena, and the systematic linking of terms to symbols and diagrams – can significantly enhance learners’ conceptual understanding and their ability to navigate specialized English. In addition, attention to cross-linguistic and translation challenges demonstrates that ESP instructors and translators alike benefit from semiotic-aware strategies, including bilingual glossaries, multimodal interpretation, and metaphorical

scaffolding. These approaches support accurate translation, prevent terminological ambiguity, and foster greater disciplinary literacy across languages. By integrating applied linguistics, semiotics, and translation studies, this research contributes to ESP methodologies that not only improve comprehension and retention but also enable learners to engage effectively in international scientific discourse. Future research may focus on developing interactive, multimodal ESP materials, corpus-based analyses of disciplinary vocabulary, and longitudinal studies examining the impact of semiotic-aware teaching on learners' scientific literacy. Such efforts will further enhance the clarity, accessibility, and global dissemination of physics knowledge, reinforcing the role of English as a truly mediating tool in contemporary science.

References:

- [1]. **Biber, D., & Gray, B.** (2016). *Grammatical complexity in academic English: Linguistic change in writing*. Cambridge: Cambridge University Press.
- [2]. **Casas-Tost, M.** (2015). Translating science: Semiotic perspectives on terminology. *The Translator*, 21(2), 123–142.
- [3]. **Cortes, V.** (2016). Multimodality in the classroom: Teaching scientific concepts through diagrams and texts. *Journal of English for Academic Purposes*, 23, 50–62.
- [4]. **Eco, U.** (1976). *A theory of semiotics*. Bloomington: Indiana University Press.
- [5]. **Flowerdew, J.** (2013). *Discourse in English language education*. London: Routledge.
- [6]. **Gotti, M.** (2013). Translation and terminology in scientific discourse. *Linguistica Antverpiensia*, 12, 45–62.
- [7]. **Halliday, M. A. K., & Martin, J. R.** (1993). *Writing science: Literacy and discursive power*. London: Falmer Press.
- [8]. **Holmes, J., & Stubbs, M.** (2015). *Approaches to teaching scientific English*. Oxford: Oxford University Press.
- [9]. **Hyland, K.** (2000). *Discipline-specific discourse: Social interactions in academic writing*. London: Longman.
- [10]. **Jenkins, J.** (2014). *English as a lingua franca in the classroom: Pedagogical implications*. London: Routledge.
- [11]. **Lakoff, G., & Johnson, M.** (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- [12]. **Lemke, J. L.** (1998). Multiplying meaning: Visual and verbal semiotics in scientific text. In J. R. Martin & R. Veel (Eds.), *Reading science* (pp. 87–113). London: Routledge.
- [13]. **Montgomery, S. L.** (1996). *The scientific voice*. New York: Guilford Press.
- [14]. **Paltridge, B.** (2002). *Genre, frames and writing in research settings*. Amsterdam: John Benjamins.
- [15]. **Sager, J. C.** (1990). *A practical course in terminology processing*. Amsterdam: John Benjamins.
- [16]. **Swales, J. M.** (1990). *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.
- [17]. **Swales, J. M., & Feak, C. B.** (2012). *Academic writing for graduate students* (3rd ed.). Ann Arbor, MI: University of Michigan Press.

- [18].**Trimble, L.** (1985). *English for science and technology: A discourse approach*. Cambridge: Cambridge University Press.
- [19].**Whorf, B. L.** (1956). *Language, thought, and reality*. Cambridge, MA: MIT Press.

FROM LANGUAGE TO CULTURE: RETHINKING ENGLISH FOR SPECIFIC PURPOSES FOR A DIVERSE WORLD

Asma Merine, Faiçal Fatmi

University of Salhi Ahmed, Naama, Faculty of Letters and Languages, Department of English, Naama, Algeria

merine@cuniv-naama.dz

fatmi@cuniv-naama.dz

Abstract: *Undeniably, the focus on communication skills in the professional and academic fields has never been this pronounced in this era of globalisation. English language proficiency is in increasing demand in specialised fields, which has consequently brought English for Specific Purposes (ESP) to the forefront of research and practice. In the context of Business, Engineering, Medicine, Science, and other specialised domains, the fundamental language skills needed have always been the focus of ESP. Nevertheless, the approach to ESP has been adjusted to reflect changes in the global environment and the growth of cultural diversity. The rise of English in many parts of the world has brought new issues and opportunities to its instruction and use, particularly in the teaching of English as a foreign language. In light of the ongoing diversification of English, the importance of its use in different contexts is increasingly critical. The current model of ESP often neglects the intricate connection between language and culture and the role it plays in communication, especially for domains where intercultural sensitivity is integral to the professional discourse. For instance, in mastering the technical language of a profession, the culture and context that help to articulate the communication are very important in the transfer of knowledge and collaboration internationally. The primary goal of this paper is to investigate the shifting focus of English for Specific Purposes to the increasingly complex integration of language and culture by delving into the intersection of culture, language, and specialised knowledge. This paper endeavours to reconstruct a framework for ESP that not only addresses the linguistic expectations and requirements of learners, but also equips them to appropriately manage the cultural terrains in which their domains of specialisation operate. This study focuses on the significance of incorporating cultural aspects into the ESP curriculum and the application of intercultural communication strategies as part of the teaching of English to handle internationalisation, advocating for the adoption of a more multidimensional perspective on English instructional practices as a tool for teaching and for learning skills needed in today's pluralistic, multifaceted, and globalised world.*

Keywords: *Communication skills; cultural diversity; culture; ESP, language skills; non-native contexts; specialized knowledge*

1. Introduction

ESP focuses on aligning teaching outcomes with vocational and professional

career pathways within the broader framework of ELT. Unlike General English classes, which provide a basic command of English for everyday communication, ESP classes cater to the specific needs of students from disciplines such as tourism, law, medicine, business, information technology, aviation, and other vocational and technical fields. This area of research has proven multifaceted in application value and relevance to students from different fields of study. Essential to this point, however, is that any ESP is designed to train a learner in the necessary practical and theoretical language skills relevant to a given field. Frameworks on ESP still seem to give excessive focus to grammar and vocabulary at the expense of the other aspects of communication. In other words, even though there is a consensus that culture and language inform and shape each other, the way culture is taught in ESP is as though there were no culture at all.

Globalisation, indeed, is slicing through geographical boundaries, which further justifies the incorporation of cultural components in an ESP course to enhance communication and intercultural competence. This is not just a more complex perspective in the teaching of a language, but a fundamental change that accepts culture as an active shaper of how a language is used.

Learning some details within a culture can hinder a learner from functioning at a professional level, particularly in relation to communication and relating to other individuals. Changing the focus of ESP to the cultural elements enables and empowers ESP practitioners to provide learners with instruments for multicultural contexts where interacting at a level beyond communication is cultural discourse.

The present study seeks to impressively answer the following questions for the purpose of understanding the culture and language integration better:

- 1) What hurdles do teachers face in integrating culture with instructional content in an ESP class and its impact on teaching effectiveness?
- 2) What techniques should be used in the teaching of the described culture in the ESP courses to enhance the learners' professional interaction skills and competence levels?

The integration of culture and foreign language knowledge is crucial in cultivating and sustaining effective cross-cultural communication. Culture encompasses communication, and it surely has significant language components; and communication is language, so it contains and violates numerous cultural values and parameters. In the context of ESP, it is not sufficient to know the technical vocabulary; it is also necessary to understand the cultural etiquette surrounding its usage, including how, when, and to whom it is appropriate to use the vocabulary. This is especially the case for the business, healthcare, and tourism sectors, in which interactions frequently take place among people from different cultures. In addressing this issue, this theoretical study seeks to advance the framework of language education, providing perspectives that may transform ESP pedagogy to align more effectively with the realities of globalisation. All in all, the paper examines issues surrounding the teaching of culture within ESP and considers some of the pedagogical and conceptual challenges of teaching and learning culture.

2. Literature Review

2.1. What is Culture?

Researchers in anthropology, sociology, and even linguistics, have studied culture

from different perspectives due to its complex nature. Kashima, Bain, and Perfors (2019) suggest a population-level, dynamic definition of culture that is particularly relevant for contemporary research in that it views culture not as a static 'heritage' but as an information system that flows and is transformed over time. They define culture as the collection of socially communicable knowledge within a population – specifically, meanings, beliefs, norms, practices, know-how that disseminate throughout a population via communicative processes, learning, imitation, and institutions – and that knowledge can influence cognitive processes, affective processes, and behavioural processes. Such a change in focus encourages analysts to consider the ways in which cultural messaging is created, communicated, maintained, and changed, rather than defining culture in terms of traditions which are closed and bounded. Such a focus encourages the study of which messages persist, the ways in which practices spread, and the ways in which social structures and material objects stabilise or accelerate processes of change. According to Causadias (2020), the term “culture” is often used vaguely. Causadias therefore advocates for a greater specific form of the p-model wherein culture is treated as a system of “people, places, and practices” aimed at a particular objective of “enacting, justifying, or resisting power.” Within this framework, culture encompasses more than simply a static body of traditions; rather, it constitutes a complex system, with 'people' describing the population's demographics, social relationships, and group dynamic processes; 'places' refers to the ecological conditions and institutional frameworks that guide behavioural opportunities; and 'practices' describes communities' behavioural enactments — their agency, routines, and participatory engagement. He highlights the importance of power as an integrating force, emphasising that particular cultural systems are both sustained and contested through the systems that influence domination, control of access to particular spaces, and the ordering of behaviours that are permissible or deemed valuable. To summarise, culture is conceptualised in numerous ways, including, but not limited to, shared meanings and symbols, practices that are observationally acquired, and configurations of systems that result from institutions and power according to various fields of study and academics. A culture can be defined as a set of values, beliefs, attitudes, and practices that a group of individuals shares and transmits to one another, and that, as a unit, helps them interpret the world, interact with other individuals, and regulate their actions based on their social environment.

2.2. Obstacles to Integrating Culture in ESP Classes

Until recently, an absence of references to culture in ESP was due to the perception that ESP was culture-free, as commented upon by Strevens (1977, p. 89) when he argues that ESP is based on the idea of teaching and learning the language in its bare form, devoid of cultural context. In her contribution, Omaggio (2001) discusses the rationale for the absence of culture in ESP classes and attributes it to the lack of time, noting that educators are burdened with an overloaded syllabus to address. Moreover, she points out that numerous instructors feel lost when it comes to culture due to their inadequate knowledge of the target language, as well as which aspects to include in the ESP syllabus. In this regard, Gonzalez (1995, p. 58) remarks that English is used exclusively in specific areas such as science, technology, and business. Therefore, in LSP, culture is less important and given less emphasis. Indeed, the incorporation of

culture in an ESP class poses a range of difficulties that teachers need to solve. Such difficulties may hinder the importance of instruction on culture and the learning experience in totality. In an ESP context, the relevance of culture is, more often than not, overlooked, particularly in teaching situations. According to Byram (1997), 'communication in a second/foreign language involves much more than a question of grammar and vocabulary'. They may focus on language instruction without the critical cultural components that are necessary for successful implementation in professional contexts. In addition, the lack of culturally relevant content is a problem of many, if not most, professional syllabuses. The problem is perhaps easily explainable by the overly rigid framework of certain ESP programmes. Dudley-Evans and St John (1998) highlight how the structural framework of certain ESP programmes may severely limit the incorporation of culture. This poses a major problem for educators while selecting culturally relevant themes and practices to accompany the lessons.

With regards to retraining, teachers may experience a lack of materials, tools, and organised advancement opportunities for the integration of culture into teaching and professional development. As Kramsch noted in 1993, instructors sometimes lack confidence in their teaching abilities because they have not received adequate training in what we call the 'culture'. This absence might hinder students from working interactively with culture. Also, students' different backgrounds in an ESP class can be an additional hurdle to integration. Hinkel (1999), for example, talks about the different interpretive and communicative cultural issues of fragmentation. In addition, it might become next to impossible to derive the right answer to the set of issues without the requisite help.

Some educators, unfortunately, refuse to implement new methods in changing their teaching strategies. Sullivan, (2006), states, "The inability to change one's teaching practices is a barrier to curriculum innovation." Such closed-mindedness is likely to affect a teacher's ability to embrace a broader, more inclusive philosophy of education anchored in culturally responsive teaching.

Last but not least, assessing cultural competence is challenging because conventional methods of evaluation often overlook students' comprehension of cultural intricacies. As Scarino (2014) observes, there is a shift towards focusing on linguistic accuracy and away from teaching culturally integrative approaches, which further neglects the integration of culture in ESP courses.

As mentioned earlier, incorporating culture into ESP courses poses difficulties that demand thoughtful reflection and intricate design. Overcoming the hurdles mentioned will be instrumental in formulating a more effective and culturally considerate ESP curriculum that equips students for the demands of cross-cultural communication.

3. Methodology

3.1. Research Approach

In this study, the research approach is qualitative, revolving around the analysis of literature and the documented trends of English for Specific Purposes, and in the case of this particular study, the Language for Specific Purposes area. This study employs a descriptive and analytical approach to examine the growth of ESP in connection with culture in different specialised areas. The focus of this research paper is to try to understand the evolution of ESP, particularly concerning the ESP

cultural components. This evolution is characterised by shifts, challenges and the integration of new, ESP-related paradigms. The paper does not claim to present primary, empirical data, but aspires to create a conceptual structure that can be used to direct future empirical investigations. This method allows for a deep study of the responsive evolution of English for Specific Purposes due to globalisation and cultural diversity, which, in turn, provides a basis for other institutional studies on intercultural communication in particular domains. This inquiry updates the theory of English for Specific Purposes by adding the historical and current interrelated trends and gaps the inquiry has discovered, in particular, for the countries where English is a foreign language.

3.2. Scope and Limitations

This study revolves around the evolution and history of ESP, concentrating mostly on the intersection of language and culture in Business, Engineering, Medicine, and Science, among other domains. This paper investigates the ongoing changes being made to the traditional ESP model with respect to the increasing emphasis on culture and intercultural communication. This study will examine literature on the teaching of English for specific purposes in different contexts and analyse the way English teaching in specialised disciplines has evolved due to the demands of globalisation and pluralism. By examining major theories and the distinct evolution, this research will show how ESP curricula focus more on the skills learners require to operate within the intricate cultural contexts of their domains.

Regardless, this study does have some limitations to note. In the analysis of the topic “Qualitative Research” and the body of literature relevant to it, the conclusions of the study are restricted to the emphasised literature, which is not necessarily all-inclusive or the most recent in the area of research. Moreover, this study has not carried out primary empirical research, and therefore is not able to offer first-hand perspectives from practitioners at the grass-roots level, both educators and learners, who engage with ESP in active practice. Hence, this paper, while attempting a broad theoretical mapping, is not able to articulate situational specifics, nor present evidence of the implementation efficacy of cultural elements within the context of ESP instruction.

4. Approaches to Cultural Integration within the Framework of ESP

Wang (2008) asserts that the teaching of foreign languages equates to the teaching of foreign cultures, which means foreign language teachers are, in reality, foreign culture teachers. Moreover, Agar, an American anthropologist, introduced the term 'languaculture' in 1996 to describe the connection between language and culture. Actually, this issue has provoked a great deal of discussion. Ouakrime (1992) mentions several reasons for integrating culture into ESP programmes. The most critical reasons are outlined below:

Comprehending the structure of culture, its concepts, customary beliefs, and its members' behavioural patterns;

- Understanding the personal and organisational aspects of culture;
- Attaining adequate knowledge and comprehension of the culture;
- Developing the ability to understand the actions of community members or the outcomes of those actions as behaviours and their intended meanings;
- To use cultural knowledge as a motivating factor to advance proficiency in

the other language.

Integrating cultural knowledge within the framework of ESP can certainly improve learners' ICC by preparing them to handle different types of interactions mindfully and empathetically. This entails the employment of some particular techniques which enable the teachers to instil an appreciation for cultural pluralism among learners. This introduction talks about the aims of adding culture-related topics to ESP classes and aims to guide learners towards success in a diverse setting.

4.1. Needs Analysis alongside Cultural Goals

Within the scope of ESP, a systematic NA specifically tailored to the learners is required for the development of the language programme. This includes assessing the learner's skills in English, the objectives in English they wish to set for themselves, the English-related activities they plan to pursue, and conducting a discourse analysis of their profession for the pertinent language skills and gaps. This consideration stems from the premise that the English language is taught for Specific Purposes for the sake of students, aiding in the realisation of teaching English for practical utility. In their book, Dudley-Evans and St. John (1998) provide an extensive treatment of systematic needs analysis. These are the principal steps that they outline:

- Consider the students in relation to their background, their mastery of English, and the contexts in which they will apply their English language competencies.
- Collect information through surveys, interviews, questionnaires, and observations about learners' goals, motivations, and language competencies.
- Study the professional or academic domains in which the language will be used and understand that the learners' activities, contexts, and socio-cultural dimensions are critical.
- Based on the collected information, identify the relevant skills (listening, speaking, reading, writing) and components (vocabulary, grammar) of language that are necessary for the intended group.
- Organise the identified needs based on their importance and immediacy. This assists in designing the curriculum in the areas that are most needed by the learners.
- Collaborate with other stakeholders: employers, educators, and specialists from relevant fields, to confirm the results and gather further information regarding the learners' requirements.
- Design a curriculum utilising the results of the needs assessment, paying particular attention to the gaps in skills and competencies and ensure that the curriculum incorporates both language skills and cultural competencies.
- To ensure the desired outcome is achieved, implement the curriculum system, assess, and evaluate its efficacy continuously. Then, collect feedback from the stakeholders as well as the learners to implement the necessary changes and improvements.

As a matter of fact, Dudley-Evans and St John (1998) define NA as a systematic method of defining what learners must know in terms of language and culture within particular settings. It involves the collection of data about learners' backgrounds and the professional contexts in which they will function. This step is

critical in the design of the ESP curriculum aimed at meeting learners' needs so that they are able to function linguistically and professionally in their fields.

Along with emphasising linguistic skills, traditional NA lacks cultural aims, which are important for developing ICC. Effective communication, as Byram (1997) explains, goes beyond knowing how to express oneself in a different language and involves understanding the culture in which the communication takes place. Understanding different norms, values, and modes of communication is essential for avoiding misunderstandings and facilitating positive relationships in a multicultural context, which is the focus of cultural objectives. In this regard, Nechifor & Dimulescu (2021, p. 83) explain that integrating culture into teaching alongside developing students' intercomprehension and intercultural competences is crucial in preparing students for engagement in the contemporary globalised professional context.

Integrating this cultural dimension into a needs assessment framework comprises a sequence of steps. Primarily, educators ought to delineate the cultural parameters of the learners. This may require comprehending the cultural disposition of the learners, as well as the culture that they might encounter in the course of their future professional practice. Educators can gather information via surveys, interviews, and focus groups regarding a learner's culture, prior experience and expectations. The next step is to delineate specific cultural competences that learners need to attain. For example, in the business field, the ability to analyse and interpret business negotiations or non-verbal communication can facilitate the smooth conduct of a business meeting.

Incorporating this specific set of cultural competencies into the curriculum fosters language acquisition alongside workplace situations dealing with cultural interactions. The case study, role-play, and simulation methods, which mirror authentic situations are all effective strategies for achieving culture-related goals in the teaching of ESP. These activities allow learners to develop their language skills while they engage with cultural materials. Through real-life examples and situations, learners understand how deeply culture influences communication.

4.2. Contextual Learning and Authentic Materials

When teaching ESP, two methods that enhance the learning experience by embedding real-world relevance and context into the learning process are the use of authentic materials and contextual learning. Indeed, authentic materials in the context of ESP teaching are not designed with the purpose of language instruction in mind. Instead, they are extracted from contexts and settings that learners in specific fields would engage. The importance of materials is that they capture the language and the specific situational contexts learners will encounter in their occupational or academic fields. Such materials are described as reports, letters or correspondence, and technical manuals, among others, which are tailored to the learners and which immerse the learners in the field's language (Drinovac Topalović & Ljubas, 2024, p. 171). Authentic materials are important in the classroom and are often used in the field of ESP because they provide a real-life context that is pedagogically useful for students. Moreover, the purpose of using these kinds of materials is to foster a genuine connection between the text and the learners, which aids in improving situated literacy skills and language proficiency (Borucinsky et al., 2020, p. 31-44).

In ESP pedagogy, contextual learning centres on the premise that students learn

best when the language being taught is connected to the contexts and scenarios they will encounter in their future employment or academic endeavours. In this regard, it can be said that contextual learning is the process of designing exercises, instructional materials, and learning experiences that integrate the application of language skills in the relevant real-world contexts. Research demonstrates that contextualisation has a positive impact on learning efficiency in ESP classes because students are able to relate to and utilise the language skills they acquire in their workplaces. Johns (1991) highlights the importance of incorporating authentic materials in ESP. She points out that learners interact with the language in their particular fields of interest, which enhances motivation and the utility of the language. When learners encounter the practical relevance of their training, the instruction becomes more meaningful for them.

In terms of cognitive engagement, Swales (1990) outlines the idea of genre and how recognition of the conventions of particular texts within a discipline aids learners in negotiating their career contexts. Thus, contextualised texts not only teach a language, but also help learners get to know the communicative practices in a particular field, which fosters deeper cognitive involvement. In his part, Byram (1997) insists on the significance of culture in language learning as a component of language competence. Contextualised texts contain the culture and practices that are relevant in a particular profession. Through these texts, students understand the culture that surrounds their professions, thus improving their communication abilities.

In summary, integrating contextualised texts within an ESP course has proven to help learners acquire the necessary skills, as well as serve to contextualise the importance of the instruction. The works of many scholars strongly underpin this approach, focusing on authenticity, mental involvement, learner appropriateness, and culture. Through the usage of contextualised materials, ESP practitioners can greatly improve the learners' motivation and esteem for their education. All in all, utilising authentic materials and contextual learning strategies enhances the effectiveness and engagement levels of an ESP curriculum by integrating theory into practice with regard to the learners' actual communication and sociocultural needs.

4.3. Cultural Awareness through Collaborative Learning in ESP

Incorporating culture into the ESP curricula helps learners acquire the skills necessary for dealing with diverse professional environments. Cultural project exchange and project collaborative learning serve as a means to develop both language skills and intercultural competence. Group projects and conversations as means of collaborative learning can enhance cross-cultural exchange among learners of different cultures. In the domain of ESP, Wang (2015) has implemented several strategies to encourage collaborative writing through wikis. Besides, Agustina (2022) describes how focused, well-designed ESP collaborative learning sets have considerable benefits for developing learners' oral skills necessary for professional mobility. Moreover, collaborative learning promotes engagement among the students which in turn fosters both communication and teamwork skills. This is particularly evident in the manner one speaks, plans, and conveys one's thoughts by communicating across varied contexts and advocating for the use of language. Apart from others, Vygotsky (1978) articulates the importance of sociocultural interaction in the development of reasoning abilities. He argues that

doing things together enhances comprehension and memory of information. Working within collaborative teams enables students to engage with multiple points of view informed by diverse cultural frameworks. This diversity of ideas contributes to the deepening of class discussions while also enriching the participants' understanding of cultural nuances.

According to Johnson and Johnson (1999), in many professions, interdisciplinary collaborative groups are more creative and better at problem-solving, which is another fundamental aspect of many professions. Furthermore, interdisciplinary collaborative work within simulations can mimic real-life relevant activities associated with particular professions, such as group reports, case presentations, and role plays. Such application of practice reinforces the importance of integrating language and culture education, as suggested by Dudley-Evans and St John (1998) regarding NA in ESP.

Learning through cultural exchanges can be achieved by participating in cultural immersion programmes - be they actual or virtual in nature. Engaging with locals as well as specialists of the area fosters language learning and provides a perspective on the area's culture, customs and communication styles.

Byram (1997) emphasises the need for the framework of IC to include cultural immersion. Moreover, cultural interaction allows students to achieve a broader perspective within their field. Take, for instance, students learning in a business English class. They might be given group work with peers from other countries to analyse case studies of international markets. This kind of international exposure helps students understand the cultural dynamics of business and equips them to function in a highly globalised scenario. Moreover, intercultural relations positively cultivate empathy and understanding, and this form of empathy is crucial for communication.

Deardorff (2006) states that gaining intercultural competence is more than just understanding a culture; it is also having an empathetic engagement with a culture, which is an outcome of cultural interaction. To achieve such aims in an ESP class, one needs to perform cooperative tasks in which learners analyse relevant cultural issues and articulate their thoughts. Consider examining some of the aspects of culture that deal with the communication of business, negotiation, or business etiquette. Also, teachers can take advantage of the newly developed technologies to promote international virtual exchanges with colleagues abroad. These virtual collaboration platforms enable students to interact by sharing their ideas, discussing topics, working jointly on projects, and engaging in cultural sharing. Last but not least, educators can facilitate workshops whereby students can share and learn about different types of cultures. This creates an enriched learning atmosphere where diversity is embraced and nurtured.

4.4. Contrastive-Comparative Approach

There are some instructors who may recognise the importance of teaching culture in the classroom but remain uncertain regarding the methodology to use, and this is a phenomenon that is not peculiar to ESP, but the teaching of English in its broader context as well. Indeed, "the Contrastive Comparative Approach" is a viable methodology when it comes to the integration of culture in ESP classes.

This approach involves cross-cultural analysis of the learners' native culture and that of the English-speaking culture. Such contrasting can enhance learners' cultural sensitivity and their communication effectiveness. To put it differently,

within the context of ESP where the language is learned for performing certain professional activities, it is relevant to deeply value the cultural nuances. This viewpoint considers the person's work experience and prepares him/her for the management of several cultures (Byram et al. 1994). The following are the key benefits of this approach:

- Investigating different cultures aids learners in grasping much more deeply the role of different cultures in shaping behaviours and modes of interaction. This type of knowledge is vital in any professional environment in order to mitigate the possibility of making erroneous assumptions or having misunderstandings.
- The ability to appreciate the differences between the two cultures allows students to adjust their styles of communication. For example, knowing that in some cultures people prefer to be addressed in a more direct manner, while in others the approach is more nuanced, aids students in focusing their communication.
- This approach, in turn, helps learners acquire the necessary competencies needed for their future career. For example, studying cultural differences with regards to business negotiations provides students with the necessary skills to deal with those particular challenges that they will face in their future professional activities.

Regarding the application of this method in the ESP classes, case studies can be used to demonstrate cross-cultural issues related to certain professions. Students will analyse the influence of different cultures on business relationships, decisions, and problem-solving, along with exploring various dimensions of a business environment. In addition, students could organise role-playing games and act out stories with characters from different cultures. This focus on practice allows them to refine their adaptability to culture-bound communicative behaviours. Most importantly, instructors could devise academic assignments where students examine and contrast different aspects of their own culture, and the culture being learned. The principles of work ethics, leadership styles, and negotiation approaches may constitute possible themes. They may also help to organise classroom discussions aiming to motivate students to express and analyse their encounters with cross-cultural issues. Some of the reflection questions are more open-ended and promote dialogue, enhancing their comprehension of the topic.

Overall, this approach serves as a useful framework for teaching culture in an ESP class. By employing systematic cultural comparisons, instructors can foster students' cultural understanding, communicative abilities, and critical thinking. Such an approach not only enriches learners in many ways, but also broadens the scope of language education in the current era of globalisation, in which students need to be trained in comprehending and valuing multicultural differences in order to succeed in any discipline.

5. How can Culture be Integrated into ESP lessons?

Many language educators appreciate the importance of integrating culture into the process of language teaching. However, agreement on how to incorporate this idea into lessons remains elusive. Moreover, some educators feel that they need specialised instruction to teach culture and, further, there is still no prescribed handbook or actual textbook available for use in culture teaching (Frank, 2013).

The lack of consensus may stem from the fact that culture encompasses a wide range of subcategories, such as traditions and customs, food, clothing, history, architecture, artistic expression, and moral codes. Moreover, English is a language that has wide different varieties, such as British English and American English; Which one should be taught? Therefore, fully addressing the scope of culture that would prepare the learner to use English without turning the session into an anthropological or historical discourse on the language could be considered one of the culture-related fundamental influences to be a primary concern of the instructor (Bakić-Mirić et al, 2023). What follows describes teaching culture in the ESP classroom, which consists of four stages.

5.1. Teaching Source Culture

There is a need for teachers to define culture in simple terms because there are various definitions. Having a simple definition allows students to participate in dialogues. Tylor (1871, p. 1) states that culture is a 'complex whole' which encompasses several features. In his part, Snowdon (2017) defines culture as behaviour patterns which show some degree of stability over time among certain groups or populations, differing among individuals but remaining relatively constant within each group. Broadly speaking, when someone considers specific elements of culture, they will likely think about food, clothing, forms of music, artwork, or literary works. Culture may be associated with beliefs, values, worldviews, attitudes, or non-visible aspects of culture. Thus, students need to realise how their own culture shapes their thoughts, interactions, and communication. The ability to consider questions informed by one's culture helps to bridge connections across cultures. In the context of ESP, Byram (1997) points out that culture shapes individuals, which means ESP instructors may assist students in activating their prior cultural knowledge by making them aware of certain important aspects of their culture, whether visible or non-visible. All in all, through source culture, teachers can build cultural awareness that enables students to think about their identity. This level of self-awareness is crucial for communication because self-reflection helps learners to identify how their culture, in multiple ways, shapes their behaviour and engagement during professional interactions.

5.2. Teaching Elements of Culture

The fundamental aspects of culture include language, norms, beliefs, symbols, values, and history. Such aspects may be more challenging to identify and recognise because they tend to be more enmeshed within culture, and they pertain to non-visible manners (Frank, 2013). This helps students learn how communication takes place in context, considering customs, idiomatic expressions, and nonverbal communication. Understanding such phenomena deepens students' comprehension of language and enhances their ability to connect with the realities of the world. A culturally relevant resource that helps ESP learners grasp the various components of culture may best be illustrated through Hall's (1976) cultural iceberg analogy. The iceberg analogy not only helps to support the notion of the equal importance of the invisible but also illustrates their relevance. The Hall Iceberg of Culture is a construct created by the anthropologist Hall to demonstrate the tangible and intangible features of a particular aspect of society.



Figure 1: Hall's Iceberg Model
Source: (Garcia, 2014)

In fact, understanding and interpreting behaviours and expressions within the confines of one's culture can result in conflict and profound misunderstanding. Such a phenomenon is often brought to light as a primary reason for misinterpretation in cross-cultural interactions (Hofstede, 2011; Hall, 1976; Gudykunst & Kim, 2003). An example of an effective activity is "Cultural Dimensions Reflection," in which learners contemplate and analyse cross-cultural issues like individualism versus collectivism. They have the ability to create a chart that shows the comparison of the relation of these dimensions with their own culture versus the English culture. As an example, a teacher may explain that most Western cultures tend to focus on individual achievements, whereas collectivist cultures pay more attention to group harmony, consensus, and agreement. Students are invited to address these differences with reference to the more hidden cultural dimensions, including hierarchy, respect, conflict management, and forms of showing esteem. The goal is to shed light on their often-overlooked differences to aid learners in grasping the guiding arguments and principles that underpin actions in various cultures (Trompenaars & Hampden-Turner, 2012). While identifying and analysing these cultural attributes, educators can initiate discourse that showcases the distinctive aspects of the students' cultures alongside the attributes of English-speaking cultures, thereby enhancing the value and understanding of the complexity of multicultural relations and interactions.

5.3. Teaching Particular Cultures

Perhaps the most difficult aspect of intercultural education is teaching particular cultures. On one hand, one of the most important steps in the process is familiarising students with the theory of Hall as well as Hofstede's cultural dimensions (2011). These theories of cultures will matter a great deal to students in ESP classes as they offer systematic methods through which varied cultures and their behaviour and communication techniques can be understood in a constructed manner. In the case of Hall's theory, he distinguishes two categories of cultures: low-context and high-context cultures. The first tends to be more direct and prefers

oral or written communication, including the use of speeches or texts. Germany and the United States can be used as case studies for this as they greatly appreciate decisiveness and unambiguous communication. On the opposite side, high-context cultures like Japan and several Arab nations tend to be more indirect and rely on contextual and non-verbal cues. These cultures are context-based; therefore, most communication is indirect and nuanced. Teaching students such differences assists learners in understanding how everyday behaviours across cultures might be perceived differently. This understanding of the cultural sociological aspects of communication is essential for grasping and preventing possible communication blunders and other interactions in professional settings. Each dimension reveals how different societies place varying levels of importance on different values and behaviours, and how that, in turn, modifies relationships and decisions both within and outside the workplace. Through these aspects, teachers can further prepare ESP learners to dissect and contextualise the actions of individuals interacting within a particular culture. This will increase their chances of getting a job, thus helping to advance their ICC. Integrating these theories into the curriculum enables educators to facilitate learners' understanding and appreciation of cultural diversity at a deeper level. Such understanding and appreciation are vital for respectful and effective communication in a globalised world, function professionally, and assist learners in navigating through cultural pitfalls (Bakić-Mirić et al, 2023).

5.4. Teaching Intercultural Communication

IC is defined as the form of communication practised by people from different cultures. This phase of teaching is important because it focuses on the fact that communication is not simply the transfer of information; it is also enshrined in culture and is about the contexts in which the information is given and received. Students need to appreciate at this stage of their learning that IC is always culture-bound. Each culture possesses its own set of rules, values, and expectations, all of which influence the way it communicates. Some behaviours viewed as polite and respectful in one culture could, in another, be simply ignored or considered quite inappropriate. Considering that understanding the gaps and the shortcomings in the communication of the students is the cornerstone of the culture, the teacher has the responsibility to explain the gaps in the flow of information pertaining to culture. In addition to that, students need to realise that the flow of information within intercultural contexts is complex and multidimensional. Every culture possesses distinct systems of both verbal and non-verbal communication, and these systems may vary immensely from culture to culture. To illustrate, every culture attaches some meaning to different actions, including touch, facial expressions, and eye contact, and their meanings may be quite different. For example, something that may be considered an act of friendliness in one culture may be an act of insult in another culture. Such complexity highlights the need to take the culture into account when studying the phenomenon of communication. Then, individuals often neglect the wider context of culture as the framework within which communication occurs. Furthermore, these misunderstandings are often magnified due to preconceived notions and stereotypes, as well as prejudices about different cultures.

For example, let's take someone from a low context culture and imagine how they are thinking about someone from a high context culture who is communicating with

them in a very indirect manner. Such a person would likely respond incorrectly if they do not take into account the encasing culture. In this respect, teachers should emphasise the value of cultural awareness and intercultural sensitivity in the context of communication. Students' understanding of the ways in which varying cultures perceive and understand communication helps them devise ways of overcoming challenges. This includes promoting that they engage in intercultural contact with an open mind, listen to the relevant audio constructively, and pose questions to clarify the matter at hand. To conclude, fostering effective intercultural communication enables students to work collaboratively with individuals from different cultures. Through understanding cultures, students will be motivated to respect and understand the nature of communication, thereby reducing the chances of misunderstanding, especially in global contexts.

Teachers need to be aware of students' motivation for learning ESP. In most cases, English will be used for communicating with individuals who are not native speakers; therefore, the ultimate aim is to equip learners with the ability to function efficiently, not only in terms of language, but also in the skills associated with the language, as familiar cross-cultural communicators (Tomalin, 2010). This is a productive approach to ensuring that the classes aim to teach ESP in a way that makes the lessons interesting and educational at the same time, and one of the methods of making lessons meaningful is to ensure that students enjoy the learning process.

6. Strategies for Enhancing Intercultural Communication

In professional contexts, the lack of instruction on culture within the ESP classroom becomes problematic, particularly in the area of IC. Addressing this concern requires prioritising culture within the ESP curriculum. Given that even the most basic English, such as greetings, tenses, and pronouns, involves cultural considerations (Jackson, 2020), culture should be integrated from the outset of instruction. Taking this into account, Liddicoat et al (2003) identified five essential strategies that relate to teaching culture within the contemporary ESP classroom, which are the most useful:

- **Active construction:** This allows learners to build knowledge about their culture and the culture they are studying, which will help them identify the differences between the source culture and the target culture. The teacher's role here is to guide students in noticing, exploring and understanding the differences.
- **Social Interaction:** The objective of this is to help learners appreciate the differences that can occur in communication due to the cultural background of the interlocutors.
- **Making connections:** The strategy helps learners to relate their culture to the new one through a comparative lens.
- **Reflection:** This approach closely resembles the first one and aids students in recognising the differences that exist among cultures and the way in which the differences are communicated.
- **Responsibility:** The last strategy fosters the understanding of cultural appreciation and empathy among students.

Another fascinating strategy is what Cohen et al. (2013) propose learning about cultures by developing students' observation skills through authentic materials

related to the cultures. These may comprise films, books, cuisine, manners, periodicals, or even prose and newspapers from English-speaking countries, tailored to student and course objectives. By exposing learners to tangible elements of a culture, instructors can bridge theoretical ideas with practical understanding, helping students grasp life in that culture. This, in turn, helps learners grasp the more abstract and complex aspects of culture dealt with previously. In the context of ESP, mastering the culture of a specific language, especially for informal business meetings and meals, benefits their professional career by facilitating interaction with people from various cultural backgrounds.

Students may also be assigned the task of preparing a presentation on the experience, real or virtual, of residing in English-speaking countries, focusing on cultural differences and elements such as verbal and nonverbal communication, active intercultural listening, and related stereotypes and prejudices. Other students then critique the “experience” in an English-speaking country and provide appraisal based on not just intercultural behaviour but also understanding of the culture. Furthermore, students may reflect on their own culture, seamlessly building from what they have undertaken in the preceding stages. The endeavours outlined in this article help teachers know the first steps to take in guiding their learners towards greater cultural awareness.

Along with these aspects, cultural issues and cultural similarities and differences among countries can be incorporated into the ESP class. Moreover, when the ESP instructor focuses on teaching the other skills, particularly speaking and listening, ‘throw-away cultural information,’ as illustrated in the table below, serves to draw attention to cultural issues.

