
МЕТОДИЧКИ ВИДИЦИ

Тематски број

CHALLENGES IN ENGLISH AS A MEDIUM OF
INSTRUCTION (EMI)



Нови Сад, 2025.

Методички видици
Тематски број

CHALLENGES IN ENGLISH AS A MEDIUM OF INSTRUCTION (EMI)

Главна и одговорна уредница
Др Биљана Радић-Бојанић,
Филозофски факултет Универзитета у Новом Саду

Уреднице тематског броја
Др Јагода Топалов, Филозофски факултет Универзитета у Новом Саду
Др Драгана Гак, Факултет техничких наука Универзитета у Новом Саду

Међународни уређивачки одбор

Др Раул Руис Сесилија, Универзитет у Гранади, Шпанија
Др Георги Ипсилантис, Аристотелов универзитет у Солуну, Грчка
Др Николае Станћу, Холандска пословна академија, Бреда-Дордрехт, Холандија
Др Емина Авдић, Универзитет „Св. Кирил и Методије”, Скопље,
Северна Македонија
Др Лудмила Браниште, Универзитет „Александру Јоан Куза”, Јаши, Румунија
Др Ирена Водопија-Крстановић, Свеучилиште у Ријеци, Хрватска
Др Марија Мијушковић, Универзитет Црне Горе, Црна Гора
Др Никола Добрић, Универзитет Алпен-Адрија, Клагенфурт, Аустрија
Др Сњежана Корен, Свеучилиште у Загребу, Хрватска
Др Марија Јуријевна Копиловскаја, Државни универзитет у Санкт Петербургу,
Руска Федерација
Др Предраг Мутавџић, Универзитет у Београду
Др Ранка Перић Ромић, Универзитет у Бањој Луци, Република Српска,
Босна и Херцеговина
Др Вишња Павичић Такач, Свеучилиште у Осијеку, Хрватска

Домаћи уређивачки одбор

Др Јелена Редли, Филозофски факултет Универзитета у Новом Саду, Србија
Др Николина Зобеница, Филозофски факултет Универзитета у Новом Саду, Србија
Др Марина Токин, Филозофски факултет Универзитета у Новом Саду, Србија
Др Наташа Ајџановић, Филозофски факултет Универзитета у Новом Саду, Србија
Др Сања Маричић Месаровић, Филозофски факултет Универзитета у Новом Саду,
Србија
Др Ивана Иванић, Филозофски факултет Универзитета у Новом Саду, Србија
Др Снежана Стојшин, Филозофски факултет Универзитета у Новом Саду, Србија
Др Биљана Лунгулов, Филозофски факултет Универзитета у Новом Саду, Србија

Часопис за методику филолошких и других друштвено-хуманистичких
предмета

МЕТОДИЧКИ ВИДИЦИ

Издаје

Филозофски факултет Нови Сад

Адреса

Др Зорана Ђинђића бр. 2, Нови Сад

www.ff.uns.ac.rs

metodicki.vidici@ff.uns.ac.rs

metodickividici.ff.uns.ac.rs

За издавача

Др Миливој Алановић, декан

Уредница

Др Биљана Радић-Бојанић

Секретарка редакције

Мр Милица Брацић

Лектура

Др Јагода Топалов (текстови и резимеи на енглеском)

Мр Милица Брацић (резимеи на српском)

Припрема за штампу

Игор Лекић

ISSN 2217-415X

ISSN 2334-7465 (Online)

Часопис Методички видици штампа се уз финансијску подршку
Министарства науке, технолошког развоја и иновација Републике Србије.

Methodical Perspectives

Special issue

CHALLENGES IN ENGLISH AS A MEDIUM OF INSTRUCTION (EMI)

Editor-in-chief

Biljana Radić-Bojanić, PhD, Faculty of Philosophy, University of Novi Sad

Editors of the Special Issue

Jagoda Topalov, PhD, Faculty of Philosophy, University of Novi Sad

Dragana Gak, PhD, Faculty of Technical Sciences, University of Novi Sad

International editorial board

Raul Ruiz Cecilia, PhD, University of Granada, Spain

George Ypsilandis, PhD, Aristotle University, Thessaloniki, Greece

Nicolae Stanciu, PhD, Netherlands Business Academy, Breda-Dordrecht, Netherlands

Emina Avdić, PhD, University St. Cyril and Methodius, Skoplje,
Republic of North Macedonia

Ludmila Braniște, PhD, University Alexandru Ioan Cuza, Iași, Romania

Irena Vodopija-Krstanović, PhD, University of Rijeka, Croatia

Marija Mijušković, PhD, Univerzitet Crne Gore, Crna Gora

Nikola Dobrić, PhD, Alpen-Adria Universität, Klagenfurt, Austria

Snježana Koren, PhD, University of Zagreb, Croatia

Maria Yurievna Kopylovskaya, PhD, Saint Petersburg State University,
Russian Federation

Predrag Mutavdžić, PhD, Faculty of Philology, University of Belgrade, Serbia

Ranka Perić Romić, PhD, University of Banja Luka, Republic Srpska,
Bosnia and Herzegovina

Višnja Pavičić Takač, PhD, University of Osijek, Croatia

Domestic editorial board

Jelena Redli, PhD, Faculty of Philosophy, University of Novi Sad, Serbia

Nikolina Zobenica, PhD, Faculty of Philosophy, University of Novi Sad, Serbia

Marina Tokin, PhD, Faculty of Philosophy, University of Novi Sad, Serbia

Nataša Ajdžanović, PhD, Faculty of Philosophy, University of Novi Sad, Serbia

Sanja Maričić Mesarović, PhD, Faculty of Philosophy, University of Novi Sad, Serbia

Ivana Ivanić, PhD, Faculty of Philosophy, University of Novi Sad, Serbia

Snežana Stojšin, PhD, Faculty of Philosophy, University of Novi Sad, Serbia

Biljana Lungulov, PhD, Faculty of Philosophy, University of Novi Sad, Serbia

Journal of teaching methodology of philological and social studies

Methodical Perspectives

Published by
Faculty of Philosophy, Novi Sad

Address
Dr Zorana Đinđića 2, 21000 Novi Sad
www.ff.uns.ac.rs

metodicki.vidici@ff.uns.ac.rs
metodickividici.ff.uns.ac.rs

Representing the Publisher
Milivoj Alanović, PhD, Dean

Editor-in-chief
Biljana Radić-Bojanić, PhD

Secretary of the journal
Milica Bracić

Proofreading
Jagoda Topalov, PhD (texts and summaries in English)
Milica Bracić (texts and summaries in Serbian)

Typeset
Igor Lekić

ISSN 2217-415X
ISSN 2334-7465 (Online)

Journal *Methodical Perspectives* is printed with the financial support of the Ministry of Science, Technological Development and Innovation of Republic of Serbia.

САДРЖАЈ

PREFACE	9
---------------	---

ПРЕДГОВОР	10
-----------------	----

Branka L. Milenković, Anica R. Radosavljević Krsmanović

INTERNATIONALISATION THROUGH ENGLISH AS A MEDIUM OF
INSTRUCTION (EMI): PERCEPTION OF EMI PRACTITIONERS

ИНТЕРНАЦИОНАЛИЗАЦИЈА КРОЗ ЕНГЛЕСКИ КАО ЈЕЗИК ВИСОКОШКОЛСКЕ НАСТАВЕ (ЕЈВИН): ПЕРЦЕПЦИЈА ЕЈВИН НАСТАВНИКА	11
---	----

Ivana D. Miškeljin, Ljiljana J. Knežević

THE IMPORTANCE OF CERTAIN VARIABLES FOR APPLYING FOR
INTERNATIONAL STUDENT MOBILITY PROGRAMS – STUDENTS’
PERCEPTIONS

VAŽNOST ODREĐENIH VARIJABLI ZA PRIJAVLJIVANJE ZA PROGRAME MEĐUNARODNE MOBILNOSTI – PERCEPCIJE STUDENATA	34
--	----

Jagoda P. Topalov

THE PARADOX OF PREPARATION: EMI TRAINING, NEED FRUSTRATION
AND TEACHER DEMOTIVATION IN HIGHER EDUCATION

PARADOKS PRIPREMLJENOSTI: OBUKA ZA UNIVERZITETSKU NASTAVU NA ENGLESKOM, FRUSTRACIJA POTREBA I DEMOTIVACIJA PROFESORA	51
--	----

Dejan M. Karavesović, Danica M. Jerotijević Tišma

LINGUISTIC ASPECTS OF EMI EDUCATOR TRAINING: INSIGHTS FROM
THE UNIVERSITY OF KRAGUJEVAC

ЈЕЗИЧКИ АСПЕКТИ ОБУКЕ УНИВЕРЗИТЕТСКИХ ПРЕДАВАЧА ЗА НАСТАВУ НА ЕНГЛЕСКОМ ЈЕЗИКУ: УВИДИ СА УНИВЕРЗИТЕТА У КРАГУЈЕВЦУ	69
--	----

Mirna M. Vidaković, Zora D. Trninić	
NAVIGATING THE EMI TRANSITION: EXPLORING THE PROFESSIONAL NEEDS OF TEACHERS IN HIGHER EDUCATION	
TRANZICIJA KA NASTAVI NA ENGLISKOM JEZIKU: ISPITIVANJE PROFESIONALNIH POTREBA NASTAVNIKA U VISOKOM OBRAZOVANJU	89
Dragana M. Gak, Vesna Ž. Bogdanović	
TEACHING IN A SECOND LANGUAGE: COMMUNICATION CHALLENGES IN ENGLISH-MEDIUM INSTRUCTION	
NASTAVA NA STRANOM JEZIKU: KOMUNIKACIONI IZAZOVI ENGLISKOG KAO JEZIKA VISOKOŠKOLSKE NASTAVE	114
Katarina O. Lazić, Dragana D. Ilić	
FORESTRY EDUCATION IN ENGLISH: INSTRUCTORS' VIEWS ON EMI FOR CHINESE STUDENTS	
STAVOVI NASTAVNIKA O NASTAVI ŠUMARSTVA NA ENGLISKOM JEZIKU ZA KINESKE STUDENTE	133
Milena Z. Škobo, Milena V. Šović	
UNIVERSITY TEACHERS' PERSPECTIVES ON USING THE TESLA CHATBOT IN EMI COURSES: A CASE STUDY FROM SINGIDUNUM UNIVERSITY	
PERSPEKTIVE UNIVERZITETSKIH NASTAVNIKA O UPOTREBI TESLINOG ČETBOTA U IZVOĐENJU NASTAVE NA ENGLISKOM JEZIKU: STUDIJA SLUČAJA UNIVERZITETA SINGIDUNUM	163

V ДОДАЦИ

PROPOZICIJE ZA TEHNIČKO UREĐENJE RADA	187
STYLESHEET	191
HINWEISE ZUR FORMATIERUNG DER AUFSÄTZE	195
CONSIGNES AUX AUTEURS	199
БІОГРАФСКИ ПОДАЦИ О АУТОРИМА	203

PREFACE

The thematic issue of the journal *Methodical Perspectives*, titled “Challenges in English as a Medium of Instruction (EMI)”, provides a special focus on the important topic of the internationalization of universities in Serbia from the perspective of English as the Medium of Instruction (EMI).

The idea for this thematic issue emerged after a short-term project titled *Internationalization of the University of Novi Sad and the perspectives of English as a Medium of Instruction*, which offered participating researchers insight into lecturers’ experiences at one faculty (the Faculty of Technical Sciences, University of Novi Sad). The project results indicated that after two decades of university internationalization there is a need to analyze the situation at other higher education institutions as well.

The thematic issue consists of eight original research papers that reflect on experiences across five universities. The authors explore teachers’ motivation to participate in EMI training, their self-perceived competence, and perceived challenges in delivering instruction in English; students’ motivation to apply for mobility programs; the need to expand EMI training to include psychological support for teachers; the strengths and weaknesses of instructors in linguistic, pedagogical, and intercultural competencies; teachers’ attitudes toward challenges in understanding and communication in English, their classroom behavior, and their preparedness for such instruction; communication challenges viewed through the lens of lesson preparation, curriculum adaptation, and strategies implemented by lecturers; teachers’ views on the challenges and language needs of Chinese students in EMI forestry courses; and the use of multilingual chatbots and the extent to which they influence motivation, interaction, and informal learning.

All papers raise important issues that are present in current practice at Serbian universities and, through pedagogical implications, offer solutions that could contribute to improving English medium instruction.

The guest editors would like to thank the journal *Methodical Perspectives* for the opportunity to contribute to this special issue and, we hope, to encourage broader discussion on this topic. We also express our gratitude for the excellent collaboration and support throughout the entire process.

Novi Sad, 29 October 2025
Jagoda Topalov and Dragana Gak

ПРЕДГОВОР

Тематски број часописа *Методички видици*, „Challenges in English as a Medium of Instruction (EMI)”, даје посебан осврт на важну тему интернационализације универзитета у Србији из угла енглеског језика као језика високошколске наставе (ЕЈВИН).

Идеја за објављивање тематског броја настала је након краткорочног пројекта „Интернационализација Универзитета у Новом Саду и перспективе енглеског као језика високошколске наставе”, који је учесницама на пројекту дао увид у искуства предавача на једном факултету (Факултет техничких наука Универзитета у Новом Саду). Пројекат је указао на то да, након две деценије интернационализације универзитета, постоји потреба да се ситуација анализира и на другим високошколским институцијама.

Темат се састоји од осам оригиналних научних радова, који шире сагледавају искуства на пет универзитета. Аутори су разматрали мотивацију наставника да се укључе у обуку за ЕЈВИН, њихову самопроцену компетентности и перципиране изазове у извођењу наставе на енглеском језику; мотивацију студената за пријављивање на програме мобилности; потребу да се обука за ЕЈВИН прошири и пружи наставницима и психолошку подршку; предности и слабости предавача у области лингвистичких, педагошких и интеркултурних компетенција; ставове наставника о изазовима у разумевању и комуникацији на енглеском језику, њихово понашање у учионици, њихову припремљеност за такву наставу; комуникацијске изазове кроз призму припремања за наставу, прилагођеност наставног програма и стратегије које предавачи примењују; ставове наставника о изазовима и језичким потребама кинеских студената на настави на ЕЈВИН-у из области шумарства; и употребу вишејезичних четботова и у којој мери они утичу на мотивацију, интеракцију и неформално учење.

Сви радови покрећу важна питања, која су у заступљена у пракси на универзитетима у Србији и кроз педагошке импликације предлажу решења која би могла да допринесу унапређењу наставе на енглеском језику.

Гостујуће уреднице се захваљују часопису *Методички видици* на прилици да учествују на овај начин у објављивању посебног издања и, надамо се, покретању шире дискусије на ову тему. Такође, захваљујемо се и на изванредној сарадњи и подршци током целог процеса.

У Новом Саду, 29. 10. 2025.
Јагода Топалов и Драгана Гак

Branka L. Milenković
University of Kragujevac
Faculty of Philology and Arts,
English Department
branka.milenkovic@filum.kg.ac.rs
<https://orcid.org/0000-0002-6754-8754>

Original research paper
UDC 811.111'243:005.44
DOI: 10.19090/MV.2025.16.2.11-31

Anica R. Radosavljević Krsmanović
University of Kragujevac
Faculty of Philology and Arts,
English Department
anica.krsmanovic@filum.kg.ac.rs
<https://orcid.org/0000-0003-1709-8641>

INTERNATIONALISATION THROUGH ENGLISH AS A MEDIUM OF INSTRUCTION (EMI): PERCEPTION OF EMI PRACTITIONERS¹

ABSTRACT: In this study, we address one aspect of internationalisation in higher education in Serbia through the professional development program of *English as a Medium of Instruction (EMI)*, conducted at the University of Kragujevac. The study aims to investigate the teachers' motivation for the EMI training program, their self-perception of EMI competence, as well as the expectations and challenges of teaching in the EMI context. For this purpose, we used a modified questionnaire, integrating closed-ended and open-ended questions to gather both quantitative and qualitative data through methods of descriptive statistics and content analysis. The research results suggest high motivation and various levels of self-perceived competence regardless of insufficient EMI experience.

Keywords: higher education, internationalisation, professional development, English as a Medium of Instruction (EMI), EMI teachers, motivation, self-perception, expectations, challenges.

ИНТЕРНАЦИОНАЛИЗАЦИЈА КРОЗ ЕНГЛЕСКИ КАО ЈЕЗИК ВИСОКОШКОЛСКЕ НАСТАВЕ (ЕЈВИН): ПЕРЦЕПЦИЈА ЕЈВИН НАСТАВНИКА

АПСТРАКТ: Ово истраживање усмерено је на један аспект интернационализације у високошколском образовању у Србији, реализован кроз програм професионалног

¹ Research has been financed by the Ministry of science, technological development and innovation of the Republic of Serbia (Contract for financing professor scientific research with the Institutional Accreditation in 2025, no: 451-03-137/2025-03/ 200198)

усавршавања за енглески као језик високошколске наставе (ЕЈВИН) на Универзитету у Крагујевцу. Циљ истраживања био је да се испита мотивација наставника за пријављивање на ЕЈВИН програме, њихова самопроцењена компетентност за извођење овакве наставе, као и очекивања и изазови које перципирају у извођењу наставе на енглеском језику. У ту сврху коришћен је модификовани упитник који је обухватао питања затвореног и отвореног типа, са циљем прикупљања квантитативних и квалитативних података. Подаци су анализирани применом дескриптивне статистике и анализе садржаја. Резултати истраживања указују на висок степен мотивације учесника обуке и на варијације у самопроцени компетентности иако постоји недостатак искуства у извођењу наставе на енглеском језику.

Кључне речи: високо образовање, интернационализација, професионални развој, енглески као језик високошколске наставе (ЕЈВИН), ЕЈВИН наставници, мотивација, самопроцена компетентности, очекивања, изазови.

1. INTRODUCTION

In the world that has witnessed increased connectivity and vast technological development in the past decade, additionally enforced by the global pandemic, the higher education system has also experienced changes in the direction of supporting this connectivity through the internationalisation process. Higher education (HE) institutions (HEIs) have found internationalisation as a response to many contemporary global challenges and as a fruitful ground for enhancing the HE system. It is important to grasp the scope of the process and to indicate that internationalisation refers to

the international process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education, in order to enhance the quality of education and research for all students and staff, and to make a meaningful contribution to society. (De Wit & Hunter, 2015: 3)

Internationalisation in HE has thus become an indispensable aspect of HE policies among the universities worldwide and a priority in HEIs, not only for social, political and economical reasons (Knight, 2004), but also to ensure the adequate training (Deardorff 2012) of 'globally-ready' graduates (Simões and Sangiamchit 2023: 1). These graduates are thus capable of examining local, global and intercultural issues; capable of appreciating different perspectives and worldviews; capable of engaging in effective interactions with individuals from different cultures; and being able to act for collective well-being and sustainable

development². Therefore, the university policies are important official documents that enhance the implementation of the internationalisation strategy. They help us to understand the driving forces that encourage different programs that support the HE development of internationalisation.

Recent research has emphasized diversity in the HE policies and practices that are (non)complementary to the institutional policies (Sahan et al. 2021:28). Serbia is among the countries that support internationalisation, implementing it from the top-down – from the institutional policies about internationalisation to the classroom practices, mentioning English or EMI (*English as a Medium of Instruction*) development as a component of the HEI's internationalisation plan. (Sahan K. et al. 2021:28)

Since the focus of this study is to examine the professional development of the professors at the University of Kragujevac in Serbia, in the domain of EMI practice and internationalisation, we will briefly reflect on the University of Kragujevac's official documents. These documents relate to the Internationalisation strategy³ of the university and its primary aims for the implementation and action delivery in this area. The Internationalisation strategy document (2020-2027) at the University of Kragujevac covers its main areas: its vision, mission, and the specific goals, defining the specific direction of the institutional development. In the light of the previously addressed scope of internationalisation, reflecting on the advancement of the quality of education and research for students and staff (De Wit & Hunter 2015:3), the Internationalisation strategy document of the University of Kragujevac closely aligns the definition of the process, focusing on the following four goals of the strategy implementation: 1) Improvement of study programmes (Internationalisation at home), 2) Increase of the number of incoming and outgoing mobilities (Students, Researchers, Teaching and Administrative staff), 3) Improvement of the cooperation with foreign universities and research institutions, industry and other partner institutions through international projects, and 4) University's commitment to internationalisation (among others through the development of the Action plan for the implementation of the Internationalisation strategy (2020-2027)). The first two goals, pertaining to the improvement and development of the study programs in English and the

² OECD Future of Education and Skills 2030

https://www.oecd.org/content/dam/oecd/en/publications/reports/2018/06/the-future-of-education-and-skills_5424dd26/54ac7020-en.pdf (retrieved on 08 September 2025)

³ https://kg.ac.rs/Docs/internationalisation_strategy.pdf (retrieved on 08.09.2025. at 13.15)

support of the mobility programs, present the foundation of research in this study. They are the basis for the professional development of the university teaching staff, which takes place through the English as a Medium of Instruction (EMI) teacher training program.

2. ENGLISH AS A MEDIUM OF INSTRUCTION IN HIGHER EDUCATION

It has been well-established that the English language has become a global, universal demand in higher education. While there are other forms of integrating the English language with the content areas in lower education structures⁴, the phenomenon of English as a Medium of Instruction (EMI) has been particularly present in higher education (Macaro, Curle, Pun & Dearden 2018), offering both undergraduate and postgraduate study programs through the medium of English. Due to the declining enrollment numbers of local students and the ever-present migration trends in Serbia and worldwide, this situation has led to even more emphasis on internationalisation in higher education, with the aim to meet those challenges. In order to accommodate the novel circumstances, higher education institutions worldwide have come to offer their study programs in English, and numerous HE policies have been enacted to support this development of EMI. Several years back, the meeting of Lisbon European Council (2020) raised discussions (Jorgenson & Shultz 2012) about equipping students with qualifications for an internationalized context, to build not only knowledge networks but also create social cohesion, regionally, nationally and internationally (Valcke et al. 2022: 65) Therefore, a need has emerged for addressing the student needs and for continual professional development of the teaching staff. To align with these needs, various EMI teacher training programs have been conducted at HE institutions. They prepare the university professors to deliver their courses in English and therefore target the international student body, but also relate to the domestic student body, to prepare them for global immersion.

⁴ “In North America the phenomenon is sometimes labelled ‘immersion’ or ‘content-based learning’ or ‘content-based language learning’ or ‘content-based language education’. In Europe, but not exclusively in Europe, it is usually labelled ‘content and language integrated learning’ (CLIL) or ‘integrating content and language in higher education’ or ‘English-taught programmes’. EMI is a term used ubiquitously geographically and, usually but not exclusively, applied to HE.” (Macaro, Curle, Pun & Dearden 2018:37)

2.1. EMI current trends in the developing countries

As we consider the current trends in Serbia, it is important to note what the status of EMI is in Serbian higher education at the moment. Therefore, we will reflect on one of the recent studies and publications that addresses this issue. Based on the research conducted in collaboration between the British Council and the University of Oxford (Sahan et al. 2021)⁵, primarily funded by the British Council, global mapping of EMI in HEIs in the developing countries has provided a significant insight into the status of EMI at a tertiary level of education. The researchers collected data ‘from the informed respondents, HEI websites and key institutional players’ (Sahan et al. 2021:63) about the language of instruction at HEIs, specifically looking into the courses taught in English. Based on the research findings, in Figure 1, we present the current trends of EMI in higher education.

What are the current trends for EMI in higher education?

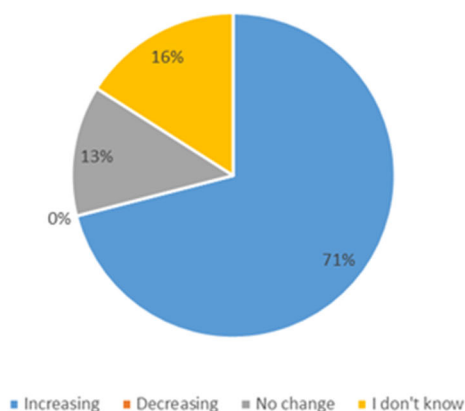


Figure 1. What are the current trends for EMI in higher education in the developing countries?

⁵ This report forms part of a larger British Council global project exploring current research, policy, practice, and potential future trends in English-medium education in higher education. The participant countries in the research were: Afghanistan, Algeria, Argentina, Armenia, Azerbaijan, Bangladesh, Botswana, Brazil, Cameroon, China, Columbia, Egypt, Ethiopia, Georgia, Ghana, India, Indonesia, Iraq, Jordan, Kazakhstan, Kenya, Lebanon, Malaysia, Mauritius, Mexico, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nigeria, Pakistan, Peru, Philippines, Rwanda, Senegal, Serbia, South Africa, Sri Lanka, Sudan, Tanzania, Thailand, Tunisia, Turkmenistan, Uganda, Ukraine, Uzbekistan, Venezuela, Vietnam, Zambia, Zimbabwe. (Sahan et al. 2021:18-21)

As the research indicates, there is a firm dominance of the increasing trend (71%) of implementing EMI programs in higher education, whereas no higher education institution (0%), in the developing countries reported the decreasing trend. Based on the results, we may observe that there is a continual development of EMI study programs that indicate a high degree of interest in teaching courses in English. Serbia is among the countries that ensue this trend and since the developing countries are severely under-researched in terms of regionally and nationally specific challenges associated with EMI delivery at the programme, course and classroom level, the authors have concluded that there is a need for more research in this area (Sahan et al. 2021:63). The purpose of this research is to contribute to these findings by reflecting on the present situation of EMI study programs in Serbia, mainly at the University of Kragujevac.

3. EMI TEACHERS' PERCEPTIONS AND MOTIVATION FOR EMI

English as a Medium of Instruction is a specific type of teaching practice in international contexts where English is considered an instrument, rather than a subject, more precisely a by-product of attaining academic knowledge in content courses (Alfehaid 2018). Within the context of EMI, teachers' motivation to participate in training programs and their self-perception of EMI competence have been recognized as critical factors determining the success of EMI programs, alongside various linguistic and contextual factors. University teachers' motives for EMI teaching and internationalisation in general are shaped by a combination of personal, professional, and institutional factors. Previous research has suggested that teachers perceive EMI programs as a chance to develop at a personal level, such as the improvement of language competence, the development of pedagogical skills, and the construction of a more globalized professional identity (Aguilar-Pérez & Arnó-Macià 2024; Doiz & Lasagabaster 2018). In this process, teachers are usually intrinsically motivated. From a professional perspective, university teachers often perceive EMI as a way to advance their careers and increase access to global knowledge and the market (Birgün 2023; Farrell 2020). At an institutional level, the inspiration for many instructors to teach EMI lies in the wish to support internationalisation initiatives, fulfill university objectives, and meet institutional requirements (González-Bello et al. 2024; Yuan et al. 2020). One such example of an institutional requirement is the requirement for the application in the Erasmus+ mobility program at the University of Kragujevac. EMI certification, obtained as a successful completion of the professional development program, presents one of

the requirements for the document *Contribution to Internationalisation*⁶, which is valued for the application in the Erasmus+ mobilities.

Teachers' self-perception of their EMI competence is equally important, as it plays an important role in shaping their classroom practice. Teachers who perceive themselves as competent in EMI generally demonstrate more self-efficacy in creating a successful EMI environment, showing increased willingness to implement internationalisation (Macaro et al. 2019; Wang 2021), which in turn boosts their motivation and overall effectiveness in EMI classrooms (Macaro et al. 2019). This highlights the need to consider teachers' motivation and self-perceived EMI competence as important dimensions when designing and implementing EMI training programs.

This study, therefore, aims to explore the factors motivating Serbian HE teachers to apply for the EMI training program as well as their self-perceived competencies in EMI teaching. The findings provide insights into their professional development needs and their readiness to teach in multilingual and intercultural contexts.

4. RESEARCH METHODOLOGY

4.1. Research design and objectives

The study examines teachers' motivation for applying to the EMI training program and their self-perception of EMI competence in the context of EMI teacher training conducted at the University of Kragujevac, Serbia, during the 2024-2025 academic year.

The research questions guiding this study are as follows:

1. What is the degree of university teachers' motivation for teaching EMI courses, and what are the reasons that encouraged them to apply for the EMI training program?
2. How do teachers perceive their own EMI competence?
3. What are the challenges that EMI teachers might encounter when teaching in international contexts?

The research design was exploratory in nature, given the relatively small sample size (N=21). Consequently, the study does not aim for broad

⁶ https://www.kg.ac.rs/doc/Listu%20prijava%20dokumenta_STA_1.pdf (retrieved on 11.09.2025. at 11.47)

generalizability, but rather seeks to provide insights into tendencies and trends within this particular group of university teachers.

4.2. Participants

The participants were professors enrolled in the EMI training program at the University of Kragujevac during the 2024-2025 academic year. Regarding their scientific fields, the largest group was from the field of medicine (42.9%), followed by the field of natural sciences (23.8%) and humanities and social sciences (23.8%). A smaller proportion of teachers (9.5%) came from the technical fields.

In relation to higher education teaching experience, 42.9% reported over 10 years of experience, 23.8% indicated from 7 to 10 years, and 19% from 4 to 6 years. There were fewer respondents with limited experience, with 9.5% reporting less than a year and 4.8% from 1 to 3 years.

In terms of prior experience with teaching international students, 31.8% of the participants reported in the questionnaire that they had taught international students either in Serbia or abroad, while the majority (61.9%) had not had teaching experience in international contexts.

4.3. Instruments and procedure

The study employed a modified questionnaire developed on the basis of the EMI handbook and the TAEC project (*Transnational Alignment of English Competences for University Lecturers*, co-funded by the Erasmus+ program of the European Union).⁷ The instrument covered several key dimensions relevant to EMI-teaching contexts: background information (academic title, field of study, teaching experience, and prior experience with international students), motivation for participation in EMI training (e.g., personal development, internationalisation, and personal challenges), and self-perception of EMI competence (technical and practical skills, and intercultural/multilingual awareness). The questionnaire included both closed-ended and open-ended questions, allowing for the collection of quantitative and qualitative data. Motivation and self-perception were measured using a Likert-scale format, ranging from 1 – strongly disagree to 5 – strongly agree (e.g., *I can use different language strategies when I am uncertain how to say something in English*, or *I can overcome potential obstacles and*

⁷ https://cip.ku.dk/english/projects-and-collaborations/taec/TAEC_Handbook_FEB_2020_NoEdit.pdf (retrieved on 30.03.2025. at 03:15h)

misunderstandings in the multilingual classroom). In addition, several open-ended questions were used to obtain insights into teachers' motivation and experiences (e.g., *Explain in your own words what you are expecting to receive from the course.*).

Participation in the study was voluntary, and all of the participants provided informed consent prior to completing the questionnaire, which aligned with the ethical requirements of the research. They completed the questionnaire during the EMI training program. Responses were collected anonymously to encourage accurate reporting, while the data were used exclusively for research purposes.

Quantitative data were analyzed using descriptive statistics, while SPSS 20.0 was employed to calculate frequencies and percentages. Qualitative data from open-ended questions were analyzed through content analysis.

5. RESULTS AND DISCUSSION

The present section outlines the obtained quantitative and qualitative results, while relating them to the research questions and providing a contribution in the concluding remarks.