Table 1: Culture Integration through Language Skills

Listening skill	Intercultural competence can be fostered through listening skill activities like video-recorded cultural dialogues, audio or video-taped cultural misunderstandings, interviews with native speakers, songs and other relevant materials.
Speaking skill	Intercultural components may be integrated into speaking skill activities like face-to-face tandem learning, asking questions to a native speaker, or role-playing.
Reading skill	A diverse set of activities such as writing and reading critically, as well as writing and reading about culture, can be incorporated in interdisciplinary classes with reading skills and the intercultural dimension in mind.
Writing skill	Undertaking tandem email learning, designing comparative cultural stories and essays, and other such activities emphasise the writing skills with an intercultural dimension.

7. Discussion

The current work strengthens what is arguably one of the most prominent arguments in the field of ESP today. It states that one cannot adequately teach a language for a specific purpose in isolation, as even the most specialised discourse is a resource of a particular culturally informed professional communication. This is

why Wang's (2008) position, that the teaching of foreign languages is also the teaching of foreign culture, and Agar's (1996) understanding of Languaculture, remain indispensable to ESP to this date, as they emphasise that meaning is not restricted to grammar and vocabulary, but also in the use of language in context, in culturally congruent manners. In this light, Ouakrime (1992) argues for the inclusion of culture in the study of ESP (i.e., explanatory beliefs, behavioural habits, and culture of the institution) which closely relates to acquiring Intercultural Communicative Competence (ICC) whereby one is able to communicate effectively only if actions and purposes are decoded through culturally valid lenses (Byram, 1997).

Nonetheless, one of the most pivotal implications of the 'culture-in-ESP' argument is the need for systematic and not incidental cultural integration. This is where needs analysis (NA) transcends a mere diagnostic tool for language deficiencies, and becomes a tool for planning the culture-related communicative requirements of particular professions. Dudley-Evans and St John's (1998) NA Model is dependable due to placing contextual relevance. Although the discussion suggests cultural goals are often under-added to the NA, professional success often has to do with it (Byram, 1997). The recommendation of incorporating cultural elements into Needs Analysis through surveys, interviews and document analysis, suggests that the objectives of an ESP curriculum should also specify what the learners should be able to communicate, as well as the socially appropriate timing and context of utterances in given professional settings (Nechifor & Dimulescu, 2021). Effectively, this involves breaking down overarching cultural goals (e.g. "understand different cultures") into measurable behaviours, such as reading and addressing non-verbal communication, controlling dissonance, and professional circumvention where required.

Integrating culture can be achieved in the classroom by using contextual learning and authentic materials. The use of materials such as emails, manuals, reports, meeting scripts, etc. contains the actual language of the area of study and as such will aid cultural integration. In this respect, Johns (1991) argues that the authenticity that pertains to the material being taught enhances the relevance and motivation of the learners. The analysis, however, suggests an additional dimension: an authentic genre allows learners to participate in the discourse of particular disciplinary communities and learn the communicative cultures of those fields as to what is considered persuasive, polite, professional, and credible. This aligns well with Byram (1997), who argued that mastery of a language is linked with cultural knowledge and interpretive skills. However, realia can also present a problem, such as exhibiting a professional 'gaze' where the materials neglect some voices, or where materials promote a 'one-best-way' argument about professional communication. For this authenticity to have an impact, it must be coupled with some degree of analytical guidance to empower students to pose more critical, open-ended questions. For instance, who is the speaker? Why are they speaking? What are the power relations that shape this particular genre, etc., rather than merely replicating superficial form.

In the same way, collaborative learning opportunities are yet another means for acquiring an ICC because of the applicable perspective-taking and the negotiation of meaning, both of which are emphasised within the sociocultural framework of Vygotsky (1978). Research with wikis and collaborative assignments within English

for Specific Purposes (Wang, 2015; Agustina, 2022) supports that aspect of group work helps develop professional communication (planning, collaboration, and reporting) and provides a relatively safe space for learners to experience different cultural schemata. The discussion centres on and extends this line of reasoning in stating that intercultural learning is cognitive as well as affective and relational and this is also in line with Deardorff (2006) and the attitudes of openness and empathy. Despite these important aspects of collaborative learning, particular aspects of collaborative learning are unlikely to result in achieving an outcome of intercultural competence. For instance, without intentional moderation and structured critical reflection, collaborative group learning may provide opportunities to reaffirm stereotypes, ignore minority perspectives, and privilege “fluent dominance” over inclusive participation. This is why the inclusion of specific intercultural objectives, role switching, feedback forms, and reflective post-exercises are the best combination for collaborative tasks.

The contrastive-comparative approach allows learners to make connections from new cultural insights to their own “source culture” (Byram et al., 1994). This significantly diminishes the risk of conceptualising the target culture as the only legitimate norm. Analysis of communication styles, workplace ethics, leadership approaches, and negotiation tactics enables students to refine their ability to customise rather than just imitate. This strategy, however, comes with a classic caveat; if approached too superficially, the act of comparison can degenerate into essentialism (i.e. Culture A is uniformly direct; Culture B is uniformly indirect). Although it is possible to begin observing patterns through the use of models, such as Hall (1976) and Hofstede (2011), it is suggested in the discussion to use the models as heuristics and not to apply them as rules that are not to be broken. ESP instruction should help students see cultural frameworks not as stereotypes to apply, but as hypotheses to be explored, since, in professional life, communication differs according to organisation, geography, generation, and individual characteristics.

There is a proposed order in the later sections concerning pedagogy: teaching source culture, then culture as a whole, then specific cultures, and finally teaching intercultural communication. This is coherent because it moves from the self to greater levels of cultural understanding and then other cultural engagement. This also addresses the practical issue pointed out by Frank (2013): while teachers appreciate the need for teaching culture, they frequently do not have any handbook to refer to. By outlining cultural learning and combining it with techniques such as Liddicoat et al. (2003)'s purposeful construction, reflection, and responsibility, the framework makes culture teaching and learning attainable as well as evaluable. However, the question of which “English culture” to teach a global community of English speakers remains open and unresolved. While ESP students will work and communicate with non-native speakers, more emphasis will be given to adapting flexible, respectful, and authentic intercultural approaches instead of merely replicating British or American behaviour (Tomalin, 2010; Jackson, 2020). Considering this, the term ‘teaching culture’ within the scope of English for Specific Purposes should pay more attention to the instruction of learners in relation to dealing with and interpreting the complexity and plurality of culture, in addition to being able to communicate with others in a respectful and ethical manner across cultural divides.

The discussion yielded the conclusion that the use of culture in ESP instruction is

not an added enrichment component to be considered, but rather is essential to preparing students for a career in the global marketplace. This conclusion supports the recommendation of having an integrated approach to instruction, wherein (1) needs analyses identify culture and language, (2) culturally-responsive authentic materials are used to demonstrate the different professions and the genres associated with them, (3) students practice intercultural collaboration and enactment of culturally-responsive experiential modular tasks, and (4) students are guided to use structured and comparative reflection in order to assist them in avoiding generalisations that are shallow, superficial, and/or stereotypical. In the future, this area would greatly benefit from improved evaluation techniques pertaining to ICC in ESP (for instance, performance rubrics, reflective portfolios, and scenario evaluations) and from the development of training programmes for educators which would enable teachers to confidently approach the teaching of culture, avoiding the pitfalls of turning ESP classes into general anthropology and avoiding the perpetuation of stereotypes.

8. Recommendations

The forthcoming recommendations specify some directions for further research to consolidate the integration of culture within the ESP framework, as well as to enhance learners' intercultural communicative competence within the profession.

- ✓ Assess how traditional needs analysis and needs analysis with explicit cultural goals differ with respect to the enhancement of ICC in ESP learners.
- ✓ Conduct longitudinal studies over an entire semester or an internship period to assess how integrated Culture ESP courses change the learners' professional discourse practices.
- ✓ Determine which of the following genres best cultivate intercultural communication and professional pragmatics: authentic emails, reports, minutes of meetings, manuals, and negotiations.
- ✓ Assessing indicators such as empathy, perspective-taking, conflict resolution, and the understanding of meaning beyond mere words and grammar can be used as measuring points for evaluating cultural integration.
- ✓ Analyse the group work, wikis, role playing, and simulation exercises to determine which of the cooperative activities develops the greatest intercultural consciousness in the context of ESP.
- ✓ Investigate the impact of global virtual collaboration on the development of intercultural skills and employability, particularly in business, engineering, and medical fields of study.
- ✓ Evaluate approaches that mitigate stereotyping and focus on differences within cultures (i.e. vertical, geographical, intergenerational, and occupational).
- ✓ Develop and confirm instruments such as thematic practical exercises, analytical portfolios, conversation analysis, and work-situated evaluations, that are consistent with the reality of the workplace.
- ✓ Examine the types of training that ESP practitioners need to teach culture with confidence and ethical responsibility in the absence of guidance from

their textbooks.

- ✓ Examine the usefulness of AI-assisted simulation technologies, digital case studies, and online platforms while tracking potentially damaging harms, such as bias and the oversimplification of cultural categories.

9. Conclusion

Although cultural information is typically minimal or even absent in an ESP course, it is in fact essential. This is because learning a language is inextricably linked to understanding cultural context, which is vital for effective IC. Regardless of how one views a student's abilities upon completing a language course, either from the perspective of the student's competence or societal expectations, the role of culture remains pivotal, particularly in the context of ESP courses. Consequently, it has become crucial in teaching methodologies to consider the relationship of culture within the context of language. In this respect, ESP practitioners must use a paradigm that allows learners to grasp the intangible elements of culture which were discussed in this article. It has long been recognised by many language specialists that fluency in the vocabulary and grammar of a language does not equate to proficiency in the language from the perspective of the student. This suggests that learners must also grasp the sociocultural contexts in which the language is used.

To foster greater student involvement in culture-specific language acquisition in ESP, ESP practitioners may consider assigning research-based and reflective activities. Such activities will motivate students to engage with the ongoing learning processes by reflecting on the personal experiences and the expectations that they bring to the learning environment, including hopes about how acquiring English and the corresponding cultures will aid them in their future personal and professional pursuits. This article aims to provide foundations that will help ESP instructors enable students to analyse both the target culture and the source culture. Such reflection fosters the efficiency of the students as intercultural communicators, fully prepared to enter the professional workforce upon completion of the ESP course. In summary, the perspective and research works articulated in the paper build towards the integration of culture in the ESP syllabus because in today's globalised world, communicating successfully across cultures is more essential than ever. Thus, a contrastive-comparative approach in addition to other approaches to the teaching of culture is beneficial to the ESP learner in that it enables the learner to acquire the foreign culture and advance towards genuine intercultural communication.

References:

- [1]. **Agustina, L.** (2022). Encouraging students to do collaborative learning in ESP courses to strengthen students' oral communication skills. *Journal of Languages and Language Teaching*, 10(1), 76-84.
- [2]. **Bakić-Mirić, N., Butt, S., Dilparić, B., and Ashirimbetova, M.** (2023). Teaching culture in the modern ESP classroom. *Journal of Teaching English for Specific and Academic Purposes*, 495-506.
- [3]. **Bonwell, C. C., and Eison, J. A.** (1991). Active learning: Creating excitement

in the classroom. ASHE-ERIC Higher Education Report No. 1. Washington, D.C.: The George Washington University, School of Education and Human Development.

- [4]. **Borucinsky, M., and Jelčić-Čolakovac, J.** (2020, June). Promoting authenticity in the ESP classroom: The impact of ICT and use of authentic materials on reading comprehension. In *5th International e-Conference on Studies in Humanities and Social Sciences: Conference Proceedings*. Belgrade: Center for Open Access in Science (pp. 31-44).
- [5]. **Byram, M., and Morgan, C. et al.** (1994). *Teaching-and-Learning Language-and-Culture*. Clevedon, Philadelphia, Adelaide: Multilingual Matters.
- [6]. **Byram, M.** (1997). *Teaching and assessing intercultural communicative competence*. Clevedon: Multilingual Matters.
- [7]. **Causadias, J. M.** (2020). What is culture? Systems of people, places, and practices. *Applied Developmental Science*, 24(4), 310-322.
- [8]. **Cohen, L., Manion, L., and Morrison, K.** (2013). *Research Methods in Education*. Routledge.
- [9]. **Deardorff, D. K.** (2006). Identification and Assessment of Intercultural Competence as a Student Outcome of Internationalization. *Journal of Studies in International Education*, 10(3), 241-266.
- [10]. **Drinovac Topalović, M., and Ljubas, S.** (2024). The importance of teaching culture in English for specific purposes (ESP). *Mostariensia (Mostar)*, 28(1), 165-180.
- [11]. **Dudley-Evans, T., and John, M.** (1998). *Development in English for Specific Purposes*. Cambridge: Cambridge University Press.
- [12]. **Frank, J.** (2013). Raising cultural awareness in the English language classroom. *English Teaching Forum*, (2013): 51(4), 1-12.
- [13]. **Gonzalez, A.** (1995). The cultural content in English as an international auxiliary language (EIAL): Problems and issues in Tickoo, M.L. (ed.): *Language and Culture in Multilingual Societies*. Singapore: SEAMEO Regional Language Centre.
- [14]. **Gudykunst, W. B., and Kim, Y. Y.** (2003). *Communicating with Strangers: An Approach to Intercultural Communication*. 4th edn. Boston: McGraw-Hill.
- [15]. **Hall, E. T.** (1976). *Beyond culture*. New York: Anchor Press.
- [16]. **Hinkel, E.** (Ed.). (1999). *Culture in Second Language Teaching and Learning*. Cambridge: Cambridge University Press.
- [17]. **Hofstede, G.** (2011). Dimensionalizing cultures: The Hofstede model in context. *Online Readings in Psychology and Culture*, 2(1).
- [18]. **Jackson, J.** (Ed.). (2020). *The Routledge Handbook of Language and Intercultural Communication* (2nd ed.). Routledge.
- [19]. **Johns, A. M., and Dudley-Evans, T.** (1991). English for specific purposes: International in scope, specific in purpose. *TESOL Quarterly*, 25(2), 297-314.
- [20]. **Johnson, D. W., and Johnson, R. J.** (1999). Making cooperative learning work. *Theory into Practice*, 38(2), 67-73.
- [21]. **Kashima, Y., Bain, P. G., & Perfors, A.** (2019). The psychology of cultural dynamics: What is it, what do we know, and what is yet to be known?. *Annual Review of Psychology*, 70(1), 499-529.
- [22]. **Liddicoat, A. J., Papademetre, L., Scarino, A., & Kohler, M.** (2003). Report

on intercultural language learning. Report to the Australian Government Department of Education Science and Training. Canberra: DEST.

- [23]. **Nechifor, V., and Dimulescu, D.** (2021). Developing students' intercultural communicative competence for academic mobility purposes. *The European Proceedings of Social & Behavioural Sciences*, 107, 1624-1632.
- [24]. **Omaggio, A.** (2001). *Teaching Language in Context*. Boston: Heinle and Heinle.
- [25]. **Scarino, A.** (2014, July). The development of the Australian Curriculum and implications for Japanese language education. In *National Symposium on Japanese Language Education* (p. 15).
- [26]. **Snowdon, C. T.** (2017). Introduction to animal culture: Is culture uniquely human? *The Handbook of Culture and Biology*, 2-104.
- [27]. **Stevens, P.** (1977). Special purpose language learning: A perspective survey article. *Language Teaching and Applied Linguistics Abstracts*, 10, 145-163.
- [28]. **Sullivan, P., Tobias, S., and McDonough, A.** (2006). Perhaps the decision of some students not to engage in learning mathematics in school is deliberate. *Educational Studies in Mathematics*, 62(1), 81-99.
- [29]. **Trompenaars, F., and Hampden-Turner, C.** (2012). *Riding the Waves of Culture: Understanding Diversity in Global Business*. London: Nicholas Brealey Publishing.
- [30]. **Vygotsky, L. S.** (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- [31]. **Wang, X. Y.** (2008). Reflection on the notion of culture teaching. *US-China Foreign Language*, 6(1), 49-53.
- [32]. **Wang, Y. C.** (2015). Promoting collaborative writing through wikis: A new approach for advancing innovative and active learning in an ESP context. *Computer Assisted Language Learning*, 28(4), 499-512.

ENHANCING EMPATHIC COMMUNICATION THROUGH SIMULATION: THE ROLE OF EMPATHY MAPS AND SIMULATED PATIENT FEEDBACK IN MEDICAL TRAINING

Judit Szalai-Szolcsányi¹, Kata Eklics², Vilmos Warta³

^{1,2,3}Department of Languages for Biomedical Purposes and Communication, Medical School, University of Pécs, Hungary

¹Doctoral School of Health Sciences, Faculty of Health Sciences, University of Pécs, Pécs, Hungary

¹judit.szolcsanyi@aok.pte.hu

²kata.eklics@aok.pte.hu

³vilmos.warta@aok.pte.hu

Abstract: *This study investigates how empathic communication skills among medical and dental students can be effectively developed through simulation-based training that incorporates the Empathy Map as a structured reflective tool. Empathy, a key element of patient-centred care, is often difficult for students to apply in practice, particularly in emotionally charged or complex clinical situations. The course “Empathic and Assertive Communication in Clinical Practice,” delivered at the University of Pécs Medical School in 2023, combined theoretical instruction in clinical empathy, assertiveness, persuasive strategies, and breaking bad news with 23 simulated physician–patient encounters involving trained simulated patients and demonstrator peers. The Empathy Map was used to help students identify patients’ thoughts, emotions, prior knowledge, motivations, and barriers to cooperation. Both student-physicians and simulated patients completed the map after each encounter, providing comparable perspectives on the interaction. Additionally, the Patient–Professional Interaction Questionnaire (PPIQ) captured patient feedback on the quality of communication. The findings show that students consistently recognized patients’ thoughts and attitudes, while identifying emotions proved more difficult, reflecting the broader distinction between cognitive and affective dimensions of empathy. Patient feedback also highlighted strong performance in empathic communication behaviours, including active listening, attentiveness, calm tone, allowing time for questions, and creating a sense of trust and safety. Within the empathy-related items, patients rated “understood my feelings” higher than “was able to put themselves in my place,” aligning with the understanding of clinical empathy as primarily cognitive in nature. Students overwhelmingly found the Empathy Map to be useful for improving their communication skills, and its regular use supported the development of reflective practice and a deeper understanding of patients. However, some sections of the map remained incomplete, suggesting the need for further guidance and practice. Overall, the study demonstrates that integrating simulation-based learning with structured reflective tools can effectively enhance empathic competencies and support the development of patient-centred communication skills essential for modern healthcare.*

Keywords: *medical communication training; enhancing empathic communication;*

empathy map; simulation-based learning; reflective learning tools; health professions education

1. Introduction

In medical education, the development of students' professional competencies and knowledge is of paramount importance. However, alongside medical subject teaching, enhancing medical students' empathic communication skills is also essential for their successful and effective participation in clinical practice. The ability to communicate with empathy forms the foundation of the physician–patient relationship. It has a significant impact on patient satisfaction and compliance, thereby contributing to more effective therapy outcomes.

Enhancing communication skills among medical students is therefore a key component of their training, as effective communication is indispensable for establishing and maintaining a successful physician–patient relationship. Communication courses offer students the opportunity to acquire methods and techniques of empathic communication, enabling them to understand their patients better, support them more effectively, and treat them more effectively. Enhancing communication skills during medical training enables students to become competent and effective physicians who can respond to the individual needs of their patients. However, the current level of empathy among healthcare professionals and medical students remains suboptimal (Cairns, 2020).

The course “*Empathic and Assertive Communication in Clinical Practice*” aims to enhance the level of empathy among medical students through targeted development of empathic communication skills. The communication exercises foster practical proficiency, helping future physicians avoid communication difficulties that might otherwise hinder therapeutic success. The “*Empathic and Assertive Communication in Clinical Practice*” course was first introduced in 2021 for students enrolled in the Hungarian-language medical program, and subsequently for those in the English-language program at the University of Pécs, Medical School, Department of Languages for Biomedical Purposes and Communication. The course's objective is to allow students to practice simulated physician–patient interactions in a controlled environment at the Medical Skills Education and Innovation Centre (Medi Skills Lab) of the University of Pécs, Medical School.

Authentic clinical cases, supported by trained simulated patients who convincingly portray the role of a patient, are used in the course. During course design, particular emphasis was placed on creating communication scenarios that represent challenging situations — such as dealing with resistant or uncooperative patients, or delivering bad news — requiring the medical student, acting as the physician, to employ empathy-based communication strategies. Our primary goal was to foster shared decision-making, persuasion, and collaboration through the effective use of empathic communication methods and techniques. In the present study, we employed the *empathy map* as a tool for developing empathic communication, and we analyzed questionnaires completed by patients to assess how feedback could contribute to the improvement of medical students' communication skills.

2. Characteristics of physician–patient communication

2.1. The dominant role of physicians

In medical care, patients must comply with their physician's guidance. The physician's instructions and requests influence certain patient behaviors and often affect their entire lifestyle. Even in situations that initially appear impersonal, a confidential level of interaction between physicians and patients develops relatively quickly. Empathy is a fundamental prerequisite for establishing this level of trust. Patient cooperation can only occur when the individual has complete confidence in the person providing instructions, treatment plans, and advice.

2.2. The role of empathy in individually tailored interaction

Physician–patient communication represents a unique context in which patients find themselves in an intimate situation with a stranger — their physician — to whom they must often disclose sensitive and personal information. Patients are asked questions they may not discuss even with close family members, and they allow examinations that intrude into their intimate sphere. Therefore, this interaction must be individualized rather than based on stereotypes. Physicians must be able to communicate according to the psychological needs of each patient. In such dialogues, empathy plays a particularly significant role. As Buda (1986, p. 186) states, “*Empathy essentially provides the key to understanding the patient's individual system of communication codes.*” When patients perceive the physician–patient interaction as empathic and understanding, their cooperation increases, which in turn enhances therapeutic outcomes. Establishing an atmosphere of honesty and trust is essential, and physicians can achieve this attunement only through empathic communication. This becomes particularly important when physicians must deliver bad news. Without sufficient empathic skills, physicians may encounter difficulties in interpersonal interactions, which can negatively affect the efficacy of treatment. In employing empathy, the physician's personality is actively engaged in understanding the patient's emotional and cognitive state, directing full attention to both verbal and nonverbal communication. Therefore, improving physicians' communication skills, cultivating communicative sensitivity, and enhancing empathic abilities are of paramount importance (Buda, 1986).

3. Defining empathy

In the context of empathic communication, it is essential to clarify what empathy means from the physician's perspective. Earlier studies sought to answer two key questions: How can we know what another person thinks and feels? Moreover, what factors facilitate a sensitive and considerate response to another person's suffering? Several theories suggest that these two questions are interconnected, whereas other research has addressed only one or the other.

Batson (2011) identifies eight distinct uses of the term *empathy*:

Concept 1: Understanding another's inner state (thoughts and feelings)

This definition emphasizes the importance of comprehending what the other person feels. Such understanding requires insight into the person's internal state, including thoughts and emotions, and is often referred to as *cognitive empathy* (Eslinger, 1998; Preston & de Waal, 2002; Wispé, 1986; Zahn-Waxler, Robinson, & Emde, 1992). However, determining what others think or feel can be difficult,

especially when their expressive capacities are limited.

Concept 2: Perceptual attunement

Here, empathy is rooted in perception. The observer's posture and neural responses reflect attunement to the observed individual's situation, forming a *perception–action model* through the detection of facial expressions, posture, and motor responses (Preston & de Waal, 2002).

Concept 3: Emotional resonance

Perhaps the most common definition, empathy is seen as the ability to *feel with* another person — to experience emotions similar, though not identical to those of the other (Hoffman, 2000).

Concept 4: Affective attunement

This view emphasizes the ability to imagine what we ourselves would feel in the other person's situation.

Concept 5: Perspective taking

Empathy involves imagining what another person thinks or feels in a given context, based on verbal communication and familiarity with the other's personality, values, and desires.

Concept 6: Imaginative perspective-taking

This approach concerns imagining what the other person might think or feel if they were in someone else's place.

Concept 7: Empathic distress

Empathy is described as the feeling of distress elicited by witnessing another person's suffering — not personal anxiety, but concern for the situation itself.

Concept 8: Compassionate empathy

This final definition refers to the emotional experience of sharing in another person's suffering (Batson, 2011).

The diversity of these conceptualizations highlights that the meaning of empathic communication varies widely among individuals. Therefore, it is crucial to define which aspects of empathy can be effectively applied in clinical practice. Based on an extensive review of the relevant literature, empathy in patient care has predominantly been defined as a *cognitive* — rather than affective or emotional — attribute. It involves understanding the patient's pain and suffering, rather than *feeling* them (Hojat, 2007).

According to Silverman, Kurtz, and Draper (2013, p. 138), the two-step process of empathy in clinical practice consists of:

Understanding and sensitively appreciating another person's situation or feelings;
and

Communicating that understanding back to the patient in a supportive manner.

4. The role and benefits of empathic communication in clinical practice

Empathic communication can help reduce patients' anxiety and stress levels by allowing them to experience that their physician is attentive, listens actively, provides support, and responds appropriately to their emotions. From the patient's perspective, empathic communication fosters trust and emotional connection with the physician, enhancing satisfaction and loyalty. Empathy contributes to creating a reassuring and supportive environment in which patients feel comfortable expressing emotions and disclosing details related to their illness.

The enhancement of empathic communication skills has numerous advantages,

including:

- Patient safety and satisfaction: The quality of physician–patient communication has a significant impact on patients’ sense of safety and overall satisfaction. Effective communication helps physicians obtain accurate and detailed information from their patients.
- Reduction of medical errors: The use of verbal and nonverbal elements of empathic communication—such as clarifying questions, concise phrasing, and summarizing—reduces misunderstandings and misinterpretations, thus lowering the likelihood of medical errors.
- Patient-centred care: Applying methods and techniques of empathic communication helps medical students understand and respond to patients’ individual needs and preferences.
- Conflict management: Medical students often encounter situations that may lead to conflicts or challenging communication with patients or their relatives. Communication courses offer students the opportunity to learn effective methods of empathetic and assertive communication, as well as conflict resolution.

A growing number of studies have highlighted the importance of empathy in several key domains of medicine. Nevertheless, empathy remains a challenging concept to define. One widely accepted definition describes clinical empathy as a cognitive attribute that involves the ability to understand the patient’s inner experiences and perspective and to convey this understanding effectively (Hojat et al., 2002).

Clinical empathy—specifically within the physician–patient relationship—is often divided into two dimensions. The affective dimension refers to an individual’s passive emotional response to another person’s feelings, while the cognitive dimension represents an active skill that can be learned and developed. Neumann (2008) characterizes this latter form of empathy as “*detached concern*,” meaning the capacity to understand another person’s experience without being overwhelmed by personal emotional involvement.

Reflecting the various definitions of empathy, different institutions have developed diverse approaches to enhancing empathic communication in clinical settings, depending on which aspect they emphasize. Traditionally, the cognitive and behavioral components of empathy have been regarded as the most amenable to development. In contrast, moral and emotional empathy are often considered individual personality traits, typically not addressed within university curricula (Norfolk et al., 2007; Stepien & Baernstein, 2006).

Some institutions aim to strengthen empathy through communication exercises, reflecting a behavioral preference in defining empathy (Shapiro, Lancee & Richards-Bently, 2009; Stepien, 2006). However, students and professionals who are confused by the multiple definitions of empathy may sometimes reject such exercises, fearing emotional exhaustion in patient interactions. Consequently, training programs should clearly define empathy and address possible misconceptions.

Furthermore, aspects of medical culture itself can contribute to a decline in empathy among medical students (Barnhill Bayne, 2011). Therefore, students must participate in training programs designed to develop empathy and empathic communication throughout their medical education.

5. The Empathy Map

The empathy map is a visual tool designed to facilitate collaboration between medical students and simulated patients. Within a communication scenario, the participating medical student articulates what they have learned about the patient during the interaction. By externalizing this acquired knowledge, the student establishes a shared understanding of the patient's needs and supports joint decision-making.

Initially developed in a business context for constructing customer profiles, the empathy map synthesizes known information about an individual by visualizing what the person says, does, sees, and hears. Additional sections explore the individual's concerns, fears, frustrations, desires, and needs, while also identifying what makes the person feel content or fulfilled.

When applied in medical education, the empathy map effectively helps medical students understand another person's perspective—an essential first step in developing *therapeutic empathy*. Research involving empathy maps has shown that this tool is both practical and engaging for analyzing physician–patient interactions. Training with empathy maps encourages students to reflect on empathy and the physician–patient relationship, emphasizing the importance of empathy within clinical encounters and promoting a partnership-based model of medical communication. Completing an empathy map enables students to gain deeper insight into the patient's viewpoint by interpreting the information exchanged during the consultation. In doing so, it reinforces the three core components of clinical empathy: understanding the patient, communicating that understanding, and acting upon it in a supportive manner (Cairns, 2020). Empathy maps can also be used in group settings, where not only the participants directly involved in the physician–patient scenario (the student in the physician's role and the simulated patient) fill out the map, but also external observers. Comparing these perspectives can provide valuable feedback to the student, helping them refine their empathic communication. Receiving feedback from peers who observed the situation from an emotionally neutral, outside standpoint can be particularly effective in fostering empathy. An advanced version of this tool is the Health Empathy Map (HEM), which divides the empathy map into four quadrants and integrates the three key components of empathy: perspective-taking, emotional sharing, and empathic concern. Current findings suggest that the HEM is an effective instrument for stimulating the development of empathy. It provides a valuable means of assessing students' empathic abilities, as it highlights differences across empathy dimensions and identifies specific areas for individualized or group-based improvement (Uchôa de Resende Sousa, 2021).

The empathy map applied in the present research follows a cognitive approach. The observation sheet is divided into the following sections:

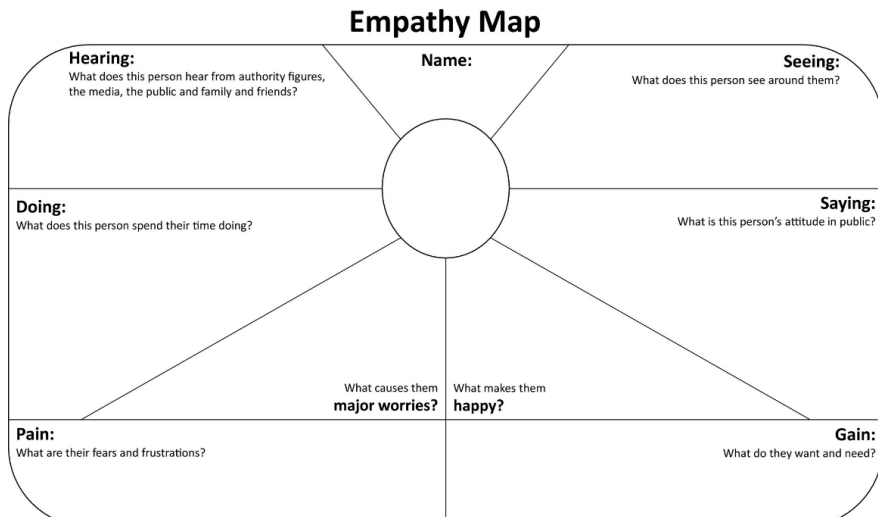


Figure 1: The empathy map

Source: <https://asmepublications.onlinelibrary.wiley.com/doi/10.1111/tct.13270>

The observation sheet is divided into the following sections:

Hearing: Information that patients have been exposed to through reading, the media, healthcare professionals, friends, family members, or public health campaigns.

Seeing: What patients have observed or experienced in their surroundings.

Doing: The actions, routines, and habits that patients engage in during their daily lives, including health-related behaviors, treatment adherence, lifestyle choices, and coping strategies that influence their overall well-being.

Saying: The words and behaviors that reflect the patient's motivation and conduct.

Pain Points and Challenges: The difficulties, obstacles, or stages of the process that hindered or delayed the achievement of their goals, impeding rather than facilitating progress.

Gain and Opportunities: The potential goals and opportunities that patients may experience once the redesign eliminates the pains and barriers that previously held them back.

6. Method

The study participants were third-, fourth-, and fifth-year medical and dental students. The research was conducted at the University of Pécs, Medical School, Department of Languages for Biomedical Purposes and Communication, within the course entitled “*Empathic and Assertive Communication in Clinical Practice.*” The course took place during the spring semester of 2023, over a period of 12 weeks, with two contact hours per week. The course was jointly led by Dr. Katalin Eklicsné Lepenye, language instructor, and Judit Szalai-Szolcsányi, language instructor and psychologist.

The course aimed to enable students to apply empathic and assertive communication techniques—introduced through theoretical sessions and supported by the principles of persuasion and shared decision-making—in

simulated physician–patient interactions. To enhance empathic communication, the use of the *empathy map* was introduced. In addition, participants playing the role of patients completed the *Patient–Professional Interaction Questionnaire (PPIQ)*, which assesses patient-centred care from the patient’s perspective (Casu, 2018). Before engaging in simulation-based practice, students participated in several weeks of theoretical instruction covering the following topics:

- Theoretical foundations of empathy, and the role and importance of empathy in medical communication (definition of clinical empathy)
- Assertive communication
- The role of persuasive communication in healthcare (managing resistant patients, persuasion, and shared decision-making)
- Breaking bad news (SPIKES model)
- Empathy map (detailed description and application)

6.1. Description of the Study

Students volunteered to take on the role of a physician in the simulated physician–patient interactions. During the sessions, demonstrator students regularly participated as patients, and on ten occasions, trained simulated patients (SPs) took on the role of patients. The simulation scenarios and patient cases were provided to the participants assisting in the study in advance. We selected scenarios in which empathic communication plays a particularly significant role, such as interactions with resistant patients and delivering bad news. The twenty medical cases were categorized as follows:

- Acute illnesses and their management (e.g., hypochondria, gastric ulcer, panic disorder)
- Explanation of surgical procedures and treatments (e.g., cholecystectomy, stent implantation, gastroscopy, tooth extraction)
- Diagnosis of chronic diseases (e.g., Wolff–Parkinson–White syndrome, hypercholesterolemia, Crohn’s disease)
- Breaking bad news (e.g., acute pancreatitis, brain tumour, Hepatitis C infection)

Before initiating the dialogue, a detailed description of the assigned scenario was provided to the student playing the role of the physician.

Before starting the simulated physician–patient interaction, the observing students were asked to take notes of their observations. The duration of each dialogue was approximately 10–15 minutes. After the student performed the assigned scenario, they received an oral, personalized evaluation and feedback. First, the student reflected on their own performance (self-reflection), sharing their thoughts and feelings with the group. Then, the simulated patient described their experiences, thoughts, and emotions during the interaction. Subsequently, the other students provided their feedback, and finally, the instructors evaluated the simulation based on the principles of effective feedback. In addition to positive reinforcement, their assessment also included constructive criticism.

For the written evaluation of the scenarios, the following tools were used:

- Empathy Map (completed by both the physician and the patient)
- Patient Questionnaire (*Empathy Scale; The Patient–Professional Interaction Questionnaire (PPIQ) to Assess Patient-Centred Care from the Patient’s Perspective*) (Casu, 2018).

Items of the *Patient–Professional Interaction Questionnaire (PPIQ)* used to assess patient-centred communication can be found in Appendix A.

The Empathy Map was completed immediately after the simulated physician–patient encounter. The patient was asked to describe, in the first person, their thoughts and feelings about the scenario, what they had previously heard or seen related to the given illness, what they said and how they behaved (representing their motivation), as well as the challenges that hindered or prevented them from achieving their goals and the possible ways to overcome these barriers. The student acting as the physician completed the same map, but from the patient’s perspective. Comparing the two maps helped students identify similarities and differences between the physician’s and the patient’s perceptions.

To measure the extent to which empathic communication was achieved, an Empathy Scale was used. After each simulated encounter, the demonstrator student or lay patient participant completed the scale.

The 16-item questionnaire measures four factors:

1. Effective communication (items 1, 3, 6, and 9)
2. Interest in the patient’s plans (items 2, 5, 7, and 14)
3. Empathy (items 4, 8, 10, and 12)
4. Facilitation of patient involvement (items 11, 13, 15, and 16)

Source: Casu, G., Gremigni, P., Sommaruga, M., & Mariani, R. (2018). *The Patient–Professional Interaction Questionnaire (PPIQ) is used to assess patient-centred care from the patient’s perspective*. *Patient Education and Counseling*, 102(1), 126–133.

7. Results

7.1. The empathy map

By using the Empathy Map, we aimed to determine whether completing it helps students better understand the patient’s perspective through the interpretation of what was said.

The results are summarized in the table found in Appendix B.

At the end of the course, students were asked to what extent the use of the Empathy Map had helped them identify the patient’s thoughts, feelings, and attitudes throughout the semester in order to promote effective therapeutic cooperation.

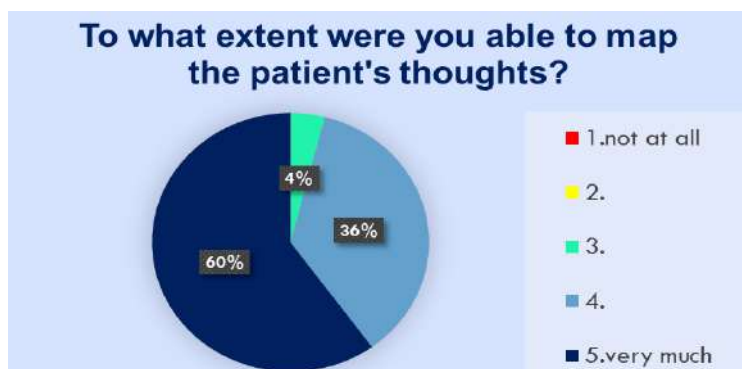


Figure 2: Students’ self-assessment of their ability to identify patients’ thoughts

The students evaluated themselves as having successfully identified the patients' thoughts. More than half of the students (60%) rated this as completely successful based on the patients' feedback.

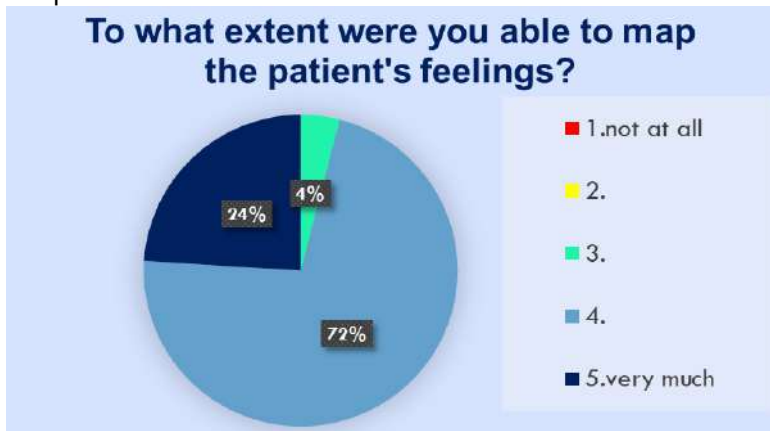


Figure 3. Students' self-assessment of their ability to identify patients' feelings

The students were able to identify the patients' emotions in each simulation; however, this aspect was not achieved as successfully. Only 24% of the respondents felt that they had fully accomplished this, while the majority (72%) rated their performance with 4 points, and 4% assessed their ability to recognize emotions as average. The recognition of emotions also depends on the extent to which a given patient expresses or conceals their feelings. In general, patients found it easier to share and articulate their thoughts than their emotions.

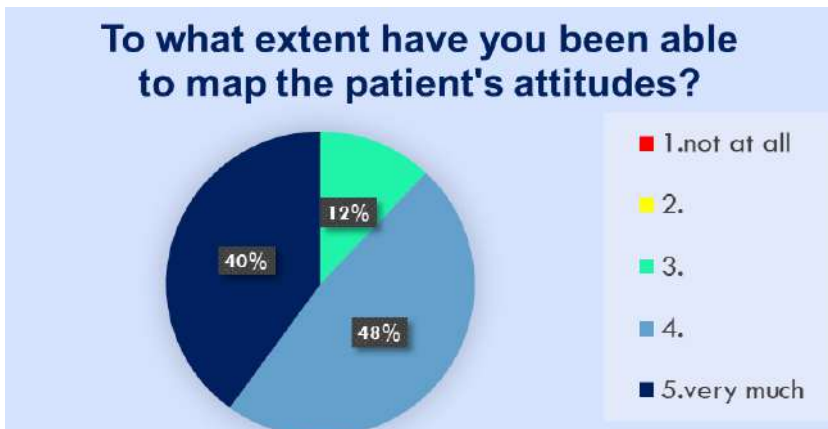


Figure 4. Students' self-assessment of their ability to identify patients' attitudes

Based on the questionnaire results, students were also successful in identifying the patients' attitudes during the simulated situations. A total of 40% of the students considered their performance to be entirely successful, while 48% rated it as almost completely successful. Persuasive communication plays a crucial role in challenging situations—such as when dealing with resistant or rejecting patients—

which the students encountered during the course. The first step in persuasive communication is to explore the patient's previous misconceptions and fears that may hinder cooperation, as well as to understand the patient's attitude toward the illness (Németh, 2007). Effective cooperation and shared decision-making can only be achieved if the patient's negative attitude can be transformed into a positive one during the conversation through the use of empathic communication. The students also provided feedback on the extent to which the Empathy Map helped them attune to the patient.

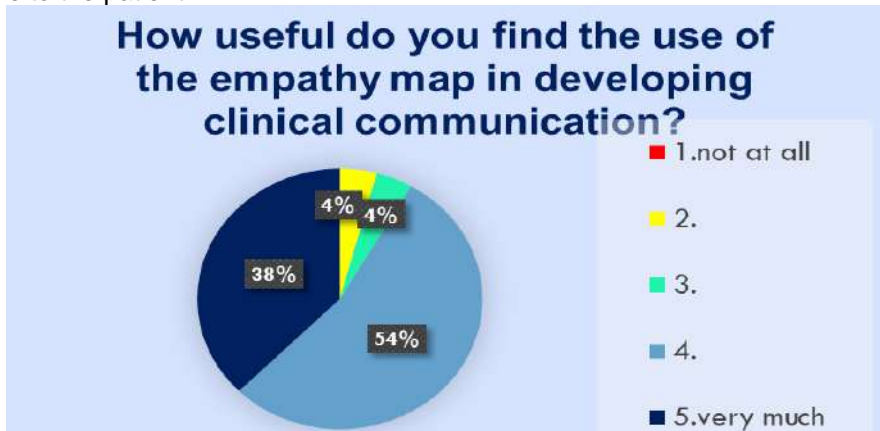


Figure 5. Perceived usefulness of the Empathy Map

The students found the Empathy Map to be valid; 92% of them believed it was either fully or almost fully beneficial for improving their communication skills. The use of the Empathy Map is currently in an introductory, pilot phase. Our primary goal was to support medical students in becoming more aware of patients' thoughts, feelings, background knowledge, concerns, and motivations. We found that, in many cases, the physician was able to articulate the patient's perspective; however, in several instances, both participants found it challenging to describe what they had experienced during the interaction accurately. As a result, some sections remained incomplete. In some cases, the patient described their thoughts and feelings not about their own illness but about the physician, which nevertheless provided valuable feedback for the physician.

Despite the initial difficulties, with practice, participants became increasingly able to express both their own perspective as the patient and the other's perspective as the physician. Due to time constraints, it was not possible to conduct a detailed comparison and in-depth analysis of each physician–patient pair of maps. In the next phase of the research, we plan to help students and simulated patients gain a deeper understanding of how to use the Empathy Map, allocating more time for brief discussions of the reflections they record.

7.2 Patient's feedback

The maximum score for each question was five points, resulting in a total possible score of 115 points across 23 cases.

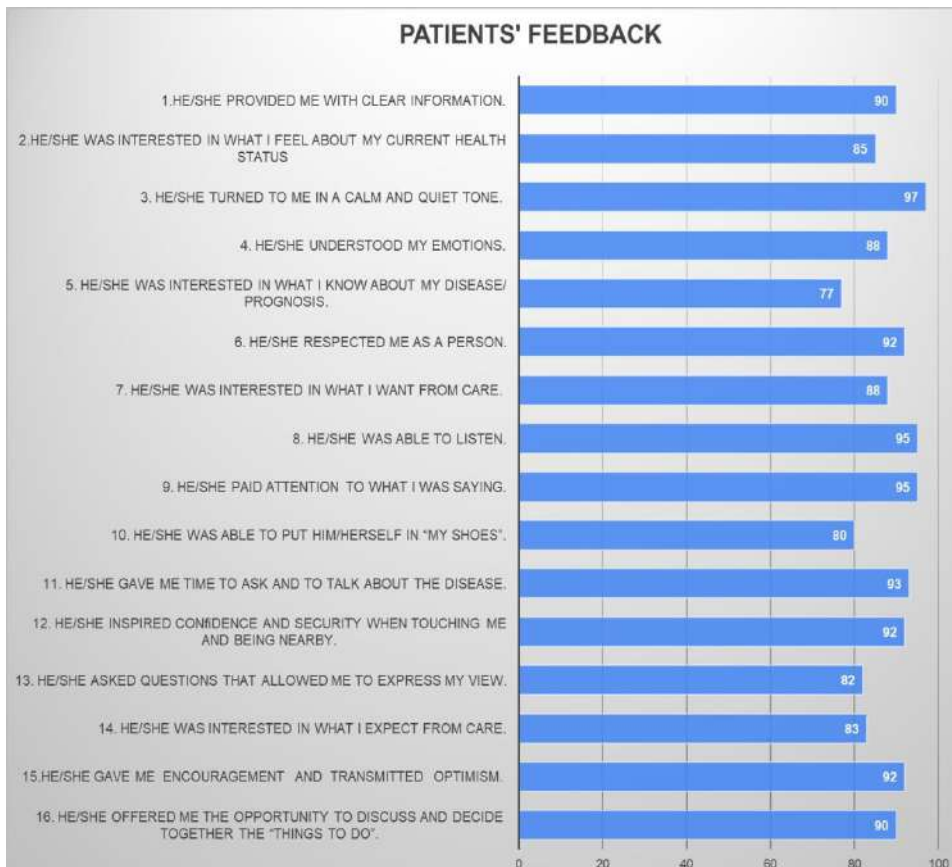


Figure 6. Summary of patients' feedback

The highest ratings from the patients were given to the following statements:

1. He/she turned to me in a calm and quiet tone (3).
2. He/she was able to listen (8). He/she paid attention to what I was saying (9).
3. He/she gave me time to ask and to talk about the disease (11).
4. He/she inspired confidence and security when touching me and being nearby (12).

In the questionnaire, the empathy factor items were questions 4, 8, 10, and 12. Among these, attentiveness and active listening received the highest scores. Within this factor, the statement "understood my emotions" was rated higher by patients than "was able to put themselves in my shoes." This difference can be explained by the concept of clinical empathy, which is primarily cognitive (involving understanding) rather than affective (involving feelings).

Interest in the patient's future plans was not strongly associated with empathic communication, which may explain why this factor received the lowest scores.

When analysing the factors and questions by simulation scenario, we found that lower scores did not depend on the type of illness but rather on how well the doctor and the patient were able to establish mutual understanding and rapport in a given situation.

8. Conclusion

The knowledge acquired and the experiences gained through the practical exercises and feedback can provide valuable support for the students' future medical careers. Patients of physicians who communicate empathically are more open to discussing their feelings and more willing to share their thoughts and questions with their doctor, which leads to more effective therapy (Hojat et al., 2002). Therefore, developing empathic communication skills among medical students is essential in medical education.

Every tool, method, and technique that facilitates this development—such as simulation-based scenarios and their verbal and written evaluations (including empathy maps and patient feedback)—can contribute effectively to this process.

Numerous studies have demonstrated that physicians who communicate with empathy elicit more information about their patients' symptoms, resulting in more accurate diagnoses and more effective treatments. Such patients receive more disease-specific information, become better informed, and take a more active role in their own recovery. They tend to cooperate more effectively with their physicians, report greater satisfaction, show reduced depressive tendencies, and experience an improved quality of life (Hojat et al., 2002).

Our study also highlighted that, in addition to empathic communication, students have a strong need to develop *assertive communication* skills. Our future goal is to integrate training that helps students learn and practice maintaining a balance between empathy and assertiveness in their interactions with patients.

References:

- [33]. **Barnhill B, H.** (2011) "Training Medical Students in Empathic Communication", *The Journal for Specialists in Group Work* 36:4. 316-329.
- [34]. **Batson, C. D.** (2011) "These Things Called Empathy: Eight Related but Distinct Phenomena", In: Decety, J. – Ickes, W. (eds.) (2011): *The Social Neuroscience of Empathy*. The MIT Press: Cambridge, Massachusetts.
- [35]. **Cairns, P. et al.** (2020) "Empathy maps in communication skills training", *The Clinical Teacher*, 18(2):142-146.
- [36]. **Casu, G. – Sommaruga M., Gremigni, P.** (2018) "The Patient-Professional Interaction Questionnaire (PPIQ) to assess patient centered care from the patient's perspective", *Patient Education and Counseling* 102.1. 126-133.
- [37]. **Eslinger, P. J.** (1998) "Neurological and neuropsychological bases of empathy. *European Neurology*, 1998, 193–199.
- [38]. **Hoffman, M. L.** (2000) "Empathy and moral development: Implications for caring and justice", New York: Cambridge University Press.
- [39]. **Hojat, M. et al.** (2002) "Physician empathy: definition, components, measurement and relationship to gender and specialty", *American Journal of Psychiatry* 159.9. 1563-1569.
- [40]. **Hojat, M.** (2007) "Empathy in Patient Care", *Springer*. Philadelphia, Pennsylvania, pp. 77-85.
- [41]. **Neumann, M. et al.** (2008) 'Analyzing the "nature" and "specific

effectiveness” of clinical empathy: A theoretical overview and contribution towards a theory-based research agenda’, *Patient Education and Counseling*, 71(3), pp. 339–347.

- [42]. **Németh, E.** (2007) “A meggyőző kommunikáció szerepe a gyógyításban”, *medicalonline*, https://medicalonline.hu/cikk/a_meggyozo_kommunikacio_s_zerepe_a_gyogyitasban
- [43]. **Norfolk, T. – Birdi, K. – Walsh, D.** (2007) „The role of empathy in establishing rapport in the consultation: new model”, *Medical Education*, 41. 690–697.
- [44]. **Preston, S. D., & de Waal, F. B. M.** (2002) “Empathy: Its ultimate and proximate bases”, *Behavioral and Brain Sciences*, 25, 1–72.
- [45]. **Shapiro, S.M. – Lancee, W.J. – Richards-Bentley, C.M.** (2009) “Evaluation of a communication skills program for first-year medical students at the University of Toronto”, *BMC Med Educ*, 9.11.
- [46]. **Silverman, J. – Kurtz, S. – Draper, J.** (2013) “Skills for Communicating with Patients”, *Radcliffe Publishing Ltd*: London
- [47]. **Stepien, K. – Baernstein, A.** (2006) “Educating for empathy”, *Journal of General Internal Medicine*, 21. 524–530.
- [48]. **Uchôa de Resende Sousa, L. et al.** (2021) “The Health Empathy Map as an instrument of reflection in a non-care teaching scenario”, *Revista Brasileira de Educação Médica*, 45.4.
- [49]. **Wispé, L.** (1986) “The distinction between sympathy and empathy: To call forth a concept a word is needed”, *Journal of Personality and Social Psychology*, 50, 314–321.
- [50]. **Zahn-Waxler, C., Robinson, J. L., & Emde, R. N.** (1992) “The development of empathy in twins”, *Developmental Psychology*, 28, 1038–1047

Appendix

Appendix A

Please, report here the professional qualification of the chosen clinician

Was it your first encounter with this clinician? Yes No.

- 1 He/she provided me with clear information.
- 2 He/she was interested in what I feel about my current health status.
- 3 He/she turned to me in a calm and quiet tone.
- 4 He/she understood my emotions.
- 5 He/she was interested in what I know about my disease/prognosis.
- 6 He/she respected me as a person.
- 7 He/she was interested in what I want from care.
- 8 He/she was able to listen.
- 9 He/she paid attention to what I was saying.
- 10 He/she was able to put him/herself in "my shoes".
- 11 He/she gave me time to ask and to talk about the disease.
- 12 He/she inspired confidence and security when touching me and being nearby.
- 13 He/she asked questions that allowed me to express my view.
- 14 He/she was interested in what I expect from care.
- 15 He/she gave me encouragement and transmitted optimism.
- 16 He/she offered me the opportunity to discuss and decide together the "things to do".

Appendix B

Illness	Empathy Map Question	Physician – about the patient	Patient's perspective
WPW	What prevents the patient from achieving their goal?	"Pain"	"I can't tolerate pain."
Melanoma	What prevents the patient from achieving their goal?	"Afraid to hope"	"Only blind hope in the treatment."
Bypass surgery	What has the patient heard previously?	"Age-related risk"	"Risky surgery; Hospital-acquired infection."

Dizziness	What prevents the patient from achieving their goal?	"Sceptical about physiotherapy"	"I don't believe in physiotherapy."
Dizziness	What has the patient heard previously?	"Her mother's similar symptoms worry her, as her mother had a stroke."	"My mother's stroke case, similar symptoms."
Cholesterol-lowering therapy	What prevents the patient from achieving their goal?	"She doesn't want to take medication; she wonders what happens if she skips a dose."	"Uncertainty about medications and the healthcare system."
Hypochondria	What does the patient think or feel?	"Afraid of a serious illness"	"I was sure something was seriously wrong with me."

THE ROLE OF DIGITAL PORTFOLIOS IN EMPLOYABILITY-FOCUSED ESP COURSE

Sanda Katavić-Čaušić¹, Dubravka Kuna²

¹Department of Interdisciplinary Studies, Faculty of Economics, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia

²Department of Common Courses, Faculty of Humanities and Social Sciences, Josip Juraj Strossmayer University of Osijek, Osijek, Croatia

¹sanda.katavic.causic@efos.hr

²dkuna@ffos.hr

Abstract: Student employability has emerged as a paramount concern in higher education (HE) in recent years, placing an imperative on educators to rethink higher education teaching methods through the implementation of innovative and immersive initiatives and competency-based practices. Bridging the pedagogical and professional divide and developing practical and transferable skills is increasingly valued as these skills are fundamental to student success in different business roles and a constantly evolving job market. In the HE context, English for Specific Purposes courses (e.g. Business English) have always been designed around specific language needs. Their core focus is on task-based learning and delivering practical content that is both authentic to the professional landscape and relevant for student career success. Moreover, employability skills development should be a cornerstone of the Business English curriculum as it needs to be made responsive to real-world market demands in the global context. A highly tailorable and flexible solution capable of meeting the specialized requirements of business students is the digital portfolio, the added value of which is its potential relevance across diverse educational levels, disciplines and professions. This article presents digital portfolios as a strategic tool capable of maximizing professional learning to address the above-mentioned concerns. Specifically, the digital portfolio serves as a personalized repository for showcasing artefacts like students' CVs, cover letters, recorded spoken samples, video comments, written reflections and infographics on relevant topics, or any other content that can be tailored to the students' needs or disciplines. This pedagogical approach not only encourages students to actively immerse themselves in the learning process and reflect on achieved competences and/or challenges, but it also provides concrete evidence of both linguistic and transferable skill development. Observations from both the instructors' and students' self-reflections suggest that this method enhances learning outcomes and at the same time empowers students to take ownership of their professional development, and prepares them more realistically for the demands of the modern workplace.

Keywords: employability skills; higher education; ESP; Business English; digital portfolios

1. Introduction

Global career readiness is a condition *sine qua non* in today's highly-competitive job market and higher education (HE) institutions need to demonstrate readiness to equip students with comprehensive knowledge, experiences and skills necessary for managing their transition into professional work and their future careers. Therefore, the responsibility of HE is to design curricula that comply with labour market requirements. This alignment effectively addresses human resource needs, as student employability ultimately validates the relevance of higher education. Redefining the curriculum and introducing contemporary, interactive and creative pedagogical approaches showcase higher education's agility in proactively responding to changing job market requirements as quickly as possible.

This study attempts to offer an innovative and flexible pedagogical approach that can be readily implemented within ESPs and bridge the gap between academic knowledge acquisition and the evolving demands of the job market. More specifically, it aims to analyse the shifting paradigms of teaching for the job market in the context of higher education. In addition, the study presents digital portfolios as a relevant solution and a strategic tool to address the employability imperative identified above as well as a platform for fostering core professional and transferable competencies, including self-presentation, intercultural, digital and technical competencies, critical thinking, project management competencies, etc. Finally, the aim of the paper is to position digital portfolios as an example of pedagogical good practice and an adaptable solution for practising employability skills in different HE settings and enhancing employability across various professional fields.

2. Skills for Better Employability

The rapid pace of changes in the job market and its constantly evolving nature has placed particular importance on student employability. Employability may be defined as “a set of achievements – skills, understandings and personal attributes – that makes graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy” (Yorke, 2006: 8). Be it technological development, new strategic considerations or some other concerns, students are expected to be able and ready to adapt to swift-changing needs of the job market.

The changes in the labour market inevitably require the shifting paradigms of teaching as well as developing new, innovative approaches in higher educational practices. In addition to the core academic and technical competences, a growing importance has been given to a set of skills also known as *employability skills*, *soft skills* or *transferable skills* (cf. Tomlinson, 2017). Their importance has been highlighted by a variety of policy makers and education providers: international organizations such as the European Union (e.g. CEDEFOP, 2017), national government organizations (e.g. National Careers Service, 2024; Government of Ontario, 2023), universities and online learning platforms (e.g. Oxford University, 2025; Libertas.hr, 2021; Futurelearn 2020) and so on.

The term *employability skills* refers to “a set of transferable skills and key personal attributes which are highly valued by employers and essential for effective performance in the workplace” (The University of Sydney, 2023). While hard skills refer to subject specific knowledge and job-related competences, employability or

soft skills are “generic in nature, rather than job-specific, and are common to all work roles and workplaces across all industry types” (The University of Sydney, 2023). The importance and ubiquity of the term *soft skills* has been reflected by its addition into general English dictionaries (e.g. dictionary.cambridge.org, 2025; www.collinsdictionary.com, 2025).

The list of employability skills is neither unique nor definite (cf. Yale University, 2019; Tertiary Education Commission, 2021; Coursera, 2025). For example, based on the report of the Confederation of British Industry, the Oxford University Careers Centre focuses on the following employability skills: business awareness, communication, creativity, initiative, leadership, planning, self-management, and teamwork (Oxford University, 2025). Having good communication skills, for instance, implies “building rapport and feeling confident engaging others through listening, observing, writing, and presenting” (Oxford University, 2025). In order to achieve this, it is suggested that students first start thinking about spoken and written communication with different audiences and for different purposes. Debating ideas with friends, networking, watching TED presentations, etc. are all effective strategies to enhance their communication skills. More specifically, the list of short-, medium- and long-term commitments (e.g. writing an article or review for a student publication, creating your own website, running a campaign about something important to you, etc.) are proposed.

Even a brief glance at the list of attributes that graduates are supposed to develop and demonstrate in just a single area is impressive and it is clear that neither building nor demonstrating the possession of these skills are simple and straightforward. Many employability skills (e. g. in communication, teamwork, etc.) are gained through prescribed curriculum courses and activities in degree programmes: through various forms of written assignments, oral presentations, common projects, etc. However, there are also a vast number of non-compulsory activities enhancing employability opportunities and contributing to the student success in the professional landscape: student conferences, workshops, hackathons, mobility programmes, internships, volunteering, etc. They all significantly add to the personal traits and skills of the graduates which are highly desirable by the employers.

It is highly likely that most HE courses attempt to integrate employability skills into their curricula to some degree. ESP, being a forward-thinking and fundamentally practical discipline in higher education, has been largely responsive to real-world market demands and it has made the development of employability skills an important part of its curriculum. For example, Chi and Vu (2023) investigate how Vietnamese graduates evaluate the contributions of ESP courses to their employability. Dlabolová and Čoupková (2022) discuss the design of their ESP courses for science students and the implementation of skills needed for peer-feedback, mediating meaning and providing evidence of one's achievements. Spirovská Tevdovská (2017) compares the views of students in ESP classes with the views of potential employers regarding the employability skills.

As for the employer's side, in addition to the list of skills emphasized in the report by the Confederation of British Industry above, the research conducted by Robles (2012) provides a valuable insight into the soft skills that the surveyed business executives in the USA recognize as crucial: integrity, communication, courtesy, responsibility, social skills, positive attitude, professionalism, flexibility, teamwork, and work ethic. They want their employees to “communicate effectively, get along

well with their coworkers, embrace teamwork, take initiative, have high work ethic, and portray professionalism” (Robles, 2012: 462). Nghia, Anh and Kien (2023) compare most valued soft skills in business and other occupational fields in various countries and provide evidence that English language education contributes to graduates’ employability.

ESP instructors have been determinedly attempting to align their curricula to the needs of the labour market identified above and to integrate some soft skills. Numerous advancements in technologically enhanced language learning provide a modern learning environment that fosters active involvement of students in the learning process, an augmented learning experience, and greater authenticity.

3. Digital Portfolios in ESP Teaching

One of the digital classroom solutions that leverages technology and has the potential to bridge academic learning and professional competence through ESP courses are digital or e-portfolios. Digital portfolios are an ideal fit for ESP due to their interdisciplinary and customizable nature. They cultivate proficiency that requires not only language skills but also an understanding of language’s role within specific professional environments, making them relevant across academic disciplines and professional fields.

At their most basic, digital portfolios can be described as a digital dossier of materials that documents individual competencies and achievements in the form of tasks, reflections, photographs, audios, videos, links, infographics, presentations, scanned documents, and self-reflections. Salem (2025: 1), for example, defines e-portfolios as a comprehensive e-collection of multimodal learning artefacts that have various purposes, including teaching, assessment, and providing insight into a student’s learning process. Lam (2023, cited in Mogas, Cea Álvarez and Pazos-Justo, 2023: 829) further adds that these artefacts are crucial for helping students reflect on their learning journeys and as such they contribute to learning in numerous ways (Mapundu and Musara, 2019: 191). While working on a digital portfolio, students continuously monitor their progress, developing the key skill of reflection almost subconsciously. The skill enables them to think critically about their learning experience and professional development, which can be evidenced by the role of digital portfolios in fostering critical thinking, problem-solving, and the skills needed for lifelong learning, as highlighted by Bolliger and Shepherd (cited in Ciesielkiewicz, 2019: 649). This is further supported by Alexiou and Paraskeva (2010: 3049), who claim that digital portfolios enhance self-regulated learning and encourage students to be active and autonomous learners. And precisely higher education aims to promote the competence of autonomous learning because in this way the learning process is increasingly shifted to the student, which additionally supports the suitability of digital portfolios for the context. Taking ownership of their learning through portfolios while studying will eventually be substituted by proactivity when they enter the labour market where they will have to demonstrate these skills to employers. Ultimately, this demonstrates how digital learning contexts, aligned with new pedagogical paradigms, are highly supportive of both student learning and career readiness. This versatility, comprehensiveness and authenticity is what gives digital portfolios their enduring value, a value that, as a result of numerous contributions, is clearly multifaceted. Furthermore, Mogaz, Álvarez, and Pazos-Justo (2023: 829) argue that digital resources must be

integrated into syllabi to effectively guide students' learning. This is the reason why digital portfolios can be said to represent a highly important approach to fostering self-management skills as they enable experiential and personalized learning in both academic and professional settings. Due to their ability to foster students' growth, constructivist learning, and critical reflection on their learning, Mapundu and Musara (2019: 192) claim that portfolios have become a key factor in e-learning. This perspective aligns with Malita's (2009: 2312) assertion that it is vital not only to introduce this method, but to implement it as an overall concept within the curriculum. As such, they are no longer just an educational resource but, as Alonso-Díaz et al. (2018: 143) note, a fundamental component of the new learning culture and, in our view, a modern career must-have.

Preparing students for future work can be done through various comprehensive approaches, combining in-class guided learning with independent study whereby the students engage in different assignments and projects that develop intercultural communication skills and core business skills such as self-management, digital literacy, problem-solving, time-management, critical thinking, collaboration, etc. In comparison with other tools, digital portfolios are particularly effective as they can be turned from a learning repository into a powerful tool for professional development. In other words, they can bridge the gap from theory to practice, which is exactly what today's students prioritize – the practical application of their education.

4. Digital Portfolio in a Business English Course

4.1. Context and Participants

This paper provides an overview of the five-year experience gained from implementing a digital portfolio concept within the Business English (BE) curriculum. More specifically, it focuses on the integration of the concept during the 2024/25 academic year in the Business English course for third-year undergraduate students at the Faculty of Economics in Osijek, Croatia. Comprising both full-time and part-time students, the above-mentioned course (Business English 6) is mandatory and it includes three weekly English classes with a lecture and two practical study sessions. It generally enrolls a cohort of approximately 160 students in the summer semester, all majoring in Business Economics. Students typically possess a B2 level of English proficiency according to the Common European Framework of Reference for Languages. The curriculum of the Business English course is based on the idea to strike a balance between the in-class lessons as a directed learning pathway accompanied by an independent student learning experience through digital portfolios, maximising the affordances of technology.

4.2 Aims

Firstly, the digital portfolio was introduced in the Business English course in pursuit of a quality solution that would innovate the teaching practice, and, in doing so, encourage students to embrace education-enhancing opportunities and elevate their learning experience by taking on assignments that go beyond the standard curriculum. Secondly, the idea was to add value to traditional language learning by raising both students' perception of learning as a lifelong process as well as their

awareness of more meaningful, deeper, and applied methods of learning. Thirdly, as experienced language instructors, the authors recognize that true language and skill mastery, particularly at higher proficiency levels, is dependent on immersive and autonomous learning. Given the limited contact time in the BE course at hand, it was aimed to implement a solid solution that would enable students to move beyond the classroom. Ultimately, strong language proficiency constitutes a significant advantage for successful global market integration.

With this context in mind, the introduction of digital portfolios into Business English classes represents a welcome transformative shift in the instructor's pedagogy. It reflects a collective responsibility to prepare new generations of competitive professionals by connecting language skills with practical professional tasks, fostering student autonomy, and providing them with a tangible, transferable document for future employment.

4.3. The Portfolio Development Process

There are numerous website-making platforms nowadays but, for the purpose of Business English classes, Google Sites have been chosen as the platform for creation of their digital portfolios. Some of the compelling advantages of using Google Sites include the possibility of their seamless integration with Google Workspace, simplicity and user-friendliness. Also, for students who did not have a Google account it was easy, fast and completely free to create one.

After creating a Google Account and accessing Google Sites, students begin the process of building their portfolios which turns them from passive recipients of knowledge in traditional teaching into active participants of the course, students who learn by creating their own content in line with the course instructor's guidelines. The guidelines were explained during the introductory course session and were available throughout the semester in a presentation on the learning management system (LMS). They encompass a detailed explanation of the concept, duration, obligations, and assessment, as well as step-by-step instructions for each specific portfolio assignment. All assignment topics included in the portfolio are covered as educational units within the course curriculum but can be modified from academic year to academic year, in accordance with the curriculum and outcomes. In the 2024/2025 academic year, the assignments included:

- A clear title page with the student's name, a favourite quote and its author. In addition, on this page, there should be a dropdown menu that shows all 7 submitted assignments, with each one on a separate page.
- Assignment 1 is a biography focused on the student's professional aspects, education, and experience, accompanied by an inserted tabular curriculum vitae in Europass or another chosen format.
- Assignment 2 is a cover letter for a real job of the student's choosing, based on a current job advertisement from suggested websites like Eurojobs, Guardian Jobs, or LinkedIn Jobs. The instructions for writing it are provided to the students during lectures and through documents on the LMS. Students must also include a link to the selected advertisement.
- Assignment 3 is an approximately one-minute audio recording in which the student shares their view on the importance of teamwork skills and personal experiences. They are guided by a question template to cover specific aspects of the topic.

- Assignment 4 is to present the content of a chosen TED talk on the topic of leadership, followed by a critical opinion on its quality and/or usefulness.
- Assignment 5 is to create a personal infographic using a digital tool like Canva. Using images, symbols, and topic-specific keywords or phrases, students will present their view of one or more business risks in the global environment over the upcoming five-year period, as well as potential solutions.
- Assignment 6 is to provide answers to a series of questions and statements about what job satisfaction means to them. Each answer must be elaborated on with a minimum of three sentences. Students begin this portfolio page with a favourite quote about job satisfaction and must interpret the quote in their own words.
- Assignment 7 is a self-reflection task. Students debrief the portfolio project and reflect on their learning process. They reflect on their efforts, achievements, and challenges encountered during the summer semester. By evaluating their strengths and weaknesses, the students set personal English learning goals for the future.

From what has been stated above, it is clear that students are no longer creating a single, static document, but rather a dynamic and collaborative one. The document enables instructors to view, edit, and assess student work, while serving as tangible evidence of learning and growth for students and potentially employers. Furthermore, students demonstrate their foreign language communication abilities through a series of relevant, employability-focused assignments that directly align with the course material. In this way, classroom learning is shifted toward the practical development of employability skills. It is through this process that students not only acquire new knowledge and skills but also learn to reflect on their experiences, a crucial skill for adapting to the demands of the modern workforce.

5. Reflections and Implications

The digital portfolio was implemented as a core component of the curriculum for its primary educational purpose: to document student learning and growth over time. To achieve this, students were required to synthesize their knowledge of professional English, digital skills, and business-related topics into a professional, tangible document with effectively presented content. Instructor experience and student feedback both confirm the program's authenticity and real-world relevance, showing that this dynamic and multi-faceted tool was clearly beneficial for the learning process and made the entire teaching process a success. Students were empowered and took ownership of their learning, transitioning from traditional passive methods to autonomous, individualized, and self-regulated learning. In the context of professional English, the portfolios provided concrete evidence of a student's ability to apply language skills in a holistic, real-world business setting, thereby fostering interdisciplinary learning.

However, it must be admitted that the students' initial reactions varied when a digital portfolio was introduced as a new learning methodology at the beginning of the semester. This was largely due to a combination of mixed feelings and a lack of knowledge, leaving many participants feeling reserved and uncertain about the new approach. While most students were intrigued and interested, others were

quite reluctant and discouraged. This was primarily due to the immediate realization that creating a portfolio would require more effort than traditional coursework. This initial reaction is best captured by a student's candid reflection below. To ensure authenticity, students' comments in the article have not been edited.

When I found out, during the introductory session of the Business English 6 course, that we wouldn't be taking a written exam as usual but instead had to create our own digital portfolio consisting of various tasks, such as voice recordings, writing a CV in English, expressing our opinions on certain topics, writing a cover letter, and other creative assignments, I thought to myself: "It would be easier to just take an exam."

After attending the classes and beginning the portfolio creation process, however, students reported an increase in their confidence and ability to create professional portfolios.

The portfolio's flexibility—which has allowed its content to be easily modified over the years in response to changing curricula, learning outcomes, and course materials—confirms that this pedagogical approach offers a unique opportunity to integrate tailored and versatile activities that foster essential professional English, employability, critical thinking and self-presentation skills. As a powerful medium for promoting lifelong learning and preparing students for a successful career, the digital portfolio's growing popularity is evident: students find them invaluable as dynamic records of their competencies that can be continuously updated and presented to future employers throughout their careers. To illustrate, here is what some students had to say:

Here I had a chance to express my opinion on interesting questions which is a rare occurrence nowadays when you can solve pretty much any task using AI tools.

Creating the portfolio helped me organize my experiences and present my skills more confidently in English.

I put a lot of effort into understanding the tasks and organizing my ideas, which helped me progress throughout the semester.

The relationship between the course content and the language is illustrated by the views of two students:

Working on this portfolio project has been a valuable learning experience that helped me improve my business English skills, especially in writing and expressing opinions clearly.

One of my favorite parts of the portfolio was writing about the TED Talk. It allowed me to connect language learning with real-life topics and listen to native speakers, which improved my listening skills.

The most interesting task for me was writing the cover letter, because we had the freedom to write it for any job in the world and in any location. I let my imagination run wild and really enjoyed looking through job ads and imagining myself working in those roles.

Digital portfolios did not remain only a static artefact but became also a process itself or a multidimensional reflection of their learning journey. Being actively involved in building and maintaining their digital portfolios, students took personal responsibility for their learning which made them most effective as a learning tool. Furthermore, as a key component of modern educational strategy, the portfolio creation process had a significant impact on student engagement by raising their

awareness of the learning journey and encouraging them to evaluate their own work and progress. Hence, the final assignment in the portfolio, designed as a comprehensive process of self-reflection and self-evaluation, served as the foundation for a deeper and more authentic review of students' work. This open-ended task prompted them to reflect on their work, allowing them to assess their strengths and weaknesses and set learning goals for the future. This approach allowed them to effectively demonstrate skills and competencies that conventional coursework often fails to capture. It is particularly beneficial for students who are constrained by traditional testing, or are otherwise reluctant or unable to present, as it provides a platform to fully showcase their learning and be recognized for the skills they have truly acquired. Despite potential concerns about objectivity and reliability compared to traditional methods, our experience indicates that a focus on authentic assessment through portfolios substantially increased student engagement and facilitated a deeper gain in knowledge. Here are some examples of students' self-reflection on their skills:

What I did best was writing the CV, as I had already written one for a student job, so I had a rough idea of how it should look.

One of my weaknesses is spontaneous speaking and using more advanced grammar when talking.

The most challenging part was recording my voice and speaking in English. I often feel nervous about pronunciation and grammar when speaking, but this task helped me build more confidence. I now understand how important it is to practice speaking regularly, not just writing or reading.

Based on the comments from a significant number of students, we can conclude that students described the portfolio project as a valuable and solid learning experience. They felt the assignments were not only interesting and practical but also an effective way to apply what they learned. While they found the project itself was not overly difficult, they recognized that it required a structured and challenging approach at all stages. Their realization that they successfully met these challenges ultimately made the entire process a deeply motivational and interesting experience. Below are some student reflections that highlight the portfolio's contribution to their professional development and the development of their employability skills.

Creating this digital portfolio, in addition to solving tasks, has given me the opportunity to get to know myself, my strengths, but also the challenges I need to overcome in order to be prepared for future business challenges.

It helped me set new goals for my career and personal growth.

Through the assignments and reflections, I became more aware of how important communication, organization, and presentation are in the business world

Each assignment pushed me in different ways - some tasks were tougher and some were easier, but none of them were boring.

This was a great opportunity to reflect on yourself as a person and the result of your actions. It helped me value myself more and brought me joy...

While portfolios offer unique benefits, their implementation comes with practical challenges. With large numbers of students, as is our case, the detailed feedback and individual attention required for effective assessment can be a significant burden for the educator. This is a crucial factor, as the process requires a substantial amount of time and effort from the assessor. Still, in smaller group

settings, ESP educators can use digital portfolios to gain a deeper understanding of each student's language proficiency, identifying individual strengths and areas for growth. This in turn enables them to customize instruction and improve learning outcomes. In other words, the inherent flexibility and adaptability of this pedagogical approach allow for the widespread implementation of digital portfolios across a variety of teaching models and ESP contexts.