5.1. Motivation factor in the quantitative analysis

The first objective of the study was to examine the teachers' motivation for enrolling in the EMI training program (Research Q1: *What is the degree of university teachers' motivation for teaching EMI courses, and what are the reasons that encouraged them to apply for the EMI training program?*). Specifically, the aim was twofold: to assess the degree of their motivation for teaching EMI courses and to explore the reasons behind the decision to participate in the EMI training course. In Table 1, we report the results of EMI teachers' level of motivation to apply for the EMI training course.

Motivation level	Number of respondents	Percent (%)
Highly motivated	8	38.1%
Motivated	10	47.6%
Undecided	2	9.5%
Slightly motivated	1	4.8%
Not motivated at all	0	0%

Table 1. Teachers' self-reported motivation for teaching courses in English

In Table 1, we may observe that the descriptive statistics revealed a significant majority of the participants indicated being motivated (47.6%) or highly motivated (38.1%) to teach in English, while only a small proportion showed hesitation (9%) or low motivation (4.8%) (Table 1).

We extend our findings in Table 2 with the obtained results about the specific motivating factors that may further be examined.

Reason for Participation	Number of respondents	Percent (%)
Professional development	17	81.0
Overcoming personal/professional challenges	17	81.0
Language skills improvement	16	76.2
Applying innovative teaching approaches	16	76.2
Stepping out of comfort zone	15	71.4
Internationalisation /global exposure	8	38.1
Publishing research	7	33.3
Interacting with international students	7	33.3
International recognition	4	19.0
Preparing students for global job market	3	14.3
Institutional obligation	1	4.8

Table 2. Quantitative results on teachers' motivation for the EMI program

When examining specific reasons for participation in the EMI training, intrinsic and developmental factors emerged as the most frequently cited factors, rather than institutional obligations (Table 2). The most frequently reported motives were professional development (81%) and overcoming personal and professional obstacles in teaching in English (81%). For instance, a significant majority of participants affirmed the statement, *'I want to overcome personal barriers in teaching through English'*, which suggests that self-development and the desire to improve classroom performance were strong internal motivators. Previous research similarly showed that the primary motivators for teachers' EMI engagement include their desire to develop their pedagogical skills, the challenge of instructing in English, and the increase of their confidence in teaching through English (Hariyanti 2023; Zhao et al. 2023). Likewise, 76.2% of the respondents affirmed that the training would contribute to the improvement of their language skills, and the same percentage agreed with the statement, *'I view EMI as an opportunity to investigate innovative teaching methodologies'*, reflecting an orientation towards pedagogical experimentation. The findings align with recent studies suggesting that intrinsic motivation and innovation significantly influence

teachers' engagement with EMI (Macaro et al. 2018). Moreover, a significant majority of the participants (71.4%) viewed the EMI training as an opportunity to move beyond their comfort zones. The results suggest that the EMI training was perceived both as a challenge and a chance for professional growth and career development, as observed in prior research (Wang et al. 2025; Yuan 2020).

At the same time, more externally oriented motives were less common. Only 38.1% viewed EMI as related to internationalization or global exposure, whereas one-third associated it with publishing research in English (33.3%) and interacting with international students (33.3%). These factors, although less significant, indicate an awareness of EMI's role in global academic collaboration and intercultural interaction. Interestingly, a significant minority of the respondents reported that their motivation emerged from international recognition (19%), preparing students for the global job market (14%), or fulfilling institutional standards (4.8%). The results differ from those reported in other contexts, where institutional initiatives and internationalization were recognized as the main motivators for EMI training participation (González-Bello et al., 2024). In contrast, the variation observed in the study suggests that, in the Serbian context, where EMI training is recent, educators tend to view it less as a tool for institutional development and more as an opportunity for professional and personal growth.

5.2. Self-perception factor in the quantitative analysis

The second objective of the study was to examine the participants' self-perception of EMI-related competence (Research Q2: *How do teachers perceive their own EMI competence?*). The findings of the descriptive statistics indicated a balanced perspective regarding their perceived EMI competence. Although they expressed high motivation for professional and personal development, their self-perception of particular skills was marked both by confidence in certain domains and by a more reserved stance in other aspects (Table 3).

No.	Questionnaire item	Strongly disagree (%)	Disagree (%)	Neutral (%)	Agree (%)	Strongly agree (%)
1.	I can design and prepare English-language presentation slides for my classes.	-	-	9.5	42.9	47.6
2.	I can effectively use English to draw attention to key points in my EMI lessons.	-	-	9.5	61.9	28.6

3.	I can deliver interactive EMI lectures successfully.		14.3	33.3	52.4	-
4.	I can rely on various language strategies when unsure how to phrase something in English	-	4.8	28.6	38.1	28.6
5.	I can speak English clearly and use correct pronunciation.	4.8	4.8	42.9	42.9	4.8
6.	I use intonation and linguistic elements to emphasize important details in EMI lectures.	-	14.3	61.9	23.8	-
7.	I use English to highlight the learning objectives of EMI lessons.	4.8	4.8	71.4	19.0	-
8.	I can organize complex subject matter into smaller, coherent sections for EMI instruction.	-	-	61.9	28.6	9.5
9.	I adapt classroom activities in EMI instruction to ensure cultural diversity.	4.8	-	85.7	9.5	-
10.	I adjust my teaching content in multilingual EMI instruction to foster a culturally inclusive classroom.	4.8	4.8	71.4	14.3	4.8
11.	I am aware of the benefits that EMI instruction provides.	-	-	9.5	28.6	61.9
12.	I understand the significance of cultural influences in multilingual environments.	4.8	-	14.3	42.9	38.1
13.	I can effectively face challenges when teaching in a multilingual environment.	4.8	-	19.0	47.6	28.6
14.	I design EMI lessons to promote collaboration, inclusivity, and mutual exchange of knowledge and skills.	-	4.8	66.7	28.6	-

Table 3: Selected items on self-perceived EMI competence among university teachers

The strongest confidence appeared in the areas related to the technical and practical aspects of EMI instruction. The majority of the participants (90.5%)

expressed confidence in preparing and using English-language presentations and materials. Approximately 52.4% believed that they were able to deliver interactive lectures successfully, and about two-thirds (66.7%) reported that they could rely on various language strategies when unsure how to phrase something in English. These patterns suggest that many of the teachers already had a solid base for the practical application of English in the classroom and, as stated previously, teachers with a positive outlook on their EMI competence tend to demonstrate more self-efficacy in establishing a fruitful EMI context and are inclined to contribute to internationalisation (Macaro et al. 2019; Wang 2021).

However, for certain language skills such as pronunciation, intonation, and clarity of speaking, confidence levels were diminished. For example, 47.7% agreed that their pronunciation is clear, whereas 42.9% maintained a neutral stance. Regarding intonation, merely 23.8% expressed confidence, whereas 61.9% remained uncertain. This suggests that these technical skills in EMI instruction require further development and support.

Lesson preparation and instructional design also appeared as areas of uncertainty and neutrality. A significant proportion of the participants were hesitant about their capacity to define clear learning objectives adapted to EMI contexts (71.4% neutral) and to divide teaching content into meaningful sections effectively (61.9% neutral). Similarly, the adaptation of educational activities and content to EMI contexts produced a significant percentage of neutral responses (85.7% neutral for activities, 71.4% for content). These findings show that while teachers have a moderate degree of confidence in lesson delivery, they experience uncertainty in designing and organizing materials in ways that align with the pedagogical requirements of EMI instruction, particularly in terms of content adaptation and lesson structuring.

The results further showed that the participants exhibited significant confidence in facing multilingual and intercultural aspects of EMI instruction. Almost all participants recognized the benefits of multilingual classrooms (90.5%), while a significant majority reported that they understood the significance of cultural influences in multilingual environments (81%). Furthermore, 76.2% confirmed that they were capable of effectively responding to challenges arising in multicultural classes. On the other hand, a considerable number of the participants (66.7%) expressed uncertainty regarding their ability to foster a collaborative and inclusive EMI classroom, while less than one-third (28.6%) showed confidence in this skill. The neutral responses may reflect the lack of experience or uncertainty in practical EMI implementation, thus suggesting that even when teachers recognize

the importance of certain EMI aspects, they may not feel fully competent to apply these standards.

In general, besides the language-related aspects, these findings indicate that the teachers also recognize the cultural dimension as an integral part of effective EMI instruction. This discrepancy between their confidence in intercultural and multilingual awareness and their hesitancy in lesson planning highlights the need for targeted professional development that would enable them to adapt their general teaching competence into EMI practices.

5.3. *Expectations and challenges in qualitative content analysis*

For the purpose of the qualitative component of this study, the objective was to examine two aspects addressed in the open-ended survey questions: participants' expectations regarding the EMI course they applied for (Q: '*Explain in your own words what you expect to receive from the course.*') and the challenges they expect to encounter while teaching in an EMI setting (Q: '*Explain in your own words what may be potential challenges in preparing an EMI lecture.*'). These aspects were analyzed in relation to Research Q3: *What challenges might EMI teachers encounter when teaching in international contexts?* The open-ended questions were included because they provide insight into participants' motivation for applying for the EMI course. In addition, we expected that challenges reported by the participants may align with their self-perception and their skills and knowledge in the EMI field, thus complementing the results of the quantitative analysis.

The method used in this part of the research was content analysis, and we were able to obtain 74 written responses in these open-ended questions, as the participants were able to include as many items as they felt necessary to express their standpoints. Among them, we extracted 27 content items in total, 12 related to expectations and 15 related to challenges. We identified the three most dominant content item responses, both for the expectations and for the challenges, and we present them in Table 7. Frequency refers to the total number of times a particular theme was mentioned across all responses. Percentages were calculated against the total number of collected responses (74), as the participants frequently included more individual item responses for these questions.

EXPECTATIONS	Frequency	Percent (%)	CHALLENGES	Frequency	Percent (%)
To learn the pedagogical skills/approaches for teaching international students	10	13.5%	Managing ESP (English for Specific Purposes) vocabulary	6	8.1%
To enhance language skills for communication with the international students (vocabulary)	9	12.2%	Taking specific action in managing cultural aspects of an EMI class (e.g. avoiding discrimination)	6	8.1%
To gain confidence for speaking and discussion in English	7	9.5%	Assessment design for EMI class (addressing students' different English language proficiency)	4	5.4%

Table 4. Key content item responses for *expectations* of the EMI program and *challenges in teaching EMI*

Although most of the HE teachers reported using English for research purposes, the participants' responses reveal that they recognize that EMI teaching involves more than translating the L1 lecture into the L2 lecture. For example, the data indicate that the most common respondents' expectations (35.2%) from the EMI professional development program relate to the support in pedagogical skills/approaches, to the support to enhance their English language proficiency, and thereby obtain more confidence to speak in front of a larger student body. This perspective may also be found (Macaro et al. 2015) in research:

Most importantly for quality of education, there is considerable research evidence that many EMI teachers do not feel linguistically confident to teach their subjects through English. We should stress the word 'teach' here. Most teachers, it would appear, feel confident to read or write about their subject in English or even to present at conferences. (Sahan 2021:11)

EMI lecture is predominantly based on applying different pedagogical skills and approaches that are specifically designed for an international teaching context, and where L2 English is used as a tool to deliver the content for international students. "The key difference in teaching in an EMI context is that

they [HE teachers] have to dig deep to find the linguistic resources to adequately convey information to students who themselves may have low levels of English proficiency” (Sahan et al. 2021:11). The obtained results validate the quantitative research findings, indicating that the most prominent motives for applying to the EMI program were to overcome personal and professional obstacles to teaching in English (81%) and to improve classroom performance and English language skills.

Thereby, the challenges identified were related to different driving motivational forces, specifically concerning EMI methodology. The most dominant challenges and obstacles (21.6%) were related to language skills that are discipline-specific (ESP vocabulary), ensuring linguistic inclusivity for a culturally diverse student body, and finally, the assessment methodology aspects addressing tailor-made assessment instruments to meet the diverse student needs in an international context. As indicated earlier, EMI training is perceived by teachers as both a challenge and a chance for professional growth (Wang et al. 2025, Yuan 2020). It should be emphasized that within the internationalization strategy, institutional support in providing professional development programs such as EMI teacher training significantly enhances the personal and professional development of HE teachers. Consistent with the findings of our study, recent research highlighted numerous and various challenges associated with implementing EMI programs, including the lack of qualified teachers, both linguistically and in terms of pedagogical training for EMI, the need to improve English for EMI communication and the need for an inclusive approach (Sahan et al. 2021:12). We may conclude that there is evidently a growth in academic subjects that are taught in English worldwide and HE teachers have the need for professional development and support to teach their EMI classes effectively.

6. CONCLUSION

Serbia is among the developing countries where English as a Medium of Instruction is in its developmental stages, contributing to the internationalization of higher education institutions. State universities in Serbia have been providing the necessary institutional support for the professional development of HE teachers through policies, practical application, EMI teacher training programs, and certification of EMI practitioners. This initiative has resulted in the accreditation of university study programs in English, attracting a number of international students in recent years.

This exploratory study aimed to explore the motivation and self-perception of university teaching staff who have obtained EMI certification and to identify

developmental tendencies and trends at the University of Kragujevac in Serbia regarding the use of English as a Medium of Instruction.

The results revealed that the primary teachers' motives for participation in the EMI training encompass their personal and professional development, including the improvement of their language skills, the implementation of innovative pedagogical approaches, and overcoming personal and professional challenges. However, the findings revealed that there was a lack of motivation from the perspective of contribution at the global and institutional level. This has led us to believe that it may be significant to establish a cohesive relationship between global, institutional requirements and personal and professional development through continual support and access to EMI resources, raising motivation for internationalization at the institutional level.

The findings related to the self-perceived EMI-related competence indicate the teachers' high confidence in technical and practical aspects of EMI teaching, including preparing and using English-language presentations and materials. In contrast, the participants expressed uncertainty in planning EMI lessons, micro-managing content, and supporting inclusive teaching practice. The participants expressed increased awareness of multicultural and multilingual aspects of EMI teaching, but have also emphasized challenges in the domain of particular aspects of cultural inclusivity, in communication, linguistic choices, as well as assessment practices.

The research has provided significant insight into the status of EMI at the University of Kragujevac, from the vertical perspective, systematic institutional HE policies to practical implementation, as well as through horizontal perspectives, analyzing the needs, motivation, but also self-perception of EMI practitioners. Due to the preliminary scope of research, the study is limited by a relatively small sample size and its focus on a single training program. Consequently, the results may only indicate general trends and tendencies. Extending the sample size and including various groups of EMI certified teachers may increase the reliability and generalizability of the findings. In addition, as the study relied on the self-reported data by the EMI participants, the findings may reflect personal perceptions. Future research could integrate observational methods to strengthen the validity of the results and thereby provide a more comprehensive insight into the implementation of English as a Medium of Instruction at the tertiary level of education.

ONLINE RESOURCES

- https://cip.ku.dk/english/projects-and-collaborations/taec/TAEC_Handbook_FEB_2020_NoEdit.pdf (accessed on 30 March 2025)
- OECD Future of Education and Skills 2030
- https://www.oecd.org/content/dam/oecd/en/publications/reports/2018/06/the-future-of-education-and-skills_5424dd26/54ac7020-en.pdf (accessed on 08 September 2025)
- https://kg.ac.rs/Docs/internationalisation_strategy.pdf (accessed on 08 September 2025)
- <https://en.kg.ac.rs/courses.php> (accessed on 09 September 2025)
- https://en.kg.ac.rs/study_programmes.php (accessed on 09 September 2025)
- https://www.kg.ac.rs/doc/Lista%20prijava%20dokumenata_STA_1.pdf (accessed on 11 September 2025)

REFERENCES

- Aguilar-Pérez, M., Arnó-Macià, E. (2024). Personal narratives of three EMI teachers: construction of their identities based on their experiential development. *Journal of Multilingual and Multicultural Development*: 1–14. <https://doi.org/10.1080/01434632.2024.2373254>.
- Alfahaid, A. (2018). Using English as a medium of instruction in a Saudi University: Experiences and implications, *The Asian EFL Journal* 20 (12.2): 83–130. Accessed on 15 August 2025. URL: <file:///C:/Users/User/Downloads/asianEFL.pdf Y>.
- Alhassan, A. (2021). Challenges and Professional Development Needs of EMI Lecturers in Omani Higher Education. *SAGE Open* 11(4): 1–12. <https://doi.org/10.1177/21582440211061527>.
- Birgün, M. (2023). Lecturers' Perspectives on English Medium Instruction (EMI): Implications for Professional Development. *Kastamonu Eğitim Dergisi* 32: 282–294. <https://doi.org/10.24106/kefdergi.1473603>.
- De Wit, H., Hunter F., (2015). The Future of Internationalization of Higher Education in Europe. *International Higher Education* 83: 2–3. Accessed on 12 September 2025. URL: <file:///C:/Users/User/Downloads/The_Future_of_Internationalization_of_Higher_Educa.pdf>.
- Doiz, A., Lasagabaster, D. (2018). Teachers' and students' second language motivational self system in English-medium instruction: A qualitative

- approach. *TESOL Quarterly* 53(3): 657–679. <https://doi.org/10.1002/TESQ.452>.
- Farrell, T. (2020). Professional development through reflective practice for English-medium instruction (EMI) teachers. *International Journal of Bilingual Education and Bilingualism* 23: 277–286. <https://doi.org/10.1080/13670050.2019.1612840>.
- González-Bello, E., García-Meza, I., Nenninger, E. (2024). English-medium instruction for the internationalization of the curriculum: Teachers' motives and expectations. *Folios* 59: 112–126. <https://doi.org/10.17227/folios.59-17340>.
- Hariyanti, Y. (2023). Teachers' perception of the implementation of pilot teacher training on EMI. *Journal of Languages and Language Teaching* 11(2): 347–354. <https://doi.org/10.33394/joltt.v11i2.7009>.
- 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>.
- Macaro, E., Akıncıoğlu, M., Han, S. (2019). English medium instruction in higher education: Teacher perspectives on professional development and certification. *International Journal of Applied Linguistics* 30 (1): 144–157. <https://doi.org/10.1111/ijal.12272>.
- Sahan, K., Mikolajewska A., Rose H., Macaro E., Searle M., Aizawa I., Zhou S. Veitch A. (2021). *Global mapping of English as a medium of instruction in higher education: 2020 and beyond*. London: British Council.
- Simões, A. V. Sangiamchit, C. (2023). Internationalization at home: Enhancing global competencies in EFL classroom through international online collaboration. *Education Sciences* 13: 264. <https://doi.org/10.3390/educsci13030264>.
- Valcke, J., Nashaat-Sobhy, N., Sánchez-García, D. Walszczyk, J. (2022). Teacher development to mediate global citizenship in English-medium education contexts. *Journal of English-Medium Instruction* 13: 65–84. Accessed on 12 September 2025. URL: <file:///C:/Users/User/Downloads/TeacherdevelopmenttomediateglobalcitizenshipinEnglish-mediumeducationcontexts.pdf>.
- Wang, C. (2021). The relationship between teachers' classroom English proficiency and their teaching self-efficacy in an English medium instruction context. *Frontiers in Psychology* 12: 1–9. <https://doi.org/10.3389/fpsyg.2021.611743>.

- Wang, K., Yuan, R., De Costa, P. (2025). A critical review of English medium instruction (EMI) teacher development in higher education: From 2018 to 2022. *Language Teaching* 58: 141–172. <https://doi.org/10.1017/S0261444824000351>.
- Yuan, R. (2020). Promoting EMI teacher development in EFL higher education contexts: A teacher educator's reflections. *RELC Journal* 51: 309–317. <https://doi.org/10.1177/0033688219878886>.
- Yuan, R., Chen, Y., Peng, J. (2020). Understanding university teachers' beliefs and practice in using English as a medium of instruction. *Teaching in Higher Education* 27: 233–248. <https://doi.org/10.1080/13562517.2020.1715936>
- Zhao, W., Liu, Z., Wang, T., Yin, X., Sun, Y., Zhang, X., Yang, H. (2023). Assessment of a training project of English as a media of instruction (EMI) using Kirkpatrick model. *BMC Medical Education* 23: 271. <https://doi.org/10.1186/s12909-023-04204-5>.

Бранка Л. Миленковић
Аница Р. Радосављевић Крсмановић
Универзитет у Крагујевцу

ИНТЕРНАЦИОНАЛИЗАЦИЈА КРОЗ ЕНГЛЕСКИ КАО ЈЕЗИК ВИСОКОШКОЛСКЕ НАСТАВЕ (ЕЈВИН): ПЕРЦЕПЦИЈЕ НАСТАВНИКА УКЉУЧЕНИХ У ЕЈВИН

Сажетак

Ово истраживање усмерено је на један аспект интернационализације у високошколском образовању у Србији, реализован кроз програм професионалног усавршавања за енглески као језик високошколске наставе (ЕЈВИН) на Универзитету у Крагујевцу. Циљ истраживања био је да се испита мотивација наставника за пријављивање на програме на ЕЈВИН-у, њихова самопроцењена компетентност за извођење овакве наставе, као и очекивања и изазови које перцепирају у извођењу наставе на енглеском језику. У ту сврху спроведено је анкетно истраживање експлоративног типа међу наставницима који су похађали обуку за ЕЈВИН током академске 2024/2025. године. За потребе истраживања коришћен је модификовани упитник (ЕЈВИН приручник заснован на ТАЕС пројекту: *Transnational Alignment of English Competences for University Lecturers*, суфинансиран у оквиру Erasmus+ програма Европске уније), који је обухватао питања затвореног и отвореног типа, са циљем прикупљања квантитативних и квалитативних података. Подаци су анализирани применом дескриптивне статистике и анализе садржаја. Резултати истраживања показују да је основни извор мотивације наставника лични и професионални развој, укључујући усавршавање језичких компетенција, примену иновативних наставних приступа и превазилажење професионалних изазова. Самопроцена компетентности указује на високо самопоуздање у техничким и практичним аспектима наставе на ЕЈВИН-у, као што су припрема материјала и

презентација на енглеском језику, али и на изражену несигурност у планирању часова и подстицању инклузивне наставне праксе. Поред тога, наставници су показали изражену свест о интеркултурним и мултилингвалним аспектима наставе, али су исказали и потребу за подршком у примени инклузивних поступака у настави. Из ових увида произлазе импликације које указују на потребу пажљивог осмишљавања програма обуке за ЕЈВИН, као и додатне подршке у развоју педагошких компетенција ових наставника.

Кључне речи: високо образовање, интернационализација, професионални развој, енглески као језик високошколске наставе (ЕЈВИН), ЕЈВИН наставници, мотивација, самопроцена компетентности, очекивања, изазови.

Received: 12 September 2025

Accepted: 23 October 2025

Ivana D. Miškeljin
University of Novi Sad
Faculty of Education in Sombor
ivanamiskelj@ gmail.com
<https://orcid.org/0009-0009-5677-5917>

Original research paper
UDC 81'243:378.1-057.87
DOI: 10.19090/MV.2025.16.2.33-49

Ljiljana J. Knežević
University of Novi Sad
Faculty of Sciences
ljiljana.knezevic@dbe.uns.ac.rs
<https://orcid.org/0000-0003-2516-7299>

THE IMPORTANCE OF CERTAIN VARIABLES FOR APPLYING FOR INTERNATIONAL STUDENT MOBILITY PROGRAMS – STUDENTS' PERCEPTIONS¹

ABSTRACT: The paper aims to identify the extent to which certain linguistic, educational and communicative variables are important for students' decision to apply for international student mobility programs. For this purpose, a structured questionnaire was designed and administered to senior year students from ten faculties of the University of Novi Sad (N=727) participating in ISM programs during the winter semester of 2024/25 academic year. The analysis of the collected data included descriptive statistics, t-test, Mann-Whitney-U test and Pearson correlation coefficient. The obtained results suggest that the highest priority was given to English language proficiency and the lowest to subject-specific knowledge. Significant differences were detected between male and female students' responses, with females attaching more importance to four of the six variables which were examined. Self-assessed English proficiency stood in positive correlation with two of the surveyed variables.

Keywords: international student mobility, variables, internationalization of higher education, English language teaching in higher education.

¹ The research presented in the paper was part of a project entitled *The Role and Importance of Language Competence in Students' Participation in Mobility Programs* which has been funded by the Provincial Secretariat for Higher Education and Scientific Research (2024-2025), No. 000405126202409418003000000001/1.

VAŽNOST ODREĐENIH VARIJABLI ZA PRIJAVLJIVANJE ZA PROGRAME MEĐUNARODNE MOBILNOSTI – PERCEPCIJE STUDENATA

APSTRAKT: Rad nastoji da utvrdi do koje mere su određene jezičke, obrazovne i komunikativne varijable važne za odlučivanje studenata da se prijave za međunarodne programe studentske mobilnosti. Za ovu svrhu, kreiran je strukturirani upitnik i sproveden među studentima završnih godina deset fakulteta Univerziteta u Novom Sadu (N=727) koji učestvuju u programima međunarodne studentske razmene tokom zimskog semestra akademske 2024/25. godine. Analiza prikupljenih podataka je uključivala deskriptivnu statistiku, t test, Man Vitnijev U test i Pirsonov koeficijent korelacije. Dobijeni rezultati ukazuju da najveći prioritet studenti daju dobrom znanju engleskog jezika, a najmanji dobrom predznanju iz struke. Uočene su značajne razlike između odgovora studenata i studentkinja, pri čemu studentkinje daju veći značaj četirima od ukupno šest ispitivanih varijabli. Samoprocena znanja engleskog jezika stoji u pozitivnoj korelaciji sa dve ispitivane varijable.

Ključne reči: međunarodna mobilnost studenata, varijable, internacionalizacija visokog obrazovanja, nastava engleskog jezika u visokom obrazovanju.

1. INTRODUCTION

International Student Mobility (ISM) is a policy of the internationalization of higher education (Teichler 2017), its transformational force (Knight 2007) affecting ‘the society and the nation in general’ as well (Rodrigues 2012: 7) and, arguably, its most visible component (White & Lee, 2020; Bista et al. 2018).² In Europe, ISM is predominantly intra-regional,³ enabled by the Bologna Process, promoted and supported by exchange programs such as ERASMUS+ and supranational bodies such as the European Commission (Erdei & Káplár-Kodácsy 2020). It is an important component of higher education within the Bologna process in Serbia. ISM has enormously risen over the last two decades (Zayim-Kurtay et al. 2025; Gutema et al. 2023; Kim & Zhang 2022) becoming more diverse and multipolar due to emerging new (non-Western) education hubs such as China, India, Malaysia, South Korea, South Africa, Turkey, Russia (Zayim-Kurtay et al. 2025; Xu 2023). It has also paid more attention to equity and inclusion over

² Internationalization is not a unified term or concept and challenges at institutional, local, national and regional as well as geopolitical level add to its diversity (Marinoni 2024). According to a widely accepted definition of internationalization it is ‘the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of post-secondary education’ (Knight 2008: 21).

³ <https://share.google/EoQzj9Idk2WXigLnq>

the past five years, according to the 6th *IAU Global Survey Report* (Marinoni et al. 2024). With the Covid-19 pandemic disruption and restrictions behind (Zayim-Kurtay 2025; Ellis et al. 2024), ISM faces new challenges posed by the current geopolitical situation (Marinoni et al. 2024) and rising socio-economic inequalities (Chankseliani & Kwak 2024). However, there are positive innovative developments such as virtual exchanges and collaborative online international learning,⁴ joint and dual degrees, ‘decolonization’ of the curriculum, among others (Marinoni et al. 2024: 3). Furthermore, in May 2024, the European Council endorsed the recommendation entitled ‘Europe on the Move’ – learning mobility opportunities for everyone, which aims to promote and boost learning mobility across the European Union by embedding it into education and training, emphasizing inclusion and outlining measures to overcome mobility barriers.

According to the *2025 European Commission Report*,⁵ 1.76 million students from abroad (both EU and non-EU countries) were undertaking tertiary level studies across the EU in 2023, 11.419 from Serbia (7.527 (Bachelor’s or equivalent), 3.154 (Master’s or equivalent) and 738 (Doctoral or equivalent)).⁶ The number of mobile students from Serbia is on the rise based on the numbers for the two previous years provided by Eurostat: 10.080 in 2022 and 9.926 in 2021.⁷ According to Zubaşcu (2021), ERASMUS+ is extensively used by students in all countries of the Western Balkan region, including Serbia, and the CEEPUS data show an above average relative student participation. Participation in COST actions has also considerably increased. However, as pointed out by Zubaşcu (2021), the main problem is that the outgoing mobility is higher than the incoming mobility, which is indicative of the underdeveloped research infrastructure in the region. According to Schuch (2021), participation in these programs is estimated to continue growing for all countries in question. There are projects and initiatives towards more inclusive regional mobility in the Western Balkans (cf. Lula & Bino 2023), including the Balkan Universities Association (BAUNAS). According to research by Bošnjović and Trivun (2013), the more the strategies of internationalization and policy elements are represented in the internal documents

⁴ However, according to research, a physical mobility experience is very important for achieving some of the benefits such as developing intercultural competencies (Erdei & Káplár-Kodácsy 2020).

⁵ https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Learning_mobility_statistics

⁶ https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Learning_mobility_statistics

⁷ <https://share.google/0sUbhWLoXweYD6R00>

of higher education institutions, the greater direct impact on mobility development is.

In response to the growing need for new insights and perspectives related to the trends and issues of ISM recruitment, this paper seeks to contribute to the current body of literature on the understanding of the variables which are relevant for students' decision to apply for these programs and pursue part of their higher education abroad, based on students' perceptions on participating in ISM, whereby ISM here is considered to be a cross-border stay or education of at least 3 months for the purpose of following university classes or professional training in English as a medium of instruction (horizontal mobility).⁸ More precisely, the paper aims to identify the extent to which the variables such as subject-specific knowledge, good command of English, social and communication skills, overlapping of course content at two universities (home and host universities) and openness to new cultures, ways of living and different educational systems are important for students to apply for ISM. Additionally, the paper aims to explore whether these perceptions differ between female and male students, as well as whether students' self-assessed English language proficiency is related to their perceptions.

The paper is structured as follows. Section 2 gives a brief review of the more recent literature on student decision-making. Section 3 explains the methodology used to answer the research questions. Section 4 presents a discussion of the findings. The conclusion points out the relevance of the research findings, addresses the study limitations and provides suggestions for further work.

2. LITERATURE REVIEW

There are numerous studies on understanding why students (from both EU and non-EU countries) decide to study abroad. Let us mention some of the more recent studies from countries with diverse cultural and economic backgrounds (for an overview of earlier research on the topic, see Dubow et al. 2020). A comprehensive study from the neighbourhood, conducted by Doda et al. (2024),

⁸ ISM can take different forms. With respect to modality, it can be blended mobility (combining distant learning and physical mobility), or virtual to a large extent. It can be horizontal (students spend a period of their studies abroad), vertical (students take a full degree abroad) and brain mobility (students do not return to their home countries). With respect to length, it can be short-term mobility (1 week to 3 months), semester mobility (from 3 to 6 months,) and long-term mobility (from 6 to 12 months) (Erdei & Káplár-Kodácsy 2020), the latter ones being the most frequent at higher education institutions (Teichler 2017).

examines ‘the pushing and pulling factors’ for international Albanian students when choosing a country as their study destination. A qualitative methodology is used to analyse the data gathered from the students by open-ended online questionnaires. The study has identified the major challenges, such as cultural adjustment and financial difficulties. It has offered practical suggestions for higher education institutions to enhance the support and resources available to students for applying for these programs such as language support, cultural orientation programs, peer mentoring programs, developing partnerships with universities, educational agencies, government bodies, and industry. A compelling study by McNicholas and Marcella (2024) examines the decision-making process of international non-EU postgraduate students when choosing a business diploma in the UK. Based on semi-structured interviews analysed in the framework of an interpretivist, marketing philosophy, a new conceptual model is offered reflecting the continuous, cyclical and iterative nature of the decision-making process. A Typology of Decision Makers is proposed with respect to the level of awareness and approach to information search. The model can be employed to segment and target potential postgraduates, thus supporting these students and increasing the number of applications for the institution. A study by Albien and Mashatola (2021) identifies motivators, enablers and barriers in the decision-making process of students who want to ‘become internationally mobile’ in the current literature on ISM and applying them to a South African university student group proposes a conceptual model in the framework of organizational psychology which could be used to predict future mobility motivations of international students in general. Four main motivators are detected: costs of higher education programs, costs of living in the host country, socio-political ties and trade connections between a student’s home and host countries, and students’ own desire for better higher education; two main enablers: desire to gain an advantage over fellow students with respect to employment and intellectual capital (a network in the host country, academic qualifications and language proficiency), and many barriers, most notably financial costs and separation from the social support system. A study by Dubow et al. (2020) provides an international comparative analysis of ISM decision-making, interviewing a group of mobile students in the EU (from both EU and non-EU countries of origin). The findings foreground the ways the students’ decisions relate to the social, cultural, economic and political contexts in which they are made and how they relate to the students’ life goals. And finally, according to a survey by Milovanović et al. (2020) on the attitudes of medical and education students of a university in Serbia towards the internationalization of

higher education, the students have generally positive attitudes towards internationalization, but they think that the state has not done enough to engage internationally. The students also feel ready for and are interested in ISM programs, but find that they are not well-informed about all relevant aspects of them. Milovanović et al. (2020) also point out that internationalization is an under-researched topic in our country. More recently, though, research into English as a medium of instruction (EMI) in Serbia has been reported (Radić-Bojanić 2025), but the need for more empirical data on the topic of internationalization of our higher education remains. Addressing this research gap, the current study aims to examine students' perceptions on certain variables which may be relevant for their decision to apply for ISM programs and thus contribute to the topic of higher education internationalization. Let us now look more closely at the context and implications of our research.

3. METHODOLOGY

The paper draws on the quantitative analysis of the data collected for larger research on ISM at the University of Novi Sad and the University of East Sarajevo. This study focuses on the data gathered at the University of Novi Sad (UNS).

The aim of the study is to examine the importance of certain variables such as subject-specific and English language knowledge, social and communication skills, overlapping of courses at home and host universities and openness to new cultures in students' decision to apply for ISM programs. Accordingly, the research questions set in the study are as follows:

RQ1: How do UNS students perceive the importance of subject-specific knowledge, English proficiency, communication and social skills, overlapping of course content, openness to new cultures, ways of living and educational systems when deciding to participate in ISM programs?

RQ2: Are there any significant differences between male and female students' perceptions of these variables?

RQ3: To what extent are students' perceptions of these variables associated with their self-assessed English language proficiency?

3.1. Participants

The study participants were senior year students of ten faculties of the University of Novi Sad (N=727), participating in ISM programs (Faculty of Sciences, Faculty of Education in Sombor, Faculty of Technical Sciences, Faculty

of Economics in Subotica, Faculty of Philosophy, Faculty of Agriculture, Faculty of Technology, Faculty of Medicine, Academy of Arts, and Faculty of Sports and Physical Education). Out of the total number of participants (N=727), female students constituted the majority (N=548), while male represented a quarter of the sample (N=179).

3.2. *Instrument*

For this purpose, a structured questionnaire was designed based on the vast existing literature on students' engagement in ISM (Di Pietro 2023; Albien & Mashatola 2021; Kaya 2021; Jackson et al. 2020; Bista et al. 2018; Teichler 2017). The questionnaire included five sections focusing on students' views on various aspects of ISM programs, such as their benefits, relevance for future career, personal and professional development, obstacles in the application process, and certain factors seen as preconditions for the student decision to participate in the programs, which is the focus of the current study. In this section, the students responded to the question 'To what extent do the following six variables represent important preconditions for you to apply for ISM'. The six variables were: good subject-specific knowledge, good command of English, well-developed communication skills, well-developed social skills, significant course content overlapping at two universities (and transfer of credits), and openness to new cultures, ways of living, and different educational systems. The students' responses were recorded on a four-point Likert scale (1 – I totally disagree; 2 – I partially disagree; 3 – I partially agree; 4 – I absolutely agree). In order to test the scale, reliability and factorability analyses on the six variables were conducted. The Kaiser–Meyer–Olkin measure indicated adequate sampling adequacy (KMO = .571), and Bartlett's test of sphericity was significant, $\chi^2(15) = 120.689$, $p < .001$, suggesting that the correlation matrix was suitable for factor analysis. However, Cronbach's alpha for the six items was .689, indicating only moderate internal consistency. Although the exploratory factor analysis suggested a possible two-factor solution, the reliability analysis indicated only moderate internal consistency across the six determinants. Given this, and in line with our research aims, we treated each item as a separate dependent variable rather than combining them into a composite scale.

As for the respondents' English language knowledge, it was self-assessed on a five-point scale (1 – Insufficient, 2 – Sufficient, 3 – Good, 4 – Very good, 5 – Excellent). The assessment of English proficiency constituted the section of the questionnaire focusing on the sociodemographic characteristics of the respondents. Although the instrument employed different Likert-point ranges, all variables were treated as continuous and standardized prior to correlation analysis, which addresses scale comparability.

3.3. Procedure

Applying the quantitative survey method, the research data were collected during the winter semester of the academic year 2024/25. Prior to the questionnaire administration, verbal consent was obtained from the participants. The data analysis included descriptive statistics, t-test, Mann-Whitney U test and Pearson and Spearman correlation coefficient.

4. FINDINGS AND DISCUSSION

This section presents the study's results in relation to the three research questions. Thus, the descriptive statistics of the survey findings relate to RQ1, i.e., show how students perceive the importance of the six variables (subject-specific knowledge, good command of English, social and communication skills, overlapping of course content, and openness to new cultures, ways of living, and different educational systems) for participation in ISM. The findings are given in Table 1 below.

Variables:	Mean	SD	Skewness	Kurtosis
1. Subject-specific knowledge	2.89	0.78	-0.336	-0.248
2. Good command of English	3.58	0.61	-1.186	1.033
3. Good communication skills	3.41	0.65	-0.754	0.084
4. Good social skills	3.40	0.68	-0.803	0.213
5. Significant overlapping of course content at two universities (and transfer of credits)	3.26	0.79	-0.806	0.227
6. Openness to new cultures, ways of living and different educational systems	3.45	0.68	-1.016	0.765

Table 1. Students' perceptions of the importance of certain variables for applying for ISM

The obtained results suggest that the students from the University of Novi Sad attach importance to all of the mentioned variables for applying for ISM, as the values range from 2.89 to 3.58. The highest priority is given to good command of English and the lowest to subject-specific knowledge. Communication and social skills are equally valued and generally viewed as very important variables for ISM participation. The same holds true for the factor of openness to new cultures. Overall, it seems that UNS students value more language and cultural variables over educational ones for participation in ISM. A possible explanation for this can be found in the fact that the study participants are senior year students who have already completed a large number of subject-specific courses and thus gained

knowledge and confidence in various fields of their area of study. From this perspective, the lack of subject-specific knowledge may seem less worrisome and therefore less important than studying in a foreign language, something they have not experienced before. It has to be added at this point that all Bachelor's degree programs at UNS are accredited in the Serbian language only, while English-medium courses are offered at Master's degree by some of the faculties. The cultural aspect, which is inseparable from the language we communicate in, has been recognized as a crucial challenge in ISM participation by Albanian students (Doda et al. 2024). The priority of linguistic and cultural variables expressed by the participants of this study can be related to the previously mentioned study. The more demanding a variable appears, the more importance and relevance it gains for ISM.

To test possible gender differences in relation to the participants' perceptions, the t-test was applied for all variables except for variable 2 (good command of English) which lacked normal distribution (as seen in Table 1) and therefore required a non-parametric test, in this case the Mann-Whitney U test. The results referring to the five variables are presented in Table 2 below.

Variables	Gender	Mean	SD	Mean Difference	t	p	95% Reliability interval	
							lower	higher
1. Subject-specific knowledge	M	2.94	0.79	0.06	0.885	0.376	-0.072	0.190
	F	2.88	0.77					
3. Good communication skills	M	3.26	0.73	-0.20	-3.625	0.000	-0.313	-0.093
	F	3.46	0.62					
4. Good social skills	M	3.31	0.72	-0.12	-2.024	0.043	-0.234	-0.004
	F	3.43	0.67					
5. Significant overlapping of course content	M	3.12	0.84	-0.18	-2.643	0.008	-0.312	-0.046
	F	3.30	0.77					
6. Openness to new cultures, ways of living and different educational systems	M	3.29	0.77	-0.22	-3.694	0.000	-0.330	-0.101
	F	3.50	0.64					

Table 2. Gender differences in relation to students' perceptions of the importance of certain variables for applying for ISM

In our output, SPSS reported $p = 0.000$, which should be read as $p < .001$. This suggests that the likelihood of obtaining the observed results under the null hypothesis is extremely small. In this study, the values below 0.05 are interpreted as statistically significant, and the values below 0.01 or 0.001 indicate even stronger evidence against the null hypothesis. Accordingly, three out of five variables (good communication skills, significant overlapping of course content and openness to new cultures, ways of living and different educational systems) show significant differences between male and female students' responses, with females perceiving these three variables more important than their male peers. The results related to the variable Good command of English can be seen in the following table.

Determinant	Middle rank (M)	Middle rank (F)	Mann-Whitney U	Z	p
2. Good command of English	339.03	372.16	53516.500	2.166	0.030

Table 3. Gender differences in relation to students' perceptions of the importance of English proficiency for applying for ISM

The Z-value in the Mann–Whitney U test is a standardized score indicating how far the observed U statistic deviates from the mean of its distribution under the null hypothesis. A Z of 2.166 suggests that the difference in mean ranks between male and female respondents on Good command of English is about 2.2 standard deviations away from what would be expected if there were no difference. The corresponding $p = 0.030$ indicates that this difference is statistically significant at the 0.05 level.

Overall, the gender-related findings point to some significant differences between our male and female students' responses, with females assigning greater importance to the language and communication variables, significant course overlap and openness to new cultures when deciding to participate in ISM than males. Previous studies on ISM have also pointed to some gender differences, with females inclining to these programs more than males. Thus, Presley et al. (2010) and Stroud (2010), for example, report that female students generally show more interest in ISM programs and perceive them as a more valuable experience than their male peers. Furthermore, Tompkins et al. (2017) point out that females tend to express greater interest in developing an understanding of other countries and cultures. In this regard, the results of the current study can be considered corroborative of previous findings reported in the literature.

Finally, to examine the relationship between students' self-assessed English language proficiency and the importance of certain variables for ISM participation, the Pearson correlation coefficient was applied for all variables except for Good command of English (Variable 2), for which the non-parametric measure of Spearman correlation was employed. The results are given in Table 4.

Variables	Self-assessed English proficiency	
Pearson correlation		
1. Subject-specific knowledge	r	-0.014
	p	0.703
3. Good communication skills	r	-0.001
	p	0.968
4. Good social skills	r	0.024
	p	0.512
5. Significant overlapping of course content	r	.149**
	p	0.000
6. Openness to new cultures, ways of living and different educational systems	r	.125**
	p	0.001
Spearman correlation (rho-p)		
2. Good command of English	r	0.063
	p	0.091

Table 4. The relationship of students' self-assessed English proficiency and certain variables for applying for ISM

As observed, two variables significantly correlate with self-perceived English proficiency, and these are variable 5, significant overlapping of course content, and variable 6, openness to new cultures, ways of living and different educational systems. A practical aspect of ISM, in this case, significant overlapping of course content, and the cultural dimension of ISM participation are more important to the respondents who perceive themselves as proficient English speakers. As of the latter, the cultural factor has been recognised as an important variable for ISM participation in a number of studies (Kotler & Keller 2016; McNicholas & Marcella 2024). Since culture is tightly connected to foreign language learning, we may assume that the respondents with higher English proficiency self-assessed scores are more knowledgeable about this and therefore attach more importance to openness to new cultures and ways of living for ISM participation. Certainly, the correlation findings presented here deserve attention of further research.

To sum up, the study findings point to the importance of the English proficiency factor and the relevance of students' openness to new cultures, ways of living, and different educational systems in decision-making regarding their participation in ISM. As such, the study offers certain pedagogical implications for English language teaching in higher education in terms of emphasizing the cultural dimension in language learning. In this regard, paying more attention to the development of intercultural competences and skills in English language syllabi is desirable. A possible way to achieve this can be through the implementation of virtual exchange, an innovative pedagogy referring to internet-based learning in which students from diverse linguistic and cultural backgrounds collaborate on specific tasks through which they improve their communicative and intercultural competences (Vuković-Vojnović & Knežević 2023; Zečević & Trkulja-Milekić 2022).

5. CONCLUSION

The paper has made an empirical contribution to the current literature on variables which are relevant for students' decision to apply for ISM. The findings show that the students from the University of Novi Sad generally attach importance to all of the surveyed variables for applying for ISM, although the highest priority is given to English language proficiency. The findings also point to significant gender differences indicating that female students consider openness to new cultures and experiences, good communication skills and overlapping of course content more important for applying for ISM than their male peers. Self-assessed English proficiency is found to correlate with openness to new cultures and experiences and course overlapping. On the whole, the findings offer some useful insights into students' perceptions of ISM programs and their potential decision to apply for them and as such, contribute to the general lack of literature on higher education internationalization in Serbia. Some limitations of the current study should be acknowledged. Although large in size, the sample in this study is constituted by the students of only one university in Serbia and for obtaining a better picture of students' perceptions on this topic a sample of students from different universities would certainly be more representative. The inclusion of qualitative research design, which lacked in the current research, could also provide a better insight into students' views of the variables relevant for their decision to apply for ISM. These limitations can be taken as guidelines for conducting further research in the field.

REFERENCES

- Albien, A., Mashatola, N. J. (2021). A systematic review and conceptual model of international student mobility decision-making. *Social Inclusion* 9(1): 288–298. <https://doi.org/10.17645/si.v9i1.3769>
- Bista, K., Sharma, G., Gaulee, U. (2018). International student mobility: Examining trends and tensions, in *International Student Mobility and Opportunities for Growth in the Global Market*, ed. K. Bista (Hershey): 1–14. <https://doi.org/10.4018/978-1-5225-3451-8.ch001>
- Bošnjović, J., Trivun, V. (2013). Academic mobility in the Western Balkans. *Business Systems Research* 4(1): 76–86. <https://doi.org/10.2478/bsrj-2013-0007>
- Chankseliani, M., Kwak, J. (2024). The ripple effect: Understanding the societal implications of international student mobility. *International Journal of Educational Research* 102520. <https://doi.org/10.1016/j.ijer.2024.102520>
- Di Pietro, G. (2023). Student characteristics and barriers to international mobility: Evidence from the European Union. *European Education* 55(2): 123–136. <https://doi.org/10.1080/10564934.2023.2278765>
- Doda, S., Hysa, A., Liça, D. (2024). International student mobility: Pushing-pulling factors for international students. *Journal of Educational and Social Research* 14(6): 402–423. <https://doi.org/10.36941/jesr-2024-0182>
- Dubow, T., Marchand, K., Siegel, M. (2020). International student mobility decision-making in a European context. Accessed on 15 July 2025. URL: <<https://share.google/CFRnMLIJLtHRBCneu>>.
- Ellis, T., Jola, C., Cameron, A. (2024). Cultural adaptation and transition within international higher education: University students' experiences of studying abroad during the 2020 coronavirus pandemic. *PLoS ONE* 19(10): e0308134. <https://doi.org/10.1371/journal.pone.0308134>
- Erdei, L. A., Káplár-Kodácsy, K. (2020). International student mobility at a glance. Promising potential and limiting barriers of non-traditional mobility. <https://doi.org/10.13140/RG.2.2.34727.78242/2>
- European Commission (2025). *Learning mobility statistics*. Accessed on 20 July 2025. URL: <https://ec.europa.eu/eurostat/statisticsexplained/index.php?title=Learning_mobility_statistics>.
- Eurostat (2025). *Mobile students from abroad enrolled by education level, sex and country of origin*. Accessed on 20 July 2025. URL: <<https://share.google/0sUbhWLoXweYD6R00>>.

- Gutema, D. M., Pant, S., Nikou, S. (2023). Exploring key themes and trends in international student mobility research – A systematic literature review. *International Student Mobility Research*. <https://doi.org/10.1108/JARHE-05-2023-0195>
- Jackson, J., Howard, M., Schwieter, J. W. (2020). Language proficiency: Developmental perspectives and linguistic outcomes of education abroad, in *Education abroad. Bridging scholarship and practice*, ed. A. Ogden, B. Streitwieser, & C. Van Mol (New York: Routledge): 92–105. <https://doi.org/10.4324/9780429431463>
- Kaya, F. (2021) Language proficiency development and study abroad experience: A study on EFL learners. *GiST Education and Learning Research Journal* 23: 33–58. <https://doi.org/10.26817/16925777.943>
- Kim, S., Zhang, C. (2022). Factors influencing Korean students' choice of study abroad destination short-term and long-term by destination country. *Asia Pacific Education Review* 23(1): 197–208. <https://doi.org/10.1007/s12564-021-09705-w>
- Knight, J. (2007). Internationalization: Concepts, complexities and challenges. *Springer International Handbooks of Education* 18: 207–227. https://doi.org/10.1007/978-1-4020-4012-2_11
- Knight, J. (2008). *Higher education in turmoil: The changing world of internationalization*. Leiden: Brill Sense. <https://doi.org/10.1163/9789087905224>
- Kotler, P., Keller, K. L. (2016). *Marketing management* (15th ed.). London: Pearson.
- Lula, L., Bino, B. (2023). Advancing inclusive regional mobility in the Western Balkans. Accessed on 17 August 2025. URL: <<https://wb-csf.eu/op-eds-csf/advancing-inclusive-regional-mobility-in-the-western-balkans>>.
- Marinoni, G., Bartolome, S., Cardona, P. (2024). Internationalization of higher education: Current trends and future scenarios, 6th IAU Global Survey Report. Accessed on 24 July 2025. URL: <https://www.iau-aiu.net/IMG/pdf/2024_internationalization_survey_report_digital.pdf>.
- Milovanović, R., Stojanović, B., Ćirković-Miladinović, I., (2020). Stavovi studenata prema internacionalizaciji visokog obrazovanja. *Inovacije u nastavi* 33(2): 86–96. <https://doi.org/10.5937/inovacije2002086M>
- McNicholas, C., Marcella, R. (2024). An interactive decision-making model of international postgraduate student course choice. *Journal of Marketing for*

- Higher Education* 34(2): 802–827. <https://doi.org/10.1080/08841241.2022.2076276>
- Presley, A., Damron-Martinez, D., Zhang, L. (2010). A study of business student choice to study abroad: A test of the theory of planned behavior. *Journal of Teaching in International Business* 21(4): 227–247. <https://doi.org/10.1080/08975930.2010.526009>
- Radić-Bojanić, B. (2025). English as a medium of instruction as part of the internationalization strategy at the University of Novi Sad. *Current Issues in Language Planning* 26 (5): 706–723. <https://doi.org/10.1080/14664208.2024.2405759>
- Rodrigues, M. (2012). Determinants and impacts of student mobility: A literature review. Accessed on 25 July 2025. URL: <<https://share.google/TWx6fbWbmPsCSIRcK>>.
- Schuch, K. (2021). Patterns of geographical mobility of researchers from six Western Balkan countries in regional and European mobility based training programs. *Ftevel Journal for Research and Technology Policy Evaluation* 52: 19–35. <https://doi.org/10.22163/fteval.2021.516>
- Student Mobility and Internationalization Issue Overview – AACSB. Accessed on 24 July 2025. URL: <<https://share.google/EoQzj9Idk2WXigLnq>>.
- Stroud, A. H. (2010). Who plans (not) to study abroad? An examination of U.S. student intent. *Journal of Studies in International Education* 14(5): 491–507. <https://doi.org/10.1177/1028315309357942>
- Teichler, T. (2017). Internationalization trends in higher education and the changing role of international student mobility. *Journal of International Students* 1(5): 157–176. <https://doi.org/10.3917/jim.005.0179>
- Tompkins, A., Cook, T., Miller, E., LePeau, L. A. (2017). Gender influences on students' study abroad participation and intercultural competence. *Journal of Student Affairs Research and Practice* 54(2): 204–216. <https://doi.org/10.1080/19496591.2017.1284671>
- Vuković-Vojnović, D., Knežević, Lj. (2023). Inclusion of virtual exchange in ESP university classes – Students' perceptions. *Metodički vidici* 14(2): 143–160. <https://doi.org/10.19090/mv.2023.14.143-160>
- White, B, Lee, J. L. (2020). The future of international HE in a post-mobility world. Accessed on 25 July 2025. URL: <<https://share.google/ru58KdXH51Y7wrFIQ>>.

- Xu, X. (2023). Reconceptualizing international student mobility: A multipolar structure lens. *Journal of International Students* 13(2): 1–4. <https://doi.org/10.32674/jis.v13i2.5868>
- Zayim-Kurtay, M., Kaya-Kasikci, S., Kondakci, Y., Bulut-Sahin, B., Kéri, A., Levatino, A., Marinoni, G., Ovchinnikova, E., Öz, Y., Sin, C., Weber, T., Bin Qushem, U. (2025). Im/mobility in a disruptive time: The impact of Covid-19 on the size and directional flow of international student mobility. *Comparative Migration Studies*. <https://doi.org/10.1186/s40878-025-00431-5>
- Zečević, S., Trkulja Milekić, Lj. (2022). Telecollaboration as an EFL environment in the global age. *Zbornik radova Filozofskog fakulteta Univerziteta u Prištini* 52: 55–74. <https://doi.org/10.5937/zrffp52-39509>
- Zubašcu, F. (2021). Interest in EU research mobility schemes growing in the Western Balkans. Accessed on 17 August 2025. URL: <<https://sciencebusiness.net/news/erasmus/interest-eu-research-mobility-schemes-growing-western-balkans>>.

Ivana D. Miškeljin
Ljiljana J. Knežević
University of Novi Sad

VAŽNOST ODREĐENIH VARIJABLI ZA PRIJAVLJIVANJE ZA PROGRAME MEĐUNARODNE MOBILNOSTI – PERCEPCIJE STUDENATA

Sažetak

Međunarodna mobilnost studenata je politika internacionalizacije visokog obrazovanja, njegova transformaciona snaga koja utiče na društvo i državu u celini i verovatno njegova najvidljivija komponenta. Kod nas je važan deo Bolonjskog procesa. Međunarodna mobilnost studenata je značajno porasla u protekle dve decenije, postajući raznovrsnija i multipolarna i poklanjajući više pažnje ravnopravnosti i inkluziji. U porastu je i u Srbiji, prema podacima iz izveštaja Evropske komisije i Eurostata iz 2025. godine. Kao odgovor na rastuću potrebu za novim uvidima i perspektivama, u vezi sa trendovima i pitanjima regrutovanja novih studenata za programe međunarodne mobilnosti, ovaj rad, napisan na osnovu podataka koji su deo većeg istraživanja, ima za cilj da empirijski doprinese obimnoj literaturi o razumevanju faktora bitnih za odlučivanje studenata da se prijave za te programe i jedan deo svog studiranja provedu u inostranstvu, a na osnovu percepcija studenata o učešću u programima međunarodne razmene studenata. Tačnije, cilj rada je da utvrdi do koje se mere varijable, kao što su dobro predznanje iz struke, dobro znanje iz engleskog jezika, dobre komunikacijske i socijalne veštine, dobra podudarnost predmeta na dva univerziteta (i priznavanje odslušanih predmeta) i otvorenost ka drugim kulturama, načinu života i obrazovanja, čine važnim za studente da bi se prijavili za te programe. Dodatno, rad nastoji da istraži da li se percepcije razlikuju u zavisnosti od pola studenata, kao i da li

studentska samoprocena znanja engleskog jezika utiče na njihove percepcije. Za tu svrhu, sastavljen je strukturirani upitnik na osnovu obimne literature o učešću studenata u programima međunarodne razmene. Upitnik je distribuiran među studentima završnih godina deset fakulteta Univerziteta u Novom Sadu (N=727), koji učestvuju u programima međunarodne studentske razmene tokom zimskog semestra akademske 2024/25. godine. Analiza prikupljenih podataka je uključivala deskriptivnu statistiku, t test, Man Vitnijev U test i Pirsonov koeficijent korelacije. Dobijeni rezultati ukazuju da najveći prioritet studenti daju dobrom znanju engleskog jezika, a najmanji dobrom predznanju iz struke. Uočena je značajna statistička razlika između percepcija studenata i studentkinja, pri čemu studentkinje daju veću važnost četirima od ukupno šest ispitivanih varijabli. Samoprocena znanja engleskog jezika stoji u pozitivnoj korelaciji sa dve ispitivane varijable. Rezultati pokazuju dominaciju varijable dobrog poznavanja engleskog jezika i važnost otvorenosti studenata prema novim kulturama i iskustvima prilikom donošenja odluka u vezi sa učestvovanjem na ovim programima. Kao takvi, rezultati su relevantni za nastavu engleskog jezika u visokom obrazovanju u smislu poklanjanja više pažnje interkulturnim kompetencijama i pitanjima sadržaja nastavnog programa za engleski jezik zarad uspešnije internacionalizacije univerziteta, držanja koraka sa globalnim trendovima i većeg angažovanja na globalnom nivou.

Ključne reči: međunarodna mobilnost studenata, varijable, internacionalizacija visokog obrazovanja, nastava engleskog jezika u visokom obrazovanju.

Received: 21 August 2025

Accepted: 20 October 2025

Jagoda P. Topalov
University of Novi Sad
Faculty of Philosophy,
Department of English Studies
jagoda.topalov@ff.uns.ac.rs
<https://orcid.org/0000-0001-7100-0444>

Original research paper
UDC 378.016:811.111-057.4
DOI: 10.19090/MV.2025.16.2.51-68

THE PARADOX OF PREPARATION: EMI TRAINING, NEED FRUSTRATION AND TEACHER DEMOTIVATION IN HIGHER EDUCATION¹

ABSTRACT: This study examines the demotivating role of competence and autonomy need frustration among instructors teaching via English as a Medium of Instruction (EMI). Drawing on Self-Determination Theory (Deci & Ryan 2000; Ryan & Deci 2020), it investigates whether three background variables – completion of EMI-specific training, EMI teaching experience and class composition (integrated versus separate groups of students) – explain variation in these psychological dimensions. Data were collected from university professors engaged in EMI and analyzed to assess the influence of these factors. Results revealed that EMI training was consistently associated with higher levels of both competence and autonomy frustration, whereas class composition and EMI experience showed no significant effects. These findings suggest that current training practices may inadvertently heighten instructors' awareness of challenges without sufficiently addressing structural and institutional constraints. The study underscores the need for training that not only develops pedagogical strategies but also supports instructors' psychological needs, thereby sustaining motivation and enhancing EMI teaching quality.

Keywords: Self-Determination Theory, needs frustration, demotivation, English as a Medium of Instruction, university professors.

PARADOKS PRIPREMLJENOSTI: OBUKA ZA UNIVERZITETSKU NASTAVU NA ENGLESKOM, FRUSTRACIJA POTREBA I DEMOTIVACIJA PROFESORA

APSTRAKT: Istraživanje ispituje demotivaciju u nastavi na engleskom kao jeziku visokoškolske nastave (EJVIN), konceptualizovanu kroz prizmu frustracije potreba za

¹ The paper is based on research conducted as part of the project *Internationalization of the University of Novi Sad and the perspectives of English as a Medium of Instruction* (*Internacionalizacija Univerziteta u Novom Sadu i perspektive engleskog kao jezika visokoškolske nastave*) no. 000851277 2024 09418 003 000 001 04 002 funded by The Secretariat for Higher Education and Research of the Autonomous Province of Vojvodina.

kompetencijom i autonomijom u okviru Teorije samoodređenja (Deci & Ryan 2000; Ryan & Deci 2020). Konkretno, istraživanje razmatra da li specifična obuka za EJVIN, nastavničko iskustvo u kontekstu EJVIN-a i sastav grupe (integrisane naspram odvojenih grupa međunarodnih studenata) predviđaju varijacije u ovim dimenzijama. Upitnik o demotivaciji popunili su univerzitetski nastavnici angažovani u nastavi putem EJVIN-a. Regresione analize pokazale su da je obuka bila jasno povezana sa višim nivoima frustracije kako kompetencije, tako i autonomije, dok sastav grupe i iskustvo u nastavi nisu imali značajne efekte. Nalazi ukazuju na to da trenutne prakse obuke mogu nehotice povećati svest nastavnika o izazovima, ali bez dovoljno pažnje posvećene strukturnim i institucionalnim ograničenjima. Rezultati naglašavaju potrebu za obukom koja ne samo da razvija pedagoške strategije, već i podržava psihološke potrebe nastavnika, čime se održava motivacija i unapređuje kvalitet nastave putem EJVIN-a.

Ključne reči: teorija samoodređenja, frustracija potreba, demotivacija, engleski kao jezik visokoškolske nastave, univerzitetski profesori.

1. INTRODUCTION

The rapid expansion of English as a Medium of Instruction (EMI) in higher education has drawn considerable attention to its impact on student learning, yet the psychological experiences of instructors remain comparatively underexplored. While much EMI research highlights students' language proficiency, learning outcomes and classroom participation, relatively little systematic and theory-driven work has examined the motivation of those responsible for teaching (Lasagabaster 2018; Macaro 2018). This neglect is notable, as the sustainability and quality of EMI depend not only on institutional policies and student readiness, but also on instructors' willingness to engage and persist in this demanding pedagogical context.

Self-Determination Theory (SDT; Deci & Ryan 2000; Ryan & Deci 2020) provides a valuable lens for examining teacher motivation in EMI. According to SDT, sustained motivation depends on the satisfaction of three basic psychological needs: autonomy, or the perception of choice and control; competence, or the feeling of being capable and effective; and relatedness, or the sense of connection with others. When these needs are met, teachers are more likely to engage fully and persist in their work; when they are blocked, motivation can diminish, and disengagement may occur (Ryan & Deci 2020). In EMI contexts, teaching conditions such as institutional recognition, class composition and available training can either support or frustrate these needs, with direct consequences for instructors' professional well-being (Galloway & Ruegg 2020; Soruç & Griffiths 2018).