6. Conclusion

This paper documents the implementation of digital portfolios in the BE curriculum, highlighting how these tools – powerful professional assets – enhance the course's value while effectively supporting the development and strengthening of students' employability within formal education. The purpose of introducing them into the course was to develop a strong sense of student competence in their abilities and to boost their confidence in the pre-employment process. It also aimed to raise awareness of this professional tool with which students can showcase a full range of skills and abilities transferable from academic to professional life. Moreover, the process of creating the portfolio as tangible evidence, made students aware of their acquired linguistic, professional and technical competencies, as well as the importance of these skills for their professional identity and future employability. It is the holistic nature of digital portfolios – spanning diverse needs and disciplines – that enables students to 'learn by doing' an authentic product that simulates real professional practice.

The findings of the study could be useful for ESP practitioners but also experts in different disciplines, policy makers, and current and future students since graduate employability is often not considered enough or is even neglected. Accordingly, employability skills should be cultivated across all academic disciplines, not solely business-related ones, and educators should explicitly link students' in-class activities with the proficiencies in the professional world. Therefore, preparing students for the global market via digital portfolios should be considered as an integral part of the ESP and Business English curriculum.

The study concentrated predominantly on the portfolio's value as a learning tool and a mechanism for personal growth. The findings are possibly constrained by their contextual specificity, stemming from experiential insights unique to a particular institution and pedagogical approach. The study's five-year focus, encompassing the pandemic years, introduces an additional limitation concerning potential temporal shifts in curriculum or student demographics.

The results of this study suggest a need for further research into the broader application of digital portfolios, as this approach is undoubtedly transferable across various disciplines and in diverse educational contexts. In addition, their inherent digital and collaborative features make them perfect for documenting learning in structured initiatives like virtual exchanges, distance or hybrid learning environments. Future research should therefore investigate these benefits in greater detail.

References:

- [1]. **Alanson, E.R. and Robles, R.A.** (2016) 'Using electronic portfolios to explore essential student learning outcomes in a professional development

- course', *Asia-Pacific Journal of Cooperative Education*, 17(4), pp. 387–397. <http://files.eric.ed.gov/fulltext/EJ1131574.pdf>.
- [2]. **Alexiou, A.** and **Paraskeva, F.** (2010). 'Enhancing self-regulated learning skills through the implementation of an e-portfolio tool', *Procedia - Social and Behavioral Sciences*, 2(2), pp.3048–3054. doi: <https://doi.org/10.1016/j.sbspro.2010.03.463>.
- [3]. **Alonso-Díaz, L., Gutiérrez-Esteban, P., Delicado-Puerto, G., Yuste-Tosina, R., Cubo Delgado, S., and Arias-Masa, J.** (2018) 'E-portfolio: Open educational resources for a new learning culture', *Eurasia Journal of Mathematics, Science and Technology Education*, 14(4), pp.1435–1443. doi: <https://doi.org/10.29333/ejmste/82604>.
- [4]. **Andini, D., Kusnandar, H. F., Andriati, Y. S., Sumarni, R., Faizal, R., Abdillah, W. A. and Marlina, L.** (2024) 'Developing digital portfolios to enhance employability and career success: a community service program for high school students and fresh graduates in Tasikmalay', *Dedikasi Sains dan Teknologi (DST)*, 4(2), pp.150–157. doi: <https://doi.org/10.47709/dst.v4i2.4925>.
- [5]. **Carter, S.** (2021) 'ePortfolios as a platform for evidencing employability and building professional identity: a literature review', *International Journal of Work-Integrated Learning*, 22(4), pp.463–474. Available at: https://www.researchgate.net/publication/364342295_ePortfolios_as_a_platform_for_evidencingemployability_and_building_professional_identity_A_literature_review. [Accessed 5 Nov. 2025].
- [6]. **CEDEFOP.** (2017). *Developing employability skills*. [online] Available at: <https://www.cedefop.europa.eu/en/tools/vet-toolkit-tackling-early-leaving/intervention-approaches/developing-employability-skills>.
- [7]. **Chi, D. N. and Vu, N. T.** (2023). English for Specific Purposes Courses and Vietnamese Graduates' Employability. In: T.L.H. Nghia and L.T. Tran, L.T., Ngo, M.T., eds., *English Language Education for Graduate Employability in Vietnam. Global Vietnam: Across Time, Space and Community*. Singapore: Springer, pp.259–281. doi: https://doi.org/10.1007/978-981-99-4338-8_12.
- [8]. **Ciesielkiewicz, M.** (2019) 'The use of e-portfolios in higher education: from the students' perspective', *Issues in Educational Research*, 29(3), pp.649–677. Available at: <http://www.iier.org.au/iier29/ciesielkiewicz.pdf>. [Accessed 8 Nov. 2025].
- [9]. **Costa, F. A. and Laranjeiro, M. A.** (eds) (2008) *E-portfolio in education: practices and reflections*. Sintra: Associação de Professores de Sintra. Available at: <https://repositorio.ulisboa.pt/entities/publication/491094c4-9428-49f5-bc62-ebc1c6deeddc>. [Accessed 11 Nov. 2025].
- [10]. **Coursera.** (2025). *What Are Employability Skills and Why Do They Matter?* [online] Available at: <https://www.coursera.org/articles/employability-skills> [Accessed 4 Nov. 2025].
- [11]. **dictionary.cambridge.org.** (2025). *SOFT SKILLS | meaning in the Cambridge English Dictionary.* [online] Available at: <https://dictionary.cambridge.org/dictionary/english/soft-skills> [Accessed 16 Aug. 2025].
- [12]. **Diabolová D. and Čoupková E.** (2022) 'Transferable Skills in ESP', *CASALC Review.*, [online] 12(2), pp.181–190. Available at: <https://journals.muni.cz/casalc-review/article/view/31013/30054> [Accessed

4 Sep. 2025].

- [13]. **Futurelearn** (2020). *Soft Skills: What They Are And How To Develop Them - Blog*. [online] FutureLearn. Available at: <https://www.futurelearn.com/info/blog/soft-skills-what-they-are-and-how-to-develop-them>. [Accessed 20 Aug. 2025].
- [14]. **Government of Ontario** (2023). *Essential Employability Skills | ontario.ca*. [online] www.ontario.ca. Available at: <https://www.ontario.ca/page/essential-employability-skills> [Accessed 20 Aug. 2025].
- [15]. **Gutiérrez-Santiuste, E., García-Segura, S., Olivares-García, M. Á. and González-Alfaya, E.** (2022) 'Higher Education Students' Perception of the E-Portfolio as a Tool for Improving Their Employability: Weaknesses and Strengths', *Education Sciences*, 12(5), p. 321. doi: <https://doi.org/10.3390/educsci12050321>.
- [16]. **Jwaifell, M.** (2012) 'Electronic Portfolio increases both Validating Skills and Employability', *The Journal of Quality in Education*, 3(3), p.16. Available at: <https://joqie.org/index.php/joqie/article/view/90/86>. [Accessed 2 Sep. 2025].
- [17]. **Libertas.hr.** (2021). *Što su meke i tvrde vještine i kako ti mogu pomoći u budućoj karijeri – Sveučilište Libertas*. [online] Available at: <https://www.libertas.hr/novosti/sto-su-meke-i-tvrde-vjestine-i-kako-ti-mogu-pomoci-u-buducjoj-karijeri/> [Accessed 20 Aug. 2025].
- [18]. **Le Quang, D., and Nguyen Thi, D. H.** (2019). Portfolio - An Alternative Form of Assessment in EFL Context. *International Journal of Scientific and Research Publications*, 9(1), p.439. doi: <http://dx.doi.org/10.29322/IJSRP.9.01.2019.p8557>.
- [19]. **Llopis-Giménez, V. J., and Rius, C.** (2023) 'The Contribution of digital portfolios to Higher Education Students' autonomy and digital competence', *Education Sciences*, 13(8), p.829. doi: <https://doi.org/10.3390/educsci13080829>.
- [20]. **Mapundu, M. and Musara, M.** (2019) 'E-Portfolios as a tool to enhance student learning experience and entrepreneurial skills', *South African Journal of Higher Education* [Preprint], pp.191–214. doi: <https://doi.org/10.20853/33-6-2990>.
- [21]. **Mitchell, L., Campbell, C., Somerville, M., Cardell, E. and Williams, L. T.** (2021) 'Enhancing graduate employability through targeting ePortfolios to employer expectations: a systematic scoping review', *Journal of Teaching and Learning for Graduate Employability*, 12(1), pp.16–35. doi: <https://doi.org/10.21153/jtlge2021vol12no2art1003>.
- [22]. **Mogas, J., Cea Álvarez, A. and Pazos-Justo, C.** (2023) 'The contribution of digital portfolios to higher education students' autonomy and digital competence', *Education Sciences*, 13(8), p. 829. doi: <https://doi.org/10.3390/educsci13080829>.
- [23]. **National Careers Service** (2024). *How to Develop Your Soft Skills | Careers Advice | National Careers Service*. [online] nationalcareers.service.gov.uk. Available at: <https://nationalcareers.service.gov.uk/careers-advice/how-to-develop-your-soft-skills> [Accessed 20 Aug. 2025].
- [24]. **Nghia, T.L.H., Anh, N.P. and Kien, L.T.** (2023). English Language Skills and Employability: A Theoretical Framework. In: T.L.H. Nghia and L.T. Tran, L.T., Ngo, M.T., eds., *English Language Education for Graduate*

- Employability in Vietnam, Global Vietnam: Across Time, Space and Community.* Singapore: Springer, pp.71–93. doi: https://doi.org/10.1007/978-981-99-4338-8_4.
- [25]. **Ornellas, A., Falkner, K. and Edman Stålbrandt, E.** (2019) 'Enhancing graduates' employability skills through authentic learning approaches', *Higher Education, Skills and Work-Based Learning*, 9(1), pp. 107–120. Available at: https://www.researchgate.net/publication/329762555_Enhancing_graduates'_employability_skills_throughauthentic_learning_approaches. [Accessed 28 Aug. 2025].
- [26]. **Oxford University** (2025). *Develop Your Employability Skills*. [online] www.careers.ox.ac.uk. Available at: <https://www.careers.ox.ac.uk/develop-your-employability-skills> [Accessed 20 Aug. 2025].
- [27]. **Robles, M.M.** (2012). Executive Perceptions of the Top 10 Soft Skills Needed in Today's Workplace. *Business Communication Quarterly*, [online] 75(4), pp.453–465. doi: <https://doi.org/10.1177/1080569912460400>.
- [28]. **Salam, M. A.** (2025) 'The student e-portfolios: importance and relevance at higher learning institution', *TAJ Journal of Teachers Association*, 38(2), pp. 1-4. doi: <https://doi.org/10.70818/taj.v38i02.0339>.
- [29]. **Spirovska Tevdovska, E.** (2017). Enhancing Employability Skills in ESP (English for specific purposes) context – A Study Conducted at South East European University. *Journal of Teaching English for Specific and Academic Purposes*, 5(2), pp.275–284.
- [30]. **Tertiary Education Commission** (2021). *Employability skills*. [online] www.careers.govt.nz. Available at: <https://www.careers.govt.nz/resources/tools-and-activities/employability-skills/> [Accessed 22 Aug. 2025].
- [31]. **The University of Sydney** (2023). *Employability skills*. [online] The University of Sydney. Available at: <https://www.sydney.edu.au/careers/students/career-advice-and-development/employability-skills.html> [Accessed 20 Aug. 2025].
- [32]. **Tomlinson, M.** (2017). Forms of graduate capital and their relationship to graduate employability. *Education and Training*, 59(4), pp.338–352. doi: <https://doi.org/10.1108/et-05-2016-0090>.
- [33]. **Yale University** (2019). *Developing Soft Skills*. [online] It's Your Yale. Available at: <https://your.yale.edu/working-at-yale/learn-and-grow/training/clerical-technical-training-and-development/developing-soft> [Accessed 22 Aug. 2025].
- [34]. **Yorke, M.** (2006). *Employability in higher education: what it is - what it is not*. Hestington, York: Higher Education Academy.
- [35]. **www.collinsdictionary.com.** (2025). *Soft skills definition and meaning | Collins English Dictionary*. [online] Available at: <https://www.collinsdictionary.com/dictionary/english/soft-skills> [Accessed 16 Aug. 2025].

SCAFFOLDING STRATEGIES IN EMI BIOLOGY CLASSROOMS: A MIXED-METHODS CASE STUDY

Ouafa Ouarniki¹, Houda Boumediene²

¹SIGMA Laboratory, University of Oran 1, Ziane Achour University, Djelfa, Algeria.

²AILE Laboratory, Amar Telidji University, Laghouat, Algeria.

¹ouafa.ouarniki@univ-djelfa.dz

²h.boumediene@lagh-univ.dz

Abstract: *The adoption of English as a Medium of Instruction in Algerian higher education has created pedagogical and linguistic challenges, particularly in science disciplines. Therefore, this study explores how scaffolding strategies are enacted and perceived in EMI biology classrooms at Ziane Achour University of Djelfa. To this end, an exploratory mixed-methods case study design was employed. Data were collected through a student questionnaire (N = 45), instructor interviews (N = 4), and classroom observations. Subsequently, quantitative data were analysed descriptively, while qualitative data were analysed thematically. Overall, the findings suggest that students and instructors perceived scaffolding strategies as supportive of engagement with biology content taught in English. In particular, vocabulary support, visual resources, guided practice, and collaborative learning were reported as helpful. However, instructors also identified challenges related to limited training and institutional support. Consequently, although the findings are context-bound, the study provides insight into scaffolding practices in an emerging EMI context and highlights the importance of pedagogical support in EMI science education.*

Keywords: *Scaffolding; English as a Medium of Instruction (EMI); Biology education; Mixed-methods research; Content and Language Integrated Learning (CLIL); Higher education*

1. Introduction

In recent years, the adoption of English as a Medium of Instruction (EMI) has gained momentum across global universities, particularly in regions where English is not the first language. This shift reflects broader educational reforms aimed at enhancing global competitiveness and aligning academic standards (Braun & Clarke, 2006). In 2023, Algeria implemented a national EMI policy encompassing various disciplines, including biology. While the policy appears progressive, its execution reveals significant challenges. Many Algerian biology students face the dual burden of grasping complex scientific concepts while simultaneously navigating the intricacies of academic English. This situation often leads to reduced classroom engagement and limited conceptual understanding.

Furthermore, subject experts, though proficient in their fields, frequently lack the pedagogical training necessary to integrate language support effectively. To address these issues, scaffolding has emerged as a vital instructional approach. Grounded in Vygotsky's theory of the Zone of Proximal Development (ZPD),

scaffolding entails providing structured academic and linguistic assistance that gradually diminishes as learners gain proficiency. Within EMI settings, it serves a dual function, supporting comprehension of disciplinary content and fostering acquisition of specialized language (Huang, 2024).

This aligns with the Language for Specific Purposes (LSP) framework, which views language as intrinsic to subject mastery. Despite its global relevance, empirical studies on scaffolding in Algerian science education remain sparse. Although previous research has examined general attitudes toward EMI and student experiences (Rose & Yuksel, 2024), few have investigated how scaffolding strategies are applied or perceived in practice. Consequently, this study focuses on biology instruction at Ziane Achour University of Djelfa. It seeks to answer two research questions:

1. To what extent do scaffolding techniques enhance students' grasp of biological concepts, vocabulary development, and active participation?
2. How do instructors and learners evaluate the strengths and limitations of scaffolding in an EMI context?

By analyzing classroom realities, the study aims to offer practical insights for improving EMI implementation in linguistically diverse academic environments.

2. Review of Literature

2.1 Sociocultural Scaffolding in EMI Contexts

The theoretical foundation of scaffolding stems from Vygotsky's (1978) sociocultural model, particularly the ZPD, which emphasizes learning through social interaction and guided support. In practice, this involves breaking down tasks, modeling cognitive and linguistic processes, and providing cues to facilitate student understanding. In EMI classrooms, such support is indispensable. Scientific disciplines like biology demand not only comprehension of abstract ideas but also fluency in technical language (Chen & Wang, 2021). LSP-informed scaffolding techniques, including vocabulary previews, visual representations, and collaborative learning, offer essential scaffolding for navigating both linguistic and conceptual complexity.

2.2 Impact of Scaffolding on EMI Learning Outcomes

Recent empirical research underscores the positive influence of scaffolding on student achievement within EMI frameworks (Lai & Idris, 2025). Structured instructional support reduces cognitive overload, encourages academic language use, and fosters learner autonomy. When content and language are taught in tandem, students exhibit improved comprehension and sustained engagement (Umekita, 2025). Moreover, integrating linguistic guidance into content delivery equips learners with the tools needed for independent academic performance, reinforcing the centrality of scaffolding in EMI pedagogy.

2.3 EMI and CLIL: Differentiating Instructional Models

Although EMI and Content and Language Integrated Learning (CLIL) are often associated, they differ in key pedagogical priorities. CLIL explicitly incorporates language learning objectives into subject instruction, while EMI typically prioritizes content delivery, assuming sufficient language proficiency. In contexts like Algeria,

where this assumption may not be valid, scaffolding serves as a bridge. By adopting CLIL-inspired methods, such as explicit terminology instruction and language-focused classroom tasks, EMI educators can significantly enhance learner outcomes. Thus, scaffolding provides a cohesive framework for addressing the instructional gaps between the two approaches (Wang & Winstead, 2023).

2.4 Digital Tools and Post-Pandemic Scaffolding

Technological advancements have introduced innovative scaffolding opportunities, especially in the aftermath of the COVID-19 pandemic. Digital resources, including simulations, multimedia glossaries, and collaborative platforms, allow learners to interact with content at their own pace and revisit complex material as needed (Ouarniki & Alhasani, 2025). These tools have proven particularly effective in science education, where abstract ideas often require repeated exposure. Additionally, digital scaffolding fosters student autonomy and extends learning beyond traditional classroom boundaries, particularly in hybrid or resource-limited settings (Outemzabet & Sarnou, 2023).

2.5 Research Gaps in Algerian EMI Contexts

Although EMI has garnered increased attention in Algeria, current research predominantly explores general challenges or emotional responses. Investigations into specific instructional practices, especially scaffolding, remain limited. This oversight hampers the development of targeted training and informed policy-making. By examining real-world classroom applications of scaffolding in Algerian biology instruction, this study seeks to provide actionable recommendations for enhancing both teaching practices and institutional strategies in EMI contexts.

3. Methodology

3.1 Research Design

The current research utilised a convergent parallel mixed-methods case study, in which data collection in both quantitative and qualitative forms was carried out in one stage of the research process, followed by analysis in each case separately, then later combining them in the interpretation stage. The choice of this mixed method was informed by its ability to provide a broader understanding of scaffolding practices in EMI biology classrooms. Most importantly, the study was exploratory in nature. Rather than aiming to establish causal relationships or statistically generalisable outcomes, it sought to identify patterns, tendencies, and perceptions related to the use of scaffolding strategies in a newly implemented EMI context. Consequently, all findings are interpreted as context-specific and indicative, in line with methodological recommendations for small-sample, institution-bound educational research.

3.2 Research Context and Participants

The study was conducted at Ziane Achour University of Djelfa, a public Algerian university that began implementing EMI in selected science programmes following the national policy shift introduced in 2023. The Faculty of Biology was chosen as the research site because it was among the first faculties to adopt EMI and because biology courses present substantial conceptual and linguistic demands

for students.

3.2.1 Sampling Procedure

A purposive sampling strategy was used to ensure that all participants had direct and sustained experience with EMI instruction. This approach was considered appropriate given the exploratory aims of the study and the limited number of EMI biology courses available at the institution during the data collection period.

The participant group consisted of:

- Forty-five undergraduate biology students ($n = 45$) enrolled in the third-year EMI course *Cellular and Molecular Biology*. All students registered on the course were invited to participate through an in-class announcement made by the course instructor. Participation was voluntary, no incentives were offered, and no students who wished to participate were excluded. No formal refusals were recorded.
- Four biology instructors ($n = 4$) who taught at least one EMI course. Instructors were invited via direct email from the researchers, and all invited instructors agreed to participate. Although all instructors had strong disciplinary expertise, none had received formal training in EMI pedagogy or language-integrated instruction.

While the sample size is limited, it reflects the entire population of EMI biology instruction at the institution at the time of the study and is therefore appropriate for a qualitative-dominant, exploratory case study rather than for statistical generalisation.

All participants provided informed consent, and ethical approval was obtained from the university prior to data collection.

3.3 Data Collection Instruments

To address the research questions comprehensively and ensure methodological triangulation, three data collection instruments were employed: a student questionnaire, semi-structured instructor interviews, and classroom observations.

3.3.1 Student Questionnaire

A structured questionnaire was administered to students at the end of the semester. The instrument consisted of three sections:

- Section A collected demographic information (age and gender) and students' self-reported English proficiency.
- Section B included 5-point Likert-scale items measuring students' perceptions of specific scaffolding strategies (e.g., vocabulary pre-teaching, visual support, guided practice, and collaborative learning).
- Section C comprised open-ended questions inviting students to reflect on the most and least effective scaffolding practices experienced during the course.

The questionnaire was piloted with a group of ten students who were not included in the main sample to ensure clarity, linguistic appropriateness, and contextual relevance. Minor wording revisions were made based on pilot feedback, while no structural changes were required.

Internal consistency analysis conducted on the main dataset yielded a Cronbach's alpha of 0.84, indicating satisfactory reliability for exploratory educational research.

It is acknowledged that questionnaire data rely on self-reported perceptions, which may be influenced by social desirability or recall bias. This limitation is explicitly addressed in the Discussion section.

3.3.2 Semi-Structured Instructor Interviews

Semi-structured interviews were conducted with the four participating instructors to explore their instructional practices, pedagogical decision-making, and perceptions of scaffolding in EMI biology courses.

The interviews were conducted primarily in English, which is the language of instruction for the courses, with occasional clarification in French when requested by participants to ensure accurate expression of ideas.

Interview questions focused on:

- types of scaffolding strategies employed,
- rationales for instructional choices,
- perceived challenges of EMI teaching,
- and institutional support and training needs.

Each interview lasted between 30 and 45 minutes, was audio-recorded with participants' consent, and transcribed verbatim for analysis.

3.3.3 Classroom Observations

Six EMI biology lectures were observed by one of the researchers using a pre-designed observation checklist developed specifically for this study. The checklist was informed by existing EMI and CLIL literature and focused on observable scaffolding practices rather than on evaluative judgments of teaching quality.

The checklist included six domains:

1. Vocabulary pre-teaching
2. Use of visual and multimodal resources
3. Guided practice and modelling
4. Collaborative learning activities
5. Scaffolded questioning
6. Strategic use of students' first languages (Arabic and/or French) as supportive resources

To enhance procedural consistency, the checklist was trialed during two preliminary observations that were not included in the final dataset. All observations were conducted by the same researcher to minimize variability in interpretation.

Observation data were used for triangulation purposes and to contextualize questionnaire and interview findings rather than as an independent measure of instructional effectiveness.

It is recognized that classroom observation may influence participant behavior due to the Hawthorne effect, whereby individuals modify their actions because they are aware of being observed. This issue is addressed as a methodological limitation in the Discussion section.

3.4 Data Analysis Procedures

3.4.1 Quantitative Analysis

Questionnaire data were analyzed using SPSS (Version 26).

Given the exploratory nature of the study and the relatively small sample size, the analysis was deliberately limited to descriptive statistics, including frequencies, means, and standard deviations.

No inferential statistical tests were conducted, and all references to inferential analysis were removed to ensure consistency between the Methods and Results sections. The quantitative findings are therefore presented as descriptive trends rather than as statistically generalizable outcomes.

3.4.2 Qualitative Analysis

Qualitative data from open-ended questionnaire responses, instructor interviews, and classroom observation notes were analysed using thematic analysis, following Braun and Clarke's (2006) six-phase framework: familiarization with the data, initial coding, theme development, theme review, theme definition, and reporting.

To enhance analytical rigor, two researchers independently coded the data. Coding discrepancies were discussed and resolved through consensus, thereby improving consistency and trustworthiness. Observation data were used to corroborate and enrich themes emerging from student and instructor narratives.

3.5 Trustworthiness and Rigor

Several strategies were implemented to enhance the methodological rigor of the study.

Triangulation across data sources (questionnaires, interviews, and observations) strengthened the credibility of the findings. Member checking was conducted with instructor participants to confirm the accuracy of interpreted meanings, and peer debriefing between the researchers supported reflexivity and analytical transparency.

For the quantitative component, rigor was supported through pilot testing and internal consistency analysis. Collectively, these procedures contribute to methodological transparency while remaining appropriate to the study's exploratory scope and contextual focus.

4. Results

This section discusses the study's findings in terms of the two research questions that guided it.

Data for this study came from student questionnaires, instructor interviews, and classroom observations. In keeping with the mixed-methods design, quantitative data is presented descriptively, whereas qualitative data is presented thematically. What is more important is that all data sources complement one another in offering an in-depth and contextualized description of EMI biology classroom scaffolding.

4.1 Quantitative Findings: Student-Reported Perceptions of Scaffolding

First, questionnaire data offer an overview of how students perceived the scaffolding strategies implemented in their EMI biology course.

Table 1 presents the number and percentage of students who reported agreement or strong agreement with statements related to specific scaffolding practices.

Table 1. Overview of student agreement with scaffolding strategies in EMI biology (Likert scale).

Scaffolding Strategy	Agree or Strongly Agree (%)
Pre-teaching vocabulary helped me understand biology concepts.	41 (91%)
Visual aids make complex ideas easier to grasp.	39 (87%)
Group activities helped me learn better.	37 (82%)
Step-by-step instruction supported application of new knowledge.	36 (80%)
I felt more confident participating due to these strategies.	38 (84%)

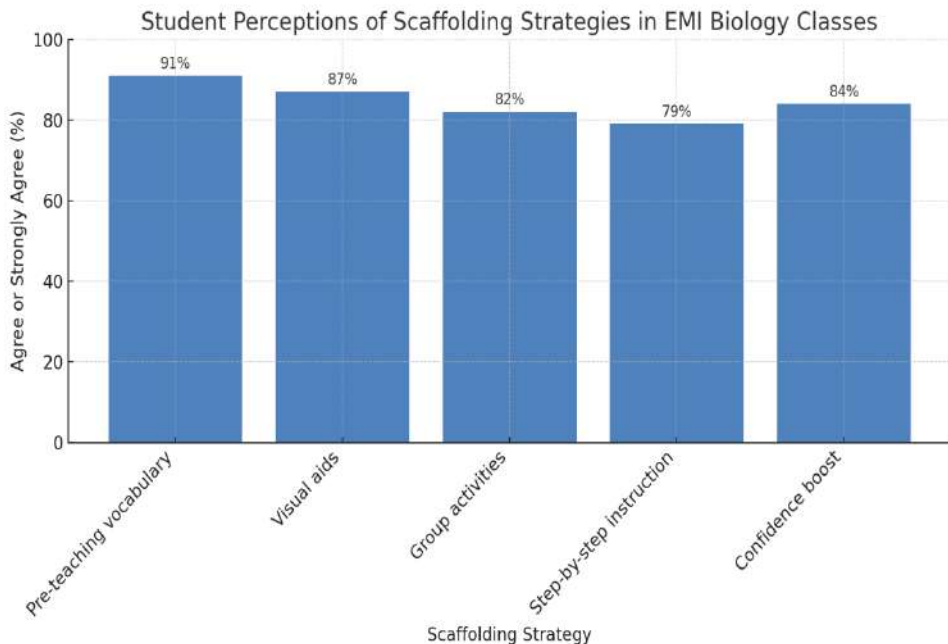


Figure 1. Student Perceptions of Scaffolding Strategies in EMI Biology Classes (N = 45).

Table 1 shows the percentage of students who either agreed or strongly agreed with Each scaffolding strategy was listed on the 5-point Likert-scale questionnaire. It can be seen from the results that the overall perception of using scaffolding strategies in the EMI biology classes is very high.

These results indicate a very positive student response to scaffolding, particularly with regard to pre-teaching vocabulary and visual or multimodal scaffolding.

Students emphasized how such scaffolds had made biological processes more accessible while decreasing linguistic difficulty in terms of content matter engagement.

Gender- and English-level comparisons revealed small and descriptive differences rather than statistically tested contrasts:

- Female students (n = 28) indicated a slightly higher mean level of appreciation

($M = 4.43$, $SD = 0.48$) compared to male students ($n = 17$; $M = 4.21$, $SD = 0.61$). Students who self-identified as having medium or higher English proficiency ($n = 30$) reported greater appreciation for reflective and strategic scaffolding supports (e.g., journaling, sentence frames), whereas students with lower confidence in English reported greater reliance on visual supports, bilingual explanation, and peer support. These variations suggest that scaffolding effectiveness may differ according to learners' linguistic profiles, underscoring the need for differentiated scaffolding practices in EMI settings.

4.2 Qualitative Findings: Teacher and Classroom Insights

Five broad themes emerged from the qualitative data obtained through instructor interviews and classroom observations.

4.2.1 Scaffolding Builds Comprehension

All four instructors reported employing vocabulary scaffolding, sequenced structuring, and simplified language to facilitate content comprehension. They emphasized the importance of breaking complex biological concepts into manageable components. "When I pre-teach significant vocabulary prior to lecture, students track much more easily – they're not lost in translation." – Instructor A

"We attempt to simplify, but we still capture the essence of biology. That's difficult, but scaffolding enables us to do that." – Instructor C

Students' responses echoed these perceptions:

"I used to learn words without knowing. But now, with example and explanation by the teacher, I finally know the meaning." – Student 24

Students further emphasized the role of vocabulary pre-teaching in preparing them cognitively for lessons:

"Earlier, I didn't know what 'mitochondria' was. But when our teacher provided us with a definition and picture, it made sense for the first time." – Student 16

"Pre-teaching primes us. I am better prepared to learn if I already know the key words." – Student 22

4.2.2 Visual Aids and Multimodal Tools to Enhance Learning

The use of visual scaffolding techniques is observed in the classrooms. Tutors use PowerPoint presentations, scientific images, YouTube videos, or pictures drawn on the board to make abstract biological concepts easier to understand.

"Without graphics and animation, I believe that 60% of my class would be confused. Graphics are stronger than my English." - Instructor D

Students were firmly linking visualization functions to understanding and recalling:

"Videos help when we can't read the words. I look again at home." – Student 3

"I remember the shape of DNA, not from the lecture, but from the color-coded picture shown in class." – Student 29

"When I look at a diagram, it's a quick route to the information. Even if I don't get what the sentence means, the picture does." – Student 10

"Animations are particularly useful for hard stuff such as enzymes. I've re-watched it at home to remind." – Student 35

Classroom observations confirmed instructors' frequent pause of the slides to explain visual elements and invited students to identify parts of diagrams provided further reinforcement for visual-verbal integration.

4.2.3 Guided Practice Reduces Cognitive Load and Increases Confidence

Model examples, guided worksheets, and laboratory demonstrations allowed for incremental learning, following in the tradition of the “I Do – We Do – You Do” teaching progression. “When I model first, then we model together, students feel safe. Then they do it on their own with more confidence.” – Instructor B

Observational notes revealed that instructors paid close attention to laboratory demonstrations and practised collectively before independent execution. Students themselves valued this structured approach:

“I’m scared to answer by myself when asked, but once we try it together, I know I can do it.” - Student 7

“Whatever we practice step by step, I never panic. I hear better and I remember more.” – Student 31

4.2.4 Challenges

Although they showed strong adherence to scaffolding techniques, the instructors face some challenges, which include:

- Insufficient training in EMI and scaffold-oriented pedagogy
- Information overload and lack of time
- Unpredictable access to projectors, internet, and multimedia resources
- A lack of departmental coordination and EMI-specific guidelines. “We’re supposed to be teaching biology in English, but no one is instructing us on how to do that,” I learned from YouTube.” – Instructor D

“Sometimes I intend to use a video, but the projector will not work. Then I have to speak with it, and that is difficult.” – Instructor C

“I believe that scaffolding does work, but without training and resources, we do the best that we can.” – Instructor B

“We don’t have enough time to cover all the scaffolding activities. We have to decide what to omit.” – Instructor B

4.2.5 Collaborative Tasks Develop Language Practice and Engagement

Activities such as pair explanation, think-pair-share, and mini-presentations enabled students to interact with biological concepts as they developed their English language proficiency.

“Students explain it better to one another than I do. Sometimes in Arabic, sometimes in English, but they manage.” – Instructor A

“I am shy to speak in class, but if I speak in groups, practice in English is easy.” – Student 14

“In pairs, we tell each other in English and sometimes in Arabic. No one gets left behind this way.” – Student 18

“In group work, we use words. My friend told me about ‘osmosis’ using an example. “And now I will never forget.” – Student 20

This theme emphasizes peer-mediated scaffolding, especially in EMI classrooms where scaffolding by teachers might not be accessible to everyone.

Such descriptions highlight the value attached to the need for institutional support, professional development, as well as practical follow-through in ensuring the success of teaching in EMI.

Indeed, the quantitative results show the strong support of students for scaffolding techniques in EMI biology classes, especially in the form of vocabulary previews

and visual support. The qualitative results further support these findings and add depth in showing the scaffolding role in ensuring comprehension, building confidence, and promoting student participation, apart from showing the supporting and constraining factors in the context of EMI classes.

5. Discussion

This section interprets the findings in relation to the research questions and relevant theoretical perspectives, while remaining consistent with the exploratory scope and methodological design of the study.

5.1 Perceived Role of Scaffolding in EMI Biology Learning

The findings of this study strongly suggest that scaffolding strategies enhance students' learning outcomes in EMI biology classes. As supported by existing literature (Meyer 2010; Airey 2011), the subjects of this study stated that pre-teaching vocabularies, visual aids, and guided practice helped them comprehend difficult biology concepts and participate in class more confidently. This is consistent with Vygotsky's (1978) contention that learners can perform more complex tasks under appropriate guidance in their Zone of Proximal Development (ZPD).

Most prominently, animations, flowcharts, and diagrams as visual aids were external cognitive tools that enabled students to make sense of abstract biological processes and thereby contributed to a reduction of perceived cognitive load. Moreover, the "I Do – We Do – You Do" approach, observed during class instruction, allows for the transition from passive reception to active production, with greater understanding as well as assurance. Especially, weaker English students reported greater perceived benefit from such a type of scaffolding, step-by-step structural assistance, which implies the need for language-level differentiation. Therefore, it is possible to conclude that scaffolding not only assists with academic understanding but also serves a principal affective role in the reduction of apprehension and increase in learner controls reflected in students' reported experiences.

5.2 Perceived Strengths and Constraints of Scaffolding Practices

In fact, both findings and teacher and student attitudes converged on the usefulness of scaffolding as a pedagogical strategy in EMI classrooms. Students appreciated visual assistance, group discussion, and task-explicit frames. Teachers recognized the pedagogical benefits of scaffolding but were concerned about its practicability due to institutional and logistical constraints.

In reality, for EMI to have effective scaffolding, it has to be based on pedagogical sensitization as well as institutional support. This is because, as was experienced by the tutors, they had to improvise learning to teach for EMI since they did not receive any training on EMI pedagogy, a condition that was also cited in a similar research conducted by Umekita in 2025. Additionally, answers from the students concerning peer participation underscore the significance of socially mediated learner approaches, which is one of the most significant aspects of Vygotskian Theory. By peer scaffolding, students had the chance to engage as well as make use of their academic English for conversation, which is done with minimal risks. Yet the results show that there were some systemic problems such as limited

digital tools, lack of training opportunities, and absence of institutionalized EMI templates. These factors impinge on the sustainable implementation of scaffolding and demonstrate the urgent need for policy-level support for EMI teachers.

5.3 Alignment with Sociocultural and CLIL-Oriented Perspectives

The findings of the study align with those of earlier empirical studies in other international EMI contexts (Chen, Li, & Wang, 2021). The study contributes new insights, though, by placing these findings in the specific under-researched Algerian context, where EMI is at the initial stage of implementation and scaffolding has yet to be institutionalized.

Theoretically, the results provide contextual empirical reinforcement for Vygotsky's ZPD and CLIL-based teaching, confirming scaffolding as a mediating mechanism that assists students in transitioning from dependence to greater independence in language and content learning. Notably, the effectiveness of scaffolding in this context is not based on very advanced English proficiency but on access to organized, responsive support that is contingent on students' needs. Additionally, the research stresses the place of interaction and guided participation in EMI classrooms. The teacher–student and peer–peer interactions noted operated as scaffolding events that supported understanding, in accordance with the sociocultural view of learning as a collective and contextualized process.

5.4 Pedagogical and Institutional Implications

Based on the understanding derived from the above case study, the findings suggest that scaffolding needs more emphasis as a pedagogical tool in the teaching of science in EMI contexts. For the teacher, the above strategies might be helpful in assisting students in coping with the challenges of EMI more confidently. From the institutional point of view, the above case study suggests that the value of EMI teacher training, the availability of digital tools, and pedagogical guidelines might be useful, although it should be noted that the above implications should be understood as suggestions rather than recommendations, as the above case study is more exploratory in nature.

5.5 Methodological Limitations

However, it should be noted that there are certain methodological limitations to the research that should be taken into consideration when interpreting the results of the study. For instance, the research was carried out in a single institution, and the number of participants was relatively small. This means that the results of the study cannot be generalised to EMI in general in Algeria and beyond. The results should be seen as contextual and exploratory in nature. The study also used a student questionnaire, which is based on perceptions. The perceptions of the participants may be threatened by self-report bias. However, the findings of the study should not be considered as objective learning outcomes. Third, the classroom observations may be threatened by the Hawthorne effect, where the teachers and students may change their behavior due to awareness of being observed. While multiple observations were conducted to reduce this effect, it cannot be entirely eliminated. Finally, because EMI is still at an early stage of implementation in the Algerian context, the scaffolding practices observed may reflect emergent and adaptive responses rather than stable or institutionalised instructional models. These limitations do not diminish the value of the study. Rather, they highlight

directions for future research, including longitudinal designs, multi-institutional studies, and the integration of objective learning measures alongside perception-based data.