Recent studies in the Western Balkans and beyond reveal that EMI instructors frequently report difficulties balancing content delivery with language support, adapting teaching methods to diverse student needs and maintaining autonomy under institutional constraints (Bogdanović, Topalov & Gak 2025; Radić-Bojanić 2025; Pecorari & Malmström 2018). Although EMI training is often assumed to enhance competence and confidence, evidence suggests a more complex reality: training may raise instructors' awareness of linguistic and pedagogical challenges without equipping them with the institutional support required to address them, potentially increasing frustration rather than alleviating it (Tang 2020; Uehara & Kojima 2021).

In light of these challenges, the present study investigates competence and autonomy frustration as indicators of demotivation in EMI teaching. Specifically, it examines whether variation in these dimensions can be explained by three background variables: completion of EMI-specific training, level of EMI teaching experience, and class composition (whether international students are taught separately or integrated with domestic students).

2. THEORETICAL FRAMEWORK

This study draws on SDT (Deci & Ryan 2000; Ryan & Deci 2020) to conceptualize the motivational factors influencing instructors' engagement in teaching international students in EMI contexts. SDT is a well-established macro theory of human motivation that explains the quality and persistence of engagement through the satisfaction or frustration of three basic psychological needs: autonomy (the perception of choice and self-direction in one's actions), competence (the perception of effectiveness in interacting with one's environment), and relatedness (the perception of connection and belonging with others). When the social and institutional environment supports autonomy, competence and relatedness, individuals are more likely to internalize extrinsic motivations and sustain engagement over time. Conversely, contexts that undermine these needs tend to lead to controlled motivation or amotivation. Whereas unmet psychological needs may limit the realization of individual growth, the active thwarting of these needs has been linked to defensiveness, reduced well-being and even the onset of psychopathology (Bartholomew et al. 2011). In line with this, scholars have recently emphasized that it is not only the fulfillment or lack of fulfillment of psychological needs that matters, but also the possibility that these needs may be actively frustrated or undermined (Chen et al. 2015). Building on this perspective, competence satisfaction reflects a sense of effectiveness and capability in achieving desired outcomes, whereas competence frustration is characterized by

feelings of inadequacy and self-doubt. Similarly, autonomy satisfaction refers to experiencing self-determination, willingness and volition in one's actions, while autonomy frustration emerges when individuals feel controlled by external demands or internalized pressures (Chen et al. 2015).

In EMI settings, the teaching of international students presents unique challenges and opportunities that can influence these motivational processes. Linguistic and cultural diversity in the classroom may enhance intrinsic motivation for instructors who value intercultural engagement but may also frustrate the need for competence when adequate training, resources, or institutional support are lacking. Similarly, institutional recognition, fair compensation and appreciation from students can bolster relatedness and promote more self-determined forms of motivation, whereas their absence may lead to controlled motivation or disengagement (Skaalvik & Skaalvik 2017).

This study captures two dimensions consistent with SDT, the first being perceived ineffectiveness and lack of institutional recognition and the second being lack of autonomy and classroom connection. Perceived ineffectiveness primarily reflects competence need frustration, encompassing experiences of difficulty adapting teaching methods, challenges posed by language and cultural barriers, and the lack of institutional acknowledgment or compensation. These perceptions can erode teachers' sense of professional effectiveness and value within the institution (Slomp et al. 2018). Lack of autonomy and classroom connection, on the other hand, primarily reflects autonomy need frustration, including feelings of low purpose, insufficient prior experience to make confident instructional decisions, and inadequate institutional support. While some aspects also touch on student appreciation, the dominant theme is reduced volition and control over one's teaching in the EMI setting, with such experiences having been shown to predict lower engagement and higher burnout in teaching contexts (Van den Broeck et al. 2010; Bartholomew et al. 2011). Framing these dimensions within SDT allows for a more in-depth understanding of how both personal experiences and institutional structures influence instructors' motivation to adapt their teaching methods for international students in EMI environments. This theoretical grounding provides a basis for interpreting factor analytic results and for designing interventions that enhance need satisfaction and, in turn, more self-determined forms of motivation.

Although relatedness is a fundamental need within SDT, prior research suggests that competence and autonomy are more directly implicated in task-specific demotivation and disengagement (Ryan & Deci 2000; Vansteenkiste & Ryan 2013). In line with this, the present study focused on competence and autonomy frustration, as

these needs are most likely to capture the specific challenges instructors face in EMI contexts, such as linguistic barriers, institutional constraints and limited instructional volition.

When it comes to extralinguistic and contextual factors that may facilitate the development of self-determined beliefs and behavior, EMI training is a direct avenue for competence support, as it provides instructors with pedagogical strategies for managing linguistic diversity and integrating content and language. Prior research shows that EMI preparation courses improve instructors' perceived teaching efficacy, adaptability and confidence in classroom interaction (Macaro et al. 2018; Soruç & Griffiths 2018). Lack of training, by contrast, can leave instructors feeling underprepared, leading to competence frustration and reduced autonomy in instructional decision-making.

Apart from EMI training, EMI teaching experience is another key factor influencing need satisfaction. With experience, instructors develop and internalize strategies, gain confidence in their classroom management and enhance their ability to tailor instruction to diverse student needs. Studies have shown that novice EMI instructors are more likely to report difficulties in balancing content and language demands and to experience higher levels of stress (Lasagabaster 2018; Rose & Galloway 2019). In contrast, more experienced instructors tend to perceive EMI as a professional growth opportunity rather than an additional burden.

Class composition (whether international students are taught in separate groups or integrated with domestic students) can shape both competence and autonomy perceptions. Integrated classes may require greater scaffolding and differentiated instruction, potentially increasing competence demands and constraining autonomy (Pecorari & Malmström 2018). However, integrated classrooms can also offer opportunities for intercultural learning and relatedness if effectively managed (Jiang et al. 2019). Separate classes may allow for more tailored instruction and greater instructional control, but can limit cross-cultural interaction.

Taken together, these three factors – EMI training, EMI teaching experience and class composition – represent interconnected pathways through which competence and autonomy needs are either supported or frustrated in EMI contexts. The present study adopts a demotivation perspective, conceptualizing higher levels of competence and autonomy frustration as indicators of reduced motivation to teach EMI courses. While prior research has identified a range of institutional, pedagogical and experiential factors that may shape EMI teaching experiences, less is known about how specific background characteristics, such as EMI-specific training, years of EMI teaching experience and the composition of student groups, relate to perceived

competence and autonomy in this context. Addressing this gap, the study investigates (1) the overall level of professors' demotivation when teaching in EMI settings, and (2) whether EMI training, EMI experience level and class composition can explain variation in professors' perceived competence and autonomy for EMI teaching.

3. METHOD

Drawing on SDT and EMI literature and relying on a cross-sectional quantitative design, this study investigates the following research questions:

1. What is the level of professors' demotivation when teaching courses in EMI settings?
2. To what extent do EMI training, EMI experience level and class composition predict professors' perceived competence and autonomy for EMI teaching?

Based on prior research, the following hypotheses are proposed:

H1: Professors who have attended an EMI teaching preparation course will report lower competence-oriented and autonomy-oriented demotivation than those without such training.

H2: Higher EMI teaching experience levels will be associated with lower competence-oriented and autonomy-oriented demotivation.

H3: Professors teaching in integrated classes will report higher competence-oriented and autonomy-oriented demotivation than those teaching in separate classes.

3.1. Participants

The sample in this study included 102 professors (male = 65, female = 37) from the Faculty of Technical Sciences at the University of Novi Sad who have so far in their careers taught at least one EMI course to international students. Table 1 displays the frequencies of the participants' academic title cross-tabulated with their experience in working with international students.

	Experience in teaching international students				Total
	Novice (1 to 5 years)	Early career (6 to 10 years)	Experienced (11 to 15 years)	Highly experienced (16 years and more)	
Full professor	11	22	24	4	61
Associate professor	10	18	3	1	32

Assistant professor	4	2	3	0	9
Total	25	42	30	5	102

Table 1. Participants' academic level across the reported experience of teaching in EMI contexts

Of the total number of participants, 9.8% reported that they took a course specializing in EMI teaching methodology organized by the University of Novi Sad, while 90.2% reported that they did not attend such a course. Furthermore, 25.5% reported they teach EMI courses to integrated groups consisting of both international and domestic students, while 74.5% teach their courses to separate groups.

3.2. *Instrument*

Demotivation in teaching international students in EMI contexts was measured using a nine-item scale developed for this study. Items were designed to capture experiences of basic psychological need frustration as conceptualized by SDT (Deci & Ryan 2005), with an emphasis on the EMI teaching context. The items reflected barriers, lack of purpose, and constraints that could undermine teachers' autonomy and competence. Participants rated each item on a five-point Likert scale (1 = completely disagree, 5 = completely agree), with higher scores indicating greater demotivation and higher need frustration. Because the items were all negatively worded, no reverse coding was applied.

An exploratory factor analysis (EFA) was conducted on nine demotivation items using principal component analysis with Varimax rotation. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .744, exceeding the recommended minimum of .60, and Bartlett's test of sphericity was significant, $\chi^2(21) = 255.55$, $p < .001$, indicating that the correlation matrix was suitable for factor analysis. Two components had eigenvalues greater than 1 and together they explained 66.99% of the total variance (Component 1 = 48.92%, Component 2 = 18.08%, see Table 2). Communalities after extraction ranged from .536 (item 6) to .980 (item 5). After rotation, the first factor (Competence-oriented demotivation) had strong loadings from five items (items 1, 2, 3, 4 and 5), ranging from .711 to .959. The second factor (Autonomy-oriented demotivation) had strong loadings from four items (items 6, 7, 8 and 9), ranging from .582 to .838. Cross-loadings were minimal, and the rotated solution exhibited a simple structure that aligned with theoretical expectations from SDT.

Item	Item (short description)	Communality	Factor 1	Factor 2	α
1	Frustration due to language/cultural barriers	0.606	0.711	0.319	.819
2	Frustration due to not being paid	0.614	0.761	0.187	
3	No clear benefit from extra effort	0.762	0.873	0.010	
4	Effort not recognized by institution	0.586	0.757	0.113	
5	Lack of purpose in EMI teaching	0.980	0.959	0.245	
6	Difficult to find motivation to adapt methods	0.536	0.061	0.582	.768
7	Lack of experience reduces motivation	0.760	0.241	0.838	
8	Efforts limited by constraints on teaching	0.806	0.304	0.802	
9	Demotivated by lack of institutional support/resources	0.678	0.027	0.823	

Table 2. Exploratory factor analysis of demotivation indicators in EMI teaching

For each factor, mean scores were calculated by averaging the item scores. Higher means indicate stronger demotivation related to the specific need frustration domain.

3.3. Procedure

Participants completed the survey online via Google Forms during November and December 2024. The dataset contained no missing values. Categorical predictors were coded for analysis as follows: EMI training (0 = No, 1 = Yes), EMI teaching experience level (0 = Novice, 1 = Early career, 2 = Experienced, 3 = Highly experienced; with Novice as the reference category in regression) and Class composition (0 = Integrated classes, 1 = Separate classes). Factor scores for competence-oriented and autonomy-oriented demotivation were computed as the mean of the respective items identified in the exploratory factor analysis. All variables were checked for coding accuracy prior to analysis. The data were analyzed by IBM SPSS Statistics (Version 25) using both descriptive statistics (means, standard deviations, skewness, kurtosis) and inferential statistics, including exploratory factor analysis and multiple regression analyses.

4. RESULTS

To address the first research question (RQ1: What is the level of professors' demotivation when teaching courses in EMI settings?) descriptive statistics was calculated for each item and for the two composite factor scores representing competence-oriented and autonomy-oriented demotivation. To address the second research question (RQ2: Can EMI training, EMI experience level, and group composition explain the professors' level of perceived competence and autonomy for teaching EMI courses?), two multiple regression analyses were conducted, with competence-oriented demotivation and autonomy-oriented demotivation as dependent variables, respectively, and EMI training, class composition and years of EMI teaching experience as predictors.

Table 3 presents the results of descriptive statistics that was calculated for each item and for the two composite factor scores (competence-oriented demotivation and autonomy-oriented demotivation).

Item (short description)	Mean	SD	Skewness	Kurtosis
Frustration due to language/cultural barriers	2.40	1.37	0.57	-0.9
Frustration due to not being paid	3.38	1.39	-0.42	-1.01
No clear benefit from extra effort	2.67	1.33	0.17	-1.07
Effort not recognized by institution	2.59	1.28	0.21	-1.01
Lack of purpose in EMI teaching	2.28	1.27	0.48	-0.99
Competence composite score	2.65	0.97	-0.10	-0.86
Difficult to find motivation to adapt methods	2.19	1.16	0.41	-1.18
Lack of experience reduces motivation	1.97	1.10	0.92	0.01
Efforts limited by constraints on teaching	2.80	1.45	0.09	-1.30
Demotivated by lack of institutional support/resources	2.16	1.18	0.82	-0.12
Autonomy composite score	2.51	0.88	-0.08	-0.84

Table 3. Descriptive indicators of demotivation in EMI teaching

Item means ranged from 1.97 (Lack of experience reduces motivation) to 3.38 (Frustration due to not being paid). The competence-oriented demotivation factor had a mean of 2.65 (SD = 0.97), while autonomy-oriented demotivation had a mean of 2.51 (SD = 0.88), both below the midpoint of the 5-point scale, indicating that on average respondents reported relatively low to moderate demotivation. A paired samples t-test revealed that the competence-oriented

demotivation was statistically significantly higher than the autonomy-oriented demotivation ($t = 4.653$, $p = .000$). Skewness and kurtosis values for all items and composite scores were within acceptable ranges (± 1), suggesting no severe deviations from normality.

A multiple regression was conducted to examine whether EMI training, class composition (separate vs. integrated), and years of EMI teaching experience predicted professors' perceived competence demotivation in teaching EMI courses (see Table 4). The overall model was not statistically significant, $F(3,97) = 1.37$, $p = .256$, and explained 4.1% of the variance in competence ($R^2 = .041$).

Predictor	B	SE B	β	t	p	95% CI for B
Constant	2.50	0.30	-	8.21	< .001	[1.89, 3.10]
EMI training	0.50	0.34	0.15	2.48	0.022	[-0.17, 1.18]
Class composition	0.23	0.22	0.11	1.07	0.290	[-0.20, 0.67]
Years of EMI experience	-0.04	0.11	-0.04	-0.38	0.707	[-0.26, 0.18]
Note. $R^2 = .041$, $F(3,97) = 1.37$, $p = .256$.						

Table 4. Effects of training, class composition, and experience on teacher competence need frustration in EMI contexts

Of the three predictors, only EMI training emerged as a significant positive predictor ($B = 0.50$, $SE = 0.34$, $\beta = 0.15$, $t = 2.48$, $p = .022$), indicating that professors who completed EMI training reported higher competence-oriented demotivation scores than those who did not. Class composition ($p = .290$) and years of EMI teaching experience ($p = .707$) were not significant predictors.

Another multiple regression was conducted to examine whether EMI training, class composition, and years of EMI teaching experience predicted autonomy-oriented demotivation (see Table 5). The overall model was statistically significant, $F(3, 97) = 2.76$, $p = .046$, explaining 7.9% of the variance in autonomy scores ($R^2 = .079$).

Predictor	B	SE B	β	t	p	95% CI for B
Constant	2.56	0.27	-	9.40	< .001	[2.02, 3.09]
EMI training	0.69	0.30	0.23	2.27	0.025	[0.09, 1.29]
Class composition	0.19	0.20	0.10	0.98	0.332	[-0.20, 0.58]
Years of EMI experience	-0.12	0.10	-0.12	-1.25	0.216	[-0.32, 0.07]
Note. $R^2 = .079$, $F(3,97) = 2.76$, $p = .046$						

Table 5. Effects of training, class composition, and experience on teacher autonomy need frustration in EMI contexts

EMI training emerged as a significant positive predictor ($B = 0.69$, $SE = 0.30$, $\beta = 0.23$, $p = .025$), indicating that professors who completed EMI training reported higher autonomy-oriented demotivation scores. Class composition and years of EMI experience were not significant predictors (both $p > .05$).

Because EMI training emerged as a significant predictor in the regression analyses for both competence- and autonomy-oriented demotivation, independent samples t-tests were conducted to explore whether specific demotivation items differed between professors who completed EMI training and those who did not (see Table 6).

Item (short description)	No EMI training M (SD)	EMI training M (SD)	Mean diff.	t	p
Frustration due to language/cultural barriers	2.20 (1.28)	3.10 (0.88)	-0.90	-2.18	.032
Frustration due to not being paid	2.30 (1.34)	3.30 (1.34)	-1.00	-2.23	.028
No clear benefit from extra effort	3.38 (1.41)	3.40 (1.35)	-0.02	-0.04	.967
Effort not recognized by institution	2.59 (1.34)	3.40 (1.07)	-0.81	-1.86	.066
Lack of purpose in EMI teaching	2.53 (1.25)	3.10 (1.45)	-0.57	-1.34	.183
Difficult to find motivation to adapt methods	2.09 (1.14)	3.10 (0.99)	-1.01	-2.71	.008
Lack of experience reduces motivation	1.87 (1.10)	2.90 (0.57)	-1.03	-2.91	.004
Efforts limited by constraints on teaching	2.72 (1.44)	3.60 (1.35)	-0.88	-1.85	.067
Demotivated by lack of institutional support/resources	2.07 (1.17)	3.00 (1.05)	-0.93	-2.43	.017

Table 6. Independent samples t-tests comparing demotivation items by EMI training status

Results showed that EMI-trained professors reported significantly higher frustration due to language/cultural barriers, $t = -2.18$, $p = .032$ and frustration due to not being paid, $t = -2.23$, $p = .028$. They were also more likely to report difficulty finding motivation to adapt teaching methods, $t = -2.71$, $p = .008$, lack of experience as a source of reduced motivation, $t = -2.91$, $p = .004$ and demotivation due to lack of institutional support/resources, $t = -2.43$, $p = .017$. Although differences for effort not being recognized by the institution and efforts being

limited by constraints on teaching approached significance ($p = .066$ and $.067$, respectively), they did not reach the conventional threshold.

In the following section, these findings will be examined in relation to existing research and theoretical frameworks to explore possible explanations for the observed patterns of demotivation among EMI professors.

5. DISCUSSION

The goal of the research reported in this paper was to investigate competence- and autonomy-oriented demotivation, as framed within SDT (Deci & Ryan 2005; Ryan & Deci 2020), among professors who teach international students using EMI. Specifically, the study addressed two questions: (1) What is the level of professors' competence- and autonomy-oriented demotivation in EMI teaching? and (2) Can EMI training, EMI experience level, and group composition explain variation in these two demotivation dimensions? Descriptive analyses indicated that mean scores for both competence- and autonomy-oriented demotivation were below the midpoint of the 5-point scale, suggesting generally low to moderate demotivation. However, paired-samples testing revealed that competence-oriented demotivation was significantly higher than autonomy-oriented demotivation, suggesting that competence-related challenges are a more prominent source of demotivation in EMI teaching than autonomy-related ones. From an SDT perspective, professors may experience greater frustration when they perceive that their skills, resources, or institutional recognition are insufficient to meet the demands of teaching in EMI contexts. Such perceptions may be heightened by the additional linguistic and cultural complexities of working with international students. In contrast, autonomy-oriented factors, while still relevant, may be less salient either because professors retain a degree of choice in instructional approaches or because restrictions on autonomy are perceived as a general feature of academic work, not unique to EMI (Han & Yin 2016).

Examining the individual survey items reveals that demotivation in EMI teaching arises from a mix of personal, institutional and structural challenges. Professors noted frustrations related to communication barriers, inadequate compensation and the limited recognition of their additional efforts. Some also pointed to constraints on teaching methods, lack of prior experience with international students and insufficient resources as factors that made it harder to adapt and act autonomously in the classroom. While overall demotivation levels were low to moderate, these indicators suggest that specific external constraints and perceptions of reduced professional effectiveness can nonetheless temper

enthusiasm for EMI teaching. Examining these patterns in light of previous research suggests that the challenges identified in this study are not isolated to the present context but are consistent with broader trends reported in EMI literature. Prior studies have documented similar sources of demotivation, including persistent language and cultural barriers (Tang 2020), insufficient pedagogical flexibility and resources (Zheng & Choi 2024), and a lack of institutional recognition and support (Uehara & Kojima 2021). The absence of financial or professional incentives for EMI teaching, as noted by Macaro (2018), further echoes the frustration linked to inadequate compensation and undervaluation observed here. Taken together, these parallels suggest that both the competence- and autonomy-oriented demotivation reported by professors in this study reflect structural and contextual factors that have been repeatedly identified across diverse EMI settings, underscoring the need for systemic responses at policy and institutional levels.

Regression analyses showed that, across both demotivation dimensions, EMI training emerged as the only significant predictor, with professors who had received EMI training reporting higher demotivation scores. In contrast, class composition (separate vs. integrated) and years of EMI experience were not significant predictors. Overall, these findings suggest that while general demotivation levels were low to moderate, the observed positive association between EMI training and both competence- and autonomy-oriented demotivation may reflect heightened awareness of instructional challenges among trained professors, a pattern that aligns with SDT's emphasis on the role of contextual factors in supporting or undermining the basic psychological needs in EMI settings. One possible explanation is that EMI training increases awareness of the pedagogical, linguistic, and intercultural demands of teaching in such settings, making professors more aware of the gap between recommended practices and their own institutional realities. When adequate institutional support, resources, or policy alignment are lacking, this heightened awareness may translate into greater frustration and demotivation, as the ideal conditions outlined in training remain unattainable in practice. Similar patterns have been observed in professional development research, where increased expertise can amplify dissatisfaction if the work environment does not enable the application of newly acquired skills (cf. Borg 2018; Macaro 2018; Rose et al. 2021). In the context of EMI, Macaro (2018) and Galloway and Ruegg (2020) have noted that training alone is insufficient to improve teaching outcomes unless accompanied by structural changes and sustained institutional backing. From the perspective of SDT, this finding may

reflect a mismatch between increased competence awareness and the satisfaction of the other two basic psychological needs: autonomy and relatedness. EMI training is designed to enhance perceived competence by equipping professors with new strategies and knowledge. However, if the institutional context does not provide sufficient autonomy (e.g., flexibility in course design, freedom to adapt materials) or relatedness (e.g., collegial support, recognition), the result may be a heightened sense of constraint and isolation. In this way, training can inadvertently magnify demotivation by making the unmet needs more salient. Previous studies (e.g., Lamb 2017; Sugino 2010) have reported that professional development without corresponding systemic support can exacerbate feelings of frustration, particularly when teachers are aware of what should be done but are unable to implement these practices.

6. CONCLUSION

The aim of this study was to investigate the level and sources of professors' demotivation in teaching courses through EMI, as well as to examine whether EMI training, EMI experience and class composition could predict competence- and autonomy-oriented demotivation. Descriptive analyses revealed that while overall demotivation levels were low to moderate, professors reported notable frustration stemming from communication barriers, inadequate compensation and the lack of tangible benefits and recognition for their efforts. Paired-samples analysis indicated that competence-oriented demotivation was significantly higher than autonomy-oriented demotivation, suggesting that perceived professional effectiveness is a more pressing concern than autonomy in this context. Regression analyses identified EMI training as the only significant predictor of both demotivation dimensions, with trained professors reporting higher demotivation scores – likely reflecting increased awareness of pedagogical and institutional shortcomings when recommended practices cannot be implemented. This pattern aligns with SDT (Deci & Ryan 2005), which posits that motivation depends on the satisfaction of three basic psychological needs: competence, autonomy and relatedness. While EMI training may enhance perceived competence, unmet needs for autonomy (e.g., flexibility in course design) and relatedness (e.g., institutional recognition and collegial support) can undermine the overall motivation. Similar findings have been reported in professional development literature, where training without corresponding systemic change may heighten awareness of constraints, thereby increasing dissatisfaction (Borg 2018; Lamb 2017; Macaro et al. 2018; Rose et al. 2021; Sugino 2010).

These findings underscore the need for universities to couple EMI training with sustained institutional and structural support to ensure the fulfilment of all three basic psychological needs outlined in SDT. Beyond equipping professors with pedagogical strategies, institutions should foster environments that provide autonomy, recognize contributions and facilitate collegial engagement. Policy measures could include allowing flexibility in course design, offering tangible recognition or incentives for EMI teaching and ensuring adequate material and human resources. Drawing on suggestions from Galloway and Ruegg (2020) and Macaro (2018), follow-up initiatives such as mentoring, peer-support networks and collaborative problem-solving workshops can help bridge the gap between training and practice. In the university classroom, such systemic alignment can transform the heightened awareness gained through training into sustained motivation, innovation and improved learning experiences for international students, rather than allowing it to become a source of frustration and disengagement.

REFERENCES

- Bartholomew, K. J., Ntoumanis, N., Ryan, R. M., Bosch, J. A., Thøgersen-Ntoumani, C. (2011). Self-determination theory and diminished functioning: The role of interpersonal control and psychological need thwarting. *Personality and Social Psychology Bulletin* 37(11): 1459–1473. <https://doi.org/10.1177/0146167211413125>
- Bogdanović, V., Topalov, J., Gak, D. (2025). Enhancing collaboration in English as a Medium of Instruction: Challenges for content area lecturers and ESP instructors, in *Jezik i društvene nauke u kontaktu: Izazovi interdisciplinarnosti*, ed. N. Ilić, J. Marčeta & K. Pejković (Novi Sad: Filozofski fakultet): 205–261.
- Borg, S. (2018). Teachers’ beliefs and classroom practices, in *The Routledge handbook of language awareness*, ed. P. Garrett & J. M. Cots (London: Routledge): 75–91.
- Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E. L., Van der Kaap-Deeder, J., Duriez, B., Lens, W., Matos, L., Mouratidis, A., Ryan, R. M., Sheldon, K. M., Soenens, B., Van Petegem S., Verstuyf, J. (2015). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motivation and Emotion* 39(2): 216–236.
- Deci, E. L., Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry* 11(4): 227–268. https://doi.org/10.1207/S15327965PLI1104_01

- Deci, E. L., Ryan, R. M. (2005). *Self-determination theory: An approach to human motivation and personality*. Retrieved from <http://selfdeterminationtheory.org>
- Galloway, N., Ruegg, R. (2020). The provision of student support on English Medium Instruction programmes in Japan and China. *Journal of English for Academic Purposes* 45: 100846. <https://doi.org/10.1016/j.jeap.2020.100846>
- Han, J., Yin, H. (2016). Teacher motivation: Definition, research development and implications for teachers. *Cogent Education* 3(1): 1217819. <https://doi.org/10.1080/2331186X.2016.1217819>
- Jiang, L., Zhang, L. J., May, S. (2019). Implementing English-Medium Instruction (EMI) in China: Teachers' practices and perceptions, and students' learning motivation and needs. *International Journal of Bilingual Education and Bilingualism* 22(2): 107–119. <https://doi.org/10.1080/13670050.2016.1231166>
- Lamb, M. (2017). The motivational dimension of language teaching. *Language Teaching* 50(3): 301–346. <https://doi.org/10.1017/S0261444817000088>
- Lasagabaster, D. (2018). Fostering team teaching: Mapping out a research agenda for English-medium instruction at university level. *Language Teaching* 51(3): 400–416. <https://doi.org/10.1017/S0261444818000113>
- Macaro, E. (2018). *English medium instruction: Content and language in policy and practice*. Oxford: Oxford University Press.
- Macaro, E., Curle, S., Pun, J., An, J., Dearden, J. (2018). *English Medium Instruction: Content and language in policy and practice*. Oxford: Oxford University Press.
- Macaro, E., Curle, S., Pun, J., An, J., Dearden, J. (2018). A systematic review of English medium instruction in higher education. *Language Teaching* 53(1): 36–76. <https://doi.org/10.1017/S0261444817000350>
- Pecorari, D., Malmström, H. (2018). At the crossroad of TESOL and English Medium Instruction. *TESOL Quarterly* 52(3): 497–515. <https://doi.org/10.1002/tesq.470>
- Radić-Bojanić, B. (2025). English as a medium of instruction as part of the internationalization strategy at the University of Novi Sad. *Current Issues in Language Planning*: 26 (5): 706–723. <https://doi.org/10.1080/14664208.2024.2405759>
- Rose, H., Curle, S., Aizawa, I., Thompson, G. (2021). What drives success in English medium taught courses? The interplay between language

- proficiency, academic skills, and motivation. *Studies in Higher Education* 46(11): 2301–2315. <https://doi.org/10.1080/03075079.2019.1590690>
- Rose, H., Galloway, N. (2019). *Global Englishes for language teaching: Preparing teachers for English Medium Instruction*. Cambridge: Cambridge University Press.
- Ryan, R. M., Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist* 55(1): 68–78.
- Ryan, R. M., Deci, E. L. (2020). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. New York: Guilford Press.
- Skaalvik, E. M., Skaalvik, S. (2017). Teacher stress and teacher self-efficacy: Relations and consequences, in *Educator stress: An occupational health perspective*, ed. T. Mendonça McIntyre, S. E. McIntyre & D. J. Francis (Cham: Springer International Publishing): 101–125.
- Slemp, G. R., Kern, M. L., Patrick, K. J., Ryan, R. M. (2018). Leader autonomy support in the workplace: A meta-analytic review. *Motivation and Emotion* 42(5): 706–724. <https://doi.org/10.1007/s11031-018-9698-y>
- Soruç, A., Griffiths, C. (2018). English as a Medium of Instruction: Students' strategies. *ELT Journal* 72(1): 38–48. <https://doi.org/10.1093/elt/ccx017>
- Sugino, T. (2010). Teacher demotivational factors in the Japanese language teaching context. *Procedia – Social and Behavioral Sciences* 3: 216–226. <https://doi.org/10.1016/j.sbspro.2010.07.036>
- Tang, K. N. (2020). Challenges and importance of teaching English as a medium of instruction in Thailand international colleges. *Journal of English as an International Language* 15(2): 97–118.
- Uehara, T., Kojima, N. (2021). Prioritizing English-medium instruction teachers' needs for faculty development and institutional support: A best–worst scaling approach. *Education Sciences* 11(8): 384. <https://doi.org/10.3390/educsci11080384>
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., Lens, W. (2010). Unemployed individuals' work values and job flexibility: An explanation from expectancy-value theory and self-determination theory. *Applied Psychology* 59(2): 296–317. <https://doi.org/10.1111/j.1464-0597.2009.00391.x>
- Vansteenkiste, M., Ryan, R. M. (2013). On psychological growth and vulnerability: Basic psychological need satisfaction and need frustration as a unifying principle. *Journal of Psychotherapy Integration* 23(3): 263–280.