6. Conclusion

This research aimed to examine the enactment and reception of scaffolding strategies in Ziane Achour University of Djelfa English as a Medium of Instruction (EMI) biology lessons in the overall framework of Algeria's new trend of English-medium tertiary education. Applying a mixed-methods case study methodology, the research produced both quantitative and qualitative data indicating that scaffolding is a very powerful teaching tool in EMI biology lessons. Specifically, the study demonstrates that scaffolding techniques such as pre-teaching technical terms, visual and multimodal support, guided practice, and cooperative learning are associated with increased students' understanding, interest, and confidence. The findings support Vygotsky's (1978) sociocultural theory, under which students learn more successfully advanced skills if supported in their Zone of Proximal Development (ZPD). Furthermore, the success of the observed scaffolding as perceived by participants is supported by global EMI and CLIL research affirming its cross-linguistic and cross-cultural worth. Most importantly, the research identified that both students and teachers acknowledge scaffolding as an indispensable support technique in EMI settings, especially in addressing language issues and high-cognitive-load material. The study also identified the most important pedagogical and institutional challenges, namely the absence of teachers' training, insufficient technological facilities, and lack of institutionalized EMI policy instruments that negatively impact the long-term practice of scaffolding techniques in Algerian higher education.

In general, the findings not only underscore the pedagogic effectiveness of scaffolding in EMI teaching environments but also highlight the need for systemic support to ensure its long-term sustainability. Through triangulation of theoretical insights, empirical findings, and practical suggestions, the research makes a positive contribution to the nascent debate concerning EMI pedagogy in the Global South.

7. Recommendations

With the results of this exploratory case study and the methodological limitations discussed earlier in mind, the following recommendations are proposed. These recommendations are offered as context-dependent suggestions rather than prescriptions.

7.1 Pedagogical Recommendations

First, EMI teachers, especially those in science-related subjects, may benefit from more intentional use of scaffolding techniques, which might include:

- Explicit pre-teaching of key vocabulary,
- Systematic use of visual materials,
- Guided practice with step-by-step instructions, and
- Opportunities for collaborative learning.

Second, scaffolding techniques may be differentiated according to students'

linguistic confidence levels and task complexity. For example, students with lower English proficiency levels may need more visual support, while students with higher proficiency levels may need more strategic scaffolding, especially for explanation, problem-solving, and academic discourse development.

Third, peer-mediated scaffolding should be encouraged, as it provides students with a low-risk environment to negotiate meaning, practise academic English, and build confidence through social interaction.

7.2 Institutional Recommendations

At the institutional level, the findings suggest the need for greater structural support for EMI implementation. In particular, universities may consider:

- offering professional development programmes focused on EMI pedagogy, scaffolding strategies, and language-aware teaching,
- developing clear EMI guidelines that acknowledge the dual demands of content and language learning,
- improving access to digital and technological resources that support multimodal instruction,
- and fostering collaboration between subject specialists and language professionals through communities of practice.

Such initiatives may help move scaffolding practices from individual, improvised efforts toward more coherent and sustainable instructional approaches.

7.3 Recommendations for Future Research

Finally, future research may extend the current study by utilizing larger-scale and multi-institutional approaches, enabling more comprehensive comparisons with EMI contexts in Algeria. Moreover, longitudinal approaches may shed light on the development of scaffolding practices with more consolidated EMI. Besides, incorporating both perception-based and objective approaches may create a more complete understanding of the relationship between scaffolding practices and student outcomes.

Acknowledgments

The authors wish to thank the participating students and instructors at Ziane Achour University of Djelfa for their valuable collaboration. Appreciation is also extended to the Department of Biology for its institutional support throughout the study.

Funding

This research received no specific grant from any funding agency, commercial, or not-for-profit sectors.

Conflict of Interest

The authors declare no potential conflict of interest with respect to the research, authorship, and/or publication of this article.

References

- [1]. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.

- [2]. **Chen, X., Li, Y., & Wang, H.** (2021). Digital scaffolding in EMI STEM classrooms: Enhancing content comprehension and learner autonomy. *Computers & Education*, 173, Article 104275. <https://doi.org/10.1016/j.compedu.2021.104275>
- [3]. **Huang, W.-C.** (2024). Influence of enhanced self-efficacy on English performance through English medium instruction: A mixed methods research. *Asian-Pacific Journal of Second and Foreign Language Education*, 9, Article 32. <https://doi.org/10.1186/s40862-024-00255-3>
- [4]. **Lai, I., & Idris, H. B.** (2025). A review on English-medium instruction (EMI) in teaching and its effects on students' proficiency and content learning. *Forum for Linguistic Studies*, 7(1), Article 8107. <https://doi.org/10.30564/fls.v7i1.8107>
- [5]. **Mansouri, K.** (2025). Navigating the transition to English medium instruction in Algerian universities. *Journal of Language Education and Research*, 11(1), 328–345.
- [6]. **Outemzabet, B., & Sarnou, H.** (2023). Exploring the significance of English-based communication for medical academics in Algeria. *English for Specific Purposes*, 70, 116–130. <https://doi.org/10.1016/j.esp.2023.03.005>
- [7]. **Ouarniki, O., & Alhasani, M.** (2025). Listening beyond silence: Subject matter's echoes from the EMI classroom. *Journal of Studies in Language, Culture, and Society*, 8(1), 171–181. <https://asjp.cerist.dz/en/article/273152>
- [8]. **Rose, H., Curle, S., & Yuksel, D.** (2024). English medium instruction in emerging contexts: Editorial and empirical perspectives. *System*, 122, Article 103262. <https://doi.org/10.1016/j.system.2024.103262>
- [9]. **Umekita, K. M.** (2025). Scaffolding as a pedagogical strategy in a course delivered using English as a medium of instruction (EMI). *Innovative Teaching and Learning*, 7(1), 83–106.
- [10]. **Vygotsky, L. S.** (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- [11]. **Wang, Y., & Winstead, A.** (2023). Hybrid scaffolding in post-pandemic EMI classrooms: Combining digital and face-to-face support. *Education and Information Technologies*, 28, 1123–1145. <https://doi.org/10.1007/s10639-022-11480-7>.

LEVERAGING SCIENTIFIC ENGLISH FOR EMI TO ICL TRANSITION: THE CASE OF ECONOMIC SCIENCES IN HIGHER EDUCATION SETTINGS

Barkat Turki¹, Mirela Alhasani (Dubali)²

¹University Mohamed Kheider of Biskra, Algeria

²Center for European Studies, EPOKA, University -Tirana, Albania

¹barkat.turqui@univ-biskra.dz

²malhasani@epoka.edu.al

Abstract: *There is a widespread consensus that EMI is successful to the extent that content-oriented communication takes place in the classroom. The good EMI teacher succeeds in keeping necessary preparatory discourse aspects as short and effective as possible. However, a functional methodology must in fact ensure that every content item learned can be used for learning something additional to the English language in the shortest available time. The present contribution attempts to put some insights into the nature of education that occurs in an EMI tertiary context in terms of the content provided, the type of discourse used and the possible combination to create an ICL environment. The research case study concerned some teachers of Economic Sciences at Biskra University, Algeria who are simultaneously Master students in English Studies. The researcher has adopted a qualitative research methodology and, in consequence, the research tools that have been utilized were respectively a teachers' questionnaire and classroom observation. The preliminary outcomes indicate that a careful balance between a content-language EMI, along with a high level mastery of Scientific English, resulted with a multifaceted and significant success of the integration of ICL in Algerian tertiary education. The researcher is conscious that the analysis has scrutinized an exceptional or rare situation which represents in itself a limiting factor, nevertheless, the investigation displays multiple and promising perspectives for future research projects.*

Keywords: *EMI; ICL; Scientific English; Higher Education; Economics*

1. Introduction

As the world becomes more closely connected, English has become the go-to-language in relationship to multiple domains and activities, especially in higher education. Indeed, universities around the world, particularly those which belong to what is referred to as developing countries, aspire to reach higher international ranking through the constant encouragement of scientific research, reputable publications, and universal cooperation. In consequence, education policy-makers throughout the globe have initiated a reform which is based upon an axiomatic and universal reality that the English language constitutes a world-wide vehicle and a *lingua franca* for the development and vulgarization of science and technology.

Within this context, the English as Medium of Instruction (EMI) approach at university level is thought to offer suitable and visible opportunities of innovative methodologies and practices. EMI is generally defined by numerous scholars as a multifaceted educational approach that advocates the use of English in the

teaching/learning operation despite English not being the students' first language. However, EMI within higher education necessitates clear instructional objectives, strong support systems for both teachers and students, and careful consideration of the particular needs of multilingual learners.

The application of EMI in some countries- comprising Algeria- is relatively recent, nevertheless, the premises of numerous and various benefits have already emerged. Indeed, one can witness the positive changes, especially in science higher education that the Algerian university is making in order to bring its programmes to the practitioner's desktop. There is nothing like the feedback of a teacher presented in person once given the opportunity for comparing experiences, peer interactions, and immediate access to experts in EMI teaching curricula and practices.

On the other hand, a number of specialists in Algeria have already taken meaningful steps toward the implementation of Integrated Content and Language (ICL) approaches in higher education. This developing impulse is not merely theoretical- it is evidenced by concrete initiatives that are shaping the educational landscape. At the junction of these two processes, Scientific English represents a synergistic factor in the transition of EMI toward ICL. This important function can be assumed by Scientific English due to the omnipotence and the indispensability of this kind of discourse.

In sum, EMI and Scientific English constitute a harmonious combination of elements that would probably lead to the successful implementation of ICL in Algerian higher education.

2. Literary Review

2.1 The Concept of EMI

The EMI approach within instructional settings, especially in higher education, is rapidly gaining popularity around the world, in particular countries that wish to internationalize their educational systems and promote global employability for their students. However, the implementation of EMI is coined with a number of requirements, principally delivering course content, conducting workshops, facilitating discussions and assessing students' work entirely or partially in English. Moreover, a successful procedure should necessarily assign and seek to realize clear instructional objectives, most importantly, the provision of students with competitive advantages in the professional world, through enhanced language proficiency (Hamid et al., 2013)

Nevertheless, the achievement of these principal objectives should equally incorporate some other broad factors, yet quite significant, namely the activation of strong support systems for both teachers and students along with the careful consideration of the unique needs of multilingual learners like in the case of Algeria (Earls, 2016). In fact, one can notice that in the situation of EMI, the latter is usually established at an institutional level that affects entire programmes and departments which take into consideration the sociolinguistic context of multilingual and multicultural countries.

2.2 The Role of EMI as a Content/Language Vehicle of Instruction

The dual function of EMI in instructional situations implies the transmission of

knowledge (content) in relationship to the particular students' specialisms through a kind of discourse (language) that pedagogically and structurally satisfies the characteristics of Scientific English. A constructive and successful attempt to fulfil this duality necessitates the realization of important elements in connection with the major factors that should be considered, the goals that should be formulated, the requirements that should be satisfied, and the types of EMI programmes that should be elaborated.

As far as the major goals that should be considered are concerned, it is essential to analyse the underlying intention/competence of the teacher. These elements are influenced by some prerequisites such as, proficiency in English, experience, motivation, attitude and other psycho-pedagogical factors. The second element is the nature of the course and the forms that it can take such as, theoretical or workshop, written or oral approach, classroom activities, etc. The third necessary element is the assignment of the objectives of the course (lecture/workshop) and the materialistic, administrative, and pedagogical requirements that would probably contribute in the success of the course (Sahki, 2025).

Concerning the goals that should be formulated, it is important in the first place to pay special attention to the formal aspects of the language (as a medium). The structural patterns, namely, phonological, morph-syntactic and semantic should be carefully analysed and, eventually, adapted to the nature of the course. The question of the content should be studied and elaborated by the EMI instructor, s/he should ensure the provision of the high quality of the knowledge provided (message). Besides, the oral presentation of the lesson should be delivered in a clear diction, the teacher's locution should allow the learner to see through the language the world of things, persons and ideas (medium). Lastly, the EMI course should create a context in which the student would be able to experience concepts, thoughts and procedures not the actual words or structures (message).

The satisfaction of the requirements represents a complex procedure that incorporates some essential parameters which give importance primarily to the experience and strengths of individual teachers. The highly proficient EMI teacher adopts the teaching methods that involve a large range of media, modern technology (Artificial Intelligence), and sophisticated means of instruction. In addition, the ESP or possibly EMI teacher should take into account other factors which are equally significant and closely related to the learner in particular. For example, the use of English along with the students' native language at least during the primary levels in case of extremely complex notions. Moreover, it is necessary to use methods that encourage a high proportion of students' involvement in classroom interaction. On the whole, the ESP/EMI teacher should make use of authentic, motivating and informative (medium and message) teaching materials.

The question of the types of EMI programmes that should be administered is open to debate, especially at the initial phases of EMI implementation. Hence, two major and distinct positions emerge: the first level of application of Partial EMI which refers to situations where English is used for some, but not all, aspects of education. This might involve lectures being delivered in English while supplementary materials or discussions are piloted in the students' native language. In fact, Partial EMI constitutes a more flexible approach that can accommodate varying levels of English proficiency. The second level of application is Full EMI which implies an educational environment where English is used

exclusively for all instructional purposes. It entails that lectures, discussions, assignments and assessments are all conducted solely in English, creating an immersive language experience.

2.3 Scope and Purpose of EMI and Scientific English at University Level

The purpose of Scientific English is to teach students of scientific subjects (including medicine, engineering, agriculture, economics, etc.) the basic language of scientific English. This basic discourse is made up of sentence patterns, structural/functional words and non-structural vocabulary which are common to all scientific disciplines and form the essential framework upon which the special vocabulary of each discipline is superimposed. Once this basic language has been mastered, the acquisition of these special vocabularies presents very little difficulty, since they are mainly international words and therefore very similar to those already used in the students' own language.

On the other hand, the Nature of the Pedagogical Material is a process which requires that the material incorporated in the course should be selected for the most part on a frequency basis, from the scrutiny of modern scientific English. The samples covered should represent the types of literature likely to be consulted by students or graduates of science- university textbooks, professional papers and articles, scientific dictionaries and semi-popularizations. Whilst the principal criteria for the inclusion of items are frequency and range, a certain amount of material would be selected for other reasons, e.g. because of their usefulness as describers and definers. This category of components are usually members of a group or set and their presence in scientific English is essential or non-substitutable though not unduly frequent.

In addition, classroom interaction in scientific English is generally characterized by the Oral Approach. Teacher's talk and students' feedback are essentially oral in view of the fact that oral discourse in context is an effective way of fixing material, even for purely recognition purposes. Furthermore, much work can be accomplished orally than in written form over a period of time and, it is easily observable that oral work adds variety and interest to the lessons.

2.4 Complementarity of EMI and Scientific English

EMI and scientific English are naturally intertwined yet, there are certain elements and features which are open to discussion, therefore, in an attempt to enrich the debate, one can proceed with a comparative analysis through the answers of the questions below:

A. Is EMI scientific English?

EMI refers to the use of English to teach academic subjects in countries where English is not the native language. While EMI is sometimes implemented in scientific and technical disciplines, it does not necessarily equate to Scientific English. Scientific English is a specialized genre with precise lexical, syntactic, and rhetorical features used in scientific discourse (Ferguson, 2007). Scientific English, as a sub-genre of ESP, follows strict conventions such as objectivity, nominalization, and passive voice (Swales, 1990). EMI, by contrast is a broader instructional approach that may or may not focus on these specific features. For example, EMI in history or philosophy uses academic English but not scientific English in the strict sense (Kuteeva, 2020).

In STEM-based EMI settings, however, the distinction becomes blurred. Teachers and students often rely on the conventions of scientific English due to the technical nature of the content. This has led some scholars to argue that EMI in scientific fields inevitably incorporates features of scientific English, even when unintentionally (Gimenez & Shaw, 2021; Airey, 2016). Yet, others caution that assuming EMI always entails scientific English, ignores disciplinary variation and oversimplifies the linguistic challenges learners face. A single EMI course may contain elements of spoken, written, and visual scientific communication, each with different expectation (Airey, 2011; Lillis & Cury, 2010).

B. Is an EMI teacher tacitly a teacher of Scientific English?

Despite not being trained in language pedagogy, EMI instructors in scientific fields often model Scientific English in their lectures, slides, and written materials. They may use discipline-specific terminology, academic helping, or schematic structures that students implicitly absorb (Ball & Lindsay, 2013). This unacknowledged language role places EMI instructors at the intersection of content and language teaching, even if they do not recognize or accept it. Studies in European universities show that EMI teachers frequently assist students with vocabulary and explanation of key scientific terms, even while claiming “I’m not a language teacher” (Doiz et al, 2013; Klaassen & de Graaff, 2001).

The notion of “tacit language instruction” has emerged in EMI literature to describe how instructors engage with academic English- especially in sciences- without formal language teaching. According to Airey (2011), these instructors often scaffold content in ways that build students’ discipline-specific literacy, even unintentionally. However, some researchers advocate for explicit integration of language-sensitive pedagogy in EMI training so that content teachers can better support students’ development of scientific English. This does not mean turning instructors into full EAP specialists, but rather equipping them with discourse awareness (Dafouz & Smit, 2016; Shaw, 2013).

C. Can a Discourse Analyst help the EMI instructor? How, if any?

The discourse analysts play a crucial role in supporting EMI implementation, particularly by making disciplinary language practices visible. Their expertise helps identify genre structures, rhetorical strategies, and lexical patterns typical of scientific texts and lectures (Hyland, 2012; Flowerdew, 2013). They can assist EMI instructors in recognizing how knowledge is constructed through language, which is essential in scientific communication. For example, discourse analysts might help reveal how hypothesis framing or data interpretation is linguistically realized in a physics lecture versus a biology paper (Hyland & Tse, 2007).

One key contribution is the development of corpus-informed teaching materials that reflect authentic scientific discourse. These resources support EMI instructors in highlighting specific linguistic features such as causality markers, voice (passive/active) and stance (Shaw & Pecorari, 2018). Furthermore, discourse analysts contribute to EMI teacher professional development, helping instructors understand how to scaffold content linguistically and respond to student difficulties with comprehension or expression (Dafouz & Camacho-Minano, 2016). Their collaboration is especially vital in contexts like Algeria, where EMI intersects with local linguistic ecologies and may face resistance due to linguistic insecurity.

To sum up, additionally to the purely instructional aims, a scientific English course should be designed to stimulate critical thought and foster the skills of clear exposition and the impartial examination of evidence. At the same time, attempts should be made to encourage students to take an active interest in their own discipline and its relationship with other sciences and with society as well. Thus, the course should serve a broadly educational purpose as well as its specific linguistic one.

2.5 From EMI to ICL: A Synergetic Transition

2.5.1 Definition of ICL

Integrated Content and Language (ICL) in higher education refers to an educational approach that simultaneously fosters content mastery and language development. In ICL contexts, both the disciplinary knowledge and the target language (typically English) are taught in a mutually reinforcing, without relegating either to a secondary status (Cenoz, Genesee, & Gorter, 2014). Unlike traditional language support or content heavy instruction, ICL aims to develop students' academic language proficiency while deepening their understanding of complex subject matter.

2.5.2 Origins and Theoretical Underpinnings

ICL emerged from pedagogical innovations such as Content and Language Integrated Learning (CLIL) in Europe. Sheltered instruction in North America, and English as an Additional Language (EAL) practices in multilingual education systems. While CLIL was primarily introduced in primary and secondary education in the 1990s (Coyle, Hood, & Marsh, 2010), its principles gradually influenced tertiary-level practices. The need to internationalize higher education, enhance employability, and develop students' academic literacies prompted universities- especially in non-English-speaking contexts- to adopt ICL as a means to deliver subject content in a foreign language while supporting students' language development (Wilkinson & Walsh, 2015).

ICL draws from sociocultural theory (Vygotsky, 1978), cognitive academic language proficiency frameworks (Cummins, 2000), and genre-based pedagogy (Martin, 2009), emphasizing that language and content are co-constructed in academic discourse communities.

2.5.3 Main Principles of ICL

The key principles of ICL in higher education include the following:

Dual Focus: Both content mastery and language development are equally prioritized (Ball, Kelly, & Clegg, 2015).

Scaffolding: Instructional support is systematically provided to help students access both linguistic and cognitive demands (Coyle et al., 2010).

Contextualized Language Learning: Language is taught in the context of discipline-specific discourse and genres (Morton, 2020).

Collaborative Pedagogy: ICL often encourages interdisciplinary collaboration between language experts and subject-matter instructors (Airey, 2012).

Assessment Alignment: Both content knowledge and language performance are considered in assessment strategies (Costa & Pladevall-Ballester, 2019).

2.5.4 How ICL Differs from EMI?

While EMI simply refers to the use of English to teach academic subjects without explicitly focusing on language learning (Macaro, 2018), ICL is more pedagogically deliberate in addressing language needs. EMI often assumes students already have adequate English proficiency, whereas ICL acknowledges language learning as an integral part of the educational process (Pecorari & Malmstrom, 2018). The following table displays a simple comparison in terms of the different aspects of EMI and ICL:

Table 1. Comparison of Key Instructional Aspects in EMI and ICL Approaches

Aspect	EMI	ICL
Language Support	Often Minimal or Absent	Systematically Embedded
Instructor Role	Subject Expert	Subject and Language- Aware
Student Focus	Content Mastery	Content and Academic Language Development
Collaboration	Rare	Encouraged between Language/Content Instructors

2.5.5 From EMI to ICL: Ensuring a Smooth Transition

To move from EMI to ICL in higher education settings- particularly in multilingual and EFL contexts such as Algeria- a number of strategic actions are essential:

Professional Development: Teachers need targeted training on ICL methodologies, including how to scaffold language within disciplinary teaching (Linares & Morton, 2017).

Collaborative Teaching Models: Institutional support for team-teaching between language and subject instructors can bridge knowledge gaps.

Curriculum Redesign: Syllabi should include explicit language objectives aligned with content goals (Ball et al., 2015).

Resource Development: Developing ICL-sensitive materials such as glossaries, guided reading tasks, and genre-specific writing support is key.

Policy Alignment: Institutional and national language-in-education policies should legitimize the integration of language goals in higher education curricula (Dafouz & Smit, 2020).

Such a transition must also consider local realities, including teachers' English proficiency, students' language exposure, and the broader socio-political acceptance of English in academic spaces (Ouarniki, 2023).

2.5.6 Challenges of ICL Implementation

The implementation of ICL in higher education contexts faces a number of challenges that could hinder the successful establishment of ICL within tertiary level. These difficulties can be manifold such as the problems of learning subject content through a non-native language, the need for specialized teacher training, and potential limitations in grammar instruction. Additionally, ICL can lead to cognitive overload for students, requiring careful assessment and support. It is agreed that a thorough analysis should take into consideration all the aspects of the issue, however, in view of the local situation, the focus has been put on only three major problems as follows:

A. Teachers' Challenges

It is primordial that the effective implementation of ICL requires teachers to have specialized pedagogical skills and knowledge in both content and language. In consequence, numerous pre-service and in-service training programmes have been launched in the past two years throughout the majority of Algerian universities. A particular emphasis has been put on the case of subject teachers who may not have sufficient language proficiency or, contrarily, language teachers who lack adequate content language for ICL. One should recognize and value the high degree of responsibility and motivation of the majority of teachers (content or language) despite the increase in workload. Indeed, ICL can significantly augment teachers' workload due to the need for lesson planning, material adaptation, and assessment development.

B. Students' Challenges

ICL implementation can equally create a number of difficulties that would eventually face the students in different specialisms. In fact, some students may be handicapped by some learning difficulties because they would struggle with the increased cognitive demands of ICL, that may potentially cause students' exhaustion and demotivation. Moreover, there are many discrepancies in students' mastery of the English language. Such an issue may be the cause of possible inequality between one student and another. It is reasonable to presuppose that students with lower language proficiency may be at a disadvantage in ICL settings, which may, in turn, be a significant reason for widening the achievement gap.

Besides, students may display completely different learning styles and have dissimilar sociocultural attitudes and psychological apprehensions toward the English language. Indeed, ICL may not be suitable for all learning styles and some learners would eventually be more comfortable in traditional language instruction. Sociocultural attitudes and foreign language awareness along with students' psychological and emotional factors impact the learning of a large number, if not all, of students (Eder, 2024).

C. Interdisciplinary Curriculum Challenges

Our students today are going to be tomorrows' scientists, researchers and technologists. In fact, without an understanding of systems, computers and the ability to relate multiple systems, the technician of tomorrow will be lost. As our technical world becomes even more complex, these engineers, technicians and doctors of the future will require interdisciplinary capabilities that will allow them to analyse, interpret and apply information to vastly different domains. Therefore, today's and even more in the near future, the university educational system must address the need for interdisciplinary skills by challenging the students and teaching critical thinking and problem-solving skills in the curriculum structure at present time. To the experts' estimation, it is evident that the vehicle which can efficiently contribute in the realization of such endeavour is the English language, and the nature of ICL curriculum should be interdisciplinary.

In consequence, an ICL interdisciplinary curriculum necessitates the collaborative efforts and agreements of diverse participants. Within this context, the following general principles can be shared in the hope to conceptualize ICL instruction as follows:

- Developing the scientific and technological literacy and capability of those who experience it.
- Consistence of a spectrum of programmes that address the preceding goals from general education ones up to specific specialisms ones.
- Spanning the range of content and language instruction in the same curriculum.
- The correlation of subject content represents the backbone of interdisciplinary curriculum. The latter is viewed, in general, by most educators in literature, as the organization and the transfer of knowledge on a unified continuum from general to specific. Listed here are just a few reasons why such a plan should be implemented:
 - (i) Teaches students how to transfer knowledge.
 - (ii) Involves the community as a learning environment.
 - (iii) Teaches students how to analyse, explain, and apply knowledge.
 - (iv) It is competency-based.
 - (v) Students are taught how to make decisions.
 - (vi) Students learn how to work cooperatively with others.
 - (vii) It improves knowledge retention (Ouarniki & Alhasani, 2025).

Besides, the pedagogical framework of ESP course content whatever the discipline (Economic Sciences, Agricultural Sciences, etc.) which is necessary can be briefly displayed as follows:

(a) Survey and Basic Definitions: the problems of terminology which concern its relation to substantive issues in ESP course design. Furthermore, the adoption of an international overview that constitutes major emphases in ESP course design.

(b) Stages of Planning in ESP Course Design: an examination of the various criteria which need to be taken into account, and models of arranging and sequencing these factors. In addition, an analysis and evaluation of needs which can take the form of a survey of major approaches to needs analysis.

(c) Approaches to the Design of ESP Materials: there is a wide and varied range of approaches which is available such as, the functional-notional approach, the topic-based approach, the skill-based approach, and the science-activity approach. Nevertheless, the selection of one approach instead of the other definitely depends on learners' needs.

(d) Evaluation of ESP Materials: the parameters for the design of materials are based upon the approaches cited above, and any material which participants bring or suggest. Moreover, there are other key factors namely, the overall organisational principles, linguistic basis, exercise design and the intended ' audience', that should be taken into consideration.

(e) Skills in an ESP Context: the necessity of re-defining skills boundaries in an ESP context, and the analysis of macro and micro skills.

(f) Testing and Evaluation in ESP Contexts: the place of testing in ESP, testing integrative skills, and the relationship between ESP teaching programmes and evaluation.

In sum, one may advance that the elaboration of an ESP course design for any scientific discipline depends on the scrupulous application of such framework along with the collaborative efforts and agreement of the different intervening professionals concerned with the operation.

D. Assessment Challenges

The major problem which might face the content and/or language instructor in the assessment of students within ICL contexts is the criteria that should be taken into account in students' evaluation. The development of appropriate assessment methods, in the elaboration of valid and effective tests and tasks that accurately measure both content knowledge and language proficiency, can be challenging. The problem, to put it simply, concerns the aspects and proportions (depending on the evaluation objectives) that should be assigned to the content or language components of the tests. Any deficiency or imbalance in the creation of tests can dramatically affect students' pedagogical accomplishments.

3. Methodology

3.1 Research Design

A descriptive research methodology has been adopted with the application of a qualitative analysis that is necessary for the interpretation of the data provided by the research tools.

3.2 Research Instruments and Data Collection

A survey questionnaire has been submitted to a sample study of six (6) university teachers at the Department of Economic Sciences at Mohamed Kheider University of Biskra, Algeria. Additionally, three (3) sessions of classroom observation have been organized with a class of 28 students (B.A. 2nd Year) of Economic Sciences at the same department. As far as the choice of teachers is concerned, the general profile was in line with the requirements of the research work, we opted for teachers who have high qualifications in the English language along with their original specialism. The following simple table displays the principal academic backgrounds of each teacher:

Table 2. Profile of Participating University Teachers Based on Qualifications, Experience, and Attitudes

Number	Qualifications (English Studies)	Experience (Number of years)	Attitudes (Positive, Negative, Neutral)
1	B.A.	4	Positive
2	B.A.	3	Neutral
3	B.A.	4	Positive
4	M.A. (1 st Year)	6	Positive
5	M.A. (1 st Year)	6	Positive
6	M.A. (2 nd Year)	8	Positive

3.3 Results and Discussion

The organization and presentation, due to space constraints in view of the nature of publication of an article, have been arranged in such a manner that the interpretation and discussion of the questionnaire and some spontaneous discussions with some teachers have been put forward simultaneously and, the classroom observation sessions have been scrutinized in the second place.

3.3.1 Teachers' Questionnaire

1. The current application of EMI at Mohamed Kheider University of Biskra, Algeria varies from 10 to 20 percent which represents an acceptable pace of progression in view of the time devoted to the institution of EMI in Algeria by policy-makers.
2. The presentation of the fundamental advantages of EMI by teachers:
 - Prepares students for international collaboration and further studies abroad.
 - Enhances students' familiarity with scientific terminology which is predominant in English.
 - Improves access to up-to-date research and resources published in English.
3. The principal drawbacks that are pointed out by teachers:
 - Some students struggle with comprehension, especially those with weak English background.
 - Reduces classroom participation due to language barriers.
 - May negatively affect students' thorough understanding of complex subjects.
4. Besides, teachers have suggested some practical solutions to the existing difficulties:
 - Organization of regular training workshops for content teachers to improve their academic English communication skills.
 - Provide bilingual (Arabic and English) course materials at primary levels (first year students) to bridge comprehension gaps.
 - Encourage gradual integration of EMI, starting with scientific terms and summaries before full lectures.
 - Create a supportive environment for students, including intensive language centers and peer tutoring.

3.3.2 Classroom Observation

The most important elements that have been observed can be briefly summarized in the following:

A. Teachers' Attitudes

- Positive and Motivated: Many content teachers view EMI/ICL positively as it enables access to international research and allows them to develop their academic English. They think that EMI/ICL increases the quality and relevance of instruction in their scientific domains.
- Negative and Discouraged: Some teachers feel discouraged due to their limited English proficiency, which affects their ability to explain ideas clearly. They also worry about their students' comprehension and engagement.
- Neutral and Indifferent: A small portion of faculty members remains indifferent, applying EMI only when absolutely necessary such as when referencing scientific papers or collaborating with international institutions.

B. Students' Feedback

- Positive: Many students appreciate the exposure to English, as it improves their academic vocabulary and prepares them for international post-graduation studies and job opportunities.

- Negative: Some students report difficulty in understanding lectures and express stress during exams conducted in English, especially when their proficiency in this language is limited.
- Neutral: Some students remain neutral toward EMI, focusing more on course content than the language of instruction. They simply adapt to the course requirements.

3.4 Synoptic Analysis of the Case Study

A. Teachers

As far as content Teachers' Language Proficiency is concerned, this is an aim which goes beyond the usual goal of a measured level of proficiency in pronunciation, structure and vocabulary. There are other fundamental issues that should be taken into consideration. Particularly, we give importance to the nature of language and language learning and relate this to the students' linguistic and functional needs and to course and classroom methodology. In addition, some other psycho-pedagogic factors are significant as well. Teachers should be motivated to communicate in English, meanwhile they should express some tolerance and knowledge of students' problems such as errors and mistakes in relationship to various linguistic and sociolinguistic parameters.

B. Students

On the other hand, it has been observed that students are concerned with different factors that are involved in learning to communicate in English. One can notice a clear disparity in the level of students' motivation to learn content in English. Their attitudes are different in classroom situation especially their preparedness, desire and reactions to acquire knowledge and to seize the opportunity to use English. For instance, many students were reluctant and lacked confidence to use English in classroom interaction which they justified by their low proficiency in English, their fright of 'losing face' in front of the class, and many other elements that can be generally classified in the various sociocultural and psychological barriers.

Furthermore, many students indicated that the context- classroom situation- in which they are required to use English (classroom interaction) that actually poses two serious problems. The first drawback is that they do not exactly grasp their role in connection with the appropriate discursive strategies, and the second problem concerns their ignorance of the nature and type of relationships (in terms of communication in English) they should hold (student's role) with the teacher and other students in the class. The majority of students recognized that they have absolutely no difficulties in understanding the course content or achieving the different classroom activities which are related to their specialism (Economic Sciences) in English. In sum, in this particular situation which involved students of Economic Sciences, the essential of the difficulties do not emanate from the content part of the course nor the purely linguistic aspects of language such as the structure, phonology and vocabulary, but rather from their inability to use discursive strategies in conversation management like how not to monopolize the floor, when to interrupt, turn-taking, how to seek information or provide it, etc. One can acknowledge that students of Economic Sciences (the case study) have raised a serious issue in the question of EMI/ICL implementation which is rarely handled by specialists- classroom interaction and discourse strategies- that should be given

more importance and the discourse analysts' contribution is earnestly needed.

C. Classroom Methodology

In view of the numerous noticeable pedagogical events that have occurred during the classroom observation sessions of the case study, one can advance that the teaching and learning methods used in an EMI/ICL course should be determined by a number of factors such as:

- Learners should successfully communicate in English to however limited an inaccurate extent, at least during the preliminary stages, teacher's role is primordial in encouraging, motivating, and valuing students' use of English in classroom interaction.
- As a matter of fact, classroom interaction should be to a great level performed in spoken English while written materials should be devoted to targeted tasks in small group activities.
- Teachers should master innovative teaching methods and materials that are assisted by modern technology, for example the introduction of Artificial Intelligence in the language skills and classroom content activities.
- Teachers should be aware of students' attitudes toward the English language, especially their discursive abilities if their proficiency in the language is low, their sociocultural prejudices, and the lack of self-confidence and fright of other students' ironic reactions or mockery. For instance, during the classroom observation sessions of the Economic Sciences students, some classroom mates mimicked and made fun of the students who communicated in English instead of Arabic or even French. This is only one issue that necessitates urgently the pedagogical changes that should be introduced in the EMI/ICL context.
- Ultimately, students must be able to transfer the content/language they learn to the pinnacles of scientific research and publications.

4. Recommendations

A. Teachers' Pre-Service and In-Service Training

There is a natural reluctance on the part of many teachers to accept the need for the new skills and knowledge which arises from an EMI/ICL approach. This attitude must be acknowledged, and is likely to be modified through an in-service training programme of a high professional standard and backed by adequate resources and finance through the institutional support in higher education settings. However, there is also the need for novice teachers taking on EMI/ICL courses to be presented with proper job specifications and go through appropriate pre-service training programmes which enable the teacher to recognize the responsibility he is undertaking so that teachers come into the work with a commitment to learn new skills for a new type of content/language teaching. Generally, the major objectives of pre-service and in-service training programmes are summarized in the following:

- To refresh and develop teachers' competence in English in order to improve their oral performance in terms of methods of oral teaching.
- To improve teachers' knowledge of their students providing pedagogical, psycho-pedagogical and teaching methods. In consequence, teachers

would eventually acquire some significant tools that enable them to exactly determine the degree of literacy, proficiency in English, and students' levels of motivation.

- To emancipate teachers' competence in the classroom. Such an objective can be achieved through locally-based supportive activities among specialists and international collaboration with well-established and recognized higher education institutions.

B. Tutorials.

The planning, organization, contents, and application of tutorial sessions can be peculiar to individual universities depending on the local situation, means and conditions. Nevertheless, there are some general objectives and principles that should be realized for successful and effective tutorials:

- Students should be informed in advance about the particular topics being programmed.
- Classroom interaction should not be too informal: the tutor or teacher should make sure that digressions or the abusive use of the mother tongue are kept to a minimum.
- Students should necessarily do some reading of the course content in English as an essential outdoors activity.
- The desire to communicate in English should be encouraged and developed because it is crucial that students should not worry about losing face or making mistakes not only in their specialisms but also in communicating using the English language.

5. Conclusion

In summation, the present article highlighted the complexities of introducing EMI within a context marked by a strong influence of French with regard to teaching science and technology at tertiary instruction, the varying levels of preparedness among students and teachers, and the need for careful consideration of sociocultural and psychological factors. This research work contributes to a deeper understanding of the process- in full swing- of the implementation of EMI in Algeria. It underscores the importance of considering the specific local context, including linguistic history of sociocultural dynamics, when adopting EMI.

Furthermore, the investigation emphasizes the need for adequate support and preparation for both teachers and students to ensure the successful and equitable integration of EMI within the Algerian higher education system. This article equally made a forward projection of the probable transition of EMI toward ICL in the near future. It revealed that the premises are quite promising and the perspectives of astounding achievements are already emerging in the horizon. Besides, the findings can constitute a contribution for future research in ICL.

Looking ahead, the evolution of EMI into ICL in Algeria will necessitate ongoing research and the sharing of best practices. In fact, it is important to develop evidence-based strategies that cater the various needs of students and educators in diverse EMI/ICL settings. We advocate the fostering of a culture of collaboration, the provision of adequate resources, and the sensitivity to the linguistic and cultural contexts in which EMI/ICL is implemented. On the whole, specialists should

acknowledge that Mahatma Gandhi- whose patriotism, militancy, and long-lasting struggle for the independence of India from the British colonization cannot be questioned- had already suggested, eighty-five years ago, the founding philosophy of the utilization of the English language in science and also culture: “English is the language of international commerce, it is the language of diplomacy, and it contains many a rich literature, it gives an introduction to Western thought and culture. For a few of us, therefore, knowledge of English is necessary.”

Lastly, the success of EMI programmes mainly depends on the adoption of effective academic approaches that assign the priority to language support, teacher pre-service and in-service training, and culturally sensitive pedagogy. Nevertheless, it is essential to ensure that the pursuit of EMI implementation does not jeopardise the quality of content learning and, consequently, a well-balanced curriculum (content/language) would create an equitable teaching/learning environment.

References:

- [1]. Airey, J. (2011). Talking about teaching in English: Swedish university lecturers' experiences of changing teaching language. *Ibérica*, 22, 35–54.
- [2]. Airey, J. (2012). “I don't teach language”: The linguistic attitudes of physics lecturers in Sweden. *AILA Review*, 25(1), 64–79.
- [3]. Airey, J. (2016). EAP, EMI, or CLIL? In K. Hyland & P. Shaw (Eds.), *The Routledge Handbook of English for Academic Purposes* (pp. 71–83). Routledge.
- [4]. Ball, P., & Lindsay, D. (2013). Language demands and support for English-medium instruction in tertiary education: Learning from a specific context. In *English-Medium Instruction in European Higher Education* (pp. 44–63).
- [5]. Costa, F., & Pladevall-Ballester, E. (2019). Assessing content and language in higher education: An evidence-based model. *Language Learning in Higher Education*, 9(2), 311–334.
- [6]. Coyle, D., Hood, P., & Marsh, D. (2010). *CLIL: Content and Language Integrated Learning*. Cambridge University Press.
- [7]. Cummins, J. (2000). *Language, Power and Pedagogy: Bilingual Children in the Crossfire*. Multilingual Matters.
- [8]. Dafouz, E., & Camacho-Miñano, M.-del-M. (2016). Towards a dynamic conceptual framework for English-medium education in multilingual university settings. *Applied Linguistics*, 37(3), 397–415. <https://doi.org/10.1093/applin/amu034>
- [9]. Dafouz, E., & Smit, U. (2020). *ROAD-MAPPING English Medium Education in the Internationalised University*. Palgrave Macmillan.
- [10]. Doiz, A., Lasagabaster, D., & Sierra, J. M. (2013). *English-medium instruction at universities: Global Challenges*. Multilingual Matters.
- [11]. Earls, C. W. (2016). Evolving Agendas in European English-Medium Higher Education: Interculturality, Multilingualism, and Language Policy. *International Journal of Applied Linguistics*, 26(3). <https://doi.org/10.1111/ijal.12114>
- [12]. Eder, S. (2024). The Good, The Bad, The Ugly and The Best. *The International Educator (TIE Online)*. Available at: <https://www.tieonline.com>

- [13]. **Ferguson, G.** (2007). The global spread of English, scientific communication and ESP: Questions of equity, access and domain loss. *Ibérica*, 13, 7–38.
- [14]. **Flowerdew, J.** (2013). *Discourse in English Language Education*. Routledge.
- [15]. **Gimenez, J., & Shaw, P.** (2021). Scientific writing and communication in English-medium instruction. In K. Hyland & L. Wong (Eds.), *English in the Disciplines: A Multidimensional Model for ESP* (pp. 106–126). Routledge.
- [16]. **Hamid, S., Ljab, M. T., Suliman, H., & Norman, A.** (2013). Social media for environmental sustainability awareness in higher education. *International Journal of Sustainability in Higher Education*, 14(5), 474–491.
- [17]. **Hyland, K.** (2012). *Disciplinary Identities: Individuality and Community in Academic Discourse*. Cambridge University Press.
- [18]. **Hyland, K., & Tse, P.** (2007). Is there an “academic vocabulary”? *TESOL Quarterly*, 41(2), 235–253.
- [19]. **Klaassen, R. G., & de Graaff, E.** (2001). Facing innovation: Preparing lecturers for English-medium instruction in a non-native context. *European Journal of Engineering Education*, 26(3), 281–289.
- [20]. **Kuteeva, M.** (2020). Revisiting the “E” in EMI: Students’ perceptions of standard English, lingua franca and translingual practices. *International Journal of Bilingual Education and Bilingualism*, 23(3), 287–300. <https://doi.org/10.1080/13670050.2019.1656720>
- [21]. **Ouarniki, O.** (2023). Exploring teachers' perspectives on the implementation of English as a medium of instruction (EMI) in Algerian higher education institutions: Challenges and opportunities. *Afaq for Sciences*, 8(3), 176–192. <https://asjp.cerist.dz/en/article/223062>
- [22]. **Ouarniki, O., & Alhasani, M.** (2025). Listening beyond silence: Subject matter's echoes from the EMI classroom. *Journal of Studies in Language, Culture, and Society*, 8(1), 171–181. <https://asjp.cerist.dz/en/article/273152>
- [23]. **Macaro, E., Curle, S., Pun, J., An, J., & Dearden, J.** (2018). A systematic review of English medium instruction in higher education. *Language Teaching*, 51(1), 36–76. <https://doi.org/10.1017/S0261444817000350>
- [24]. **Llinares, A., & Morton, T.** (Eds.). (2017). *Applied Linguistics Perspectives on CLIL*. Amsterdam: John Benjamins.
- [25]. **Cenoz, J., Genesee, F., & Gorter, D.** (2014). Critical analysis of CLIL: Taking stock and looking forward. *Applied Linguistics*, 35(3), 243–262.
- [26]. **Ball, P., Kelly, K., & Clegg, J.** (2015). *Putting CLIL into practice*. Oxford University Press.
- [27]. **Marsh, D.** (2002). CLIL/EMILE – The European dimension: Actions, trends and foresight potential. *European Commission, Eurydice*.
- [28]. **Mehisto, P., Frigols, M. J., & Marsh, D.** (2008). *Uncovering CLIL: Content and Language Integrated Learning in Bilingual and Multilingual Education*. Macmillan Education.
- [29]. **Ortega, A., & Ibarra-Shea, G.** (2005). Longitudinal study of the linguistic and academic outcomes of EMI students. *Language Learning Journal*, 32(1), 55–72.
- [30]. **Pérez-Cañado, M. L.** (2012). CLIL research in Europe: Past, present, and future. *International Journal of Bilingual Education and Bilingualism*, 15(3), 315–341. <https://doi.org/10.1080/13670050.2011.630064>
- [31]. **Smit, U., & Dafouz, E.** (2012). Integrating content and language in higher education: An introduction to English-medium instruction. *AILA Review*,

25(1), 1–12.

- [32]. **Wilkinson, R., & Zegers, V.** (2007). Language policy and EMI: Challenges in European higher education. *European Journal of Education*, 42(3), 285–298.
- [33]. **Sahki, T.** (2025). The adoption of English Medium Instruction (EMI) in Algerian higher education: Linguistic and identity considerations. *Ziglôbitha, Revue des Arts, Linguistique, Littérature & Civilisations*, 4(13), 193–206.
- [34]. **Shaw, P.** (2013). Adjusting practices to aims in integrated language learning and disciplinary learning. *Recherche et pratiques pédagogiques en langues*, 32(3), 15–29. <https://doi.org/10.4000/apliut.3840>.
- [35]. **Dafouz, E., & Smit, U.** (2016). Towards a dynamic conceptual framework for English-medium education in multilingual university settings. *Applied Linguistics*, 37(3), 397–415. <https://doi.org/10.1093/applin/amu034>.

STUDENTS' PERCEPTIONS OF DIGITAL TOOLS IN PHARMACY ESP EDUCATION- A STUDY CONDUCTED IN NORTH MACEDONIA

Andi Xhaferi

University of Innsbruck, Austria

andixhaferri16@gmail.com

Abstract: *Digital transformation in higher education has profoundly reshaped the teaching and learning of discipline-specific languages, particularly within English for Specific Purposes (ESP). The growing adoption of digital technologies has created new opportunities for enhancing language instruction, enabling more interactive, flexible, and learner-centered approaches. In pharmacy education, digital tools are increasingly integrated to support the development of professional communication skills that are essential in technologically mediated healthcare contexts, where accurate and effective communication can directly impact patient care and professional practice. This study investigates pharmacy students' perceptions of digital tools used in ESP instruction, focusing on multiple dimensions including perceived usefulness, learner engagement, language development, and potential barriers to adoption. A mixed-methods design was employed, involving 120 pharmacy students (67 female and 53 male) who completed a structured survey to provide quantitative data, complemented by semi-structured interviews that offered qualitative insights into students' experiences, attitudes, and challenges. The findings reveal that students generally hold positive attitudes toward the use of digital tools, emphasizing their pedagogical value, capacity to increase motivation and engagement, and effectiveness in supporting the acquisition of specialised pharmaceutical vocabulary. At the same time, the study identifies challenges that may limit optimal outcomes, such as uneven levels of digital literacy among students, limited access to certain technologies, and inconsistencies in instructional implementation across courses. Overall, the study highlights the importance of thoughtfully designed, pedagogically informed integration of digital tools in ESP courses and provides practical guidance for enhancing digitally supported language instruction in pharmacy education, contributing to broader discussions on technology-enhanced learning in professional contexts.*

Keywords: *pharmacy; ESP; students; digital tools; North Macedonia*

1. Introduction

Rapid technological developments have transformed healthcare systems worldwide. As digital solutions become increasingly embedded in clinical practice, the competencies required of modern pharmacists extend beyond traditional dispensing and counselling roles. These innovations reshape not only how pharmacists access and interpret information but also how they communicate with patients, colleagues, and other healthcare professionals. Furthermore, English for Specific Purposes (ESP) pedagogy seeks to align language instruction with learners' real communicative and professional needs. Within pharmacy education,

this involves preparing students to understand and use specialised terminology, navigate digital interfaces, and engage in professional scenarios that mirror authentic workplace communication. Integrating digital tools into Pharmacy ESP courses offers opportunities to expose students to realistic clinical tasks, interactive simulations, and practice-based scenarios, bridging the gap between classroom learning and professional practice. However, the successful integration of technology depends heavily on students' perceptions, readiness, and confidence in using digital tools. If learners perceive digital resources as confusing, irrelevant, or overly demanding, the potential benefits may not be fully realized. Understanding students' attitudes is crucial for designing learning environments that support both language development and discipline-specific skills. Research on digital tools in ESP has mostly focused on Western or highly resourced contexts, leaving a gap in emerging digital learning environments like North Macedonia.

This study examines pharmacy students' perceptions of digital tools in ESP instruction, evaluates their effectiveness in enhancing engagement, specialised vocabulary, and communication confidence, and identifies barriers to implementation to provide evidence-based recommendations for improving digitally supported ESP curricula.

The study is guided by the following research questions:

How do pharmacy students perceive the usefulness, engagement potential, and language-learning benefits of digital tools employed in ESP instruction?

What barriers and challenges do pharmacy students identify in the effective use of digital tools within ESP courses?

2. Literature Review

Advances in digital technology have fundamentally transformed educational practices across disciplines, particularly in language education, by expanding opportunities for input, interaction, and output. Within the theoretical framework of Technology-Enhanced Language Learning (TELL), digital tools support learner autonomy, motivation, and engagement by providing flexible access to multimodal and authentic language resources (Hockly, 2020).

Recent meta-analyses reinforce the positive impact of digital tools on language proficiency, noting that technology-enhanced environments contribute to improved outcomes when embedded within structured pedagogical designs (Nurmal-a et al., 2025). Systematic reviews also highlight the growing integration of digital resources into ESP curricula, identifying the shift toward immersive, interactive, and learner-centered materials that align with contemporary learning needs (Rachmawati & Irawan, 2025).

Within English for Specific Purposes (ESP), pedagogy is theoretically grounded in needs analysis, genre theory, and discourse community membership, emphasizing the development of discipline-specific communicative competence and lexical knowledge (Hyland & Hamp-Lyons, 2023). Tools such as interactive simulations, multimedia case studies, and adaptive digital content enhance genre awareness and support technical vocabulary acquisition by situating language use within realistic professional contexts.

Evidence from virtual content interventions shows significant improvements in technical vocabulary retention among ESP learners, further validating the

effectiveness of digital materials designed for specialised language tasks (Saeedi & Najjarpour, 2025). However, scholars consistently highlight that the effectiveness of digital ESP instruction relies on instructors' ability to integrate technological affordances with expertise and pedagogical intent.

At the same time, pharmacy education is undergoing rapid digital transformation driven by digital health initiatives, telepharmacy, and simulation-based training. Both international frameworks and empirical evidence position digital health competencies at the core of contemporary pharmacy curricula, identifying digital literacy as an essential professional competency for future pharmacists (FIP, 2021, 2024; WHO, 2023). These advancements have direct implications for ESP instruction, as pharmacy students are required to engage with digital genres such as electronic health records, online patient-counseling platforms, and interprofessional digital communication tools. Evidence suggests that pharmacy students generally value video-based clinical simulations, terminology-focused mobile applications, and interactive digital modules for improving specialised vocabulary knowledge and communicative confidence (Meštrović & Staničić, 2021; Hou et al., 2022).

Nevertheless, recurring challenges – such as uneven access to digital infrastructure, limited familiarity with specialised applications, and insufficient institutional support – have been reported across diverse educational contexts. These findings align with broader TELL research, which emphasizes the critical role of learner attitudes, contextual variables, and digital literacy in shaping successful technology adoption within language learning environments (Gumartifa et al., 2025).

Despite the growing literature on digitalisation in pharmacy education and ESP, few empirical studies investigate pharmacy students' perceptions of digital tools specifically within ESP courses, particularly in under-researched contexts such as North Macedonia. Addressing this gap, the present study adopts a student-centred approach to explore pharmacy students' perceptions of digital tools in ESP instruction at a tertiary institution in North Macedonia, aiming to identify factors that facilitate or hinder effective implementation and to inform the pedagogically grounded integration of digital technologies in Pharmacy ESP courses.

3. Recent studies

Recent research highlights the growing role of digital literacy and technology-enhanced learning in health-professional education. Studies indicate that digital tools not only support general learning but also play a critical role in developing the specific competencies required for modern healthcare practice. For instance, Alowais, Shah, and Tolley (2023) conducted a comprehensive scoping review of undergraduate pharmacy programs worldwide, examining the integration of digital-literacy training, including health informatics, electronic health records, and other digital-health technologies. Their review of 57 studies identified common pedagogical strategies, such as theoretical modules on informatics, technology-familiarization activities, and applied digital-skills development through telehealth and interprofessional collaboration. In addition, Gaffas (2024), explored the use of the social-media platform X within a Medical English ESP course and found that structured social-media integration can enhance engagement, provide authentic professional communication contexts, and facilitate language development relevant

to clinical and academic tasks.

Such studies illustrate how digital tools can bridge the gap between language instruction and real-world professional practice. Focusing on pharmacy education, Alowais, Nazar, and Tolley (2024) examined UK pharmacy programs to assess how digital-literacy competencies are embedded in curricula. All in all, these studies demonstrate both the increasing importance of digital literacy in health-professional education and the challenges associated with its effective implementation. Although digital tools and technology-supported learning are increasingly embedded in curricula, persistent inconsistencies in practice, assessment, and alignment with professional standards reveal a gap in understanding how digital-literacy initiatives function within Pharmacy ESP courses, particularly in under-researched contexts.

4. Method

Data collection was conducted during the 2024–2025 academic year. The survey was administered electronically through the university's learning management system, ensuring both accessibility and anonymity. Participants were selected using a convenience sampling method, targeting students actively enrolled in ESP courses that incorporated digital tools. Ethical approval and all participants provided informed consent prior to participation.

To complement the survey data, semi-structured interviews were conducted with a purposive subset of 15 students, selected to ensure diversity in gender and academic year. The interview protocol focused on students' experiences with digital tools, perceived benefits and challenges encountered. Interviews were conducted individually via video conferencing, audio-recorded with participants' consent, and transcribed verbatim. Quantitative survey data were analyzed using descriptive statistics and independent-samples t-tests to examine gender-based differences in perceptions across five constructs, while qualitative interview data were analyzed thematically to identify recurring patterns, themes, and insights related to the use of digital tools in Pharmacy ESP instruction.

4.1 Participants

Participants were 120 undergraduate pharmacy students enrolled at the State University of Tetovo in North Macedonia. Participation in the study was entirely voluntary and anonymous, and students were informed that their responses would be used solely for research purposes. The sample consisted of 67 female students and 53 male students, reflecting the typical gender distribution within the faculty. All participants had previously completed at least one English for Specific Purposes (ESP) course or module focused on pharmaceutical communication, terminology development, and professional interaction in English.

4.2 Instruments

The first instrument was a 20-item questionnaire developed for this study, drawing on validated constructs from technology enhanced language learning and ESP research. Items used a 5-point Likert scale. There were five sections: Perceived Usefulness; Ease of Use; Engagement; Vocabulary Development; Professional Communication Confidence and Perceived Barriers. The survey was administered online over two weeks. Responses were exported to SPSS for descriptive analysis.

The second instrument was a semi-structured interview used with 15 students drawn from the total sample of population.

5. Results

This section presents the findings on pharmacy students' perceptions of digital tools in ESP instruction. Survey data are summarized to show trends in perceived usefulness, engagement, vocabulary development, and professional communication confidence. Insights from the semi-structured interviews complement the survey results by highlighting students' experiences, preferences, and challenges with digital tools.

5.1 Survey results

The findings from the 20-item survey administered to pharmacy students are summarized using descriptive statistics, including means and standard deviations, across key constructs are presented in Table 1.

Table 1. Means and Standard Deviations for Perception Constructs (N = 120)

Construct	Items (avg)	Mean (M)	Standard Deviation (SD)
Perceived Usefulness	3	4.12	0.61
Ease of Use	3	3.85	0.76
Engagement	3	3.98	0.72
Vocabulary Development	4	3.76	0.84
Professional Communication Confidence	3	3.64	0.90
Perceived Barriers (higher = more)	4	3.22	1.02

M =Mean; SD =Standard Deviation

Table 1 presents pharmacy students' survey results on digital tools in ESP instruction, revealing overall positive attitudes alongside notable challenges. Perceived Usefulness scored highest (M = 4.12, SD = 0.61), showing strong agreement that tools like Moodle and Quizlet enhance learning through access to authentic materials, clinical scenarios, and updated terminology.

Engagement was also high (M = 3.98, SD = 0.72), indicating that interactive tasks, simulations, and multimedia resources effectively motivate students.

Ease of Use received a moderately high score (M = 3.85, SD = 0.76), reflecting generally manageable platforms, though some students faced challenges with digital literacy or unfamiliar interfaces.

Vocabulary Development was rated moderately high (M = 3.76, SD = 0.84), suggesting effective support for specialized terminology, while Communication Confidence was slightly lower (M = 3.64, SD = 0.90), indicating that digital tools alone may not fully substitute authentic practice.

Perceived Barriers scored lowest (M = 3.22, SD = 1.02), with variability reflecting issues like inconsistent internet access, limited devices, and technical support challenges. Overall, students value digital tools for learning, engagement, and vocabulary, but barriers and variable confidence highlight areas needing further support.

Table 2. Independent-Samples t-Test Comparing Female and Male

Construct	t	df	p	Cohen's d
Perceived Usefulness	1.78	118	.078	0.28
Ease of Use	0.54	118	.590	0.08
Engagement	1.53	118	.129	0.25
Vocabulary Development	1.63	118	.108	0.28
Professional Com/Confidence	0.44	118	.662	0.08

t=t-test; df =Degrees of freedom; p=probability; Cohen's d= A measure of effect size,

Table 2 shows the independent – samples t-test which examined whether female and male students differ in their perceptions of digital tools across five constructs: Perceived Usefulness, Ease of Use, Engagement, Vocabulary Development, and Professional Communication Confidence. The results indicated that there were no statistically significant differences between female and male students for any of the constructs (all $p > .05$). Cohen's d values ranged from 0.08 to 0.28, suggesting only small effect sizes. These findings imply that male and female students in this sample perceived and experienced the digital tools in a largely similar manner.

5.2 Semi-structured Interviews

The second phase of the study included insights from the semi-structured interviews conducted with 15 pharmacy students. The interviews explored students' experiences in using digital tools for ESP instruction, providing a deeper understanding of the survey findings. Key responses are summarized in Table 3.

Table 3: Interview responses

Question	Student Response
1. Describe a digital tool that has helped you learn pharmaceutical English. What made it effective?	S1: "Quizlet helped me memorize drug classifications faster ". S2: "YouTube videos from pharmacy channels made medical instructions clearer since I could replay them."S4: "Moodle glossaries helped me because everything was organized by topic."
2. How do digital tools support your understanding of pharmacy-related terminology?	S7: "Apps show pronunciation, which helped me say drug names correctly."S9: "Digital dictionaries give instant examples in pharmaceutical contexts."S10: "Interactive quizzes helped me learn the differences between similar medications."
3. What digital platforms do you prefer using in ESP and why?	S1: "I prefer Quizlet because it makes learning feel like a game." S13: "YouTube is my favorite because the animations help me understand concepts."S14: "I like Kahoot because it's fun and competitive."
4. Can you explain a situation where a digital tool	S3: "A Kahoot quiz during class made me stay alert and want to win."S4: "Watching a short animation

increased your engagement or motivation?	about antibiotics made me more curious to learn.”S7: “Interactive assignments on Moodle motivated me because I could track my progress.”
5. What difficulties or frustrations have you experienced when using digital tools?	S2: “Poor internet connection sometimes ruins the whole activity.”S6: “Some tools feel too complicated to use at first.”S12: “I get overwhelmed when there are too many platforms to follow.”
6. How confident do you feel in professional communication after using digital tools?	S5: “I feel more confident writing emails after practicing with grammar apps.”S11: “Simulated dialogues helped me practice giving drug instructions.”S3: “Apps that correct pronunciation improved how I speak.”
7. What are the main advantages of using digital tools in pharmacy language learning?	S1: “They save time because everything is easily accessible.”S8: “They connect theory with real scenarios using videos.”
8. What barriers prevent you from fully benefiting from digital tools?	S14: “Sometimes I don’t know how to use the tool properly.”S11: “Too many assignments online make me feel stressed.”S6: “Technical problems discourage me from trying.”S9: “Some tools don’t match pharmacy content well.”
9. How can digital tools be improved to support vocabulary acquisition and communication skills?	S5: “Tools should include more pharmacy-specific vocabulary lists.”S12: “More speaking practice options would be helpful.”S3: “Realistic case simulations would improve terminology use.”
10. If you were designing the ideal digital environment for Pharmacy ESP, what would it include?	S15: “A single platform that combines vocabulary, videos, and quizzes.”S10: “Virtual pharmacy simulations for practicing communication.”S1: “A chatbot to rehearse real-life consultations.”

The semi-structured interviews provided deeper insight into students’ experiences with digital tools in Pharmacy ESP, complementing the quantitative findings. Overall, students viewed digital resources as valuable for understanding pharmaceutical terminology, accessing authentic materials, and staying engaged in learning. Many described increased confidence in written and spoken professional communication, although most still expressed a need for more authentic speaking practice and real-life simulation tasks.

6. Discussion

The findings of this study provide clear insights into pharmacy students’ perceptions of digital tools in ESP instruction, directly addressing the research questions and the objectives of understanding perceived usefulness, engagement, vocabulary development, and barriers to effective use. Regarding the first research question, students generally reported positive attitudes toward digital tools, highlighting their value in facilitating access to authentic pharmaceutical materials, interactive simulations, and specialised terminology. These perceptions align with

the study's objective of evaluating the pedagogical effectiveness of digital resources, demonstrating that well-integrated tools can enhance engagement, motivation, and domain-specific language acquisition.

In response to the second research question concerning barriers and challenges, students identified technical difficulties, platform complexity, and limited opportunities for oral communication as factors that hindered optimal learning outcomes. Although the University provides students with 24-hour internet access on campus, the data collected for this study primarily reflect students' experiences with home internet connections, which can vary in speed and reliability. These insights underscore the study's aim to identify obstacles to effective implementation, suggesting that successful integration of digital tools requires both reliable infrastructure and structured opportunities for successful learning.

Overall, the results indicate that while digital tools are effective for vocabulary acquisition and learner engagement, their impact on professional communication competence—particularly speaking—remains moderate. This finding emphasizes the importance of complementing digital resources with interactive, real-world practice, supporting the study's objective of informing pedagogically grounded strategies for ESP course design. Collectively, the discussion highlights that achieving the full potential of digital tools in Pharmacy ESP depends on thoughtful pedagogical integration, attention to technical support, and alignment with authentic professional tasks.

7. Conclusion

This study provides compelling evidence that pharmacy students hold generally positive perceptions of digital tools in ESP instruction, particularly regarding their pedagogical usefulness, engagement potential, and contribution to specialised vocabulary development. Participants valued how digital platforms facilitated access to authentic pharmaceutical materials, clinical scenarios, and discipline-specific terminology, reinforcing the view that technology-enhanced tools can effectively increase exposure to domain-specific input when integrated within thoughtfully designed pedagogical frameworks. These findings align with recent ESP research, such as Kravchenko (2024), which demonstrated that digital technologies significantly enhance terminological competence. Also,

The semi-structured interviews further enriched these insights by revealing students' lived experiences with digital tools. Participants emphasized the benefits of digital resources for understanding complex pharmaceutical terminology, accessing authentic materials, and sustaining motivation, echoing findings from Yelliza (2024) on the positive impact of flexible and interactive digital technologies in ESP learning. However, the study revealed that gains in professional communication confidence – particularly in oral skills – were modest. This may be explained by the fact that current digital simulations are often designed for general or international audiences and do not adequately reflect the specific linguistic, cultural, and healthcare contexts of North Macedonian pharmacy students, limiting their effectiveness in building confidence for real-world professional communication. This underscores the limitations of digital tools alone in fully replicating real-world communicative interactions, a nuance similarly noted in Fernández-Alcántara et al. (2025), who emphasized that virtual simulations cannot entirely substitute for authentic patient-provider communication practice.

In conclusion, these findings confirm that digital tools can significantly enhance vocabulary acquisition, engagement, and motivation in Pharmacy ESP courses, while simultaneously illustrating that oral communication competence, equitable access, and pedagogical integration remain crucial considerations.

Based on the study's findings, the following recommendations are proposed to enhance the effectiveness of digital tools in Pharmacy ESP instruction: integrate digital tools purposefully with authentic pharmacy tasks; complement digital activities with interactive speaking practice and simulations; improve usability through clear instructions and platform guidance; support students' digital literacy with targeted training and technical support; and systematically collect student feedback to refine tool selection and course design.

As for the limitations, this study used convenience sampling of students already enrolled in ESP courses using digital tools, which may introduce selection bias. As a result, the findings may not fully represent the broader population of pharmacy students in North Macedonia. Consequently, thematic saturation may not have fully captured the full range and variability of perceived barriers, and future studies should include a larger qualitative sample to ensure broader representativeness. Future research should use more diverse or randomized sampling to enhance generalizability. In addition, the study relies solely on self-reported perceptions, without objective measures such as pre- and post-test scores or a control group, therefore future research should include this tool as well.

References:

- [1]. Alowais, A., Shah, A., & Tolley, C. (2023). Digital literacy in undergraduate pharmacy education: A scoping review of current practices and pedagogical strategies. *Currents in Pharmacy Teaching and Learning*, 15(2), 101–118. <https://doi.org/10.1016/j.cptl.2022.12.006>.
- [2]. Alowais, A., Nazar, H., & Tolley, C. (2024). Digital health competencies in UK pharmacy schools: A mixed-methods study. *Currents in Pharmacy Teaching and Learning*, 16(1), 55–72. <https://doi.org/10.1016/j.cptl.2023.10.004>.
- [3]. Amin, S. M., Atta, M. H. R., Abd Elmoaty, A. E. E., et al. (2025). Bridging virtual and real learning: the role of digital literacy and metaverse perspectives in enhancing academic motivation in nursing education. *BMC Nursing*, 24, 1113. <https://doi.org/10.1186/s12912-025-01113-3>
- [4]. Anthony, L. (2018). *Introducing English for Specific Purposes*. Routledge.
- [5]. Burston, J. (2021). Mobile-assisted language learning: A selective review of research. *ReCALL*, 33(3), 252–270. <https://doi.org/10.1017/S0958344021000034>
- [6]. Charles, M. (2020). Corpus-assisted writing instruction for disciplinary English. *Journal of English for Academic Purposes*, 45, 100832. <https://doi.org/10.1016/j.jeap.2019.100832>
- [7]. Fernández-Alcántara, M., Escribano, S., Juliá-Sanchis, R., Castillo-López, A., Pérez-Manzano, A., Macur, M., Kalender-Smajlović, S., García-Sanjuán, S., & Cabañero-Martínez, M. J. (2025). Virtual simulation tools for communication skills training in health care professionals: Literature review. *JMIR Medical Education*, 11, e63082.

- <https://doi.org/10.2196/63082>
- [8]. **International Pharmaceutical Federation.** (2021). *Digital health in pharmacy education: Developing digital competencies*. FIP. <https://www.fip.org>
- [9]. **International Pharmaceutical Federation.** (2024). *Transforming pharmacy education for a digital future*. FIP. <https://www.fip.org>
- [10]. **Gaffas, A.** (2024). Integrating social media into Medical-ESP courses: Enhancing engagement and professional language learning. *Journal of English for Specific Purposes and Professional Communication*, 12(3), 210–225.
- [11]. **Gumartifa, A., Syahri, I., & Alfaresi, B.** (2025). Digital Tools in ESP Learning: Culturally and Linguistically Diverse Students' Practices and Challenges. *Voices of English Language Education Society*, 9(1), 206–217. <https://doi.org/10.29408/veles.v9i1>
- [12]. **Hampel, R., & Stickler, U.** (2012). The use of videoconferencing to support multimodal interaction in an online language classroom. *ReCALL*, 24(2), 116–137. <https://doi.org/10.1017/S095834401200002X>
- [13]. **Hockly, N.** (2020). Technology-enhanced language learning. In S. G. East & S. May (Eds.), *Language learning and technology* (pp. 1–14). Springer. https://doi.org/10.1007/978-3-030-33106-5_1
- [14]. **Hou, M., Chen, Z., & Liu, Y.** (2022). Pharmacy students' perceptions of digital learning tools in professional English courses. *Education and Information Technologies*, 27, 8151–8170. <https://doi.org/10.1007/s10639-022-11037-1>
- [15]. **Hyland, K., & Hamp-Lyons, L.** (2023). Needs analysis in ESP: Foundations and future directions. *English for Specific Purposes*, 72, 1–12. <https://doi.org/10.1016/j.esp.2023.04.001>
- [16]. **Jabbur-Lopes, M. O., Silva, L. M., & Mesquita, A. R.** (2023). Digital simulations in pharmacy education: A systematic review. *Currents in Pharmacy Teaching and Learning*, 15(3), 250–263. <https://doi.org/10.1016/j.cptl.2023.01.007>
- [17]. **Kravchenko, T. V.** (2024). Digital technologies in the ESP course for developing terminological competence. *Scientific Notes of Junior Academy of Sciences of Ukraine*, 3(31), 43–50.
- [18]. **Kukulska-Hulme, A., & Viberg, O.** (2022). Mobile collaborative language learning: A systematic review. *Computer Assisted Language Learning*, 35(3), 431–460. <https://doi.org/10.1080/09588221.2020.1810789>
- [19]. **Meštrović, A., & Staničić, Z.** (2021). The role of digital tools in teaching pharmaceutical English: Student perspectives. *Journal of Pharmacy Education*, 85(4), 560–568.
- [20]. **Mesquita, A. R., Lopes, M. O., & Silva, L. M.** (2020). Simulation-based learning in pharmacy: A review. *American Journal of Pharmaceutical Education*, 84(2), 7561. <https://doi.org/10.5688/ajpe7561>
- [21]. **Nurmala, I., Irianto, S., Franchisca, S., Amsa, H., & Susanti, R.** (2023). Technology-enhanced language learning: A meta-analysis study on English language teaching tools. *Journal on Education*, 6(1), 2188–2195. <https://doi.org/10.31004/joe.v6i1.3221>
- [22]. **Rachmawati, D. L., & Irawan, N.** (2025). Integrating Digital Technologies in ESP Classroom: A Comprehensive Overview of Current Practices and Pedagogical Implications. *International Journal of Pedagogical Language*,

- Literature, and Cultural Studies.* 1(3), 27–35,
<https://doi.org/10.63011/ip.v1i3.23>
- [23]. Saeedi, Z., & Najjarpour, M. (2025). Enhancing technical vocabulary acquisition in ESP context through virtual content development with Articulate Storyline. *Social Sciences & Humanities Open*, 11, 101539. <https://doi.org/10.1016/j.ssaho.2025.101539>
- [24]. Tsao, N. (2022). Specialised vocabulary development through online corpora in medical ESP courses. *System*, 108, 102831. <https://doi.org/10.1016/j.system.2022.102831>
- [25]. World Health Organization. (2023). Global digital health education framework. <https://www.who.int/teams/digital-health-and-innovation/global-digital-health-education-framework>
- [26]. Yelliza. (2024). Students' Views On Digital Technologies In Learning English For Specific Purposes (ESP) In University. *Journal Ilmiah Langue and Parole*. 8(2), 174–182. <https://doi.org/10.36057/jilp.v8i2.730>
- [27]. Zou, B., & Xie, H. (2021). Digital tools for vocabulary learning: A meta-analysis. *Educational Research Review*, 34, 100409. <https://doi.org/10.1016/j.edurev.2021.100409>
- [28]. Zou, B., Li, J., & Li, L. (2023). Students' attitudes toward technology-enhanced ESP learning: A systematic review. *Computer Assisted Language Learning*, 36(7), 1585–1605. <https://doi.org/10.1080/09588221.2021.2010414>

ZWISCHEN DIREKTHEIT UND HÖFLICHKEIT: KULTURBEDINGTE UNTERSCHIEDE IM KOMMUNIKATIONSVERHALTEN DER GERMANISTIKSTUDIERENDEN IN NORDMAZEDONIEN

BETWEEN DIRECTNESS AND POLITENESS: CULTURALLY CONDITIONED DIFFERENCES IN THE COMMUNICATIVE BEHAVIOR OF GERMAN STUDIES STUDENTS IN NORTH MACEDONIA

¹Biljana Ivanovska, ²Gzim Xhaferri

¹Philologische Fakultät, Štip, R. Nordmazedonien

²Südosteuropäische Universität, Tetovo, R. Nordmazedonien

¹biljana.ivanovska@ugd.edu.mk

²g.xhaferi@seeu.edu.mk

Abstract: Die vorliegende Studie beschäftigt sich mit der Frage, wie Germanistikstudierende in R. Nordmazedonien aus unterschiedlichen ethnischen und sprachlichen Hintergründen das Phänomen der Höflichkeit definieren, wahrnehmen und bewerten – insbesondere im Kontext interkultureller Kommunikation. Ausgangspunkt bildet die Politeness-Theorie von Brown und Levinson (1987), die Höflichkeit als strategischen Umgang mit dem Gesicht des Gesprächspartners versteht. Unter Rückgriff auf diese Theorie wird untersucht, ob und inwiefern sich kulturell bedingte Unterschiede in der Bewertung kommunikativer Strategien feststellen lassen. Die vorliegende Untersuchung basiert auf einem Mixed-Methods-Ansatz, bei dem quantitative Erhebungsverfahren in Form standardisierter, auf Likert-Skalen basierender Fragebögen mit qualitativen Methoden – insbesondere offenen Fragen und teilstrukturierten Interviews – methodenintegrativ kombiniert werden. Befragt wurden insgesamt 60 Germanistikstudierende an zwei Universitäten in Nordmazedonien (Tetovo und Štip), die in zwei Gruppen nach ethnischer Zugehörigkeit (mazedonisch, albanisch) unterteilt wurden. Im Zentrum der Untersuchung steht die Frage, ob sich unterschiedliche kommunikative Erwartungen und Normvorstellungen in Bezug auf Direktheit, Entschuldigung, Rücksichtnahme und indirekte Sprechakte feststellen lassen. Die Ergebnisse zeigen, dass Studierende mit albanischer Herkunft tendenziell sensibler gegenüber negativ-höflichen Strategien sind und direkte Ausdrucksformen eher als unhöflich empfinden. Im Gegensatz dazu bewerten viele mazedonische Studierende direkte Formulierungen als neutral oder sogar positiv-höflich. Diese Ergebnisse verweisen auf die kulturelle Relativität von Höflichkeit und stellen die Universalitätsansprüche klassischer Höflichkeitstheorien in Frage. Die Studie leistet einen Beitrag zur interkulturellen Pragmatik und betont die Notwendigkeit, kulturspezifische Höflichkeitsnormen im Fremdsprachenunterricht explizit zu thematisieren, um Missverständnisse in interkulturellen Kommunikationssituationen zu vermeiden und die kommunikative Kompetenz von Studierenden zu fördern.

Schlüsselwörter: Höflichkeit; interkulturelle Kommunikation; Höflichkeitstheorie von Brown und Levinson; ethnische Unterschiede; Pragmatik; kulturelle Variation.