Zheng, Q., Choi, T. H. (2024). English-medium instruction as an internationalisation strategy at a second-tier Chinese University: instructors' challenges and their shaping factors. *Asian-Pacific Journal of Second and Foreign Language Education* 9(1): 76. <https://doi.org/10.1186/s40862-024-00295-9>

Jagoda P. Topalov
Univerzitet u Novom Sadu

PARADOKS PRIPREMLJENOSTI: OBUKA ZA UNIVERZITETSKU NASTAVU NA ENGLESKOM, FRUSTRACIJA POTREBA I DEMOTIVACIJA PROFESORA

Sažetak

Ovo istraživanje bavi se demotivacijom univerzitetskih nastavnika u nastavi na engleskom kao jeziku visokoškolske nastave (EJVIN), posmatranom kroz teorijski okvir teorije samoodređenja (Deci & Ryan, 2000; Ryan & Deci, 2020). Polazna pretpostavka istraživanja jeste da održiva motivacija nastavnika zavisi od zadovoljenja osnovnih psiholoških potreba za kompetencijom i autonomijom, dok njihova frustracija dovodi do smanjenog angažovanja i odustajanja. Ispitivano je u kojoj meri tri nezavisne varijable – završena specifična obuka za EJVIN, nivo nastavničkog iskustva u EJVIN nastavi i sastav studentske grupe (odvojene ili integrisane grupe međunarodnih i domaćih studenata) – mogu objasniti razlike u stepenu frustracije kompetencije i autonomije. Podaci su prikupljeni od nastavnika zaposlenih na Tehničkom fakultetu Univerziteta u Novom Sadu, koji su uključeni u izvođenje nastave na engleskom jeziku. Regresione analize ukazale su na jasan obrazac: završena obuka za EJVIN povezana je sa višim nivoom frustracije kako u domenu kompetencije, tako i u domenu autonomije, dok druge varijable – iskustvo u izvođenju EJVIN nastave i sastav studentske grupe – nisu pokazale značajan uticaj. Taj rezultat upućuje na zaključak da postojeći programi obuke, iako osmišljeni da podrže nastavnike, mogu nehotice pojačati njihovu svest o izazovima i ograničenjima sa kojima se suočavaju, a da pri tom ne nude dovoljno praktičnih alata i institucionalne podrške za njihovo prevazilaženje. Rezultati istraživanja imaju značajne praktične implikacije. Potrebno je da obuke za EJVIN ne budu samo usmerene na razvijanje pedagoških i metodičkih strategija, već i na jačanje osećaja kompetentnosti i autonomije nastavnika. To podrazumeva i sistemsku podršku univerziteta kroz prepoznavanje dodatnog rada, obezbeđivanje adekvatnih resursa i veću fleksibilnost u prilagođavanju metoda nastave. Na taj način mogu se stvoriti uslovi za očuvanje motivacije nastavnika i unapređenje kvaliteta visokoškolske nastave na engleskom jeziku.

Ključne reči: teorija samoodređenja, frustracija potreba, demotivacija, engleski kao jezik visokoškolske nastave, univerzitetski profesori.

Received: 18 August 2025

Accepted: 6 October 2025

Dejan M. Karavesović
University of Kragujevac
Faculty of Philology and Arts,
Department of English
karavesovic@filum.kg.ac.rs
<https://orcid.org/0000-0001-5210-3202>

Original research paper
UDC 811.111:378
DOI: 10.19090/MV.2025.16.2.69-88

Danica M. Jerotijević Tišma
University of Kragujevac
Faculty of Philology and Arts,
Department of English
danica.tisma@filum.kg.ac.rs
<https://orcid.org/0000-0002-4973-0405>

LINGUISTIC ASPECTS OF EMI EDUCATOR TRAINING: INSIGHTS FROM THE UNIVERSITY OF KRAGUJEVAC¹

ABSTRACT: Unlike Content and Language Integrated Learning (CLIL), where a certain degree of educators' familiarity with linguistics may be expected, an EMI environment typically does not involve explicit knowledge of linguistic phenomena. However, educators in EMI classrooms frequently face doubts about their language proficiency in English, often disproportionately focusing on linguistic performance rather than the content and delivery of the lecture. Since it can arguably be claimed that a vast majority of academic publications related to EMI focus on pedagogical aspects, a need to consider the role of linguistics in EMI teacher training is due. Hence, this paper addresses the scope, method, and need of explicit linguistic instruction following the elaboration of classroom discussion data from teacher-training lectures of NNES educators from the University of Kragujevac in the period of 2020-2024. The presented insights underscore the significance of incorporating a pragmatic and context-sensitive approach to EMI training, balancing linguistic accuracy with communicative clarity and intercultural awareness.

Keywords: EMI, teacher training, internationalization, linguistic aspects of EMI, English as a *lingua franca*.

¹ The research conducted in the paper was funded by the Ministry of Science, Technological Development and Innovation of the Republic of Serbia (Agreement on the Transfer of Funds for Financing Scientific Research of the Teaching Staff at Accredited Higher Education Institutions in 2025, number: 451-03-137/2025-03/200198.).

ЈЕЗИЧКИ АСПЕКТИ ОБУКЕ УНИВЕРЗИТЕТСКИХ ПРЕДАВАЧА ЗА НАСТАВУ НА ЕНГЛЕСКОМ ЈЕЗИКУ: УВИДИ СА УНИВЕРЗИТЕТА У КРАГУЈЕВЦУ

АПСТРАКТ: За разлику од интегрисаног учења садржаја и језика (енгл. CLIL), где се од наставника може очекивати одређени степен познавања лингвистике, окружење у ком је фокус на енглеском као језику високошколске наставе (ЕЈВИН) обично не подразумева експлицитно познавање лингвистичких феномена. Међутим, наставници универзитета укључени у програме енглеског као језика високошколске наставе често сумњају у своје знање енглеског језика, те се неретко несразмерно фокусирају на језичке вештине, а не на садржај и начин извођења наставе. Колико нам је познато, већина академских публикација које се баве ЕЈВИН-ом фокусира се превасходно на педагошке аспекте, па се чини сасвим оправданим размотрити улогу лингвистике у обуци наставника у датој сфери. Имајући у виду претходно наведено, у тренутном истраживању покушавамо да сагледамо обим, метод и потребу за експлицитном наставом лингвистике, а на основу обраде података са предавања за обуку неизворних едукатора са Универзитета у Крагујевцу од 2020. до 2024. године. Резултати наглашавају значај укључивања прагматичног и контекстуално осетљивог приступа ЕЈВИН-у, уз праву равнотежу прецизне употребе језика, јасног преношења комуникативне намере и интеркултуралне свести.

Кључне речи: енглески као језик високошколске наставе, обука предавача, интернационализација, језички аспекти, енглески као *lingua franca*.

1. INTRODUCTION

For better or worse, the strategic move of educational institutions to extend their reach beyond local borders in order to remain competitive in the academic arena has led to a worldwide adoption of practices that could allow linguistically and culturally diverse groups of students to be educated through a shared medium of instruction. This is especially the case in higher education (HE), where the increased demands for the internationalization of studies and research, especially in Europe and Asia (Wang, Yuan & De Costa 2025: 146), additionally driven by the rising academic mobility levels of both students and faculty members, have brought about the need to bridge the gap of successfully conveying academic content in a linguistically diverse classroom. The choice of English (as the apparent *lingua franca*) for the shared instruction medium has engendered English Medium of Instruction (EMI), a teaching model whereby academic content is taught by means of English as the teaching language. Although the last decade has witnessed an exponential proliferation of academic papers elaborating on various aspects of EMI (e.g. its definition, implementation and development, domains of application, design and realization of policies, stakeholder perspectives), the question of its

status as a full-fledged discipline distinct from its ‘paternal’ disciplines of EAP (English for Academic Purposes) or ESP (English for Specific Purposes) has still remained largely unanswered. Furthermore, the lack of clear demarcation lines between EMI and CLIL (Content and Language Integrated Learning, representing a blend of teaching non-linguistic content *and* English as a language), further complicates its status as a separate discipline and illustrates its complexity in numerous ways (see Macaro 2018 for a detailed elaboration). This notwithstanding, the fact remains that EMI represents an area of increasing interest and, as such, demands further exploration. To that end, this paper aims to provide a description of a linguistic framework that might be employed in the training of non-native English-speaking (NNES) instructors for their engagement in an EMI classroom, focusing solely on English serving as a vehicle of transferring knowledge while itself not being the subject of learning.

Among numerous topics covered in the research publications, two dominant thematic areas emerge in the context of EMI-based classroom: issues regarding the use of the English language in an EMI lecture and pedagogical aspects of an EMI lecture (Macaro 2018, Doiz & Lasagabaster 2020, Vander Borgh et al. 2025). Language-wise, a vast majority of publications investigate issues connected with the language proficiency of participants in an EMI lecture (NNES instructors and students), commonly elaborating on the problems of intelligibility between the participants or students’ and instructors’ opinions regarding the use of language. However, scant attention is paid to the specific linguistic aspects pertaining to the training of NNES instructors for teaching in the EMI setting (cf. Deroey 2023). Despite the purported proclivity of EMI researchers to focus on language topics at the expense of pedagogic ones (Vander Borgh et al. 2025: 2), to the best of our knowledge, no paper investigating the specific aspects of linguistic phenomena in EMI teacher-training has been published yet (Deroey 2023 touches upon the topic, but only cursory). Consequently, the present paper is aimed at filling this void as a contribution to both general considerations of linguistic training of NNES instructors and as an illustration of the implementation of such training in a specific instance of the University of Kragujevac (UNI KG). This time, it goes a bit further – from the domain almost exclusively reserved for applied linguistics (Macaro 2019: 274) incorporating findings from areas tangent with theoretical linguistics, namely corpus linguistics as well as descriptive linguistics.

2. LANGUAGE USE IN AN ACADEMIC (EMI) CLASSROOM

2.1. Background

To better understand the structure of an EMI academic lecture, it may be best to first consider empirical analyses of authentic HE lectures held by native-speakers of English. Especially helpful for such purposes are corpus-linguistic studies investigating various modes of communication in real-life classrooms. Because they reveal much about the actual language used in such situations, without speculating what language components should or should not be included, they can serve as a benchmark for EMI lectures. Naturally, it should be noted that the ‘nativeness’ of a speaker of English is in no way a guarantee that the lecture would be more successful than the one held by a NNES instructor. Numerous factors come into play, as most experienced instructors probably know. Some of them are linguistic in nature, but others may be quite beyond the realm of linguistic performance (for instance, teacher motivation, level of expertise, personal classroom involvement, and the like; Vander Borgh et al. 2025). On the other hand, it also seems futile to rely on empirically unsubstantiated or prescriptively proclaimed models of language use not corresponding to the actual teaching context *in situ*. Therefore, we think that it is best to treat the corpus-based elaborations, such as the one presented below, as the base to build upon rather than a complete frame to be uncritically adopted. In other words, it does not mean that the situation from a genuine university classroom run by a native English speaker should be uncritically mirrored in the EMI setting, but insights into the native-English linguistic performance can certainly serve as something to be observed and built upon, with all the necessary accommodations.

One of the most comprehensive corpus-based research studies investigating specificities of the HE classroom discourse was conducted by Douglas Biber (2006). Based on a large corpus stemming from the TOEFL 2000 Spoken and Written Academic Language (T2K-SWAL) Project, Biber gives a comprehensive account of the discourse used by native English-speaking participants in HE environment in all relevant university settings and across a wide range of disciplines. For our purposes, we will concentrate on oral classroom discourse, touching also upon the language used in student’s textbooks for comparison since they can also, but less obviously so, fall within the purview of EMI as a discipline. While the EMI community usually draws a sharp line between the differences occurring when the research-publication English and classroom-based English are compared, what Biber’s study showed is that, contrary to potential expectations,

there is a considerable discrepancy between the use of English by lecturers in HE classrooms and the language use in handbooks on the same topic. More specifically, Biber established that “classroom lectures tend to use many linguistic characteristics that are more typical of conversation than academic writing” (2006: 3). This was illustrated by a transcribed section from a lecture, where the following linguistic constructions were used: questions (*did everybody get one of these?*); comprehension checks (*ok?*); personal pronouns (*I/you/they*); mental verbs (*know, think*); stance adverbials (*really* and *a lot*); (semi)modal verbs (*can* and *be going to*), accompanied by “repetitions, ‘false starts’, pauses (*um*), and the frequent use of ‘discourse markers’ (*well, so* and *ok*)” (2006: 4). Furthermore, the analysis revealed that in terms of structural features, the discourse of lectures is characterized as being essentially clausal, relying on short clauses and less complex phrasal constructions, which is typical of a spontaneous kind of oral communication (*ibid.*). Finally, the use of lexical units in lectures abounds in everyday, common terms interspersed with specialized, technical vocabulary, thus reflecting both an awareness of the audience’s structure and a strategy to elaborate complex notions. Maintaining coherence appears not to be a priority since “[t]he discourse often consists of a loosely connected sequence of ideas, with many utterances functioning to provide personal background for the main ideas” (*ibid.*). When all this is compared to the other principal instance of communicating knowledge to students – the textbooks, Biber observes that “textbook language never includes the production features or dysfluencies that are common in classroom teaching” (Biber 2006: 5), thus accentuating a sharp divide between the two teaching genres.

So, how can we associate these findings with an EMI situation? Judging from the Biber’s findings, it is clear that the term *academic English* should not be associated only with the language use found solely in written academic prose, as sometimes is the case. Consequently, the assumption sometimes made by NNES instructors that an EMI lecture needs to primarily be based on set patterns corresponding to the formal discourse (cf. Vander Borgh et al. 2025: 1), as manifested in the written academic register, can be rejected as it has evidently been shown that native-speaking lecturers themselves do not conform to such a mode of communication.² Biber (2006: 227) also noted that classroom teaching does not

² Since Biber’s corpus is restricted to four renowned American universities (Biber 2006: 23), a remark could be made that this may be attributed to the mainstream style of lecturers determined by geographical and cultural conditions, but it stands to reason that the situation in other predominantly English-speaking countries should not differ too much in this respect, given the level of mutual influence of respective educational systems.

comprise of a uniform set of features, but varies across multiple variables, such as “class size, preference for lecture or discussion formats, and level of instruction” (*ibid.*). Other pedagogic genres where an EMI instructor may play a role also occur, such as lab sessions, office hours and guided study groups, potentially employing somewhat different linguistic features than those found in lectures, although bearing obvious resemblance with lectures as the main exponents of HE spoken academic discourse.

Surprisingly or not, these insights reveal that EMI NNES lecturers actually pay more attention to establishing a connection with the students through direct linguistic communication, and not to the matters of professed linguistic appropriateness. We find these findings critical since they define the entire EMI training paradigm, allowing EMI trainers to focus on the type of language use attested in a genuine teaching environment and warranted for the EMI classroom as the attested means of academic communication.

2.2. EMI instructors’ linguistic challenges

Opposite to the layperson belief that teaching in a foreign language entails a mere switch from using one language to another, it has rightly been pointed out that EMI teaching engagement is a much more complex endeavour (Lasagabaster & Fernández-Costales 2024: 3). As Carrió-Pastor (2022: 177) observes, “[u]niversity students are learning complex subjects through English and their language proficiency entails being able to use grammar and pragmatics to communicate in an effective way.” This observation has been made about students, but it appears to be even more relevant when it comes to the students’ EMI instructors. These instructors are responsible not only for the content-related segment of lectures, where they employ communicative functions of defining, describing, illustrating, or demonstrating content to students, but also for the lecture’s organizational part. Therefore, what NNES instructors face is not only a matter of choice of the language used, yet a matter of being able to adapt to the specificities of a new multilingual/multicultural environment, too. On top of that, they sometimes need to adapt to a most likely different pedagogical approach,³

³ A recent study by Malmström, Vander Borght & Warnby (2025) showed that Scandinavian-based EMI teachers with high-level English proficiency do not necessarily opt for student-focused teaching approach, but those with lower-level command predominantly chose the teacher-focused approach. This can be interpreted in such a manner that instructors with considerable command of the language are more open to

which in turn requires additional language processing than the one realized in a ‘regular’ classroom. The previously mentioned complexity of factors illustrates how vital it is for the EMI instructors to possess adequate linguistic competencies so that they can be able to tackle complex concepts, provide intricate elaborations, and still be linguistically competent to manage a diverse student audience.

Challenges NNES instructors face when delivering lectures have been well documented (Carrió-Pastor 2022, Dimova & Kling 2018, Doiz & Lasagabaster 2020, Lasagabaster & Doiz 2021, Macaro 2019, Vander Borghet et al. 2025). In terms of linguistic skills in an EMI context, two factors play important roles: a) NNES instructors’ confidence level concerning their command of the language and b) the proficiency level of English required for a successful transmission of knowledge. Although delivering a lecture in the NNES instructor’s mother tongue does not typically pose a problem, using the foreign language may prove to be a challenging task even to NNES instructors with a high level of English command due to the decreased confidence level, which in turn may detrimentally affect their lecturing performance (Vander Borghet et al. 2025: 2). Reported reasons for the lack of confidence are mostly related to NNES instructors’ insecurities when switching to the new mode of communication and “feeling less spontaneous and flexible” (*ibid.*: 3), or, in some instances, to their doubts concerning the limited use of their native tongue in an EMI classroom in times of need (the so called ‘translanguaging’) (Lasagabaster 2022).

The proficiency factor concerns the necessary language-command level required for the successful and seamless realization of an EMI lecture. Proficiency requirements vary from one country to another, with thresholds going from high B2 CERF⁴ level to C1 level (Vander Borghet et al. 2025: 3) or even C2 (Lasagabaster & Fernández-Costales 2024: 6), the highest level of language proficiency according to CEFR. However, there is a general consensus in the literature that (high) English proficiency represents one of the key factors in EMI theory and practice (Lasagabaster & Fernández-Costales, 2024).

consider alternative teaching methods since the language hurdle is small or non-existent, while the ones who are not as proficient choose the less language-intensive approach of frontal monologic teaching. Whatever the interpretation, it appears that the choice of pedagogical approach does in some manner play a role in the choice of classroom language, thus calling for the need to include this topic as a part of the NNES instructor training considerations.

⁴ Common European Framework of Reference for Languages (for more details visit: <https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions>)

2.3. Linguistic components involved in EMI teacher training

Taking into account the considerations presented above, we now turn to the content we deem relevant for the linguistic training of NNES instructors. The initial classification is made on the conceptual basis, across the main communicative dimensions perspectivized through the linguistic lens – phonological, structural, semantic, interactional, and sociolinguistic dimensions. Such a division has been made following the general direction of focusing on functional linguistic aspects of EMI teacher-training rather than formal representations of linguistic phenomena. However, as trained linguists, we can specify the main exponents of the latter in Table 1 either as the most prominent linguistic features or as areas of interest from respective dimensions germane to the EMI context. The table below mostly draws on phenomena elaborated in Biber (2006):

Potential linguistic training component	Specific feature/area of interest
<p>a) <i>Phonological dimension</i> Aspects of classroom speech related to pronunciation and listening components, focusing on a proper channel to establish oral intelligibility between participants in an EMI setting.</p>	<ul style="list-style-type: none"> • <i>English segmentals</i> (key features of English sounds); • <i>English prosody</i> (an overview of intonation/tempo/rhythm/loudness in an EMI classroom)
<p>b) <i>Structural dimension</i> Aspects of grammatical accuracy at all levels of linguistic analysis (morphological/syntactic/discursive).</p>	<ul style="list-style-type: none"> • <i>Temporal and modal structures</i> (classroom-typical uses of common verb forms, modal constructions, etc.) • <i>Structural markedness</i> (exploring syntactic means of – passives, extraposed sentences, (pseudo-)cleft sentences); • Achieving <i>coherence</i> and <i>cohesion</i> in oral academic discourse (connectives and discourse markers); • Elements of <i>reduced syntax</i> in oral academic discourse (fragmented clauses, nominalizations, ellipsis...)

<p>c) <i>Semantic dimension</i> Lexical and sentential specificities of conveying intended meaning of utterances in EMI settings.</p>	<ul style="list-style-type: none"> • <i>Academic vs. general</i> vocabulary (key features and scope of academic word-lists in contrast to general lexis); • <i>Discipline-related</i> terminology; • <i>Lexical perspectivisation</i> (stance adverbials, hedging expressions, factual adverbials, using reflective language, etc.)
<p>d) <i>Interactional dimension</i> Dealing with linguistic mechanisms of bidirectional verbal communication.</p>	<ul style="list-style-type: none"> • Elements of <i>dialogic language use</i> (turn-taking mechanisms, eliciting feedback, etc.) • Using <i>demonstrational</i> language (use of spatial and discourse deictics, mechanisms of giving instructions and directions, etc.); • <i>Sign-posting</i> expressions; • <i>Pragmatic aspect</i> of language use (avoiding ambiguities and misunderstandings due to situational circumstances).
<p>e) <i>Sociolinguistic dimension</i> Considering linguistic aspects in a potentially multicultural and multilingual teaching environment.</p>	<ul style="list-style-type: none"> • English as the <i>lingua franca</i>; • <i>Regional varieties</i> of English in an EMI classroom; • Elements of <i>academic register</i>; • Avoiding <i>linguistic bias</i> and <i>discriminatory discourse</i>; • <i>Politeness</i> strategies; • Using <i>humour</i> in an EMI classroom (linguistic features of jocular discourse).

Table 1. An overview of relevant linguistic EMI teacher-training phenomena

As can be seen, Table 1 covers a wide range of EMI-related linguistic phenomena. It should not be seen as exhaustive, but it may serve as a solid basis for further consideration when planning a teacher-training syllabus. Since we expect the EMI teacher-trainers to be professionals highly trained in linguistics, the list itself should be self-explanatory to them, without needing further elaboration of what each item represents. It is, of course, utterly unrealistic for most of the listed items to be taught or elaborated in an EMI training context as formulated in Table 1, with trainees certainly being lay in the matters of linguistics. Instead, a linguist

expert may take into consideration a particular topic or areas of interest and adapt it to suit the intended training goal by simplifying it or integrating a specific item within a set of instructions in the form of an illustration, depending on the intended aims and resources at their disposal. We will, however, provide a brief overview of each dimension as much as it concerns the thematic frame presented in the following section.

3. EMI TEACHER TRAINING AT THE UNIVERSITY OF KRAGUJEVAC

3.1. Background

The EMI training program at the UNI KG was realized as a part of a '*Study in Serbia*' HE internationalization initiative conducted by TEMPUS Serbia organization. The initiative encompassed four major Serbian state universities: University of Belgrade, University of Novi Sad, University of Niš, and University of Kragujevac, whose representatives attended a three-day trainers' training seminar held by renowned EMI experts from the University of Oxford (Prof. Ernesto Macaro and Mark Searle) and University of Southampton (Prof. Mary Page). Although the trainers' training was predominantly oriented towards teaching methodology, aspects of a linguistic nature were covered as well.

3.2. Implementation

As of January 2025, there have been five training cycles taking place annually from 2019 to 2025 (with a hiatus during the COVID-19 pandemic). Our paper covers the first four training cycles, excluding the most recent one due to the lack of relevant data. It is worth mentioning that during the application process, it was emphasised that the training sessions did not involve teaching the language, but were aimed at honing specific linguistic and pedagogical skills for the instructors' engagement in an EMI classroom. Such a remark in the call for application was considered necessary since the duration of training did not allow for systematic language lessons tailored for EMI classrooms. Moreover, the required language proficiency level was considered as sufficient for both being able to teach in English and to attend and follow training sessions. Organisationally, each cycle involved 15 two-hour sessions divided into three parts – six sessions dedicated to teaching methodology and linguistic topics respectively, while the remaining three sessions were dedicated to microteaching sessions aimed

at evaluating the trainees' progress and adoption of training content.⁵ The training team (n=5) consisted of two experts in English linguistics, two experts in English teaching methodology, and an expert in English literature and culture. As mentioned earlier, prospective applicants were required to take a diagnostic test to determine the participants' English proficiency level, while the minimum required proficiency level of English for the participation was set to B2 of CEFR framework (applicants with IELTS score 7.5 and higher), TOEFL (score 90 and higher), as well as Cambridge FCE/CAE/CPE exam certificates of English proficiency were exempt from taking the diagnostic test). The initial assessment was conducted in the form of the computer-based British Council's APTIS test (evaluating listening, writing, speaking, and reading skills), while the latter ones were compiled and administered by the trainers from the UNI KG, concentrating on grammatical and reading components.

The total number of trainees successfully completing the programme during the four cycles was n=118 (by year: 2019/20: n=35; 2021/22: n=37; 2022/23: n=24; 2023/24: n=22). The academic areas of the participants included STEM disciplines, medicine, arts and humanities (excluding English language instructors), with medical sciences constituting the largest portion of participants due to a more extensive presence of foreign students studying at the local Faculty of Medical Sciences than other faculties at UNI KG. To the best of our knowledge, the participants had no previous experience with EMI training in any form.

3.3. Methodological considerations

The present paper is grounded in qualitative data collected in the context of EMI practices at the University of Kragujevac. The insights of the paper did not rely on standardized instruments or formal questionnaires, yet they draw on evidence gathered through classroom interaction. The material includes class observations, spontaneous feedback from participants, and anecdotal classroom evidence obtained during the course of actual instruction. The data sources were not intended to produce quantifiable or generalizable findings, but to offer an informed overview of how EMI functions in practice and what linguistic aspects emerge in authentic university settings. The use of spontaneous evidence provides

⁵ Lasagabaster (2024: 16) notes that "research shows that work based on mini-lectures or teaching demonstrations is highly profitable", affirming our choice of micro-teaching (or mini-lecture) sessions for evaluative purposes as valid. See also Molino (2024) for more on positive and negative aspects of micro-teaching assessment.

access to the lived experiences of both instructors and students, leading to richer understanding of instructional patterns, language use, and communicative challenges. Therefore, the methodological approach is interpretative and descriptive in nature. By doing so, the goal is not to perform exploratory testing of hypotheses but to synthesize insights gathered from everyday academic practice. To sum up, the study presents a broad overview of linguistic aspects of EMI, highlighting patterns and tendencies relevant to the local and international academic context, remaining mindful of the limitations of informal classroom-based data collection.

3.4. *Linguistic areas covered*

The linguistic part of the UNI KG training programme was conceptualized in such a way that its main focus was on maximizing the trainees' communicative teaching potential in English, conducted through a set of elaborations aimed at providing practical applications of selected linguistic phenomena presented in Table 1. This approach was aligned with the guidelines presented to the UNI KG trainers by English instructors at the trainers' training seminar (cf. §3.1) and responses from the needs analysis questionnaire distributed to UNI KG prospective attendees prior to the beginning of the first training cycle. A commonly employed training strategy was to (whenever possible) implicitly elucidate these linguistic phenomena not as respective thematic teaching units, but through a variety of contextualized examples or by means of implicit answer elicitation. For instance, when areas of interest were elaborated descriptively, they were always accompanied by sentential examples or contextualized real-life classroom situations. On the other hand, the content which was presumedly novel to the trainees was introduced through short elucidations, again accompanied by relevant illustrations. The training content was conceptually divided into two main domains – the classroom-management domain and the content-related domain. It is, however, important to mention that numerous phenomena classified as distinct entries in Table 1 were often subsumed within a single instructional unit: for instance, illustrating the use of *interactional* classroom-specific language also involved the *variational* aspect of choosing the appropriate register, accompanied by the trainer's comment regarding the lack of *structural* complexity (often misattributed to academic language use in general), as observed in actual classroom-related situations (Biber 2006). To gain more concrete insight, the following analysis represents an account of linguistic training of NNES instructors,

i.e., insights obtained through class observation and content analysis of the UNI KG dimensions from Table 1.

3.4.1. Phonological dimension

Phonetic and phonological features of language production are often the hardest to expound upon owing to highly technical characteristics of their description and difficulties in recognizing the relevant phenomena by linguistically untrained NNES (cf. Archibald 2021; Alkhaleefah 2023). As such, these features are often allotted the least priority in explicit elaborations of EMI specificities. A rule of thumb is that as long as there is sufficient intelligibility between the interlocutors, pronunciation should not be a matter of special interest. This, however, does not mean that phonological issues are not to be addressed as they may affect mutual and self-perceptions of NNES instructors and students in an EMI classroom (cf. Gómez-Lacabex & Gallardo-del-Puerto 2023). In our case, they received due attention by being frequently integrated into other elaborations (when discussing regional varieties of English, for example) or as distinct thematic units involving English sounds problematic for Serbian L1 speakers and matters of prosody in an EMI classroom (for instance, the effects of English intonational patterns in forming questions and achieving emphasis). The issue that merited more attention in this sense was the question of whether the trainees were supposed to imitate native-like pronunciation, as the majority of trainees believed that this was one of the crucial factors for a successful EMI lecture. To illustrate the point of overcoming the pronunciation barrier, on one occasion, the trainees listened to a one-minute video clip about photovoltaic solar cells of a natively Spanish-speaking EMI lecturer with a heavy English accent. The listening section was followed by a discussion on the matters of general intelligibility of the sample, leading to the general conclusion that although the presented topic did not correspond to any of the trainees' areas of expertise, overall comprehension was satisfactory, save certain highly discipline-specific terms. Interestingly enough, during the classroom discussions some trainees expressed an opinion that what in lay terms might be called 'incorrect' pronunciation (that is, the one not adhering to any of the mainstream standard pronunciation systems, such as Southern British Standard or General American) may turn out to be an asset in an EMI context if students share similar linguistic articulatory performance with the NNES instructor, rendering spoken communication more intelligible.

3.4.2. Structural dimension

Another important topic tackled at UNI KG NNES instructors' training concerned the issue of achieving sufficient grammatical accuracy. Again, when asked about the importance of this dimension during the informal in-class discussions, the trainees emphasised the role of grammatical 'correctness' in conveying knowledge, but eventually expressed surprise when informed about the disfluent nature of a genuine lecture held by a native speaker of English. Being academically oriented professionals, the trainees were assumed to be familiar with the discourse of academic research publications, so our task was to draw parallels between the already familiar use of academic language with the one described in Biber (2006). In doing so, we attempted to activate their existing grammatical linguistic skills, but now adapted to fit into the EMI context. Therefore, the emphasis was not so much on elaborating the syntactic mechanisms through a set of 'rules' or 'principles' but on recognition and employment of those structures that facilitate the communicative purposes relevant for the occasion. By means of sentential examples, syntactic features that were covered included passive structures, copulative constructions, existential sentences, causal structures and extraposed constructions, all presented as potential, yet not mandatory ways of EMI communication and almost always contrasting their potential classroom use and the one in academic papers. In other words, since the audience was not linguistically trained and the time restrictions did not allow for any sensible elucidation of these structures, trying to provide elaborate explanations was considered futile and was not attempted. Additionally, a certain portion of all of the three linguistic sessions was dedicated to the explanation and subsequent consolidation of new concepts, such as: a) the notion of linguistic markedness, which was recognized as an important segment of academic communication;⁶ b) aspects of dialogic language use (indirect questioning, use of turn-taking and corrective feedback constructions, paraphrasing, elements of linguistic cohesion and coherence), which in turn served as somewhat preparatory basis for the student-centred pedagogical considerations that followed.

⁶ Macaro (2019: 5) explores a similar concept of linguistic 'keyness' to identify important elements of a text at the lexical level.

3.4.3. *Semantic and interactional dimension*

Being one of the most prominent areas of academic language use, vocabulary considerations were given special attention. Two main domains were in focus – the use of general academic vocabulary and disciplinary-specific vocabulary. Before engaging in the specific uses of the two lexical domains, a concise overview of the key academic vocabulary features was presented, with reference to the well-known Academic Word List (AWL) and its possible applications in an EMI context. Illustrating discipline-specific terminology use was conducted by using examples from four academic areas: medicine, technical engineering, pedagogy, and law. Each list of terms contained academic expressions that extend across a majority of disciplines, which enabled trainees to identify common grounds in the use of academic vocabulary. In line with the findings of Biber (2006), a portion of attention was also given to lexical units signifying personal involvement of NNES instructors in EMI lectures, covering expressions conveying stance, assuming reflective positions, and employing hedging mechanisms. Other semantic considerations were not as extensive as the vocabulary ones and were mostly touched upon as *ad hoc* occurrences when elaborating on other topics.

Although represented as two separate dimensions in Table 1, the semantic and interactional dimensions were not treated as distinct thematic units within our training sessions since both rely on predominantly lexical grounds. Conforming to the strategic decision to favour a student-centred pedagogical approach, this dimension dealt with features and examples of a dialogic mode of classroom communication (principles of adequate conversational turn-taking, ways to elicit information from students, direct and indirect questions, uses of terms for demonstrations and instructions). Additional attention was paid to using the so-called *sign-posting* language, whereby instructors achieve a successful transfer of knowledge to students by employing linguistic cues that guide the listener through various aspects of the discourse spoken in the classroom.

3.4.4. *Sociolinguistic dimension*

Since it was observed that sociolinguistic matters had often stayed under the radar of EMI research, and because it was estimated that this dimension was one of the most distinctive features of an EMI lecture owing to its multilingual and multicultural orientation, our training also addressed these issues. Topics discussed involved the upsides and downsides of English being the *lingua franca* of the

academic world, as well as main features and questions pertaining to the NNES instructor's viewpoints about the choice of a suitable variety of the English language, both in terms of register (academic vs. colloquial; formal vs. informal; written vs. spoken; and the like) and in terms of regional preference (American vs. British English). Rarely discussed, but highly topical issues also received their due attention – linguistic mechanisms for the avoidance of biased language in an EMI classroom (linguistically neutral language regarding gender, ethnicity, sexual orientation, and disability), aspects of politeness in a culturally diverse setting, and scope and limitations of using humorous language to maintain positive rapport in the classroom.

4. CONCLUSION

In line with Deroey's (2023: 1) view that "[p]ractitioners charged with developing EMI training programmes could [...] benefit from knowing how others have approached such training and what their experiences were", we hope that the presented insights have shed additional light on linguistic aspects of NNES instructor training. The informed overview we provided underscores the need to observe factors not only traditionally associated with language learning, but also with those pertaining to specific skills needed to competently govern in a foreign language class. To achieve this, we believe that NNES instructor training programmes should be tailored to enable instructors to handle both language-related issues, on the one hand, and provide a pedagogically sound foundation for successful communication with the audience and transfer of knowledge, on the other. For this to happen, we suggest that formal linguistic training should not come to the fore, but should be used only as a complementary mechanism in the process of raising the NNES instructors' awareness of the EMI-specific language issues.

Such a premise was the main guideline at the described UNI KG training programme, bearing in mind that NNES instructors possessing a sufficiently high level of English language command would benefit less from explicit learning about the linguistic mechanism underlying a specific area of the language structure than from the elaboration of formal and functional aspects of the specific language uses attested as valid for the EMI domain. Given the usually limited temporal scope of the training programme and probable reluctance of the trainees to be extensively engaged in a lengthy EMI teacher-development programme due to their primary obligations, it is reasonable that adjustments to the traditional treatment of linguistic content are made. Our attempt to do so involved making them aware of a

wide range of linguistic phenomena at their disposal, accompanied by a set of recommended instructions for language use aligned with the student-centered pedagogical approach, favouring interaction and a dialogic mode of classroom communication. We aimed primarily at enhancing their already high communicative potential in English without sacrificing their identity as experts in a particular field, but still being able to recognize and apply the presented mechanisms. Ideally, the outcomes would mean that they assume the roles of facilitators who are able to independently and competently explain linguistic phenomena within reasonable limits, as well as demonstrate procedures, deliver clear instructions, provide corrective feedback, discuss complex topics, and ultimately, if needed, resolve potential language issues in English as a primary means of communication.

All things considered, addressing linguistic aspects of NNES instructor training represents an ambitious endeavour both in the theoretical and practical sense. Due to teaching content complexity, teaching at the HE level can itself pose a considerable challenge, which becomes even more onerous with English as the medium of instruction entering the scene. Drawing on previous research and NNES instructor training programme at UNI KG, our elaboration has shown that an effective linguistic training of HE instructors needs to take into account not only the instructors' development towards being highly proficient users of the English language, but also factors aligned with pedagogic orientation of the instructor, socio-cultural setting and even instructors' individual perspective towards an EMI classroom. Achieving this is no easy task, but efforts directed towards making a general instructor-training framework may prove fruitful bearing in mind that the volume of relevant research has grown considerably. Considering the fact that different educational institutions have diverse policies, available resources, and student populations, we are aware of the limitations of the generalizability of the insights presented here. Furthermore, due to the current incapacity to isolate factors affecting EMI success, such as class dynamics or institutional support, in future research, we aim at delving more deeply into the actual contribution of linguistic factors alone. Looking ahead, future perspectives in the field leave room for various additional investigations, some of which may include issues concerning pre- and post-training language assessment, effects of the interaction between linguistic and pedagogical training segments, as well as evaluation of language skills necessary for effective EMI across diverse academic disciplines.

REFERENCES

- Alkhaleefah, F. (2023). Online phonetics and phonology teaching for foreign students: Effectiveness and challenges. *International Journal of Social Science and Humanities Research* 11(2): 32–38.
- Archibald, J. (2021). Ease and difficulty in L2 phonology: A mini-review. *Frontiers in Communication* 6, 626529. doi:10.3389/fcomm.2021.626529
- Biber, D. (2006). *University Language: A corpus-based study of spoken and written registers*. Amsterdam/Philadelphia: John Benjamins B.V.
- Carrió-Pastor, M. (2022). Training teachers of English as a medium of instruction: The use of metadiscourse devices. *Porta Linguarum* 37: 177–192. <https://doi.org/0.30827/portalin.vi37.16957>
- Deroey, K. L. (2023). English medium instruction lecturer training programmes: Content, delivery, ways forward. *Journal of English for Academic Purposes* 62: 101223.
- Dimova, S., & Kling, J. (2018). Assessing English-medium instruction lecturer language proficiency across disciplines. *TESOL Quarterly* 52(3): 634–656. <https://doi.org/10.1002/tesq.454>
- Doiz, A., Lasagabaster, D. (2020). Dealing with language issues in English-medium instruction at university: a comprehensive approach. *International Journal of Bilingual Education and Bilingualism* 23(3): 257–262. <https://doi.org/10.1080/13670050.2020.1727409>
- Gómez-Lacabex, E., Gallardo-del-Puerto, F. (2023). Pronunciation and intelligibility in English-medium instruction (EMI): Lecturers' views and skills, in *English pronunciation teaching: theory, practice and research findings*, ed. V. G. Sardegna & A. Jarosz (Bristol/Jackson: Multilingual Matters): 151–167.
- Lasagabaster, D. (2022). Teacher preparedness for English-medium instruction. *Journal of English-Medium Instruction* 1(1): 48–64.
- Lasagabaster, D., Doiz, A. (2021). Introduction: Foregrounding language issues in English-medium instruction courses, in *Language use in English-medium instruction at university: international perspectives on teacher practice*, ed. D. Lasagabaster & A. Doiz (New York and London: Routledge): 1–10.
- Lasagabaster, D., Fernández-Costales, A. (2024). EMI language teacher education: A systematic review, in *Handbook of Language Teacher Education. Springer International Handbooks of Education*, ed. Z. Tajeddin & T. S. Farrell (Cham: Springer): 1–26. https://doi.org/10.1007/978-3-031-43208-8_21-1

- Macaro, E. (2018). *English medium instruction: Content and language in policy and practice*. Oxford: Oxford University Press.
- Macaro, E. (2019). Exploring the role of language in English medium instruction. *International Journal of Bilingual Education and Bilingualism* 23(2): 263–276. <https://doi.org/10.1080/13670050.2019.1620678>
- Malmström, H., Vander Borgh, M., Warnby, M. (2025). Teaching approaches and language proficiency among teachers in English-medium education: Exploring correlations and pedagogical implications. *Scandinavian Journal of Educational Research*: 1–15. <https://doi.org/10.1080/00313831.2025.2492854>
- Vander Borgh, M., Malmström, H., Martinez, R., Pecorari, D. (2025). English proficiency, pedagogy, and confidence: What really matters in EMI teaching? *Journal of Multilingual and Multicultural Development*: 1–16. <https://doi.org/10.1080/01434632.2025.2537740>
- Wang, K., Yuan, R., De Costa, P. I. (2025). A critical review of English medium instruction (EMI) teacher development in higher education: From 2018 to 2022. *Language Teaching*: 141–172. <https://doi.org/10.1017/S0261444824000351>

Дејан М. Каравесовић
Универзитет у Крагујевцу

Даница М. Јеротијевић Тишма
Универзитет у Крагујевцу

ЈЕЗИЧКИ АСПЕКТИ ОБУКЕ УНИВЕРЗИТЕТСКИХ ПРЕДАВАЧА ЗА НАСТАВУ НА ЕНГЛЕСКОМ ЈЕЗИКУ: УВИДИ СА УНИВЕРЗИТЕТА У КРАГУЈЕВЦУ

Сажетак

Све распрострањенија употреба енглеског као језика високошколске наставе (ЕЈВИН) је неизворне едукаторе, који су у обавези да држе наставу на енглеском језику, суочила са значајним језичким изазовима. За разлику од Интегрисаног учења садржаја и језика (енгл. CLIL), где се од наставника може очекивати одређени степен познавања лингвистике, окружење у ком је фокус на енглеском као језику високошколске наставе обично не подразумева експлицитно познавање лингвистичких феномена. Међутим, наставници универзитета укључени у програме ЕЈВИН-а често сумњају у своје знање енглеског језика, те се неретко несразмерно фокусирају на језичке вештине, а не на садржај и начин извођења наставе. Колико нам је познато, већина академских публикација које се баве ЕЈВИН-ом фокусира се превасходно на педагошке аспекте и имплементацију образовне политике, па се чини

сасвим оправданим размотрити улогу лингвистике у обуци наставника у датој сфери. Имајући у виду претходно наведено, у тренутном истраживању покушавамо да сагледамо обим, метод и потребу за експлицитном наставом лингвистике на основу обраде података са предавања за обуку неизворних едукатора са Универзитета у Крагујевцу од 2020. до 2024. године. Рад доноси увиде након примене четири кључне лингвистичке димензије током обуке неизворних предавача у Крагујевцу, и то фонолошке, структурне, семантичке и социалингвистичке. Кроз све димензије подједнако је наглашавана разговетност и разумљивост, комуникативна ефикасност и контекстуална осетљивост уместо нефлексибилног прилагођавања нормама изворних говорника. Резултати још једном наглашавају значај укључивања прагматичног и контекстуално осетљивог приступа наставе на ЕЈВИН-у, уз праву равнотежу прецизне употребе језика, јасног преношења комуникативне намере и интеркултурне свести. Да би се постигле жељене лингвистичка компетенција и ефикасност, обука универзитетских наставника треба подједнако да се фокусира на језичке компетенције едукатора, али и на њихову педагошку оријентацију, социјално и културно окружење, па и саме индивидуалне преференције наставника у односу на појединачни контекст у коме држе наставу на енглеском језику.

Кључне речи: енглески као језик високошколске наставе, обука предавача, интернационализација, језички аспекти, енглески као *lingua franca*.

Received: 30 August 2025

Accepted: 10 October 2025

Mirna M. Vidaković
University of Novi Sad
Faculty of Economics in Subotica
mirna.vidakovic@ef.uns.ac.rs
<https://orcid.org/0000-0001-8986-7505>

Original research paper
UDC 811.111'243:378
DOI: 10.19090/MV.2025.16.2.89-111

Zora D. Trninić
University of Novi Sad
Faculty of Economics in Subotica
zora.trninic@ef.uns.ac.rs
<https://orcid.org/0000-0002-2857-5207>

NAVIGATING THE EMI TRANSITION: EXPLORING THE PROFESSIONAL NEEDS OF TEACHERS IN HIGHER EDUCATION

ABSTRACT: In order to provide high quality courses in English as a medium of instruction (EMI) university settings, teachers need to be equipped with competences which enable smooth lecturing aligned with contemporary teaching approaches. However, insufficient attention has been given to teachers' preparation for EMI contexts. This study examines content area lecturers' understanding of EMI teaching and explores their strengths and weaknesses in terms of linguistic, pedagogical, and intercultural competences. The aim is to obtain guidance for devising professional support programmes. The sample consisted of social sciences teachers with little or no EMI experience who completed a questionnaire and participated in an interview. Data analysis employed descriptive statistics and content analysis. The results indicate the teachers' overall recognition of the importance of professional development, with most focus placed on the need to enhance English for academic purposes and classroom management skills. While the findings provide some insight into the training needs of future EMI practitioners, further research with a larger and more diverse sample would deliver more generally applicable results.

Keywords: English as a Medium of Instruction, higher education, social sciences, competences, professional development.

TRANZICIJA KA NASTAVI NA ENGLESKOM JEZIKU: ISPITIVANJE PROFESIONALNIH POTREBA NASTAVNIKA U VISOKOM OBRAZOVANJU

APSTRAKT: Kako bi ponudili kvalitetne kurseve u kontekstu univerzitetske nastave na engleskom jeziku, nastavnici treba da poseduju kompetencije koje će omogućiti efikasno držanje predavanja u skladu sa savremenim pedagoškim pristupima. Međutim, nedovoljno pažnje se pridaje pripremi nastavnika za dato nastavno okruženje. Ovaj rad ispituje shvatanje nastave na engleskom jeziku od strane nastavnika stručnih predmeta, kao i njihove prednosti i slabosti u pogledu lingvističkih, pedagoških i interkulturnih

kompetencija. Cilj je dobijanje smernica za kreiranje programa koji će pružiti profesionalnu podršku. Uzorak se sastoji od nastavnika iz oblasti društvenih nauka koji imaju malo iskustva u držanju nastave na engleskom jeziku ili ga nemaju. Oni su popunili upitnik i učestvovali u intervjuu. Analiza podataka je obuhvatila deskriptivnu statistiku i analizu sadržaja. Rezultati ukazuju na to da nastavnici prepoznaju važnost stručnog usavršavanja, pri čemu je poseban naglasak stavljen na unapređenje engleskog jezika za akademske svrhe i razvoj veština upravljanja učionicom. Iako rad pruža određeni uvid u potrebe za obukom za nastavu na engleskom jeziku, dodatna istraživanja sa većim i raznolikijim uzorkom nastavnika obezbedila bi šire primenljive rezultate.

Ključne reči: nastava na engleskom jeziku, visoko obrazovanje, društvene nauke, kompetencije, stručno usavršavanje.

1. INTRODUCTION

The incorporation of English as a medium of instruction (EMI) in study programs and courses, as one of the driving forces of internationalization of universities, has witnessed remarkable growth in the past two decades. In order to increase international visibility, strengthen their position in a competitive market, and address declining enrollment due to a demographic factor, Serbian universities have also embarked on this trend. A growing number of higher education institutions have started offering undergraduate and/or postgraduate courses and programmes, joint degree programmes and the like in English to both home and international students. This has put additional pressure on teachers who not only require a high level of proficiency in English, but also need to employ various strategies to meet the specific pedagogical and intercultural demands of this teaching context. Against this backdrop, the existing research has highlighted overall concern among the teaching staff regarding the implementation of EMI courses (Beltrán-Palanques 2021; Fortanet-Gómez 2020; Mišić-Ilić & Đorđević 2022; Yuan 2023) as well as the issue of insufficient availability of training programmes addressing various aspects of EMI educational environment (Alhassan 2021; Lasagabaster 2021; Radić-Bojanić 2025). Taking into account the rapid spread of EMI in Serbian higher education and a key role that teachers play in preparing students for a highly competitive and changing international labour market, addressing teachers' competences and needs in the EMI context is of crucial importance. This is additionally emphasized by the fact that the area of EMI is significantly under-researched in Serbia.

Therefore, with the aim of contributing to the research body within this field as well as EMI practice, the study explores the competences, attitudes towards and needs for professional development of higher education teachers within the

area of social sciences. In other words, the research focuses on the following specific tasks:

- examining teachers' perception of various aspects of their linguistic competence;
- identifying potential challenges in an EMI classroom within linguistic, pedagogical, and intercultural domains;
- examining teachers' perception of their professional development needs in terms of linguistic, pedagogical, and intercultural competences.

The choice of the field was made based on the fact that it had not been considered in previous studies (Đorđević & Blagojević 2019; Mišić-Ilić & Đorđević 2022; Popović et al. 2016; Radić-Bojanić 2025). Another reason was the understanding that EMI teaching is discipline-dependent, which implies that teacher training should be sensitive to the specific subject area (Banks 2018). The paper particularly focuses on content area lecturers (CALs) with little or no experience in teaching in English, as they require greater guidance to develop necessary competences and gain confidence. This might have a positive long-term impact on their future EMI practices. The results will provide a valuable insight into the types of support CALs need in order to deliver high-quality courses.

2. THEORETICAL BACKGROUND

A widely adopted definition provided by Dearden (2014: 4) perceives EMI as “the use of the English language to teach academic subjects (other than English itself) in countries or jurisdictions where the first language (L1) of the majority of the population is not English”. Many authors note that the concept is not easy to capture due to its recent emergence as a research field (Macaro 2018) and its implementation in “a wide range of contexts with varying linguistic histories and landscapes, educational policies, as well as school systems” (Yuan 2023: 269). However, determining what it entails has important implications for conducting high quality courses and teacher development programmes. Since this research is focused on CALs and their professional competences, this section will address EMI and its dimensions in that context.

There is a general agreement among researchers (Piquer-Piriz & Castellano-Risco 2021; Radić-Bojanić 2025) that effective teaching and successful accomplishment of learning outcomes in the EMI classroom requires much more than CALs proficiency in the English language, which is often considered a central concern in both lecturing and teacher training programmes (Beltrán-Palanques

2021; O'Dowd 2018). In recent research, particular focus has been placed on the pedagogical and intercultural dimensions of EMI teaching (Đorđević & Blagojević 2019; Fortanet-Gómez 2020; Mancho-Barés & Arnó-Macià 2017; Mišić-Ilić & Đorđević 2022) so as to cater for the needs of students who come with diverse linguistic, educational, and cultural backgrounds. Therefore, the remainder of this chapter will explore in greater detail the issue of linguistic, pedagogical, and intercultural competences, which also represent central topics of the empirical research.

English language competence, often referred to as English proficiency or linguistic competence in the EMI literature encompasses the knowledge of general English, English for specific purposes (ESP), and English for Academic Purposes (EAP). General English knowledge can be determined through indicators of proficiency described in *The Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume* (Council of Europe, 2020). ESP refers to the knowledge and use of vocabulary, genres, and skills related to a specific discipline (e.g. economics), whereas EAP includes the ability to read and write academic texts, give presentations, hold lectures, lead discussions, provide feedback, and similar communicative academic-related skills. English language competence also entails the ability to deliver comprehensible utterances and adjust speech in terms of intonation, speed, volume, and the like, as well as the usage of language for classroom management (providing and exchanging information, resolving conflicts, negotiating, giving instructions, etc.) (Rubio-Alcalá & Mallorquín 2020). Various studies indicate that this area presents the greatest challenge for CALs (Broggini & Costa 2017; Doiz & Lasagabaster 2018; Lasagabaster 2018).

The language proficiency level required for EMI lecturing in the Serbian as well as many other national contexts has not been defined explicitly (Macaro et al. 2018; Radić-Bojanić 2025). Some authors suggest that it should be at C1 level (CEFR) minimum, as this can enable clear and coherent lecture delivery (Drljača Margić & Vodopija-Krstanović 2018; Lasagabaster 2021). Mišić-Ilić and Đorđević (2022: 18), however, note that a high level of proficiency

does not necessarily include near-native pronunciation or flawless grammar. It is not so much about 'good English' as about providing good understanding of what the teacher wants to communicate in English as well as having a sufficient range of general and discipline-specific vocabulary, and interaction skills to communicate with EMI students. It especially means using various strategies to explain subject-specific terminology to the students and using simplified sentence structures to communicate, if necessary.

Although it is often assumed that university teachers have a high level of English language proficiency with English being the *lingua franca* in academia and science, the studies suggest that participating in research, projects, and conferences cannot adequately equip teachers to tackle complex and dynamic interaction occurring in the EMI setting. Teachers may have a good command of academic or discipline-specific English, but some authors (Dang et al. 2023; Doiz & Lasagabaster 2018; Mišić-Ilić & Đorđević 2022) notice that when faced with informal and unanticipated situations (e.g. making digressions, using humour, resolving conflicts, using alternative explanations for technical vocabulary, etc.), they encounter linguistic limitations. These limitations may impact “how classes progress and sometimes may even hinder the rapport between teachers and students, where communication-skill-related weaknesses may cause teachers to avoid certain conversational situations” (Lasagabaster 2021: 51).

Alongside linguistic competence, pedagogical competence has recently also come to the forefront of EMI discussion, though it is still often overlooked in the EMI training programmes. This observation is significant as university teachers often lack adequate pedagogical training, which can pose a particular challenge in an English-taught class (Đorđević & Blagojević 2019; Rubio-Alcalá & Mallorquín 2020). The pedagogical competence implies the ability to “design, deliver and manage a content lecture/class that can suit and appeal to different types of students with different educational backgrounds and different types of learning styles, etc.” (Alhassan 2021: 9). It comprises “all elements of a curriculum in the stages of planning and instruction: context, objectives, contents, competences, methodology, attention to diversity, evaluation and materials” (Rubio-Alcalá & Mallorquín 2020: 47). The EMI lecturer is expected to shape the learning experience, which involves making adjustments, adopting flexibility, and utilizing approaches that promote active student participation (Rubio-Alcalá & Mallorquín 2020). Dynamic, interactive, and student-centred nature of classes are particularly emphasized in the EMI literature (Dang et al. 2023; Wilkinson 2013) as they can benefit both teachers and students. Students’ more extensive engagement reduces reliance on teachers’ linguistic competence and provides more opportunities for them to improve their own language proficiency (Dang et al. 2023), deepen the understanding of the content taught, and generally enhance discipline-specific and transversal skills (e.g. critical thinking, cooperation, etc.). Yet, the literature suggests that it represents one of key challenges in certain educational contexts (Dang et al. 2023; Dearden 2018; Macaro 2018; Vidaković 2023).

Another issue that has been brought to attention is the adaptation or design of the curriculum and teaching materials. The researchers (Briggs, Dearden & Macaro 2018; Mišić-Ilić & Đorđević 2022; Rivera Trigueros & Sánchez Pérez 2020; Zayas-Martínez & Estrada-Chichón 2020) have identified the following specific difficulties: designing/selecting materials and (interactive) activities and assessing students' performance bearing in mind their English proficiency and needs, classroom management, fostering and maintaining student motivation, and time-consuming nature of class preparation. CALs are frequently expected to start teaching in the EMI context and do it well though they have not received any kind of training (Airey 2011, as cited in Dang et al. 2023), which may cause great anxiety. Therefore, Macaro et al. (2018) and O'Dowd (2018) concluded that a focus on improving EMI educators' English language competence must be combined with developing their pedagogical competence as both are prerequisites for implementation of high quality EMI courses.

Considering that EMI courses take place in an international, multicultural classroom, teachers' intercultural competence is another key factor contributing to successful communication and accomplishment of learning outcomes (Bendazzoli et al. 2020; Fortanet-Gómez 2020; Wang, Yuan & De Costa 2025). Students' cultural and associated educational traits strongly affect their communication style, which in turn influences their interaction with peers and teachers, integration into the group, classroom dynamics, and their commitment (Bendazzoli et al. 2020). Hence, it is necessary to consider the cultural dimension in all phases of curriculum design and implementation as well as in classroom management. Given that EMI students are being prepared for geographically and culturally diverse markets, teachers should add the international dimension and multiple perspectives to their courses (Bendazzoli et al. 2020; Fortanet-Gómez 2020). Furthermore, special attention should be paid to the design of activities and assessment, as students' academic background may be different from the approach adopted in the receiving institution.¹ Dressen-Hamouda (2008) gives the example of French students who were reluctant to employ a process-oriented approach to writing (based on deductive reasoning and commonly used in North America), which conflicted with their experience grounded in an inductive approach (commonly used in Europe). Bendazzoli et al. (2020), Briggs et al. (2018), and Zayas-Martínez and Estrada-Chichón (2020) have also highlighted the challenges related to sparking student

¹ In this study, the term receiving institution refers to the institution which hosts students coming from abroad.

motivation and addressing reduced participation in a multicultural classroom, which they link to varying levels of students' English proficiency, their previous educational experience (e.g. teacher-centred classroom), and cultural background.

Another issue associated with the intercultural competence is related to stereotypes, prejudice, and generalizations, which can hamper students' learning process and their integration into a group (Bendazzoli et al. 2020; Fortanet-Gómez 2020). Participants in the TAEC² project (Bendazzoli et al. 2020) emphasize that each student should be approached as an individual and not as one adhering to generalized norms. This can be achieved by incorporating D.I.E. (describe, interpret, evaluate) activity, which entails analyzing each critical situation before taking any concrete action. Such approach reduces impulsiveness and promotes positive outcomes (Bendazzoli et al. 2020).

Studies indicate that some teachers do not fully recognize the importance of intercultural competence in the EMI setting (Beltrán-Palanques 2021). Huang and Fang (2023) observed that the respondents from the field of social sciences were more willing to incorporate the cultural element in their lecturing compared to teachers with STEM³ background. However, there is the overall agreement among researchers (Fortanet-Gómez 2020; Huang & Fang 2023; Mišić-Ilić & Đorđević 2022; Wang, Yuan & De Costa 2025) that intercultural dimension is integral to EMI teaching and should undoubtedly be included in teacher training programmes. It also needs to be emphasized that this dimension should not be perceived separately from the linguistic and pedagogical ones. All three are inextricably linked and influence one another.

The previous passages have shown that teaching in the EMI context is a complex endeavour and that CALs face numerous challenges in terms of linguistic, pedagogical, and intercultural aspects. Yet, a structured and systematic professional support to EMI teachers is still scarce or limited (Alhassan 2021; Lasagabaster 2018; Macaro et al. 2018; Radić-Bojanić 2025).

As far as the situation in Serbia is concerned, there have recently been some efforts to address the issue of professional development of CALs working or preparing to work in EMI settings. Mišić-Ilić, Đorđević and Tatar (2022: 25), for example, created a specialized intensive course within the ERASMUS+ project⁴

² TAEC stands for Transnational Alignment of English Competences for University Lectures.

³ STEM stands for science, technology, engineering, mathematics.

⁴ The name of the ERASMUS + project is Strengthening Teaching Competencies in Natural and Mathematical Sciences (*TeComp*) <http://www.tecomp.ni.ac.rs/tewe-course/>.

titled *Teaching and Academic Writing in English for Natural and Mathematical Sciences (TAWES)*, whose aim was to develop competences related to “university teaching in an EMI environment and discipline-specific academic writing in English”. Another training opportunity was offered by the TEMPUS foundation with the aim of “empowering higher education teachers to teach their courses in English by using the EMI approach” (Fondacija TEMPUS, n. d.). The course was initiated in 2019 and consisted of four cycles at four largest state universities in Serbia: the University of Belgrade, the University of Novi Sad, the University of Niš, and the University of Kragujevac (ibid). However, as Radić-Bojanić (2025) notes, it was accessible to a very limited number of CALs. Taking into account the emphasis placed on promoting internationalization and increasing the international student enrollment in higher education institutions, the current situation regarding teachers’ professional development in Serbia calls for reconsideration and increased focus.

3. RESEARCH METHODOLOGY

This exploratory study aims to provide a general insight into higher education CALs’ understanding of EMI teaching and to investigate their strengths, weaknesses, and needs in terms of linguistic, pedagogical, and intercultural competences. The obtained results can serve as a valuable guidance on devising targeted professional support for teachers embarking on EMI experience.

3.1. Sample

In order to obtain relevant data for the research, a purposive sampling approach was adopted. Therefore, the sample comprises CALs from the field of social sciences at the University of Novi Sad who have little or no experience in teaching in English; 61 completed the questionnaire and 10 participated in the interview.

3.2. Research instrument and procedure

Two research instruments were employed in the analysis – a semi-structured interview and a questionnaire, which were developed based on existing relevant literature (Beltrán-Palanques 2021; Mišić-Ilić & Đorđević 2022; Piquer-Píriz & Castellano-Risco 2021; Rubio-Alcalá & Mallorquín 2020). The application of two research instruments (methodological triangulation) contributes to the

objectivity and reliability of the study. The aim of the interview was to gain initial insight into CALs' perception of (possible) similarities and differences between teaching in L1 and L2. The interview took place on Teams platform. It was recorded and transcribed. The questionnaire, administered via Google forms, consisted of 15 closed, mixed (multiple-select and Likert scale) and open-ended questions. It was divided into three sections. The first section comprised questions regarding respondents' sex, age, academic title, the length of teaching career in higher education institution, and self-evaluation of English language skills. The second section referred to surveyed participants' experience in terms of EMI teaching and training, whereas the third one dealt with teachers' competences, expected challenges in EMI classes, and needs for professional development. The aim of the questionnaire was to obtain more structured responses and identify general key issues related to the topic. Both instruments were in Serbian in order to alleviate language barriers and anxiety.

3.3. Procedure

The interview and the questionnaire were administered in May and June 2025. Quantitative data were analysed using descriptive statistics, while qualitative data were examined employing content analysis. The latter means that the participants' responses were assigned codes which enabled categorisation of the obtained qualitative information and examination of its relationship with the quantitative data.

4. RESULTS AND DISCUSSION

The results section of the research combines data gathered via both instruments used, wherever applicable. Although the tables and diagrams included are obviously based on the questionnaire analysis, unless specified differently, the results obtained through the interview align with the statistically manageable data.

Examination of the participants' background information reveals that the majority of the informants are female (61%), and that the most represented academic title is associate professor (31%). Even so, the distribution of other titles suffices for the desired heterogeneity of the sample (full professors 21%, assistant professors 17%, teaching assistants 23%, and junior teaching assistants 8%). The given variety brings along a range from 0.8 to over 30 years of teaching experience in higher education, enabling it safe to assume that the collective of the respondents' answers combines perspectives from different stages of professional

career. On the other hand, the participants' self-reported linguistic competence, as shown in Table 1, appears to be more aligned within the group since most of them are at the B2 or C1 level, with their confidence being considerably higher, as is common among users of a non-native language, in receptive than productive skills. The identified levels of English proficiency approximate the linguistic threshold commonly set before EMI lecturers (Drljača Margić & Vodopija-Krstanović 2018; Lasagabaster 2021) but also point to the skills in need for improvement.