Abstract: *This study explores how students of German studies in the Republic of North Macedonia from different ethnic and linguistic backgrounds define, perceive, and evaluate the phenomenon of politeness — particularly in the context of intercultural communication. The theoretical foundation is Brown and Levinson's (1987) Politeness Theory, which conceptualizes politeness as a strategic management of the interlocutor's face. On the base of this framework, the study investigates whether and to what extent culturally conditioned differences can be observed in the evaluation of communicative strategies. The study follows a mixed-methods design, combining quantitative methods (Likert-scale questionnaires) with qualitative approaches (open-ended questions and semi-structured interviews). A total of 60 students of German studies from two universities in North Macedonia (Tetovo and Štip) participated, divided into two groups based on their ethnic affiliation (Macedonian and Albanian). The central research question is whether different communicative expectations and normative orientations can be identified with regard to directness, apology, consideration, and indirect speech acts. The results indicate that students of Albanian background tend to be more sensitive to negatively polite strategies and are more likely to perceive direct expressions as impolite. In contrast, many Macedonian students evaluate direct formulations as neutral or even positively polite. These findings point to the cultural relativity of politeness and challenge the universality claims of classical politeness theories. The study contributes to the field of intercultural pragmatics and highlights the importance of explicitly addressing culture-specific politeness norms in foreign language teaching in order to prevent misunderstandings in intercultural communication and to foster students' communicative competence.*

Keywords: *Politeness; intercultural communication; Theory of Politeness of Brown and Levinson; ethnic differences; pragmatics; cultural variation.*

1. Theoretischer Rahmen

Da Interaktion immer zwischen Individuen stattfindet, immer also eine soziale Komponente beinhaltet, ist Höflichkeit als Kodierungssystem soziokultureller Beziehungspflege einer jeden Kommunikation immanent.
Ankenbrand (2013: 147)

Höflichkeit stellt einen wesentlichen Bestandteil zwischenmenschlicher Kommunikation dar und spielt auch in der Kommunikation eine zentrale Rolle für das Gelingen sozialer Interaktionen. Der Begriff *Höflichkeit* geht auf den mittelalterlichen Hof zurück (vgl. Ankenbrand 2013: 35), jener gesellschaftlichen Oberschicht, in der Verhaltensnormen strenger geregelt waren und die von der Mehrheit der Bevölkerung als vorbildlich und erstrebenswert angesehen wurde. Im alltäglichen Gebrauch manifestiert sich Höflichkeit auf vielfältige Weise: Sie kann als kommunikative Strategie dienen, um Gesprächspartner zu bestimmten Handlungen zu motivieren, als grundlegende Haltung im Umgang miteinander, als kulturell geprägter Verhaltenskodex oder als moralisches Prinzip verstanden

werden. Grundsätzlich lassen sich zwei Hauptinterpretationsansätze unterscheiden: Zum einen wird Höflichkeit als Einhaltung gesellschaftlicher Normen betrachtet, zum anderen als zweckorientierte Strategie zur bewussten Durchsetzung eigener Interessen (vgl. Haferland & Paul 1996: 9–15). Formen von Indirektheit sind ein wichtiger Aspekt von Höflichkeit, wie Haferland & Paul (1996: 19) feststellen:

Soweit Höflichkeit durch Indirektheit gekennzeichnet ist, wird mit höflicher Indirektheit gemeinhin ein Verhalten bezeichnet, das auf dem Wege der Abschwächung einzelner Handlungen Schaden vom Gesicht Egos und Alters abwenden soll.

Indirektheit stellt in der kommunikativen Praxis die unmarkierte und somit vorherrschende Form der Äußerung dar, während Direktheit als eine eher seltene und auffällige Variante angesehen wird (vgl. Haferland & Paul 1996: 21–22). Dies zeigt sich darin, dass im alltäglichen Sprachgebrauch häufig zurückhaltende Formulierungen wie *Es ist etwas kalt* verwendet werden, anstelle einer expliziten Aufforderung wie *Mir ist kalt, bitte schließe das Fenster* (vgl. auch Searle 1982). Im kulturellen Kontext unseres Sprachraums gilt Indirektheit überwiegend als angemessene und sozial erwünschte Verhaltensweise im zwischenmenschlichen Umgang.

Die vorliegende Untersuchung stützt sich primär auf die Höflichkeitstheorie von Brown und Levinson (1987), die einen zentralen Beitrag zur pragmatischen Sprachforschung geleistet hat. In ihrem Modell wird Höflichkeit als eine sprachlich realisierte Strategie verstanden, die dem Schutz des sogenannten „Gesichts“ (face) des Gesprächspartners dient. Dabei differenzieren die Autoren zwischen zwei grundlegenden Arten von Höflichkeitsstrategien: der positiven Höflichkeit, die auf Nähe, Solidarität und Gruppenzugehörigkeit abzielt, sowie der negativen Höflichkeit, die Distanz, Respekt und die Wahrung persönlicher Autonomie betont. Diese Strategien sollen es ermöglichen, gesichtsbedrohende Akte (face-threatening acts) zu mildern und soziale Harmonie zu bewahren.

Die Theorie von Brown und Levinson erhebt den Anspruch auf Universalität, wurde jedoch insbesondere im interkulturellen Kontext zunehmend kritisch hinterfragt (vgl. Eelen, 2001; Watts, 2003). Kritiker bemängeln unter anderem, dass die Konzepte von „Gesicht“, Höflichkeit und Bedrohung stark von westlich-individualistischen Denkmodellen geprägt sind und somit kulturell nicht überall gleich anschlussfähig sind. Zahlreiche empirische Studien haben gezeigt, dass sowohl die Anwendung als auch die Interpretation höflicher Sprachhandlungen kulturabhängig sind. Während in individualistisch geprägten Kulturen – wie etwa in Teilen Europas oder Nordamerikas – Direktheit oftmals mit Ehrlichkeit, Klarheit und Effizienz assoziiert wird, kann dieselbe Form der Ausdrucksweise in kollektivistisch orientierten Gesellschaften – wie etwa in vielen Teilen Asiens oder des Balkans – als unangemessen, verletzend oder unhöflich empfunden werden (vgl. Scollon & Scollon, 2001).

Zusätzlich zum Modell von Brown und Levinson greift die vorliegende Studie auf theoretische Konzepte aus der interkulturellen Pragmatik zurück. Diese untersucht, wie kulturelle Normen, sprachliche Konventionen und situative Angemessenheitsbewertungen in der interkulturellen Kommunikation miteinander verwoben sind (vgl. Kádár & Haugh, 2013). Dabei wird Höflichkeit nicht als

universelles, normatives Konzept verstanden, sondern als dynamisches, kontextabhängiges Phänomen, das sich im Spannungsfeld zwischen individuellen Sprecherintentionen, kulturellen Erwartungshaltungen und situativen Gegebenheiten entfaltet.

Der hier gewählte theoretische Rahmen erlaubt es, sprachliche Höflichkeit nicht nur als Mittel der sozialen Koordination, sondern auch als Ausdruck kultureller Identität zu begreifen. In der Folge wird es möglich, die interkulturellen Unterschiede in der Bewertung und Produktion höflicher Äußerungen bei Germanistikstudierenden mit mazedonischem und albanischem Hintergrund systematisch zu analysieren und kritisch zu reflektieren.

2.Methodologie

2.1 Forschungsdesign

Die vorliegende Untersuchung folgt einem Mixed-Methods-Ansatz, der quantitative und qualitative Forschungsmethoden kombiniert, um ein umfassendes Verständnis der Wahrnehmung von Höflichkeit im interkulturellen Kontext zu ermöglichen. Dieser kombinierte Ansatz erlaubt sowohl die systematische Messung von Einstellungen und Bewertungen (quantitativ) als auch die vertiefte Analyse individueller Sichtweisen und Erfahrungen (qualitativ).

2.2 Probandengruppe

Die Zielgruppe umfasst Germanistikstudierende an zwei Universitäten in Nordmazedonien:

der Südosteuropäischen Universität in Tetovo sowie der Universität Goce Delčev in Štip.

Die Auswahl erfolgte nach dem Kriterium ethnischer und sprachlicher Zugehörigkeit, um eine ausgewogene Verteilung zwischen den zwei Zielgruppen zu gewährleisten:

- 30 Studierende mit mazedonischem Hintergrund,
- 30 Studierende mit albanischem Hintergrund.

Die Teilnehmenden befinden sich im fortgeschrittenen Stadium ihres Studiums (mindestens im dritten Semester, und mindestens B2 Niveau der deutschen Sprache) und verfügen über fundierte Kenntnisse der deutschen Sprache und Kultur. Im Rahmen der vorliegenden Studie werden zwei Hypothesen formuliert, die sich auf die kulturbedingten Unterschiede in der Wahrnehmung von Höflichkeit und Direktheit beziehen. Die erste Hypothese (H1) geht davon aus, dass signifikante Unterschiede in der Einschätzung kommunikativer Strategien zwischen Studierenden unterschiedlicher ethnischer und sprachlicher Herkunft bestehen. Aufbauend darauf vermutet die zweite Hypothese (H2), dass Studierende mit albanischem Hintergrund eine stärkere Sensibilität gegenüber Formen negativer Höflichkeit zeigen – insbesondere im Hinblick auf indirekte Ausdrucksweisen und die Vermeidung von Konfrontation. Im Gegensatz dazu wird angenommen, dass Studierende mit mazedonischem Hintergrund direkte Sprechakte weniger negativ bewerten und diese mitunter sogar als Ausdruck von Ehrlichkeit und Höflichkeit interpretieren. Die Überprüfung dieser Hypothesen soll Aufschluss darüber geben, inwiefern kulturelle Prägungen die Wahrnehmung sprachlicher Höflichkeit im

interkulturellen Kontext beeinflussen.

2.3 Erhebungsinstrumente

Die Datenerhebung erfolgt mithilfe eines strukturierten Fragebogens, der in drei thematische Abschnitte gegliedert ist:

Teil A): Definition und Einstellungen zur Höflichkeit

In diesem Teil werden die Teilnehmenden gebeten, ihre persönliche Definition von Höflichkeit zu formulieren und ihre Einstellungen zur kulturellen Relativität des Höflichkeitsbegriffs darzulegen. Beispielfragen:

- „Was bedeutet Höflichkeit für Sie?“
- „Wie äußert sich Höflichkeit in Ihrer Kultur?“
- „Glauben Sie, dass Höflichkeit in verschiedenen Kulturen unterschiedlich verstanden wird?“

Teil B): Bewertung kommunikativer Situationen (Likert-Skala)

Den Studierenden werden verschiedene kommunikative Aussagen und Sprechhandlungen präsentiert, die sie hinsichtlich ihrer Höflichkeit auf einer dreistufigen Skala bewerten sollen: (1) höflich, (2) neutral, (3) unhöflich.

Beispiele:

- „Sag mir einfach direkt die Wahrheit.“
- „Entschuldigung, dass ich störe, aber könnten Sie bitte ...?“
- „Das ist falsch, du solltest es anders machen.“

Diese Aussagen variieren im Grad an Direktheit, im Gebrauch von Entschuldigungen, Modalverben oder Höflichkeitsformeln und spiegeln typische interkulturelle Missverständnispotenziale wider.

Teil C): Offene Fragen zur interkulturellen Kommunikation

Durch offene Fragen wird die Möglichkeit geschaffen, individuelle Erfahrungen mit interkultureller Kommunikation und Höflichkeitskonflikten zu reflektieren.

Beispielsweise:

- „Welche sprachlichen Formen stören Sie im Gespräch mit Personen aus anderen Kulturen?“
- „Haben Sie schon einmal erlebt, dass Ihre Ausdrucksweise als unhöflich wahrgenommen wurde?“

2.4 Durchführung der Datenerhebung

Die Umfragen werden im Sommersemester 2025 durchgeführt. Die Teilnahme erfolgt anonym und freiwillig, unter Wahrung ethischer Forschungsstandards (z. B. Einverständniserklärung, Datenschutz). Die Fragebögen werden schriftlich (Papierform oder online) ausgefüllt, die optionalen Interviews werden in halbstrukturierter Form geführt und aufgezeichnet (mit Zustimmung der Teilnehmer*innen).

2.5 Datenanalyse

Die Auswertung erfolgt zweigleisig:

- **Quantitative Analyse** der Likert-Skalen mittels des Statistikprogramms SPSS¹:

¹ SPSS steht für Statistical Package for the Social Sciences. Es ist eine weitverbreitete Software zur statistischen Datenanalyse, die besonders in den Sozialwissenschaften

- Deskriptive Statistiken (Mittelwerte, Häufigkeiten).
- Vergleichende Analysen mittels t-Test für unabhängige Stichproben zur Prüfung signifikanter Unterschiede zwischen den beiden Gruppen (mazedonische und albanische Studierende).
- **Qualitative Analyse** der offenen Antworten (und Interviewdaten) nach dem Verfahren der thematischen Analyse:
 - Identifikation wiederkehrender Themen und kulturbezogener Schemata.
 - Kategorisierung nach Aspekten wie Direktheit, Konfliktvermeidung, Missverständnisse, Sprachideologien.

3. Methodischer Hintergrund zur vergleichenden Analyse mittels t-Test

Der t-Test für unabhängige Stichproben wird angewendet, um statistisch zu prüfen, ob sich die Mittelwerte von zwei unabhängigen Gruppen signifikant unterscheiden. Im Rahmen dieser Studie dient der t-Test dazu, Unterschiede in der Wahrnehmung von Höflichkeit zwischen zwei ethnisch unterschiedlichen Studierendengruppen zu analysieren.

Der Test basiert auf dem Vergleich der Differenz der Gruppenmittelwerte unter Berücksichtigung der innergruppenvariabilität und der Stichprobengröße. Das Testergebnis umfasst einen t-Wert sowie einen p-Wert, der die Signifikanz des Unterschieds anzeigt. Ein p-Wert unter dem festgelegten Signifikanzniveau (z. B. 0,05) deutet darauf hin, dass der Unterschied statistisch signifikant ist und nicht durch Zufall erklärt werden kann. Der t-Test setzt die Normalverteilung der Daten und die Varianzhomogenität voraus. Der t-Test ergab signifikante Unterschiede ($p < .05$) zwischen den zwei Gruppen hinsichtlich ihrer Bewertung von Direktheit und indirekter Höflichkeitsformen. Die insbesondere signifikante Abweichungen zwischen der mazedonischen Gruppe und der albanischen Gruppe wurden mit diesem t-Test gezeigt. Diese Ergebnisse stützen die Hypothese H1, dass es kulturell bedingte Unterschiede in der Wahrnehmung von Höflichkeit und Direktheit gibt. Hypothese H2 wird ebenfalls gestützt: albanische Studierende zeigen eine stärkere Orientierung an negativer Höflichkeit (z. B. indirekte Bitten, Entschuldigungsformeln), während mazedonische Studierende direkte Ausdrucksformen weniger problematisieren.

4. Ergebnisse. Quantitative Ergebnisse - Deskriptive Analyse

Die Auswertung der Likert-Skalen verdeutlicht signifikante Unterschiede in der Bewertung kommunikativer Handlungen zwischen den beiden ethnisch unterschiedlichen Studierendengruppen. Insbesondere zeigen mazedonische Studierende eine Tendenz, direkte Ausdrucksweisen häufiger als „neutral“ oder sogar als „höflich“ einzustufen, wie beispielsweise bei der Aussage „Sag mir direkt die Wahrheit“. Im Gegensatz dazu bewerten albanische Studierende dieselben Äußerungen überwiegend als „unhöflich“. Zur Veranschaulichung wird die

eingesetzt wird. Mit SPSS können Forscher:innen Daten eingeben, bearbeiten und umfangreiche statistische Verfahren durchführen, wie z. B. deskriptive Statistiken, Korrelationsanalysen, Varianzanalysen (ANOVA), t-Tests und viele weitere komplexe Auswertungen.

Verteilung der Bewertungen für die Aussage „Sag mir die Wahrheit ohne Umschweife“ exemplarisch dargestellt:

- Mazedonische Studierende: 65 % neutral, 25 % höflich, 10 % unhöflich
- Albanische Studierende: 20 % neutral, 15 % höflich, 65 % unhöflich

Eine erweiterte deskriptive Analyse widmet sich zudem der Definition und Wahrnehmung von Höflichkeit. Diese erfolgt mittels exemplarischer Kodierungen der offenen Antworten sowie unterstützender Zitate aus den Befragungen, um kulturell bedingte Unterschiede in der Interpretation und Bewertung von Höflichkeitsformen detaillierter zu erfassen.

5. Thematische Kategorien

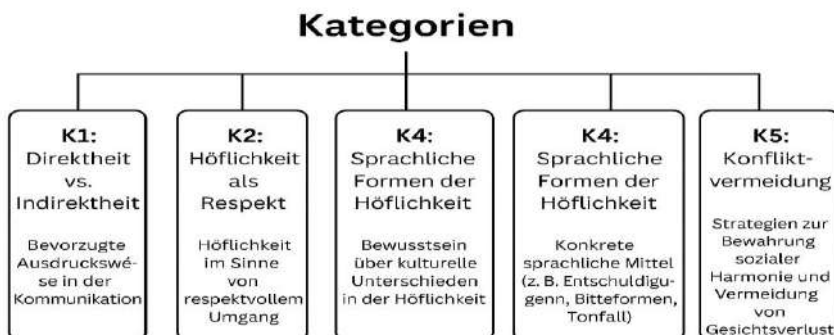
Die offenen Antworten wurden nach folgenden Hauptkategorien kodiert:

Tabelle 1. Darstellung der Kategorien und ihre Beschreibung

Kategorie	Beschreibung
K1: Direktheit vs. Indirektheit	Bevorzugte Ausdrucksweise in der Kommunikation
K2: Höflichkeit als Respekt	Höflichkeit im Sinne von respektvollem Umgang
K3: Höflichkeit als kulturelle Norm	Bewusstsein über kulturelle Unterschiede in der Höflichkeit
K4: Sprachliche Formen der Höflichkeit	Konkrete sprachliche Mittel (z. B. Entschuldigungen, Bitteformen, Tonfall)
K5: Konfliktvermeidung	Strategien zur Bewahrung sozialer Harmonie und Vermeidung von Gesichtsverlust

Das folgende Diagramm veranschaulicht fünf zentrale Kategorien zur Analyse kommunikativer Höflichkeitsstrategien im interkulturellen Kontext.

Diagramm 1. Kategorienmodell zur Analyse kulturell geprägter Höflichkeitsstrategien



Im folgenden Abschnitt werden die qualitativen Ergebnisse differenziert und nach ethnischer Zugehörigkeit dargestellt, beginnend mit den Aussagen der

mazedonischen Studierenden, deren Beiträge spezifische Muster im Verständnis von Höflichkeit erkennen lassen – insbesondere in Bezug auf Direktheit, Ehrlichkeit und sprachliche Offenheit.

A). Mazedonische Studierende

- **K1 (Direktheit):** Viele mazedonische Studierende beschrieben Höflichkeit als mit *direkter und ehrlicher Sprache* vereinbar.
„Für mich heißt höflich sein nicht, um den heißen Brei zu reden. Wenn ich direkt bin, heißt das, ich respektiere mein Gegenüber.“
- **K2 (Respekt):** Respekt wurde als zentrales Element genannt, jedoch *nicht zwingend über indirekten Ausdruck*.
„Respekt ist wichtig, aber man kann auch ehrlich und höflich gleichzeitig sein.“
- **K3 (Kulturelle Norm):** Einige sahen Höflichkeit als *weitgehend universell*, Unterschiede wurden eher in den sprachlichen Formen gesehen.
„In jeder Kultur sagt man bitte und danke, das ist doch überall höflich.“

B). Albanische Studierende

- **K1 (Indirektheit):** Die Antworten betonten häufiger *indirekte, vorsichtige Redeweisen* als höflich.
„Direkt zu sein gilt bei uns oft als grob. Man muss vorsichtig formulieren.“
- **K2 (Respekt):** Höflichkeit wurde eng mit Respekt vor Älteren und gesellschaftlicher Hierarchie verbunden.
„Man muss sich zurücknehmen, besonders gegenüber Älteren oder Lehrern. Das zeigt Respekt.“
- **K3 (Kulturelle Norm):** Höflichkeit wurde klar als *kulturell bedingt* verstanden.
„Was in einer Kultur höflich ist, kann in einer anderen Kultur unhöflich sein.“
- **K5 (Konfliktvermeidung):** Es wurde häufig auf die *soziale Funktion der Höflichkeit zur Harmonieerhaltung* hingewiesen.
„Man sollte sich so ausdrücken, dass es zu keinem Streit kommt. Das ist bei uns höflich.“

Die Analyse zeigt deutliche Unterschiede im Höflichkeitsverständnis zwischen den mazedonischen und albanischen Germanistikstudierenden, insbesondere im Hinblick auf Direktheit, Respektkonzepte und kulturelle Relativität. Die vergleichenden Ergebnisse sind in Tabelle 2 dargestellt.

Tabelle 2. Unterschiede im Aspekt der Höflichkeit in den Antworten der Probanden

Aspekt	Mazedonische Gruppe	Albanische Gruppe
Kommunikationsstil	Direkt, offen, ehrlich	Indirekt, rücksichtsvoll, konfliktscheu
Verständnis von Höflichkeit	Respekt durch Klarheit	Respekt durch Zurückhaltung und Hierarchie-Bewusstsein
Kulturelle Relativität betont	Eher begrenzt	Stark betont
Rolle sprachlicher Formen	Wichtig, aber pragmatisch	Sehr wichtig, oft ritualisiert (z. B. Entschuldigungen)

Diese Ergebnisse verdeutlichen, wie tief kulturelle Prägungen das Verständnis von Höflichkeit beeinflussen. Sie liefern zudem wichtige Ansatzpunkte für die interkulturelle Didaktik und die Entwicklung kultursensibler Lehrmaterialien im Fremdsprachenunterricht.

5.1 Qualitative Ergebnisse. Thematische Analyse offener Antworten – (Auswertung der im Teil A gegebenen Antworten)

Die qualitative Auswertung der offenen Fragen und Interviews ergab folgende zentrale Themen:

1. **Direktheit als kulturelles Signal:** Viele albanische Studierende beschrieben direkte Sprache als „aggressiv“ oder „respektlos“. Mazedonische Studierende bezeichneten sie hingegen als „ehrlich“ und „effizient“.
2. **Bedeutung von Entschuldigungsformeln:** Die Mehrheit der nicht-mazedonischen Teilnehmenden betrachtete das Fehlen von Formulierungen wie „*Entschuldigung, aber...*“ oder „*Wären Sie so nett...*“ als unhöflich.
3. **Interkulturelle Missverständnisse:** Zahlreiche Teilnehmer berichteten von Missverständnissen in Studien- oder Alltagskontexten, bei denen sie als „unhöflich“ wahrgenommen wurden – obwohl sie sich selbst als höflich empfanden.

Zitate einiger albanischer Teilnehmer:innen:

„In meiner Kultur sagt man nicht so direkt, was jemand falsch gemacht hat. Wenn jemand das bei mir macht, fühlt sich das wie ein Angriff an.“

„Man zeigt Respekt, indem man zuerst fragt, ob man überhaupt etwas sagen darf. Direktheit ist oft unhöflich, vor allem gegenüber Älteren.“

„Ich finde, man sollte Kritik vorsichtig formulieren. Es ist wichtiger, dass sich niemand verletzt fühlt, als direkt zu sein.“

„Wenn jemand sehr direkt ist, denke ich, dass er mich nicht respektiert – auch wenn es vielleicht ehrlich gemeint ist.“

„In unserer Kultur wird Höflichkeit durch Zurückhaltung und Freundlichkeit gezeigt, nicht durch direkte Aussagen.“

Die analysierten Zitate verdeutlichen ein kommunikatives Verständnis von Höflichkeit, das stark auf indirekter Ausdrucksweise und Zurückhaltung basiert, besonders im Umgang mit Kritik und Direktheit.

1. **Direktheit:**
In der albanischen Kommunikationskultur wird direkte Ansprache von Fehlern überwiegend als unhöflich und konfrontativ empfunden. Die Teilnehmenden betonen, dass eine offene und direkte Kritik häufig als persönlicher Angriff wahrgenommen wird („Wenn jemand das bei mir macht, fühlt sich das wie ein Angriff an.“). Dies reflektiert eine Präferenz für eine behutsame und indirekte Form der Kritik, bei der die Gefühle des Gegenübers geschützt werden sollen.
2. **Bedeutung von Entschuldigungsformeln:**
Entschuldigungs- und Vorsichtsformeln spielen eine zentrale Rolle, um Respekt auszudrücken und den Gesprächsverlauf sozial angemessen zu gestalten. So wird z. B. betont, dass es respektvoll ist, zunächst zu fragen, ob man überhaupt etwas sagen darf („Man zeigt Respekt, indem man

zuerst fragt, ob man überhaupt etwas sagen darf.“). Diese Vorbereitungen signalisieren Rücksichtnahme und vermeiden den Eindruck von Übergriffigkeit.

3. **Interkulturelle Missverständnisse:**

Die hohe Sensibilität gegenüber Direktheit birgt in interkulturellen Kommunikationssituationen das Risiko von Missverständnissen. Was in einer Kultur als ehrliche und effiziente Kommunikation gilt, wird hier als Mangel an Respekt interpretiert („Wenn jemand sehr direkt ist, denke ich, dass er mich nicht respektiert – auch wenn es vielleicht ehrlich gemeint ist.“). Das führt zu divergierenden Wahrnehmungen von Höflichkeit und kann die Verständigung erschweren.

Insgesamt zeigen die Zitate, dass Höflichkeit in dieser Gruppe durch Indirektheit, Rücksichtnahme und eine bewusste Vermeidung von potenziell verletzender Offenheit gekennzeichnet ist. Diese kommunikative Praxis steht im deutlichen Kontrast zu Kulturen, die Direktheit als positiv und wertvoll betrachten.

Zitate einiger mazedonischer Teilnehmer:innen:

„Ich finde es besser, wenn man ehrlich ist und nicht zu viel drumherum redet – das hat für mich nichts mit Unhöflichkeit zu tun.“

„Wenn jemand direkt sagt, was Sache ist, spart man Zeit. Ich sehe das als eine Form von Respekt.“

„Für mich ist es unhöflich, wenn man nicht ehrlich ist. Höflich sein heißt nicht, die Wahrheit zu verstecken.“

„Ich mag keine langen Einleitungen oder Ausreden. Wenn jemand etwas zu sagen hat, soll er es einfach sagen.“

„Direktheit ist für mich ein Zeichen von Klarheit. Wenn jemand zu vorsichtig formuliert, wirkt das unsicher.“

„Ich finde, dass zu viel indirekte Sprache oft zu Missverständnissen führt. Lieber direkt und offen.“

„In meiner Familie reden wir direkt. Das bedeutet nicht, dass wir unhöflich sind – im Gegenteil.“

Die Zitate spiegeln ein kommunikatives Verständnis von Höflichkeit wider, das Direktheit, Offenheit und Ehrlichkeit als zentrale Werte betont.

1. **Direktheit:**

Für die mazedonischen Studierenden ist Direktheit ein Zeichen von Ehrlichkeit und Effizienz. Sie wird als respektvoll und zeitsparend bewertet („Wenn jemand direkt sagt, was Sache ist, spart man Zeit.“). Das Vermeiden von „drumherum reden“ wird nicht als Unhöflichkeit, sondern als Ausdruck von Klarheit und Offenheit gesehen („Direktheit ist für mich ein Zeichen von Klarheit.“). Die direkte Ansprache von Sachverhalten wird sogar als Schutz vor Missverständnissen verstanden.

2. **Bedeutung von Ehrlichkeit und Wahrheit:**

Ehrlichkeit wird als ein zentraler Bestandteil von Höflichkeit angesehen, wobei Unehrlichkeit als unhöflich bewertet wird („Für mich ist es unhöflich, wenn man nicht ehrlich ist.“). Höflichkeit wird hier nicht mit Beschönigung oder Vermeidung der Wahrheit gleichgesetzt, sondern vielmehr als authentische und klare Kommunikation, die Vertrauen schafft.

3. **Interkulturelle Missverständnisse:**

Die Präferenz für direkte Kommunikation kann in interkulturellen Begegnungen potenziell zu Missverständnissen führen, insbesondere

wenn die Gesprächspartner*innen aus Kulturen stammen, die indirektere Kommunikationsweisen bevorzugen. Für die mazedonischen Teilnehmer:innen ist die indirekte Sprache oft mit Unsicherheit oder Unklarheit verbunden („Wenn jemand zu vorsichtig formuliert, wirkt das unsicher.“). Insgesamt zeigen die Zitate, dass in der mazedonischen Kommunikationskultur Offenheit, Klarheit und Ehrlichkeit die Grundprinzipien der Höflichkeit sind. Direktheit wird nicht als Angriff, sondern als konstruktiver und respektvoller Umgang verstanden, der eine effektive und transparente Kommunikation fördert.

6. Vergleichende Analyse: Wahrnehmung kommunikativer Aussagen durch mazedonische und albanische Studierende – (Auswertung der im Teil B gegebenen Antworten)

Die Analyse der Antworten auf typische kommunikative Aussagen zeigt signifikante Unterschiede in der Bewertung von Höflichkeit, insbesondere im Hinblick auf Direktheit, indirekte Formulierungen und den Einsatz von Entschuldigungen. Diese Unterschiede lassen sich auf kulturspezifische Normen zurückführen, die in den jeweiligen sprachlich-ethnischen Gruppen verankert sind.

-Direktheit vs. Indirektheit

Mazedonische Studierende neigten dazu, direkte Aussagen wie „Sag mir einfach die Wahrheit – ohne Umschweife“ (Aussage 1) oder „Du hast das falsch gemacht“ (Aussage 5) deutlich positiver zu bewerten. Ein Großteil dieser Gruppe stufte solche Aussagen als „neutral“ oder sogar „höflich“ ein. Dies weist auf eine pragmatische Norm hin, in der Klarheit und Direktheit als Ausdruck von Ehrlichkeit und Effizienz geschätzt werden. Im Gegensatz dazu empfanden albanische Studierende dieselben Aussagen überwiegend als „unhöflich“. Aussagen wie „Du hast das falsch gemacht“ oder „Ich brauche das bis morgen – machen Sie das bitte sofort“ (Aussage 3) wurden von dieser Gruppe tendenziell als zu konfrontativ und unangemessen direkt wahrgenommen. Dies reflektiert eine kulturelle Orientierung an negativen Höflichkeitsstrategien, bei denen der Erhalt von Harmonie und die Vermeidung von Gesichtsverlust im Vordergrund stehen.

-Bedeutung von Entschuldigungs- und Höflichkeitsformeln

Formulierungen mit expliziten Höflichkeitsmarkern und Entschuldigungen, wie „Entschuldigung, dass ich störe, aber könnten Sie mir bitte helfen?“ (Aussage 2) oder „Darf ich Sie kurz etwas fragen?“ (Aussage 6), wurden von albanischen Studierenden in hohem Maße als „höflich“ bewertet. Dies unterstreicht den hohen Stellenwert formeller und vorsichtiger Ausdrucksweise in dieser Kulturgruppe. Auch Aussagen wie „Das war leider nicht korrekt. Wollen wir nochmal darüber sprechen?“ (Aussage 8) wurden als respektvolle Kritik gewertet. Demgegenüber tendierten mazedonische Studierende dazu, solche Aussagen als übermäßig vorsichtig oder sogar als unnötig kompliziert zu bewerten. Hier zeigt sich eine geringere Sensibilität für negative Höflichkeitsstrategien und eine größere Toleranz gegenüber sprachlicher Direktheit.

7. Unterschiede zwischen albanischen und mazedonischen Studierenden im Umgang mit Höflichkeit und Direktheit (qualitative Einschätzungen) – (Auswertung der im Teil C gegebenen Antworten)

-Erfahrungen mit Missverständnissen

Die Mehrheit der albanischen Studierenden gab an, noch nie Missverständnisse aufgrund von Höflichkeit oder Direktheit erlebt zu haben. Diese Aussage kann auf zwei Arten interpretiert werden:

- Entweder wurden kulturelle Unterschiede bislang erfolgreich durch vorsichtige Kommunikation vermieden,
- oder es besteht ein geringeres Bewusstsein für interkulturelle Missverständnisse, was wiederum auf eine stark verankerte eigene Höflichkeitsnorm hinweist.

Mazedonische Studierende hingegen berichteten häufiger von Situationen, in denen ihre direkte Art als unhöflich missverstanden wurde – insbesondere im Umgang mit Personen aus Kulturen, die eine indirektere Kommunikationsweise bevorzugen.

-Unhöfliche Kommunikationsformen

Albanische Teilnehmer:innen empfanden lautes Sprechen, einen Befehlston, Unterbrechungen sowie das Auslassen von Höflichkeitsformeln wie „Bitte“ oder „Danke“ als besonders unhöflich. Dies legt nahe, dass formelle Höflichkeitsmarker und respektvolle Ausdrucksweise in der albanischen Kommunikationskultur stark gewichtet werden. Die Vermeidung von Dominanz oder Unterbrechung wird als Voraussetzung für respektvollen Dialog gesehen. Im Vergleich dazu definierten mazedonische Teilnehmer:innen „Unhöflichkeit“ seltener durch formelle Höflichkeitsformeln, sondern eher durch fehlende Ehrlichkeit, Uneindeutigkeit oder passiv-aggressives Verhalten. Die direkte Ansprache eines Problems – selbst ohne explizite Höflichkeitsformeln – wurde oft nicht als unhöflich empfunden, sondern als effizient und ehrlich.

-Bevorzugte höfliche Ausdrücke

Die Nennung klassischer Höflichkeitsformeln wie „Könnten Sie bitte...“, „Wären Sie so freundlich...“ oder „Vielen Dank im Voraus“ durch albanische Studierende zeigt ihre Orientierung an formalisierter, höflicher Ausdrucksweise mit Distanzwahrung. Diese Formen entsprechen den Konventionen negativer Höflichkeit (Brown & Levinson), bei der der Gesprächspartner nicht unter Druck gesetzt wird und sein „Gesicht“ gewahrt bleibt. Dagegen bevorzugen mazedonische Studierende häufig klare, unverblümete Ausdrucksweisen, die jedoch ebenfalls mit Höflichkeit assoziiert werden können – im Sinne von Transparenz, Ehrlichkeit und Zeitersparnis. Dies entspricht eher einem kulturinternen Verständnis von positiver Höflichkeit, bei der Nähe und Solidarität über Direktheit kommuniziert werden.

Die qualitative Analyse bestätigt die bereits identifizierten Unterschiede aus den quantitativen Daten:

- Albanische Studierende legen Wert auf indirekte, formalisierte Kommunikation, geprägt von Distanz, Vorsicht und Respektformeln.
- Mazedonische Studierende bevorzugen eine direkte, klare Ausdrucksweise, die nicht automatisch mit Unhöflichkeit gleichgesetzt wird.

Diese kulturellen Muster erklären auch, warum in interkulturellen Begegnungen leicht Missverständnisse entstehen können – insbesondere, wenn Direktheit mit Respektlosigkeit oder Indirektheit mit Unehrlichkeit verwechselt wird.

Zusammenfassend lassen sich zentrale Muster erkennen, die in Tabelle 3 übersichtlich dargestellt sind.

Tabelle 3: Vergleich der Höflichkeitswahrnehmung zwischen mazedonischen und albanischen Studierenden

Aspekt	Mazedonische Studierende	Albanische Studierende
Direktive Aussagen (z. B. 1, 3, 5)	Überwiegend als neutral oder höflich bewertet	Überwiegend als unhöflich bewertet
Indirekte Formulierungen (z. B. 2, 4, 6, 8)	Teils als übervorsichtig oder unnötig empfunden	Klar bevorzugt, als höflich und respektvoll eingestuft
Wahrnehmung von Kritik	Direkt möglich, ohne als unhöflich zu gelten	Kritik soll indirekt und vorsichtig erfolgen

Diese divergierenden Bewertungen bestätigen die Hypothese H1: Die Wahrnehmung von Höflichkeit und Direktheit ist signifikant von der ethnisch-kulturellen Zugehörigkeit der Befragten geprägt. Sie stützen zudem Hypothese H2: Studierende mit albanischem Hintergrund bevorzugen negative Höflichkeitsstrategien, während mazedonische Studierende eine höhere Akzeptanz für sprachliche Direktheit aufweisen.

8. Diskussion

Die vorliegenden Ergebnisse liefern wertvolle Einblicke in die Wahrnehmung und Definition von Höflichkeit unter Germanistikstudierenden unterschiedlicher ethnischer und sprachlicher Herkunft in Nordmazedonien. Sie bestätigen die Ausgangshypothesen in mehrfacher Hinsicht und verdeutlichen zugleich die Grenzen universeller Höflichkeitsmodelle wie dem von Brown und Levinson (1987) im interkulturellen Kontext.

8.1 Interpretation der quantitativen Ergebnisse

Die signifikanten Unterschiede in der Bewertung direkter versus indirekter Kommunikationsformen zwischen den untersuchten Gruppen lassen sich auf unterschiedliche kulturelle Konventionen im Umgang mit Höflichkeit zurückführen. Während mazedonische Studierende Direktheit überwiegend als legitim und funktional betrachten, legen albanische Studierende größeren Wert auf indirekte Ausdrucksweisen, Milderungstechniken und Entschuldigungsformeln – klassische Merkmale der sogenannten negativen Höflichkeit (Brown & Levinson, 1987). Diese Tendenzen decken sich mit Ergebnissen anderer Studien im südosteuropäischen Raum (z. B. Bayraktaroğlu & Sifianou, 2001; Kecskes, 2014), in denen ebenfalls eine stärkere Sensibilität für Gesichtsbedrohung und soziale Harmonie dokumentiert wurde.

8.2 Einordnung der qualitativen Befunde

Die qualitativen Daten liefern vertiefende Erklärungen für die festgestellten Muster. Insbesondere zeigt sich, dass Höflichkeitskonzepte eng mit sozialen Normen, intergenerationellen Sprachpraktiken und Identitätsdiskursen verknüpft sind. Die von Studierenden berichteten Missverständnisse im interkulturellen Kontakt

unterstreichen die Relevanz kulturell geprägter Kommunikationsstile. Interessant ist dabei, dass die direkte Ausdrucksweise von einigen Gruppen als Zeichen von Ehrlichkeit (und somit positiver Höflichkeit im Sinne von Nähe und Solidarität), von anderen jedoch als potenziell verletzend oder respektlos gewertet wird. Dies verweist auf die Notwendigkeit, Höflichkeit als kontextabhängige und kulturrelativistische Kategorie zu begreifen – im Gegensatz zur postulierten Universalität in der ursprünglichen Höflichkeitstheorie.

8.3 Implikationen für Forschung und Lehre

Die Ergebnisse zeigen deutlich, dass interkulturelle Unterschiede in der Höflichkeitswahrnehmung zu kommunikativen Barrieren führen können – auch innerhalb eines scheinbar homogenen Studiengangs wie der Germanistik. Daraus ergeben sich mehrere didaktische und wissenschaftliche Konsequenzen:

- In der Fremdsprachendidaktik sollte interkulturelle pragmatische Kompetenz gezielt gefördert werden, z. B. durch simulationsbasierte Übungen, kontrastive Diskursanalysen und Reflexionsaufgaben.
- In der Forschung sollten Modelle wie die Höflichkeitstheorie durch mehrdimensionale, kulturspezifische Erweiterungen ergänzt werden, um der Vielfalt kommunikativer Normen besser gerecht zu werden (vgl. Locher & Watts, 2005).
- Die Ergebnisse legen nahe, dass mehrsprachige Studierende mit minoritärem Hintergrund spezifische kommunikative Herausforderungen erleben, die bislang in der universitären Lehre oft unterbeleuchtet bleiben.

8.4 Limitationen der Studie

Trotz der aufschlussreichen Befunde weist die Studie gewisse Einschränkungen auf. Zum einen ist die Stichprobengröße begrenzt und nicht vollständig repräsentativ für alle Studierenden Nordmazedoniens. Zum anderen basiert die Bewertung kommunikativer Situationen auf hypothetischen Szenarien – deren Rezeption kann von realen Sprechsituationen abweichen.

Zukünftige Studien könnten konkrete Interaktionsdaten (z. B.: Gesprächsanalysen oder Tagebuchaufzeichnungen) einbeziehen und weitere Gruppen (z. B.: Romani-Studierende oder internationale Studierende) in die Analyse einbeziehen.

9. Fazit

Die vorliegende Studie hat gezeigt, dass die Wahrnehmung und Definition von Höflichkeit stark von der ethnischen und sprachlichen Zugehörigkeit der Sprecher:innen beeinflusst wird. Anhand einer kombinierten methodischen Herangehensweise – bestehend aus quantitativer Fragebogenerhebung und qualitativer Auswertung offener Antworten – konnten signifikante Unterschiede in der Bewertung kommunikativer Formen festgestellt werden.

Besonders deutlich wurde, dass Studierende mit albanischer Herkunft stärkere Präferenzen für indirekte, negativ-höfliche Ausdrucksweisen zeigen, während mazedonische Studierende Direktheit eher als neutral oder sogar positiv bewerten. Diese Befunde stützen die Hypothesen und bestätigen die Relevanz kulturell geprägter Normen für den interaktionalen Umgang mit Höflichkeit.

Die Ergebnisse werfen zugleich ein kritisches Licht auf universalistische Höflichkeitsmodelle wie jenes von Brown und Levinson (1987), da sie

verdeutlichen, dass Konzepte wie „Gesicht“, Direktheit oder Mitgefühl nicht kulturunabhängig interpretiert werden können. Vielmehr ist Höflichkeit als sozial konstruiertes, kontextabhängiges Phänomen zu verstehen, das in interkulturellen Begegnungen besondere Aufmerksamkeit erfordert.

Für die Praxis – insbesondere im Bereich der Sprachlehre – ergibt sich daraus die Notwendigkeit, interkulturelle pragmatische Kompetenz systematisch zu fördern. Dies bedeutet, Lernende für kommunikative Missverständnisse zu sensibilisieren, ihnen metapragmatisches Wissen zu vermitteln und Raum für Reflexion über eigene und fremde Normen zu schaffen. Abschließend lässt sich festhalten, dass die Erforschung interkultureller Höflichkeitswahrnehmung nicht nur ein vertieftes Verständnis kommunikativer Dynamiken ermöglicht, sondern auch konkrete Beiträge zur Gestaltung diskriminierungssensibler und inklusiver Bildungsräume leisten kann.

Literaturverzeichnis:

- [1]. **Ankenbrand, K.**, (2013): Höflichkeit im Wandel. Heidelberg: Universität Heidelberg.
- [2]. **Bayraktaroğlu, A., & Sifianou, M.** (Eds.). (2001). *Linguistic politeness across boundaries: The case of Greek and Turkish*. Amsterdam: John Benjamins.
- [3]. **Brown, P., & Levinson, S. C.** (1987). *Politeness: Some universals in language usage* (2nd ed.). Cambridge: Cambridge University Press.
- [4]. **Eelen, G.** (2001). *A critique of politeness theories*. Manchester: St. Jerome Publishing.
- [5]. **Haferland, H. & Paul, I.** (1996): Eine Theorie der Höflichkeit. In: Haferland, Harald & Paul, Ingwer (Hrsg.): Höflichkeit. Oldenburg: Red. OBST, 7–69.
- [6]. **Kádár, D. Z., & Haugh, M.** (2013). *Understanding politeness*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139382717>
- [7]. **Kecskes, I.** (2014). *Intercultural pragmatics*. Oxford: Oxford University Press.
- [8]. **Locher, M. A., & Watts, R. J.** (2005). Politeness theory and relational work. *Journal of Politeness Research*, 1(1), 9–33. <https://doi.org/10.1515/jplr.2005.1.1.9>
- [9]. **Searle, John R.** (1982): *Ausdruck und Bedeutung. Untersuchungen zur Sprechakttheorie*. Frankfurt am Main: Suhrkamp.
- [10]. **Scollon, R., & Scollon, S. W.** (2001). *Intercultural Communication: A Discourse Approach* (2nd ed.). Oxford: Blackwell.
- [11]. **Watts, R. J.** (2003). *Politeness*. Cambridge: Cambridge University Press.

BUCHBESPRECHUNG

AMELA ĆURKOVIĆ / ALMINA LISIČIĆ-HEDŽIĆ: ERFOLGREICHE
GESCHÄFTS-KORRESPONDENZ AUF DEUTSCH, LEHR- UND ÜBUNGSBUCH

BOOK REVIEW

AMELA ĆURKOVIĆ / ALMINA LISIČIĆ-HEDŽIĆ: SUCCESSFUL BUSINESS
CORRESPONDENCE IN GERMAN, TEXT- AND EXERCISEBOOK

Andrea Hamburg

Abteilung für Internationale Handelsbeziehungen, Wirtschaftswissenschaftliche
Fakultät, Universität von Oradea, Rumänien

ahamburg@uoradea.ro



Buchbesprechung:

Erfolgreiche Geschäfts- korrespondenz auf Deutsch, Lehr- und Übungsbuch

Amela Ćurković / Almina Lisičić-
Hedžić

Selbstverlag, Baška Voda, 2024

ISBN 978-953-46279-0-7

Die Reihe der gut durchdachten, systematischen Lehrmaterialien zur deutschen Sprache für spezifische Ziele wurde im Oktober 2024 mit dem Lehrwerk von Amela Ćurković und Almina Lisičić-Hedžić *Erfolgreiche Geschäftskorrespondenz auf Deutsch, Lehr- und Übungsbuch*, 152 Seiten, im Selbstverlag erschienen, bereichert. Das auf ResearchGate kostenlos erreichbares Buch bedient nicht nur den akademischen Bereich, wo laut des Vorworts Germanistikstudierende ihre Lehramtsausbildung mit Kompetenzbildung in der Geschäftskommunikation ergänzen, sondern auch den Arbeitsmarkt, wenn es um schriftliche berufliche Kommunikation geht.

Das kompakte Lehrwerk, Lehr- und Arbeitsbuch in einem, kombiniert Theorie und Praxis im ausgeglichenen Maße und sorgt durch geistreiche Veranschaulichungen, wie die Bilder auf den Seiten 5-6, um eine bessere Verständigung und Festigung des Gelernten. Es ist in 13 Kapiteln gegliedert und wird von einem Vorwort, Lösungsschlüssel für die Übungen, Glossar der wesentlichsten Terminologie und einer Liste der in der Geschäfts-korrespondenz verwendeten Verben mit Präposition mitsamt Beispielsätzen abgerundet. Jeder Abschnitt endet mit einer Zusammenfassung und bewertenden Fragen oder Übungen zum vorher dargelegten Sujet. Die einleitenden Überlegungen zur Etymologie der Wörter *korrespondieren/Korrespondent/Korrespondenz* und die thematische Auflistung der im Buch behandelten Briefftyps werden im zweiten Abschnitt von Ratschlägen, Allgemeinregeln zur gelungenen und effizienten Korrespondenz und Geschäftskommunikation gefolgt. Dabei sollte man auf solche stilistischen und formellen Aspekte achten, wie Einfachheit, Gliederung des Briefes, Kürze/Prägnanz und Mittel zwecks Stimulierung des positiven Allgemeinbildes. Denn:

Ein Geschäftsbrief muss sprachlich so optimiert sein, dass er für die Adressaten leserlich, lesbar und verständlich ist, damit alle beabsichtigten Ziele erreicht werden können. Nur wenn man verständlich schreibt, wird man auch ernst genommen und kann andere Menschen erreichen und überzeugen. (S. 10)

Da Abkürzungen in der deutschen Sprache im Allgemeinen und in der Geschäftskorrespondenz umso mehr üblich sind, bieten die Autorinnen im dritten Kapitel eine umfangreiche Liste der in der beruflichen Kommunikation meistverwendeten deutschen und internationalen (Englisch, Französisch und Latein) Abkürzungen. Die ausführliche Analyse der Form und Bestandteile des Geschäftsbriefes wird im nächsten Abschnitt durch mehrfache Formatvorlagen ergänzt und didaktisch veranschaulicht. Abschnitt 5 stellt die drei großen thematischen Felder vor, nämlich ordnungsmäßige Vertragsabwicklung, Störungen im Vertragsverlauf und Briefe zu besonderen Anlässen, denen die Musterbriefe in den nachfolgenden Kapiteln 6-12 zuzuordnen sind. Das hilft den Studierenden bei der Systematisierung und besseren Festigung des Lehrstoffes.

Während die Briefarten in den ersten zwei Themenkreisen (Abschnitt 6-10) mit der tatsächlichen Geschäftsabwicklung im Zusammenhang stehen, bringt das dritte Themenfeld (Abschnitt 11,12) Schreibformate auf, die nicht mit den unmittelbaren geschäftlichen Angelegenheiten zu tun haben. Sie sind Teile einer Bewerbung oder Höflichkeitsschreiben, wie Glückwünsche, Gratulation, Einladungen, Danksagungen, Zusagen, Absagen, Kondolenzbriefe, die in den Geschäftsbeziehungen den guten Ton angeben.

Um die Aufgabe des Briefschreibers zu erleichtern, haben die Autorinnen Textbausteine für alle Briefarten, sei es Anfrage, Angebot, Bestätigung, Ablehnung usw. in das Lehrwerk integriert. Als weiterer Pluspunkt ist es zu verzeichnen, dass in den theoretischen, deskriptiven Textstellen nicht nur Synonyme der verwendeten Fachtermini angegeben werden, sondern sogar auf juristische Unterschiede unter ihnen und daher auf Nuancen eingegangen wird.

Die im Abschnitt 11 – Bewerbungsportfolio – aufgeführten Informationen, Ratschläge für eine erfolgreiche Bewerbung, Links zu weiteren Ratgebern und Formatvorlagen für Lebensläufe bzw. Textbausteine für Bewerbungsschreiben sind weitere Beweise eines arbeitsmarktorientierten Ausbildungsprozesses im akademischen Bereich.

Das abschließende Kapitel widmen die Autorinnen der geschäftlichen Kommunikation per E-Mail und betonen dabei die Gültigkeit der früher dargelegten formellen und inhaltlichen Kriterien unabhängig von dem Kommunikationsweg. Außerdem bieten sie nützliche Informationen angesichts solcher administrativen Aspekte, wie einer ernst zu nehmenden E-Mail-Adresse, CC- bzw. BCC-Adresse, des Betreffs oder Sendezeitpunktes.

Dank seinem umfangreichen Charakter und dem guten didaktischen Aufbau macht sich das Lehrwerk unbestrittene Verdienste. Jedoch sind in der Zukunft kleine Unzulänglichkeiten, wie Tippfehler (S. 10, Fußnoten, S. 24, 38, 40, 75, 78, 112, 119, 122, 151), grammatische oder stilistische Unstimmigkeiten (S. 13, 33, 75, 104, 109, 114, 115, 144), inhaltliche Verwirrungen (S. 33, 84., Abschn. 10.4., S. 123, Abschn. 12.3., S. 127, Zusammenfassung, S. 147, Tabelle 5) und unklare Formulierungen (S. 74, Übung 26) zu beheben.

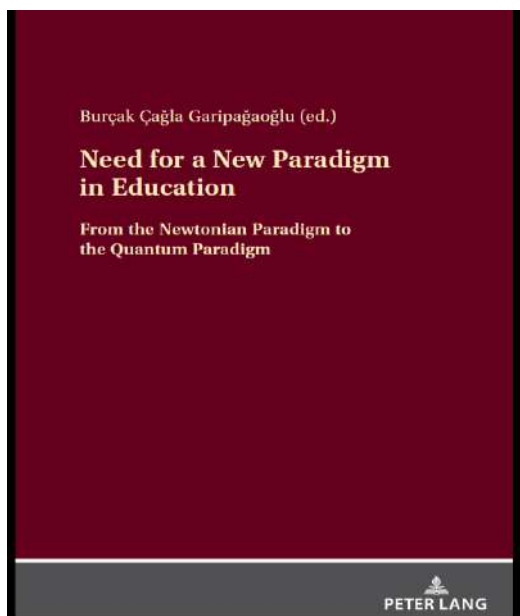
BOOK REVIEW

BURÇAK ÇAĞLA GARIPAĞAOĞLU (Ed.) NEED FOR A NEW PARADIGM IN EDUCATION. FROM THE NEWTONIAN PARADIGM TO THE QUANTUM PARADIGM

Andrea Hamburg

Department of International Business, Faculty of Economic Sciences, University of Oradea, Romania

ahamburg@uoradea.ro



Reviewed work:

Need for a New Paradigm in Education. From the Newtonian Paradigm to the Quantum Paradigm

Burçak Çağla Garipağaoğlu (editor)

Peter Lang Publishing House, Berlin, 2025

ISBN 978-3-631-91180-8 (Print)

E-ISBN 978-3-631-91181-5 (E- PDF)

E-ISBN 978-3-631-93074-8 (E- PUB)

The 2025 release of Peter Lang Publishing House *Need For a New Paradigm in Education* is a collective volume edited by Burçak Çağla Garipağaoğlu subsuming 11 chapters threaded on the thematic string: past, present and future of education, proposing viable perspectives for keeping pace with rapid change in all segments of life.

In the first part, entitled *Squeezed Between the two Calls*, Burçak Çağla Garipağaoğlu reflects, in two separate contributions (chapter 1 and 2), upon the present state of education and the need to change from the Newtonian paradigm – a reductionist view upon the existence of a single universal truth – still dominating this field to a new learner-centred perspective called the quantum paradigm. Paradoxically, the Newtonian paradigm ensuring a larger accessibility to education does not offer functional competences on a large scale, an overwhelming percentage of graduates being functional illiterates. Although this shift would be absolutely necessary for a better fitting of graduates to the demands and needs of

the labour market, there is a set of reasons and misconceptions hindering this change. A concise list of them would include: the innovational potential being undermined by exhausting everyday routine, the universal view of one-fits-all, sticking to familiar formulas and being reluctant to change or experiment, the risks and costs this experiment and change would imply, the values and standards that must currently be met, which experimentation might jeopardize and the lack of support for innovation on behalf of value networks. According to the author this latter one should be changed first to make shift possible. "In a nutshell, to develop new models for Quantum age, new value networks that can truly prioritize distinctive value propositions must be created (...)" (p. 20)

In her view, education guided by the Newtonian paradigm is set on control and supervision, as it considers learners and teachers to be lazy, incapable of autonomous learning and work. But 21st century education doesn't need control and restricting into boundaries, it needs transdisciplinarity, collaboration and fostering innovation and problem solving. It doesn't need just reforms but a totally new system guided by the principles of "Effective Thinking, Effective Action, Effective Relationships and Effective Accomplishment" (Prensky 2014, p. 13 apud Garipağaoğlu, p. 32) and these skills to be taught not indirectly as before, but in a direct way.

Being in agreement with her, education indeed needs a drastic change but as the willingness to learn on behalf of the students proportionally decreased with the large scale democratisation of education (the elimination of entrance exams to university) – at least practitioners in Romania might agree with that – the learner-centredness alone staying at the base of the new paradigm would not solve the problem.

The second part of the volume, also including two chapters, is dedicated to the thoughts of K. Selçuk Tuzcuoğlu upon *A New Social Contract for Education* handling schools as entities functioning according to economic and business models and having value networks built by teachers, parents, students, policymakers, stakeholders, the community they exist in. In this sense, the author tries to decipher and analyse business models according to which educational institutions operate in order to achieve their objectives (e.g., public/private, online, international schools, alternative ones like Montessori etc.) and highlight the funding sources they rely on (state funding, tuition fees, donations, fundraising and so on). To ensure their financial stability and sustainability schools have to manage their finances well, taking into consideration various aspects and factors of a good budget management and continuously running a cost benefit analysis when planning curriculum change, starting new programs, renovation works, investments in technology, staff development etc.

The value networks around education differ from traditional educational settings by decentralisation, emphasis laid on collaboration, diversity of and change in knowledge sources, assessment and feedback, flexibility and adaptability by co-creating education and knowledge and they "offer a more dynamic, collaborative and student-centred approach to learning, fostering a more inclusive and responsive educational experience." (p. 68).

The third part of the book, *Re-Imagining New Pillars of Education*, proposes potential constituent elements for this new type of education. According to the title

of chapter 5, *New Pedagogies: Pedagogies of Empowerment in the Context of Cancel Culture, Social Media and Inclusive Education*, the author Seda Gökçe Turan is supposed to reflect upon new pedagogical approaches to offer tools for facing the challenges of today's reality but instead of this, only the background characteristics and effects of cancel culture are discussed largely. The only solution offered is inclusive education which, in her opinion, can help a lot against the above mentioned digital behaviour and the harms it might produce. Unfortunately the bad English resulting in hard-to-understand passages makes this chapter difficult to read and interpret. Lacking a solid logical structure and presenting even fragmentary parts (p. 97), chapter 5 raises not only linguistic but content-related concerns as well.

As supporting a positive school climate would be part of the new paradigm for education, Bülent Sezgin expresses in the next chapter his conviction that art and game-based learning could contribute to its realisation and personally proposes to analyse the extent to which these tools would contribute to the development of open-mindedness and critical thinking with students. Still, the research questions raised remain just theoretical inquiries without practical insights offered by a concrete research work.

According to its title, *A New Mindset in Teacher Education: A Case Study from Turkey*, chapter 7 seems to finally make the shift from theoretical considerations to practical research. Analysing and synthesising the recommendations of different forums for 21st century skills to be developed, Burcu Erdemir concludes "In the 21st century, students need to develop thinking skills, content knowledge and social-emotional competencies to exist in complex living and working environments." (p. 123). Accordingly, these skills need first to be developed with pre- and in-service teachers to be further on transferred to the next generation. Resorting to the document analysis method the author scrutinises to what extent present teacher training in Turkey is in line with 21st century competences to be formed and what elements need improvement to cope with these requirements. Her recommendations in this respect include more specific, clearcut formulations in guidelines and curricula, overtaking good practices from international models and a previous ability testing of teacher trainee candidates.

Chapter 8 is dedicated to considerations about new realities in present and future adult education embracing concepts like lifelong learning, "the third age" learners, referring to retired adults, or gerontology. Education in this segment, as well, has to be tailored to the needs of the participants guided mainly by inner motivation for staying active and keeping pace with changes in the world. The authors, Duygu Öztekin and Yelkin Diker Coşkun, present in this sense different education models starting from the so-called Community of Inquiry (COI), having as main elements social, cognitive and teaching presence increasing the sense of belonging, over ASIE up to CIDS (collaborative instructional design system). The following steps are characteristic for ASIE: analysing the learners' profiles, after which instructional strategies are implemented and evaluated for the sake of revision, improvement, hence the above mentioned acronym. Digitalisation in the form of online education, with its latest achievement being AI and self-regulation are good allies of participants in adult education. A special facet of adult education gets contoured through migration reaching its peaks in the last decade related to which, according

to the authors, education no longer serves only personal satisfaction, it is "a human right, it is a globalization matter" (p.149).

Burcu Erdemir signs a second contribution to this volume, *Accountability-Based Performance in Education (A Case from Turkey)* – chapter 9, in which, by means of a non-systematic literature review, she reflects upon the legal, administrative, professional and result-oriented responsibility for reaching performance in Turkish education highlighting the importance of rigorous inspections in this sense and giving feedback for the sake of improvements. As there were deficiencies noticed at all levels, there is enough space for betterment in terms of policy building, support for the professional development of teachers, cooperation among stakeholders, strategic planning on behalf of educational institutions implementing transparency, responsibility and objectivity during the inspection – this latter one assured by independent inspectors – and coopting teachers for decision-making.

Chapter 10 is dedicated to the issue of language teacher education focusing upon two factors contributing to teacher candidates' professional development, namely self-reflection upon their activity and encouraging teachers' research for creating a better link between theory and practice. The authors, Evrim Eveyik-Aydın and Ece Genç-Yöntem, also propose some reflective tools and methods appropriate for language teacher education and ways for implementing them. Reflective journals upon trainee teachers' experiences, observations during teaching practice, self- and peer evaluation reports, audio/video recorded self-monitoring, action research, reflections upon unforeseen events in class, case analysis are some examples from their list.

In the concluding chapter 11, Berna Güloğlu underlines the role of school counselling in developing adaptability to changes (cognitive flexibility) and improving students' self-regulation (control of emotions, avoiding inadequate behaviour) to promote mental health, well-being and social acceptance.

Despite the numerous accuracy issues (mistypings, omissions, repetitions, grammar and stylistic aspects, hardly intelligible passages) the volume still offers valuable insights into the problem of renewing education, as well as perspectives for the future.

BOOK REVIEW MONICA ARIANA SIM'S ALLEGORIC APPROACH TO ECONOMICS

Ioana Claudia Horea

Department of International Business, Faculty of Economic Sciences, University of Oradea, Oradea, Romania
ioanahorea@gmail.com



Reviewed work:

Economics: An Allegorical Journey

Author: Monica Ariana Sim

Published by: JustFiction! Edition, Dodo Books Odian Ocean Ltd. and OmniScriptum S.R.L. publishing group, 120 High Road, East Finchley, London, N2 9ED, United Kingdom.

ISBN-10: 6208836913

ISBN-13: 978-620-8-83691-7

EAN: 9786208836917

Published: 15.05.2025

108 pages

The back cover of the volume offers a concise yet insightful overview of the author, Monica Ariana Sim, whose professional background clarifies the pedagogical orientation of the book. A lecturer at the Faculty of Economic Sciences of the University of Oradea, with studies in Letters, European Economic Relations, and a PhD in Philology, Sim brings together her expertise in language, communication, and economics to craft a work that is both informative and engaging. Her stated intention is to guide readers through the complexities of economic concepts by means of allegorical storytelling, allowing abstract notions to be internalized more intuitively. This multidisciplinary foundation, combined with her long-standing interest in Business English and communication practices, shapes the book's accessible narrative style and its focus on clarity, creativity, and conceptual relevance. The result is a volume that reflects the author's commitment to making economics not only understandable, but also appealing and meaningful to a broad audience.

Thus, Monica Ariana Sim's volume *Economics: An Allegorical Journey* presents a highly accessible and engaging didactic journey into the world of economics and

related business fields. Designed as a collection of allegorical narratives, the book guides readers – particularly young learners, students in introductory economics, or non-specialists – through fundamental concepts of economics, management, marketing, accounting, trade, tourism, and business organization. Through a series of interconnected stories, each centered on a young protagonist confronted with an economic dilemma, the author succeeds in transforming abstract theoretical notions into vivid, imaginative, and memorable scenarios. We can note that the main characters, whose names appear in the titles of chapters, are actually family members. The heroes' portrayals are subtly inspired by real-life figures.

The structure of the book is simple, clear, and well balanced. Following a short acknowledgement section and an illustrative table of contents, the volume unfolds through twelve allegorical tales, each dedicated to a specific economic domain: international business, management, marketing, accounting, finance, tourism, trade, business organizations, and more. These short stories range from six to ten pages, and each functions as a standalone explanatory narrative while also contributing to a coherent conceptual path. The volume concludes with a glossary that succinctly defines key terms, reinforcing the educational purpose of the book.

The opening story, "Christian and the Fascinating Tale of Economics," sets the tone by introducing economic branches as personified characters – the six daughters of Oeconomicus. Globara, Managos, Marketa, Tourista, Finara, and Accountia each embody a vital component of the economic system. Monica Sim's allegorical approach highlights the interdependence of these domains, subtly conveying the idea that economic prosperity is the result of coordinated contribution rather than hierarchical precedence. The didactic message is explicit: no single sector guarantees economic balance; instead, synergy among all fields ensures sustainable development.

"The prosperity of Ekonos depends on the blend of your talents and dedication." (p.15)

This sentence encapsulates one of the book's fundamental messages: economic systems thrive through cooperation among diverse branches. Rather than isolating economic sectors, the author emphasizes interdependence — a theme repeated in later stories on management, marketing, accounting, and trade. The quote can serve as a key example of how allegory reinforces real economic principles.

The subsequent tale, "The Story of Andreas and His Quest for Success in International Business," offers a narrative exploration of cultural awareness, regulatory frameworks, innovation, and ethics in global trade. The protagonist encounters real-world challenges such as negotiation across cultural contexts, interpreting trade agreements, or understanding technological transformations in logistics. The story's allegorical world becomes a simplified yet faithful reflection of contemporary international business environments, illustrating how intercultural competence, adaptability, and ethical awareness contribute to professional success.

"It wasn't about transactions, but about forming connections rooted in understanding, admiration, and a shared love for the diverse fabric of human existence." (p.21)

This excerpt expresses the ethical and intercultural dimension of international

business. It offers an excellent illustration of the book's intention to humanize economic relations and highlight cultural awareness, empathy, and communication as essential components of the global economy. It is a powerful line showing the moral underpinnings of commerce.

Language learning is addressed in two interconnected stories, "The Story of Sofi and The Language Garden" and its sequel "The Story of Sofi and Business English in Search for Prosperity." Through the character Sofi and her symbolic journey, the author depicts vocabulary acquisition, grammar structuring, and communicative practice as spatial explorations within a linguistic landscape. The sequel expands this journey into the realm of Business English, showing the relevance of communication competencies – negotiation, presentation, correspondence – for economic activities. These chapters demonstrate the author's pedagogical sensitivity in linking linguistic proficiency with economic and professional advancement.

"Communication is the spine of business." (p.39)

Short, memorable, and pedagogically impactful, this quote distills the rationale behind Business English and professional communication. It offers a clear example of how the allegorical structure uses concise maxims to reinforce essential business competencies. The metaphor of the "spine" signals structure, support, and centrality — perfectly suited to business communication.

Marketing is explored allegorically in "Rareş and the Kingdom of Prosperity. A Story of Marketing," where the protagonist learns about product design, pricing, promotion, and placement through a fantasy-like competition. Sim emphasizes the strategic nature of marketing decisions and the need to understand consumer perception, a principle reinforced through the metaphor of "glowing cookies" whose features and pricing appeal to festival-goers. The structure of the tale aligns with marketing's traditional four Ps, helping readers internalize the concepts intuitively.

"Victor's Journey into The Land of Wealth – The Tale of the Golden Thread" offers perhaps the most complex allegory, engaging with monetary circulation, value, resource distribution, and the dangers of hoarding. The Golden Thread, symbolizing currency, is presented as a fragile yet vital connective element in society. Through Victor's trials and confrontation with Avarus, readers understand how liquidity, transparency, and trust sustain economic stability, whereas accumulation without circulation destabilizes markets and communities. The story functions as an accessible metaphor of inflationary pressure, scarcity, and the social dimension of money.

"Alexandra and The Trading Tradition – The Barter System" shows how, in the city of Metropolis, Alexandra's curiosity about pre-monetary exchange leads her to test the value of goods and services directly, learning to assess worth through effort, materials, and originality. As the book crisply states,

"Value transcends currency; it involves recognizing and valuing goods and services." (p.60).

This quotation captures the conceptual heart of the barter story. By shifting the focus away from money toward intrinsic worth, effort, craftsmanship, and community, the author illustrates a foundational economic lesson in an accessible

way. It is one of the clearest pedagogical statements in the text. This succinct maxim sums up the moral of the chapter: economic value is not only a question of money but also of social recognition, craftsmanship and reciprocal trust — an approach that renders the barter episode both pedagogically clear and ethically resonant.

Accounting becomes the center of the narrative in “Vlad and the Fascinating World of Numbers – Accounting,” where everyday financial literacy – balancing income and expenses, budgeting, savings – is introduced through children’s activities. The account of Vlad’s growth from curious observer to community advisor illustrates the practical relevance of accounting for personal development, family financial planning, and communal well-being.

Management principles are addressed in “Vlăduț and the Great Jungle Expedition – A Management Exercise,” a story that foregrounds planning, role allocation, teamwork, decision-making, and leadership through an adventurous quest. The allegory mirrors the key functions of management: organizing, coordinating, leading, and controlling. The tale exemplifies how strategic thinking and collective responsibility enable successful outcomes.

Tourism, business organizations, and trade are also represented through distinct narratives that maintain the same allegorical and pedagogical framework. In “Ariana’s Journey in the Land of Tourism,” the protagonist explores different tourism sectors – heritage, adventure, hospitality – guided by symbolic guardians.

“Delia and the Kingdom of Trade: An Allegory of Business Organizations” introduces business structures such as sole proprietorships, partnerships, corporations, and cooperatives, illustrating advantages, limitations, and operational dynamics in a comprehensible manner.

The volume concludes with a substantial “Glossary” section, arranged alphabetically and enriched with etymological explanations that clarify both character names and the symbolic locations encountered throughout the allegories. Far from being a simple list of definitions, this glossary reinforces the pedagogical aims of the book by linking each fictional element to its linguistic and conceptual origins. For instance, characters such as *Accountia*, *Avarus*, *Adventura* or *Tourista* are traced back to Latin or Greek roots, offering readers an intuitive connection between narrative roles and the economic or managerial principles they personify. Likewise, places such as *Agora*, *Ekonos*, *Peregrinia*, *Metropolis* or *The Golden Forest* are explained through their historical and linguistic backgrounds, grounding the imaginative world in recognizable economic and cultural terminology. This final section thus acts as an interpretive key to the allegories, supporting readers in consolidating their understanding of the concepts woven throughout the stories.

One of the distinctive strengths of the volume lies in its coherent narrative voice and its consistent pedagogical strategy. Monica Sim relies on symbolism, anthropomorphism, and fantasy to translate theoretical content into experiential learning. The stories are written in accessible language, without technical jargon,

yet they remain faithful to the conceptual essence of economics and business studies. Each narrative incorporates elements of moral education – collaboration, curiosity, responsibility, respect, and ethical behavior – making the book suitable for younger learners and early university students alike.

From a critical perspective, the allegorical approach, while engaging, may occasionally simplify complex processes, offering idealized solutions to economic dilemmas. However, this simplification is inherent to the genre and serves its didactic purpose. The book does not aim to replace analytical textbooks, but rather to introduce concepts in a creative, memorable, and affectively appealing manner. The stories may also inspire interdisciplinary use, bridging economics with literature, creative writing, and pedagogy.

A particularly noteworthy element of the volume is the set of outstanding illustrations created by Delia Tirla, whose artistic contribution enhances the book's allegorical depth. The drawings are not merely decorative; they function as visual anchors that support the conceptual understanding of each story. Whether depicting characters such as Oeconomicus and his symbolic daughters, the enchanted marketplaces, or the diverse landscapes of Peregrinia, the illustrations clarify abstract economic notions through vivid imagery. Their expressive style and careful attention to detail make the narratives more accessible, especially for younger readers or visual learners, while simultaneously enriching the aesthetic quality of the book. By aligning each drawing closely with the thematic focus of the corresponding chapter, the illustrator succeeds in reinforcing the pedagogical purpose of the volume and transforming economic concepts into memorable visual experiences.

In conclusion, *An Allegoric Approach to Economics* stands out as an imaginative and effective educational resource. Monica Ariana Sim skillfully combines narrative creativity with conceptual clarity, offering readers a fresh perspective on economic literacy. The volume is highly valuable for teachers seeking alternative didactic tools, students approaching economics for the first time, and readers interested in understanding fundamental economic principles through engaging storytelling. The book succeeds in demonstrating that economics, often perceived as abstract or technical, can be understood, appreciated, and even enjoyed through the power of narrative imagination.

BOOK REVIEW

ON *PROMOTING DIVERSITY, ETHICS, AND LEADERSHIP IN BUSINESS ENGLISH: STRATEGIES FOR EFFECTIVE COMMUNICATION*

Kathleen Stein-Smith

Fairleigh Dickinson University, Metropolitan Campus - Teaneck, NJ - USA
kathysteinsmith@gmail.com



Monica Ariana Sim (coord.)

Promoting Diversity, Ethics, and Leadership in Business English

Strategies for Effective Communication



Reviewed work:

Promoting Diversity, Ethics, and
Leadership in Business English:
Strategies for Effective Communication

Edited by:

Monica Ariana Sim

Chapter authors:

Ioana Claudia Horea, Associate
Professor, PhD
Anamaria Mirabela Pop, Associate
Professor, PhD
Cristina Laura Abrudan, Lecturer, PhD
Monica Ariana Sim, Lecturer, PhD

Publisher:

LAP Lambert Academic Publishing

Place and date of publication:

London, United Kingdom, June 2025

ISBN: 978-620-8-44923-0-6

***Promoting Diversity, Ethics, and Leadership in Business English: Strategies for Effective Communication.* Ioana Horea, PhD; Mirabela Pop, PhD; Cristina Abrudan, PhD; Monica Sim, PhD**

While diversity, ethics, leadership, and business English are each significant themes in society and in education, this intriguing academic monograph effectively addresses all of them within a learner-oriented interdisciplinary context, filling a gap in the existing literature. Beyond an evocative and eye-catching cover image, the authors approach complex concepts through text and learning activities that are both appealing and challenging to a wide range of learners and learning styles.

Overall, the sections offer both reflective texts on diversity, ethics, and leadership, accompanied by learning activities and questions requiring readers and learners to

reflect on relevant concepts while becoming acquainted with and mastering specific business English vocabulary, grammatical structures, and perspectives.

The Foreword sets the stage for the book sections, explicitly stating the core concepts to be discussed, the reasons for their inclusion, and their relationship to global learners seeking to clearly examine and discuss these concepts in a learned second language.

“This resource aims to be a comprehensive guide to understanding and applying inclusive leadership principles in the workplace and a valuable tool for teaching English for Specific Purposes (ESP). It equips learners with the skills and knowledge they need to navigate the evolving global business environment. This material addresses the complexities of diversity, equity, and inclusion and provides the essential vocabulary, concepts, and practices required for professionals to succeed in a multicultural and dynamic world.” (p.5)

The first unit, “Inclusive Leadership Skills,” by Ioana Horea, addresses the overarching theme of inclusivity – in our schools, the workplace, and our society, through an impressive array of learning activities interspersed with insightful texts. (pp.8-30)

The nature of inclusivity is highlighted by comprehensive reading, followed by vocabulary and reinforcement activities. The comprehensive reading passages transcend mere understanding and business English to empower learners to develop a deeper understanding of both the issues and the language to examine and discuss them.

“Inclusive leaders demonstrate courage in two ways. First, they aren’t afraid to challenge entrenched organizational attitudes and practices that yield homogeneity, even if their recommendations are politically or culturally unpopular. Nor are they afraid to display humility by acknowledging their personal limitations and seeking contributions from others to overcome them.” (p.10)

The second unit, “Diversity and Equity in Leadership,” by Monica Sim, examines concepts of diversity and equity in how we lead, addressing the differences and complementarity of the concepts or equality and equity, significant for both the leader and the business language learner. (pp.31-50)

The third unit, “Legal Aspects of Workplace Diversity,” by Cristina Abrudan addresses the always present and important legal rights and protections of all in the workplace. (pp.51-72)

The fourth unit, “Leadership Styles in Diverse Environments,” by Mirabela Pop, examines the role and significance of different leadership styles in encouraging and supporting diversity in the workplace. (pp.73-92)

The fifth, and final unit, “Implementing Diversity, Equity, and Inclusion in the Workplace,” a road map to achieving sustainable diversity, equity, and inclusion in the workplace. (pp.93-112)

The volume also includes a section providing answers to the exercises proposed throughout the units, enabling readers to verify and consolidate their understanding. (pp.113-125) The book concludes with a bibliography that brings together the main works relevant to the topics addressed. (pp.125-127)

The strengths of this monograph include its theme of diversity, equity, and leadership in the workplace, within the context of business English education. These are important themes for us all, and the question-and-answer format encourages student reflection and learning on all these themes within the framework of a learned second language. In addition, while each chapter offers a unique voice and a different perspective, they are all excellent and in alignment with the overarching themes, as is the Foreword. The learning activities, which form the central core of each chapter, provide opportunities for both different levels of language learning and for different language skills.

A subsequent volume, addressing the development of relevant action plans and strategic plans, can easily be envisioned and would answer a real need in the literature and in our global workplace.

This monograph, addressing complex and contemporary issues, and offering learning resources for educators to use and to build upon, is an essential addition to academic library collections, as well as to department libraries and to the personal professional collections of business English and educational/business leadership educators everywhere. Above all, it is a resource for both educators and learners to expand the conversation on important workplace and societal issues and to develop the professional language skills to create sustainable diversity and equality in the workplace.