Level	Speaking	Writing	Listening Comprehension	Reading Comprehension
A1	0%	1.64%	0%	1.64%
A2	4.92%	4.92%	3.28%	1.64%
B1	16.39%	14.75%	8.20%	11.48%
B2	45.90%	45.90%	37.70%	26.23%
C1	29.51%	31.15%	45.90%	47.54%
C2	3.28%	1.64%	4.92%	11.48%
Grand Total	100.00%	100.00%	100.00%	100.00%

Table 1. Participants' self-reported English proficiency across skills

According to the obtained data on the participants' previous experience with EMI practices and training, as Diagrams 1 and 2 show, slightly over a half of the participants have had some opportunity to teach in English, with only a small portion of the overall number receiving the relevant training. Experiences of the informants already familiar with EMI contexts are restricted to sporadic teacher/student mobility programmes or summer schools indicating a lack of long-term EMI engagement. Such results suggest that either their need for training has not yet been identified or the reason lies in the low availability and/or visibility of training opportunities, as implied by a number of researchers (Alhassan 2021; Lasagabaster 2018; Macaro et al. 2018; Radić-Bojanić 2025).

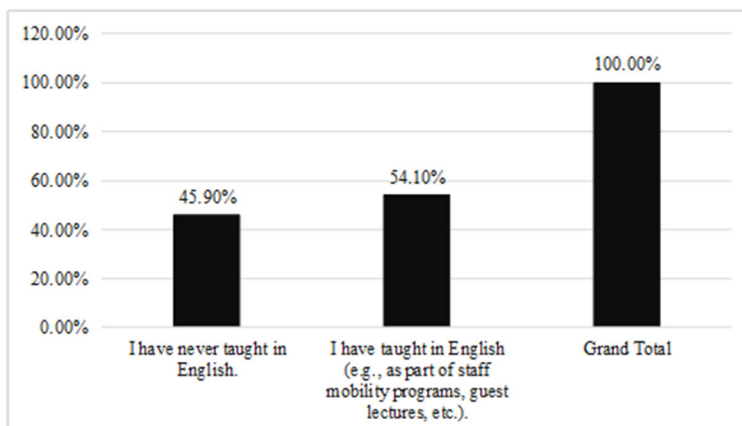


Diagram 1. Have you ever taught in English?

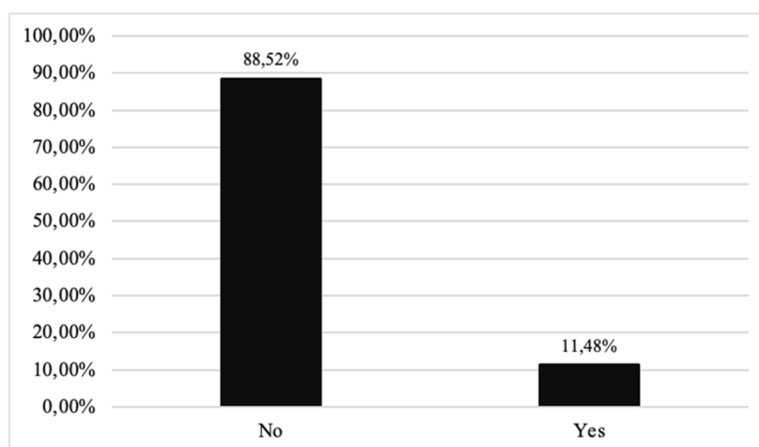


Diagram 2. Have you had any training for teaching in English?

In line with the previously noted considerable level of concern among CALs regarding EMI implementation at their institutions (Alhassan 2021; Lasagabaster 2018; Macaro et al. 2018; Radić-Bojanić 2025), research data referring to the participants' attitudes toward EMI training indicate that there is a general agreement within the group on the importance of training to deliver high-quality output, as can be seen in Table 2. Adversely to the given finding, a larger scale study (O'Dowd, 2018) that surveyed EMI teachers from 70 European universities reports on a 30% incidence of disagreement with the importance of teacher training. Such a discrepancy between research findings may follow from differences in sample structure as O'Dowd's pool (2018) included greater diversity of academic backgrounds, while the participants of the present study are

exclusively oriented toward social sciences. Similar differences were already referred to in terms of a lower willingness for the incorporation of cultural element in EMI practice of lecturers with STEM background (Huang & Fang 2023).

R	I believe EMI training is important to deliver high-quality courses.
I agree.	36.07%
I completely agree.	49.18%
I disagree.	1.64%
Neither agree nor disagree.	13.11%
Grand Total	100.00%

Table 2. Attitudes toward the importance of EMI training

However useful it is to recognise a need for development, further measurements of the already existing abilities and the lack thereof from the perspective of anticipated challenges are required to make cross-sectional comparisons and outline the shape and form of appropriate training. In addition to the linguistic data provided earlier, a more detailed breakdown of the participants' competences is given in Table 3. It draws a clearer picture of how the informants perceive their abilities across more specific domains of language use, particularly those most relevant for participation in EMI programmes. Importantly, the results obtained from self-reports on seemingly linguistic abilities in different domains, may serve as a roundabout that surpasses a possibly compartmentalised view, from the participant side, of linguistic, pedagogical, and intercultural components of EMI.

Self-reports on EMI related linguistic competences	I can easily communicate in English in spontaneous and unanticipated situations.	I have sufficient knowledge of English for academic purposes.	I have sufficient knowledge of linguistic devices needed for classroom management.	I have sufficient knowledge of English in the context of my professional discipline.
I agree.	65.57%	42.62%	36.07%	52.46%
I completely agree.	26.23%	21.31%	21.31%	29.51%
I completely disagree.	0%	1.64%	1.64%	0%
I disagree.	3.28%	8.20%	13.11%	1.64%
Neither agree nor	4.92%	26.23%	27.87%	16.39%

disagree.				
Grand Total	100.00%	100.00%	100.00%	100.00%

Table 3. Participants' self-reports on EMI related competences

As the questionnaire results indicate, lower levels of competence are mainly associated with the use of English for academic purposes and classroom management. This aligns with the findings of Fortanet-Gómez's study (2012, in Macaro et al. 2019) where the respondents highlighted that there's a marked difference between presenting a paper in English at a conference (76.9 % believed their English is up to a sufficient standard for this) and being able to teach through EMI (only 51.9% felt they knew English well enough to do this effectively). With further regard to the established weaknesses, the results are compatible with findings of other studies where the issue of classroom management was identified as one of the major EMI related challenges (Broggini & Costa 2017; Doiz & Lasagabaster 2018; Lasagabaster 2018). On the other hand, the self-perceived degree of ability increases when using the language in spontaneous speech and in contexts relying on the knowledge of English in the area of expertise. Even so, the comments obtained during the interview session are revealing of certain discrepancies between the two sets of answers. Namely, concerns were raised regarding the need to occasionally step out of the prepared lines and improvise during class so as to provide additional examples, digress or use humour to raise student engagement and motivation or further clarify a point. In one of the participant's own words *"I don't have such a wide range of vocabulary to spontaneously insert a joke or make a connection with another situation, which I do quite often in Serbian ... I wasn't that prepared"*. The identified concern echoes in conclusions of many other researchers (Dang et al. 2023; Doiz & Lasagabaster 2018; Mišić-Ilić & Đorđević 2022). Considering the noted asymmetry of the results within this study, it may be a consequence of the participants' mistaken understanding of the relevant questionnaire item to refer to language use in spontaneous, informal speech outside of class. The given results imply that the participants are not only aware of their strengths and weaknesses but also acknowledge that their lack of skill on one dimension (e.g. linguistic) may trickle down to affect the competence in another (e.g. pedagogical).

Similarly, in terms of the challenges the participants anticipate facing in EMI educational environments, research data from Table 4 show that their greatest concerns can be placed at the intersection of all three investigated dimensions – the linguistic, pedagogical, and intercultural aspects of EMI teaching. The issue that

received the highest score is that of uneven distribution of proficiency levels among students. This concern is supported by Zayas Martínez and Estrada Chichón's (2020) research, which indicated that a significant portion of EMI students experience English proficiency limitations. Such limitations may impact their comprehension and cause hesitation when speaking. Additionally, this issue may also force teachers to simplify the teaching content at the expense of quality and depth of instruction. The second highest rating relates to the use of English for teaching, i.e. the knowledge of English for academic purposes. The result underscores the previously noted teacher's awareness that the effective EMI instruction requires the ability to scaffold the student learning drawing on knowledge of EAP. Effective classroom management follows right after – generally CALs are experts in their own discipline but may lack pedagogical competence (Rubio-Alcalá & Mallorquín 2020). Classroom management is particularly challenging in EMI settings, as teachers need to simultaneously deliver content and interact with students in a non-native language. The fourth highest score shows a concern with testing and assessing the knowledge of non-native English speakers. It points to the underlying EMI requirement for adjustment of assessment methods as low scores on tests in English may not necessarily be a reflection of poor content knowledge (Shohamy 2012). To address this issue, more time and support may be provided during exams as well as alternative task and question types (Macaro et al. 2018, in Méndez-García & Luque-Agulló 2020).

EMI challenges	What do you consider your greatest challenge in teaching in English? (Add others if applicable)?
Classroom management (introducing topics and objectives, giving clear instructions, encouraging motivation and interaction, time management, responding appropriately to behavior, etc.).	18.03%
English slang.	1.64%
It is certainly more time-consuming, but I have not experienced difficulties.	1.64%
Preparing teaching materials adapted to participants and context (teaching in English for students with different proficiency levels, international students, etc.).	4.92%
Providing feedback.	3.28%
Spontaneity and timeliness during lectures and communication.	1.64%
Testing and assessing students whose native language is not English.	11.48%

Use of the English language for teaching.	24.59%
Varying levels of English proficiency among students.	31.15%
All previously listed responses are valid. I believe the training discussed in this survey is extremely important and should be organized as broadly as possible.	1.64%
Grand Total	100.00%

Table 4. Participants' perceptions of EMI related challenges

Once again, joint consideration of the questionnaire and the interview data provides additional insight into the matter under investigation. Preparation of teaching materials that went relatively unnoticed as a questionnaire item received considerable attention during the interview in terms of the time-intensive nature of the activity. The participants emphasised their greater reliance on thorough preparation when teaching in English to alleviate the concerns identified in the questionnaire. This also appears to affect their pedagogical approach, as pointed above, since the materials they use in class (e.g. PowerPoint presentations) contain considerably more text to balance out both their own linguistic issues and those of the less proficient students.

The analysis of the final sections of the questionnaire, that focus on the recognition of the areas in need for improvement, reveals a relative match with the previously identified strengths and weaknesses of the participants in terms of their existing competences as well as challenges they expect to encounter in EMI settings. According to the data presented in Table 5, the majority of the participants find they would benefit from all types of training given, particularly such that addresses their use of English in academic contexts, language use for classroom management, and skills needed to juggle cultural diversity. The need for guidance when managing intercultural issues is also underscored in the interview data, as implied in comments such as “... *there were even students from different cultural regions that are, unfortunately, involved in – let’s say – certain social conflicts. So how do you handle a situation like that?*”. The suggested importance of addressing the cultural aspect of EMI teaching is a common finding of other studies and projects (Bendazzoli et al. 2020; Fortanet-Gómez 2020; Wang, Yuan & De Costa 2025).

Need for training	Improving the knowledge of English in the professional domain.	Improving the knowledge of English for academic purposes (lecturing, presentations, discussions, feedback,	Improving the knowledge of linguistic devices needed for classroom management.	Improving paralinguistic aspects (voice, intonation, emphasis, pauses, speech rate, etc.).	Improving pedagogical competencies.	Improving intercultural competencies.
-------------------	--	--	--	--	-------------------------------------	---------------------------------------

		academic writing and reading).				
Extremely high level of need.	18.03%	22.95%	18.03%	13.11%	16.39%	19.67%
High level of need.	19.67%	22.95%	26.23%	13.11%	26.23%	22.95%
Low level of need.	18.03%	18.03%	19.67%	24.59%	27.87%	16.39%
Moderate level of need.	39.34%	32.79%	34.43%	42.62%	21.31%	37.70%
No need.	4.92%	3.28%	1.64%	6.56%	8.20%	3.28%
Grand Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

Table 5. Participants' self-reported needs for training

A somewhat lower recognition of the need for the advancement of pedagogical skills, may be a consequence of an instinctive understanding that competences of this kind largely overlap in the native and a foreign language. While such a stand could find some ground, the lack of a complete match reveals itself in high scores on competences where the seemingly distinct linguistic, pedagogical, and intercultural skills are inextricably interrelated, such as those needed for classroom management, especially when working with culturally heterogeneous groups. At the same time, the interview data suggests that the participants are well aware of the need for pedagogical adaptations of different sorts to meet the requirements of the EMI classroom. A teaching requirement that received significant recognition by the participants refers to the scope of the overall content being, at times, either simplified or reduced. At other times, with additional time invested in preparation, the content may also be adapted through extensions to include a wider range of perspectives relevant for students from a variety of cultural backgrounds and/or aspiring to compete in the international labour market, as is usually the case with EMI programmes. While call for attention to cultural diversity that underlies the noted pedagogical adjustment has already been made (Bendazzoli et al. 2020; Fortanet-Gómez 2020), it is also well captured in one of our CAL's remarks: "... I constantly look for some equivalents of examples that work well in Serbia, because I cannot simply tell them something relevant to the Serbian context, they're just not interested in that". A related pedagogical outcome is seen in the modification of their assessment methods, as one of the participants noted: "Maybe there would be fewer follow-up questions, and these wouldn't be too open but more specific. [...] That way I could assess more fairly because,

again, I don't know if their language knowledge is at the same level, and I'm not a highly proficient speaker myself".

Another result that, at first glance, may appear surprising is a rather high ranking of the need for linguistic improvement in the professional domain as it contrasts the data on the participants' strengths. While this may signal an awareness of the importance of continual professional upgrade due to the rate of new scientific developments, when paired with the comparably high value assigned to advancements in the domain of English for academic purposes, it may direct toward the need for greater consolidation of their linguistic skills, as insisted by some researchers (Beltrán-Palanques 2021; O'Dowd 2018). What is important is that the participants did not dismiss any type of training as unnecessary, including the one on paralinguistic aspects of communication, which may also be mistakenly understood as a directly transferable set of skills from the native language. On the other hand, there are studies (Aguilar & Rodriguez 2012; Dafouz 2014) where the respondents were predominantly concerned with the improvement of linguistic skills with considerable disregard of the pedagogical and intercultural EMI component. Such results were, however, interpreted along the lines of participant preoccupation with academic promotion, toward which high English proficiency is one of the fast tracks with EMI participation being solely a means to the same end.

In sum, a cross-sectional comparison of the participants' competences, expected challenges, and training needs lands on a couple of common denominators: the use of English for academic purposes and classroom management, both of which figure prominently across all research sections. While the varying level of English proficiency among students was added as another major challenge for the participants, the ability to use the language more spontaneously, and the competence to overcome any potential linguistic barriers when testing and assessing student knowledge also appear to be some of their concerns. At the same time, the section on the needs for training introduced the issue of managing cultural diversity and, somewhat surprisingly, the use of English for specific purposes, previously identified as one of the participants' major strengths, resurfaced in the examination of training needs.

5. CONCLUSIONS

Before making any conclusions, it must be pointed to a serious limitation of the study, which lies in a rather small research sample including teachers from only one university. Conducting larger scale research could provide a firmer base to treat the results not only as more generally applicable but also as offering a more

valuable contribution to the scientific field. Also, given that the use of interview as a research tool greatly facilitated results interpretation, its use with a larger sample size would be regarded useful. Considering that the authors are well-aware of the noted research flaw, the study is attributed an exploratory character pointing to the need for further investigation.

Combined results of the two research instruments provide support for several important inferences. Firstly, CALs without extensive experience and training in EMI readily recognise the need for professional guidance that would enable a smoother transition to teaching in a non-native language. Based on the participants' answers, training should ease the burden of issues related to their perceived lack of skills required to meet the challenges they expect to face in their future EMI engagements. In addition, the examined CALs generally did not express concerns that could be localised on any one EMI dimension more than the other but were rather focused on competences where the linguistic, pedagogical, and intercultural dimensions are intertwined and support each other. This may appear as a vague indicator of the favourable training direction but actually underscores the importance of parallel development within all three EMI domains. Importantly, the participants did not alienate themselves from the perspective of any type of additional guidance, not even on the skills they already feel confident about. Also, based on the established preference for beforehand practice among the informants, a custom-made training tailored around the most likely future scenarios for which potential solutions are discussed and rehearsed at group level would provide a much-needed scaffolding for real-life experience. The training could include discrete microteaching sessions where the focus would initially be divided along separate EMI dimensions (e.g. EAP, ESP, activity and assignment design) before the joint use of skills should be required. Participation of professionals with different expertise (e.g. ESP teachers, experts in teaching methodologies) could also be a valuable contribution. Placing accent on stronger productive skills that connect with cultural and pedagogical sensitivity needed for EMI classrooms is of essence to ensure efficient language content integration. Development of such competences could be supported through EMI lecture simulations where recommendations toward the best practices should be collaboratively agreed. Such an approach could additionally not only help identify any potential needs that might have been overlooked but would also enable a more effective use of the sum of individual abilities. The last aspect of the proposed guidelines mirrors the very essence of EMI practice, which lies in the synergy of linguistic, pedagogical, and intercultural competences. While the recommendations provided may serve as a

broad sketch, a more specific action plan requires more extensive research. A useful extension to the presented research may include a study conducted with more experienced EMI practitioners, who could contribute by adding their perspective on the needed competences, identified weaknesses as well as major classroom challenges.

REFERENCES

- Airey, J. (2011). Talking About Teaching in English: Swedish University Lecturers' Experiences of Changing Teaching Language. *Ibérica: Revista de la Asociación Europea de Lenguas Para Fines Específicos* 22: 35–54
- Aguilar, M., Rodríguez, R. (2012). Implementing CLIL at a Spanish University. Lecturer and Student Perceptions. *The International Journal of Bilingual Education and Bilingualism* 15: 183–197.
- Alhassan, A. (2021). Challenges and Professional Development Needs of EMI Lecturers in Omani Higher Education. *SAGE Open* 11(4): 1–12.
- Banks, M. (2018). Exploring EMI Lecturers' Attitudes and Needs, in *LSP in Multi-disciplinary contexts of Teaching and Research. Papers from the 16th International AELFE Conference*, ed. A. Curadovol (EPiC Series in Language and Linguistics): 19–26.
- Beltrán-Palanques, V. (2021). EMI Lecturers' Training Needs: Towards the Construction of a Measurement Instrument. *Alicante Journal of English Studies / Revista Alicantina De Estudios Ingleses* 34: 63–82.
- Bendazzoli, C., Crielesi, S., Dimova, S., Drljača Margić, B., Irun, M., Kling, J., Larsen, S., McAllister-Wylie, D., Meštrović-Štajduher, I., Molino, A., Pulcini, V., Rubio, X. M., Solly, M., Vodopija-Krstanović, I. (2020). *EMI Handbook: Tertiary Level Teachers' Handbook Developed by Erasmus+ TAEC Project*. Copenhagen: University of Copenhagen.
- Briggs, J. G., Dearden, J., Macaro, E. (2018). English Medium Instruction: Comparing Teacher Beliefs in Secondary and Tertiary Education. *Studies in Second Language Learning and Teaching* 8(3): 673–696.
- Broggini, S., Costa, F. (2017). A Survey of English-Medium Instruction in Italian Higher Education: An Updated Perspective from 2011 to 2015. *Journal of Immersion and Content Based Language Education* 5(2): 238–264.
- Council of Europe (2020). *The Common European Framework of Reference for Languages: Learning, Teaching, Assessment – Companion Volume*. Strasbourg: Council of Europe Publishing.

- Dafouz, E. (2014). Integrating Content and Language in European Higher Education: An Overview of Recurrent Research Concerns and Pending Issues, in *Cross-Curricular Approaches to Language Education*, ed. A. Psaltou-Joycey, E. Agathopoulou & M. Mattheoudakis (Cambridge, UK: Cambridge Scholars): 289–304
- Dang, T. K. A., Bonar, G., Yao, J. (2023) Professional Learning for Educators Teaching in English-Medium-Instruction in Higher Education: A Systematic Review. *Teaching in Higher Education* 28(4): 840–858.
- Dearden, J. (2014). *English as a Medium of Instruction – a Growing Global Phenomenon*. British Council. Accessed on 7 June 2025. URL: <https://www.britishcouncil.es/sites/default/files/british_council_english_a_s_a_medium_of_instruction.pdf>.
- Dearden, J. (2018). The Changing Roles of EMI Academics and English Language Specialists, in *Key Issues in English for Specific Purposes in Higher Education. English Language Education*, ed. Y. Kirkgöz & K. Dikilitaş (Cham: Springer): 323–338.
- Doiz, A., Lasagabaster, D. (2018). Teachers' and Students' L2 Motivational Self-System in English-Medium Instruction: A Qualitative Approach. *TESOL Quarterly* 52(3): 657–679.
- Dressen-Hammouda, D. (2008). Aligning EAP Writing Pedagogies across European Universities. A Case Study from France, in *ESP in Higher European Education: Integrating Language and Content. AILA Series*, ed. I. Fortanet-Gómez & Ch. Räisänen (Amsterdam: John Benjamins): 75–96.
- Drljača Margić, B., Vodopija-Krstanović, I. (2018). Language Development for English-Medium Instruction: Teachers' Perceptions, Reflections and Learning. *Journal of English for Academic Purposes* 35: 31–41.
- Đorđević, J., Blagojević, S. (2019). University Teachers' Attitudes towards the Implementation of English as a Medium of Instruction in Serbian Higher Education. *Nasleđe* 44: 153–166.
- Fondacija TEMPUS. (n.d.). *English as a Medium of Instruction (EMI): Project Dedicated to Teacher Training for Teaching in English at the Largest State Universities in Serbia*. Accessed on 7 June 2025. URL: <<https://tempus.ac.rs/english-as-a-medium-of-instruction-emiproject-dedicated-to-teacher-training-for-teaching-in-english-at-the-largest-state-universities-in-serbia/>>.
- Fortanet-Gómez, I. (2012). Academics' Beliefs about Language Use and Proficiency in Spanish Multilingual Higher Education. *AILA* 25: 48–63.

- Fortanet-Gómez, I. (2020). The Dimensions of EMI in the International Classroom: Training Teachers for the Future University, in *Teacher Training for English-Medium Instruction in Higher Education*, ed. M. del Mar Sánchez-Pérez (Hershey, PA: IGI Global): 1–20.
- Huang, W., Fang, F. (2023). Intercultural Competence Development in EMI Programs in China, in *English-Medium Instruction Pedagogies in Multilingual Universities in Asia*, ed. F. Fang & P. K. Sah (London: Routledge): 90–110.
- Lasagabaster, D. (2018). Fostering Team Teaching: Mapping out a Research Agenda for English Medium Instruction at University Level. *Language Teaching* 51(3): 400–416.
- Lasagabaster, D. (2021). EMI in Spain, in *The Englishization of Higher Education in Europe*, ed. R. Wilkinson & R. Gabriëls (Amsterdam: Amsterdam University Press): 77–96.
- Macaro, E. (2018). *English Medium Instruction: Language and Content in Policy and Practice*. Oxford: Oxford University Press.
- 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.
- Macaro, E., Han, Sh., Akincioglu, M. (2019). English Medium Instruction in Higher Education: Teacher Perspectives on Professional Development and Certification. *International Journal of Applied Linguistics* 30(1): 1–29.
- Mancho-Barés, G., Arnó-Macià, E. (2017). EMI Lecturer Training Programmes and Academic Literacies: A Critical Insight from ESP. *ESP Today* 5(2): 266–290.
- Méndez-García, M. C., Luque-Agulló, G. (2020). Researching English as a Medium of Instruction in University Lecturers’ Teaching Methodology: A Proposal for In-Service Training, in *Teacher Training for English-Medium Instruction in Higher Education*, ed. M.d.M. Sánchez-Pérez (Hershey, PA: IGI Global): 205–231.
- Mišić Ilić, B., Đorđević, J. (2022). ESP and Internationalization of Higher Education and Research. *Folia Linguistica et Litteraria* 42: 13–31.
- Mišić Ilić, B., Đorđević, J., Tatar, N. (2021). *Teaching and Academic Writing in English (TAWÉ) course*. Niš: Project TeComp.
- O’Dowd, R. (2018). The Training and Accreditation of Teachers for English Medium Instruction: an Overview of Practice in European Universities.

- International Journal of Bilingual Education and Bilingualism* 21(5): 553–563.
- Piquer-Píriz, A., Castellano-Risco, I. (2021). Lecturers' Training Needs in EMI Programmes: Beyond Language Competence. *Alicante Journal of English Studies* 34: 83–105.
- Popović, M., Vagić, M., Kuzmanović, M., Anđelković Labrović, J. (2016). Understanding Heterogeneity of Students' Preferences towards English Medium Instruction: A Conjoint Analysis Approach. *Yugoslav Journal of Operations Research* 26(1): 91–102.
- Radić-Bojanić, B. (2025). English as a medium of instruction as part of the internationalization strategy at the University of Novi Sad. *Current Issues in Language Planning*: 26 (5): 706–723. <https://doi.org/10.1080/14664208.2024.2405759>
- Rivera-Trigueros, I., Sánchez-Pérez, M. D. (2020). Classcraft as a Resource to Implement Gamification in English-Medium Instruction, in *Teacher Training for English-Medium Instruction in Higher Education*, ed. M.d.M. Sánchez-Pérez (Hershey, PA: IGI Global): 356–371.
- Rubio-Alcalá, F. D., Mallorquín, S. (2020). Teacher Training Competences and Subsequent Training Design for Higher Education Plurilingual Programs, in *Teacher Training for English-Medium Instruction in Higher Education*, ed. M.d.M. Sánchez-Pérez (Hershey, PA: IGI Global): 41–61.
- Shohamy, E. (2012). A Critical Perspective on the Use of English as a Medium of Instruction at Universities. *English-Medium Instruction at Universities: Global challenges*: 196–210.
- Vidaković, M. (2023). Learning English for Specific Purposes via Moodle in Emergency Situations: The Students' Perspective. *Zbornik radova Filozofskog fakulteta u Prištini* 53(4): 35–55.
- Wang, K., Yuan, R., De Costa, P. I. (2025). A Critical Review of English Medium Instruction (EMI) Teacher Development in Higher Education: From 2018 to 2022. *Language Teaching*: 1–32.
- Wilkinson, R. (2013). English-Medium Instruction at a Dutch University: Challenges and Pitfalls, in *English-Medium Instruction at Universities. Global Challenges*, ed. A. Doiz, D. Lasagabaster, J. M. Sierra (Bristol: Multilingual Matters): 3–26.
- Yuan, R. (2023). Promoting EMI Teacher Development in EFL Higher Education Contexts: What can Language Specialist Do and Become. *RELC Journal* 54(1): 267–279.

Zayas Martínez, F., Estrada Chichón, J. L. (2020). EMI at Tertiary Level in Spain. Perspectives from Lecturers at a Medium-Sized State University, in *Teacher Training for English-Medium Instruction in Higher Education*, ed. M.d.M. Sánchez-Pérez (Hershey, PA: IGI Global): 232–256.

Mirna M. Vidaković
Zora D. Trninić
Univerzitet u Novom Sadu

TRANZICIJA KA NASTAVI NA ENGLESKOM JEZIKU: ISPITIVANJE PROFESIONALNIH POTREBA NASTAVNIKA U VISOKOM OBRAZOVANJU

Sažetak

U radu se razmatraju stavovi univerzitetskih nastavnika u oblasti društvenih nauka, sa malo iskustva ili bez njega u nastavi na engleskom jeziku, o potrebi za stručnim usavršavanjem koje bi im omogućilo efikasno uključanje u novo nastavno okruženje sa optimalnim rezultatom. Iako je česta praksa da nastavnici započnu svoj angažman u sve popularnijim programima internacionalizacije na visokoškolskim ustanovama bez prethodne obuke, rad ukazuje na očigledne nedostatke takvog pristupa, pre svega utvrđivanjem a zatim i poređenjem postojećih nastavničkih kompetencija i očekivanih izazova nastave na stranom jeziku, iz kojih posledično proizlazi identifikacija potreba za stručnom podrškom. U skladu sa opšte prihvaćenim tendencijama u literaturi iz oblasti, korišćeni istraživački instrumenti, upitnik i intervju, oslanjaju se na tri ključne dimenzije nastave u jezički i kulturološki raznolikoj učionici: jezičku, pedagošku i interkulturnu dimenziju. Deskriptivna statistička obrada podataka iz upitnika i analiza sadržaja intervjua ukazuju da, iako ispitanici svoje opšte jezičke kompetencije ocenjuju relativno visoko, kao percipirane slabosti izdvajaju produktivne veštine upotrebe jezika u akademskom i kontekstu upravljanja učionicom. Isti činioici se izdvajaju i u analizi očekivanih izazova i potreba za usavršavanjem. Dodatno, ispitanici jasno prepoznaju poteškoće vezane za neujednačen nivo poznavanja jezika nastave među polaznicima; svoje ograničene sposobnosti za spontanu upotrebu jezika koja izlazi iz okvira pripremljenog izlaganja; neophodnost prilagođavanja pedagoškog pristupa; i specifične kulturološke zahteve datog okruženja. Navedeni rezultati potvrđuju i ranije ustanovljenu međusobnu povezanost jezičkih, pedagoških i interkulturnih komponenti držanja nastave na engleskom jeziku. Kao jedan od najvažnijih rezultata istraživanja, svakako se izdvaja pozitivan stav o značaju profesionalne nadogradnje u istraživanom pravcu, na kojem se dalje zasniva otvorenost i spremnost za učešće u stručnoj obuci koja bi osim unapređenja potrebnih veština doprinela boljoj konsolidaciji sume kompetencija duž pojedinačnih dimenzija obuhvaćenih istraživanjem. S obzirom na to da je rad prevashodno orijentisan ka dobijanju korisnih smernica za kreiranje programa podrške, prostor za praktičnu primenu prikazanih rezultata svakako postoji.

Ključne reči: nastava na engleskom jeziku, visoko obrazovanje, društvene nauke, kompetencije, stručno usavršavanje.

Received: 1 September 2025

Accepted: 16 October 2025

Dragana M. Gak

University of Novi Sad, Serbia
Faculty of Technical Sciences,
Department of Fundamental Disciplines in
Engineering
dgak@uns.ac.rs
<https://orcid.org/0000-0002-4909-0161>

Original research paper
UDC 371.1::811.111'243
DOI: 10.19090/MV.2025.16.2.113-132

Vesna Ž. Bogdanović

University of Novi Sad, Serbia
Faculty of Technical Sciences,
Department of Fundamental Disciplines in
Engineering
vesna241@uns.ac.rs
<https://orcid.org/0000-0002-7109-517X>

TEACHING IN A SECOND LANGUAGE: COMMUNICATION CHALLENGES IN ENGLISH-MEDIUM INSTRUCTION¹

ABSTRACT: The internationalization of higher education in Serbia is a complex process in which English-medium instruction (EMI) plays a central role. Although familiar with it, content area lecturers (CALs) often face a variety of communication-related challenges when teaching in English, which directly impact teaching quality. This study explores these challenges through the perspectives of 102 content area lecturers at the Faculty of Technical Sciences, University of Novi Sad. Their questionnaire responses were analyzed using both qualitative and quantitative approaches. The findings reveal communication challenges in teaching international students, particularly regarding content area lecturers' language proficiency and classroom interaction. Teachers also describe strategies they adopt to minimize misunderstandings, manage ongoing communication, and enhance clarity. Additional concerns include (the lack of) institutional and collegial support, which further shape the effectiveness of communication in EMI contexts. The study underscores the pedagogical importance of targeted professional development and sustained institutional support to promote effective communication in internationalized higher education.

Keywords: EMI instruction, internationalization of higher education, content area lecturers, language proficiency, communication challenges.

¹ The paper is based on research conducted as part of the project *Internationalization of the University of Novi Sad and the perspectives of English as a Medium of Instruction* (*Internacionalizacija Univerziteta u Novom Sadu i perspektive engleskog kao jezika visokoškolske nastave*) no. 000851277 2024 09418 003 000 001 04 002 funded by The Secretariat for Higher Education and Research of the Autonomous Province of Vojvodina.

NASTAVA NA STRANOM JEZIKU: KOMUNIKACIONI IZAZOVI ENGLESKO KAO JEZIKA VISOKOŠKOLSKO NASTAVE

APSTRAKT: Internacionalizacija visokog obrazovanja u Srbiji predstavlja složen proces gde značajnu ulogu ima engleski kao jezik visokoškolske nastave (EJVIN). Iako ga poznaju i koriste, predmetni nastavnici često se suočavaju sa različitim komunikacionim izazovima tokom izvođenja nastave na engleskom jeziku, što neposredno utiče na kvalitet nastave. Ovo istraživanje posmatra pomenute izazove iz perspektive 102 predmetna nastavnika na Fakultetu tehničkih nauka Univerziteta u Novom Sadu. Njihovi odgovori dati u upitniku analizirani su primenom kvalitativnog i kvantitativnog pristupa. Rezultati ukazuju na izazove u komunikaciji sa međunarodnim studenima, posebno vezano za jezičku kompetenciju i interakciju u učionici. Nastavnici su takođe opisali strategije koje primenjuju kako bi smanjili nesporazume, omogućili i unapredili komunikaciju. Dodatne teškoće obuhvataju (nedostatak) institucionalne podrške, kao i podrške kolega, što dodatno oblikuje efikasnost komunikacije u EJVIN okruženju. Istraživanje naglašava pedagoški značaj ciljanog profesionalnog usavršavanja i kontinuirane institucionalne podrške radi podsticanja efikasne komunikacije u internacionalizovanom visokom obrazovanju.

Cljučne reči: EJVIN, internacionalizacija visokog obrazovanja, predmetni nastavnici, jezička kompetencija, komunikacioni izazovi.

1. INTRODUCTION

Since the 1980s, the internationalization of higher education has represented the process of integrating an international, cultural, and global dimension into the teaching and research practices of a university (Zhang 2018). It has been organized around several key elements: global and intercultural competence, mobility, research, knowledge transfer, competitive global positioning (Oesterle 2025; Zhang 2018), and insertion of universities into global networks of international universities (Block 2022). As a result, university classrooms worldwide are becoming increasingly multi-ethnic, multilingual, and multicultural spaces (Murray et al. 2021), where English is often introduced as the primary means of communication.

English-medium instruction (EMI) is commonly defined as the use of the English language to teach academic subjects (other than English itself) in countries where the first language of the majority of the population is not English (Macaro 2018). Bradford and Brown (2017) emphasize that EMI refers to the teaching of academic content through English in classes that do not focus on language teaching or learning goals. While language learning may be perceived as a potential benefit of EMI, it is not its primary aim (Rose & McKinley 2024). Importantly, content-area lecturers do not provide explicit English-language instruction, nor are they responsible for students' language development (Block 2022). Rather, the

expectation is that students will simultaneously advance their disciplinary knowledge and their English language skills, thereby enhancing their career prospects in an increasingly globalized labor market (Galloway et al. 2024).

Universities in Serbia seeking greater international visibility and academic competitiveness have adopted EMI as part of their modernization agendas. Expanding the number of EMI courses is viewed by university management as a positive step towards attracting international students and strengthening the institution's profile. However, this trend also creates additional challenges and pressure for CALs who must deliver instructions in a second language, without being trained in EMI pedagogy, thus navigating both disciplinary and communication challenges in their classrooms.

To our knowledge, few studies have examined EMI implementation in Serbia, and research focusing specifically on communication challenges in tertiary education remains scarce (e.g., Bogdanović et al. 2025). Addressing this gap, this study explores the experiences of content area lecturers in EMI at the Faculty of Technical Sciences, University of Novi Sad. The research aims to identify the types of communication difficulties that content area lecturers face, examine how adapted curricula and teaching materials are designed to support communication between non-native speakers of English, and explore the strategies they employ to mitigate communication problems. By doing so, we aim to contribute to a deeper understanding of communication challenges in an EMI setting and provide insights into the pedagogical measures necessary to enhance communication in internationalized higher education.

Building on the primary aim, the study explores the following research questions:

1. How do content area lecturers approach class preparation in English, and in what way does their language proficiency influence their ability to clearly communicate subject content to international students?
2. How do content area lecturers perceive the adaptation of curricula and teaching materials for facilitating successful communication in multilingual classrooms?
3. What strategies do content area lecturers employ to ensure successful communication with students in the EMI context?

2. LITERATURE REVIEW

Over the last few decades, EMI has emerged as a new field of study and has become a noteworthy area of research, particularly among linguists (Sah 2022).

Even though educational systems combine content and language learning, the global expansion of EMI has been unprecedented (Galloway & Rose 2021). And yet, research on EMI is seen in its infancy (Galloway & Rose 2021), with much more research needed to understand the EMI phenomenon and the challenges. The major challenge reported by the researchers is the absence of solid EMI theoretical frameworks needed to examine the effectiveness of EMI programs. As an alternative, linguists regard EMI through the lens of communication theories or cognitive linguistics.

Researchers emphasize that EMI is a complex phenomenon encompassing multiple dimensions, ranging from policy issues (regulations, implementation, and management) to university-level practices such as teaching, research, and teacher professional development. Within this landscape, English has become a central mediator of communication in multilingual and multicultural classrooms, reflecting the broader reality of internationalized higher education (Defouz & Smit 2021).

Discipline-specific language-supported EMI through strategic and purposeful collaboration between content area lecturers and English language teachers has the most potential for achieving learning goals in the EMI context (Galloway et al. 2024: 255). The challenges it confronts include language preparedness by both students and teachers, lecture comprehension (Taguchi & Naguma 2006), insufficient academic English skills, and mastery of discipline-specific academic vocabulary (Evans & Morrison 2018).

Policy-oriented perspectives argue that effective EMI implementation requires collaboration among policy-makers, language specialists, CALs, and students. Ou (2022) stresses the importance of inclusive practices that analyze the language resources and support structures necessary for successful EMI delivery. At the classroom level, Sah (2022) raises important questions about the role of additional languages in EMI settings, noting that many teachers are not sufficiently proficient to deliver complex disciplinary content exclusively in English. This raises critical issues: should EMI be delivered entirely in English, predominantly in English, or as a blended approach involving both first and second languages? Furthermore, the question focuses on the extent of instruction in a second language, which can affect content mastery, overall communication, and teaching effectiveness (Sah, 2022: 128).

An additional recurrent topic in EMI research is the type and adequacy of language support provided to students and staff. Many institutions rely on general English courses, which are often insufficient for the demands of academic and professional communication. Increasingly, researchers call for the development of

ESP courses and discipline-specific language support. Galloway, Sahan, and McKinley (2024) confirm limited ESP support and provide insights into staff and students' perceptions due to the lack of ESP. Similarly, Wingate & Hakim (2022) call for more research into both EAP and ESP influence on successful communication in EMI.

Communication plays a crucial role in the EMI context. It relates to the interaction between content area lecturers and students, enhancing the teaching and learning process, motivation, and engagement. It also includes students' willingness to participate in classroom activities using English in verbal and non-verbal disciplinary communication. Communication in EMI can be affected by the choice of topic, students' perceptions, interaction patterns, or type of task (Zarrinabadi 2014). These factors then influence learners' sense of excitement, security, and responsibility (Kang 2005), as well as their self-confidence, anxiety, and perception of learning environment (Leger & Storch 2009). This is to be expected, since students may not be familiar with discipline-specific terminology (Gronchi 2024). Additionally, apart from linguistic proficiency, communication is also influenced by a number of non-linguistic interpersonal and intrapersonal factors (Peng 2025). "In an EMI context, it can be assumed that more interactions lead to better learning and language development" (Chien & Valcke 2020: 132). Teacher support plays a crucial role in the EMI context, including dimensions such as instrumental support, academic support, appraisal support, and affective support (Hejazi & Sadoughi 2023). Feedback (Mohd Khatib & Maarof 2015) also appears to be an appropriate way to boost students' self-efficacy, improve their performance, encourage oral communication, and provide opportunities for discussion, leading to better communication between CALs and students.

The existing literature on EMI in the Serbian context is markedly limited, indicating a gap that warrants further investigation. Mišić-Ilić and Đorđević (2022) conducted an international project on internationalization in higher education, creating a specialized course to develop competencies necessary for teaching in English. The course is based on theoretical background and practical guidelines by ESP and EMI and is intended for highly educated senior lecturers, experts in the fields of mathematics and natural sciences, with upper-intermediate and advanced English level proficiency and proficiency in reading professional literature in English. Radić-Bojanić (2025) also addresses internationalization strategies at the University of Novi Sad with an emphasis on EMI. The author investigates how clearly language education policy is formulated, how it is implemented, and how clearly content area lecturers perceive it. The implementation of EMI in Serbian

higher education and university teachers' attitudes towards it are the focus of the research by Đorđević and Blagojević (2019). They highlight potential challenges and obstacles to implementing EMI in Serbia. In their research, senior lecturers highlight several key issues: the lack of awareness about the importance of teaching methodology in EMI, potential resistance to EMI, inadequate language proficiency, and a lack of interest in self-improvement and acquiring new skills. On the other hand, younger lecturers view the EMI context as a highly motivating and challenging endeavor that fosters international educational cooperation. Popović et al. (2015) investigate students' preferences towards EMI, concluding that, among the students of a case study faculty, students of lower academic year do not want to invest their time in learning the EMI postulates, while final year students are aware of the need for continuous improvement and find the EMI courses useful. It appears that communication issues in EMI contexts have received limited attention from Serbian researchers. This study, therefore, seeks to address this gap and contribute new insights into the phenomenon.

3. RESEARCH METHODOLOGY

This research is a part of a larger project, *“Internationalization of the University of Novi Sad and the perspectives of English as a Medium of Instruction”*. The aim of the project was to investigate the challenges of teaching in English using the experience of the content area lecturers at the Faculty of Technical Sciences, University of Novi Sad, thereby contributing to the prospects of internationalization in higher education.

The primary aim is to examine the types of communication difficulties experienced by content area lecturers delivering courses in English, to analyze the extent to which lecturers' language proficiency shapes the quality of communication, and to identify the strategies teachers employ to prevent or overcome communication problems in EMI classrooms.

3.1. Research instrument

At the beginning of the project, in the fall of 2024, a questionnaire was developed by project team members. The questionnaire consisted of 85 statements, distributed across 10 diverse categories. The first category was related to demographics. The remaining sections were divided into statements on instruction-related and non-instructional information, both related to diverse aspects that can influence EMI. The former categories included Curriculum and Syllabus

Adaptation, Classroom Communication and Interaction, Assessment and Evaluation Practices, Course Design and Preparation, and Teaching Delivery and Pedagogical Approaches. The latter categories included Institutional Support and Resources, EMI Training and Professional Development, Collegial Collaboration and Peer Support, and Challenges and Demotivation. All the questions were in Serbian, so content-area lecturers could better understand them.

Statements related to demographic data were followed by multiple answers, allowing the participant to select only the most appropriate one. Additionally, some questions were open-ended to gather more detailed data from participants. On the other hand, participants were asked to rate their agreement with statements on a Likert scale ranging from 1 (Completely disagree) to 5 (Completely agree).

For the purpose of this study, only the category Classroom Communication and Interaction will be discussed in more detail in the Results and Discussion section.

3.2. Research participants

As already stated, the potential respondents included all professors from the Faculty of Technical Sciences, University of Novi Sad, who previously had participated in at least one teaching course with Erasmus+ mobility exchange students. All students were from non-Serbian-speaking countries; therefore, all lectures should have been delivered in English as the medium of instruction.

The number of CALs who participated in the research was 102. 63.7% were male and 36.7% female lecturers. Most of them were in the age group 41-50 years old (46.1% or 47 persons), followed by 51-60 years of age (28.4%), and 15% of younger lecturers (31-40 years). There were also 9.8% (10 professors) who were more than 60 years old. Subsequently, more than half of the participants (54.9%) have been teaching for over 20 years, while 45 professors (44.1%) spent between 11 and 20 years in the classroom. Only 1 participant had less than 10 years of teaching experience. Among participants, there were 62 full professors, 32 associate professors, six assistant professors, and two lecturers.

Open-ended questions offered some interesting insights about the participants. 90.2% of participants had never attended a preparatory training for teaching in English, meaning that only 10 participants attended an EMI course. Similarly, it became obvious that content area lecturers were not trained in methodology. 79.4% (81 professors) had never attended any seminar on methodology and pedagogy during their undergraduate studies, while only 21

professors (20.6%) were taught methodology during their undergraduate studies. Later, after being employed, only 14 professors attended any training or seminar on teaching with EMI, while 88 participants did not attend any training before participating in the Erasmus+ programs.

Finally, the demographic set of questions revealed that the majority of content area lecturers (74.5%) taught international students separately from domestic ones, and they used English exclusively. Twenty-six professors (25.5%) placed international students alongside Serbian students, using Serbian, German, or Italian alongside English, while the majority of CALs (89.2%) decided to teach those mixed-language classes in English only.

3.3. Procedure

After the questionnaire was prepared and a pilot survey was conducted, it was distributed to CALs. To provide the full range of possible answers in a micro context, the questionnaire was distributed only to professors from one faculty, the Faculty of Technical Sciences at the University of Novi Sad. All invited participants had taught at least one course to students who spent some time studying at the Faculty as part of the Erasmus+ student mobility exchange program.

The initial idea was to organize meetings with professors and have them complete the questionnaire in the presence of project members, in case they had any additional questions regarding it. However, toward the end of 2024, episodes of social unrest and public protests in Serbia resulted in the closure of universities. This context prevented the research team from administering the questionnaire in person to professors, necessitating its distribution via alternative channels.

Thus, the questionnaires were sent via email, and the link was provided for the Google Form Questionnaire. That email was followed by shorter or longer follow-up messages to participants, to reach the team members and let them know if they needed some clarification. This was an effective solution, as several participants sought discussions on specific categories. The links were sent and resent over a two-month period, resulting in 102 completed questionnaires.

4. RESULTS

This study investigated the communication challenges that content-area lecturers encounter when delivering instruction in English to their international students. These challenges were observed through three interrelated dimensions:

(1) teachers' approaches to teaching in English, viewed through the lens of their language proficiency, (2) the degree to which the curricula and teaching materials are adapted to meet the linguistic and cultural diversity of international students, and (3) the range of strategies teachers employ to facilitate and enhance communication in multilingual classroom settings.

4.1. Approach to teaching in English

The majority of participants were highly experienced educators, with 54.9% having more than twenty years of teaching experience. Despite their extensive professional backgrounds, almost all respondents (90.2%) reported not having received any preparatory training for teaching in English. This lack of formal preparation plays a significant part in communication in an EMI setting.

Their approach to teaching in English became evident through their responses to statements regarding class preparation. When asked to evaluate the statement "*I prepare for each class I teach in English by practicing pronunciation and studying the content of the lecture,*" they reported a wide range of practices. Specifically, 29.4% of CALs reported total disagreement, 19.6% partial disagreement, 24.5% neither agreed nor disagreed, 18.6% partially agreed, and 7.8% totally agreed. These results suggest substantial variation in how content-area lecturers perceive the need for linguistic rehearsal before teaching, reflecting differing levels of awareness or confidence in their English language proficiency.

Furthermore, the teachers were also asked to respond to the statement "*I prepare for my classes by practicing before English language teachers.*" More than 80% strongly disagreed with this statement, suggesting that CALs rarely seek linguistic support when preparing for their classes.

Another item provided additional insight into lecturers' perceptions of their communicative competence in the content area. When asked to evaluate the statement: "*My international students fully understand my instructions and explanations.*", the majority expressed confidence in their communicative clarity, with 50% strongly agreeing and 42.2% partially agreeing. This may confirm a high level of self-assurance among teachers, but it may not align with students' actual comprehension.

Further statistical analysis was conducted using Pearson's correlation test to explore potential relationships between the examined variables.

		International students understand my instructions.	I prepare for my classes by rehearsing.	I prepare with an English language specialist.
International students understand my instructions.	r	1	.131	-.014
	p		.189	.890
I prepare for my classes by rehearsing.	r	.131	1	.353**
	p	.189		.000
I prepare with an English language specialist.	r	-.014	.353**	1
	p	.890	.000	
**. Correlation is significant at the 0.01 level (2-tailed).				

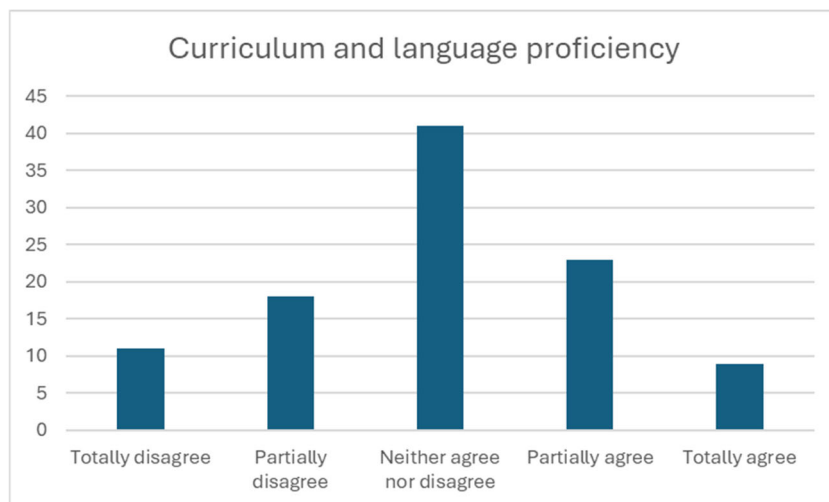
Table 1. Results of the Pearson's correlation test.

As observed from Table 1, the only significant relationship is between the two preparation strategies (rehearsing and practicing in front of colleagues), suggesting that these preparation behaviors are related and often go together. Neither preparation method shows a significant correlation with students' reported understanding of instructions.

4.2. Adaptation of curricula and teaching materials

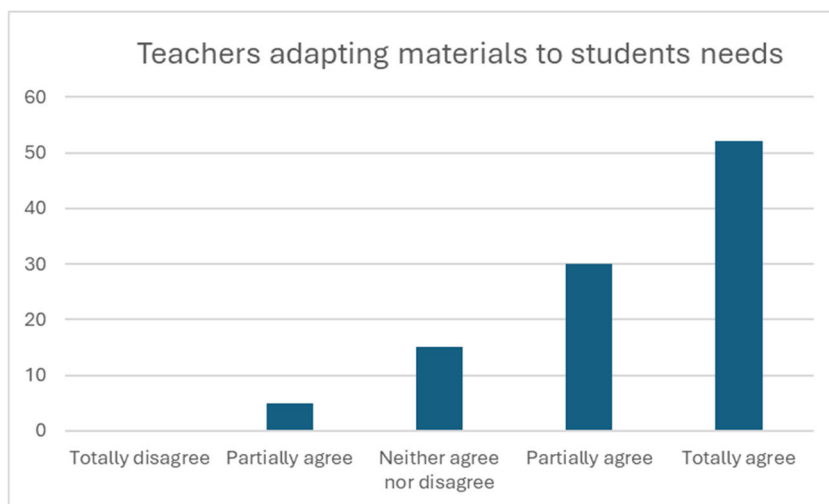
The second dimension examined in this study concerns the extent to which curricula and teaching materials impact communication in the EMI context. Teaching international students requires adapting curricula and materials to accommodate their diverse cultural and linguistic backgrounds.

When asked whether or not the curriculum takes into account the various levels of language proficiency of international students (Graph 1), only a small percentage of respondents (8.8%) totally agreed with this statement. A considerably larger group (40.2%) reported neither agreeing nor disagreeing with this statement, suggesting that many teachers may be unaware whether curriculum design formally incorporates students' linguistic diversity or whether such information is communicated to them.



Graph 1. Whether the curriculum takes into account the language proficiency of international students

Although CALs may not be directly involved in curriculum design, their classroom practices provide valuable insight into how they address the language needs of their international students.



Graph 2. Teachers adapt materials to the language needs of international students

When presented with the statement *“I use materials which help international students understand the content,”* 51% of them totally agreed and 29.4% partially agreed (Graph 2). These findings indicate that, despite limited

awareness of formal curriculum adaptation, most teachers demonstrate a strong awareness of the necessity to modify teaching materials to facilitate comprehension and communication.

4.3. *Strategies for overcoming language barriers*

The majority of teachers report using diverse strategies that facilitate communication (31.4% totally agree, 47.1% partially agree, 19.6% neither agree nor disagree, 2% partially disagree). Specifically, they welcome feedback from their international students, offer additional instructions and explanations, provide diverse forms of interaction, and establish communication channels outside the classroom.

When asked to reflect on the statement “*I ask for feedback from international students so that I can better communicate with them,*” 42.2% of respondents strongly agreed, while 33.3% partially agreed. Similarly, in response to “*I actively encourage international students to participate in class discussion,*” 47.1% strongly agreed and 33.3% partially agreed. These results suggest that content area lecturers recognize the value of interactions, both as a means of clarifying communication and as a tool for fostering engagement in international classrooms.

Teachers also emphasized their role in providing additional instructions and clarifications as needed. For the statement: “*In classes, I offer additional instructions and explanations to international students if necessary,*” 62.7% strongly agreed and 27.5% partially agreed. These practices extend beyond the classroom, with teachers using supplementary resources on digital platforms to provide students with continuous access to clarification and guidance.

A substantial proportion of respondents reported relying on multiple forms of communication to reinforce understanding. For the statement “*In classes, I use various forms of communication and interaction,*” 59.8% strongly agreed and 26.5% partially agreed. Teachers also reported establishing accessible communication channels, such as email, Microsoft Teams, or Dropbox, with 68.6% strongly agreeing and 25.5% partially agreeing that these tools were an integral part of their practice.

Further analysis of data was conducted using Pearson’s correlation test, which measures the strength and direction of linear relationships between pairs of variables. Table 2 demonstrates the results of this analysis.

		Have strategies for overcoming language barriers	Seek feedback from international students	Encourage discussion	Provide additional instructions	Provide multiple forms of interaction	Establish communication channels (email, Teams)
Have strategies for overcoming language barriers	r	1	.403**	.485**	.458**	.436**	.124
	p		.000	.000	.000	.000	.214
Seek feedback from international students	r	.403**	1	.553**	.485**	.438**	.143
	p	.000		.000	.000	.000	.150
Encourage discussion.	r	.485**	.553**	1	.551**	.460**	.184
	p	.000	.000		.000	.000	.064
Provide additional instructions	r	.458**	.485**	.551**	1	.566**	.253*
	p	.000	.000	.000		.000	.010
Provide multiple forms of interaction	r	.436**	.438**	.460**	.566**	1	.367**
	p	.000	.000	.000	.000		.000
Establish communication channels (email, Teams)	r	.124	.143	.184	.253*	.367**	1
	p	.214	.150	.064	.010	.000	

Table 2. The results of the Pearson's correlation test.

Strategies for overcoming language barriers correlated significantly with all in-class practices: use of supportive materials ($r = .216$, $p = .029$), seeking feedback ($r = .403$, $p < .001$), encouraging participation ($r = .485$, $p < .001$), providing additional instructions ($r = .458$, $p < .001$), and using multiple communication modes ($r = .436$, $p < .001$). No significant relationship was observed with the establishment of communication channels ($r = .124$, $p = .214$). The use of supplementary materials correlated significantly with several communicative practices, including seeking feedback ($r = .291$, $p = .003$), encouraging participation ($r = .334$, $p = .001$), providing additional instructions ($r = .334$, $p = .001$), using multimodal communication ($r = .293$, $p = .003$), and establishing communication channels ($r = .218$, $p = .028$). Feedback-seeking

behavior was strongly associated with encouraging participation ($r = .553, p < .001$), providing additional explanations ($r = .485, p < .001$), and employing varied communication modes ($r = .438, p < .001$). Encouraging active participation exhibited strong correlations with providing supplementary instructions ($r = .551, p < .001$) and using multimodal communication ($r = .460, p < .001$). Providing additional instructions demonstrated the strongest link with varied communication methods ($r = .566, p < .001$) and also correlated significantly with establishing communication channels ($r = .253, p = .010$). Multimodal communication strategies correlated significantly with all supportive practices, including the establishment of communication channels ($r = .367, p < .001$). Although comparatively weaker, significant correlations were identified between establishing communication channels and the use of supportive materials ($r = .218, p = .028$), providing additional instructions ($r = .253, p = .010$), and employing varied communication methods ($r = .367, p < .001$). The weaker associations involving communication channels imply that while teachers recognize the value of external communication platforms, they prioritize real-time, multimodal engagement and classroom-based scaffolding when addressing students' language-related needs.

5. DISCUSSION

The discussion that follows interprets the findings in relation to three central research questions. The first question explores how content-area lecturers approach class preparation in English and how their language proficiency influences the delivery of subject content and overall communication. The second question examines teachers' perceptions of the curriculum and its adaptation as a means of facilitating communication in linguistically and culturally diverse classrooms. The third investigates the additional strategies teachers employ to enhance communication.

As emphasized in the literature, many CALs possess extensive disciplinary knowledge; however, a limited command of English as a second language may restrict their ability to convey complex concepts with accuracy and fluency (Sah, 2022). Such linguistic limitations can lead to oversimplification of content, overreliance on rehearsal, and over-preparation. This may reflect teachers' attempts to compensate for lower linguistic confidence (Airey 2010; Helm & Guarda 2015; Margić & Vodopija-Krstanović 2018).

The results of this study indicate considerable variation in the extent to which content-area lecturers rely on rehearsing course content in English before instruction, with nearly one-third of participants expressing total disagreement with

the practice. This variation may reflect differing levels of self-awareness or confidence regarding their English language proficiency. However, these findings should be interpreted in light of the broader institutional context: almost none of the participants reported receiving formal training in teaching through English, and approximately 80% stated that they do not seek linguistic support from language specialists. Taken together, these results suggest that many content area lecturers operate in relative isolation, without structured professional or institutional support. This lack of systemic guidance reinforces the perception that teaching through English constitutes an individual struggle rather than a collaborative pedagogical endeavor (Zhang & Choi 2024).

While EMI programs are frequently introduced as part of broader institutional goals for internationalization, as is the case at the Faculty of Technical Sciences, the curricula are often based on pre-existing programs designed for monolingual and monocultural students (Jinghui 2023). In practice, however, EMI programs frequently involve learners with varied levels of language proficiency. Consequently, it is crucial to adapt both pedagogy and materials in response to linguistic diversity (Yang et al. 2019). Content area lecturers in this research, although mainly stating that they neither agree nor disagree with the statement that the curriculum accounts for language differences of international students, nevertheless demonstrate personal initiative and choose to adapt the teaching materials to meet students' communicative and comprehension needs. Over half of the participants strongly agreed and nearly one-third partially agreed that they actively use teaching materials designed to help international students understand the content. This pattern suggests that, despite the absence of formal curriculum adaptation at the institutional level, content area lecturers recognize and respond to the linguistic realities of their classrooms.

The third segment of the research also highlights CALs' proactiveness and signals their openness to diverse strategies to enhance communication in multilingual classrooms. The majority of teachers reported utilizing a range of strategies to mitigate communication challenges and ensure active participation. These include soliciting student feedback, encouraging discussion, and providing additional explanations and guidelines when necessary. Such practices demonstrate not only teachers' adaptability but also their commitment to creating a communication-rich environment (Zheng & Choi 2024).

Moreover, content area lecturers rely on multiple forms of communication and interaction, establishing accessible channels and digital platforms, such as emails, Microsoft Teams, and Dropbox, to maintain engagement beyond the

physical classroom. The use of diverse communication modes, written, visual, and oral, enhances clarity of communication for international students (Moorhouse & Wan 2023).

Collectively, these practices emphasize teachers' capacity to understand the challenges, their ability to navigate complex communicative demands, and ensure effective communication.

6. CONCLUSION AND PEDAGOGICAL IMPLICATIONS

In conclusion, the findings of this study underscore that communication challenges in English-medium instruction are not the result of a single factor but emerge from the interplay of language proficiency, curricular design, and classroom strategies. These results reveal a notable discrepancy between content area lecturers' extensive professional experience and their limited formal preparation for teaching in English. Despite their confidence in communicating subject content and in students' understanding of instructions, the data suggest that EMI teaching is still largely approached as an individual endeavor rather than as a supported institutional practice. The absence of preparatory training and the low level of collaboration with English language professionals indicate that most teachers rely on personal strategies rather than structural linguistic development.

Although they frequently encounter obstacles, content-area lecturers demonstrate considerable resilience and agency in developing practical strategies to overcome them. By actively inviting feedback, encouraging discussion, and offering supplementary explanations, they attempt to create more inclusive spaces for communication. Their reliance on multiple modes of communication further extends opportunities for interaction beyond the classroom, reflecting a growing awareness of the communicative dimension of teaching in multilingual environments.

From a pedagogical perspective, the results carry several important pedagogical implications for the effective implementation of EMI. Communication challenges in EMI classrooms are multifaceted and cannot be resolved solely through individual teacher effort. Instead, they demand systemic, pedagogical, and institutional responses that align with the realities of multilingual and multicultural higher education environments. Teachers, therefore, require structured training not only in English proficiency but also in classroom communication strategies. Only through systematic support, integrated language assistance, and sustained professional training can EMI programs in Serbia fulfill their promise of delivering high-quality, inclusive education to international students.

While this study offers important insights into the communication challenges experienced by EMI practitioners, several limitations should be acknowledged. First, the research was conducted within a single institutional context, the Faculty of Technical Sciences at the University of Novi Sad. Comparative research across institutions and disciplines would provide a more comprehensive picture of how communication challenges vary across contexts. Second, the data collection relied on self-reported perceptions of teachers, gathered primarily through questionnaires. While this approach captures valuable subjective experiences, it may not fully reflect classroom dynamics or students' perspectives.

Ultimately, the findings reaffirm that the success of English-medium instruction in Serbia will depend on how institutions value communication as the heart of teaching. Empowering lecturers through structured linguistic and pedagogical support is not merely a matter of policy, but a precondition for equitable, high-quality education in international contexts. Addressing this need should therefore remain a central priority for both institutional leaders and future research in EMI.

REFERENCES

- Airey, J. (2010). The ability of students to explain science concepts in two languages. *Hermes: Journal of Language and Communication Studies* 45: 35–49.
- Block, D. (2022). The dark side of EMI?: A telling case for questioning assumptions about EMI in HE. *Educational Linguistics* 1(1): 82–107.
- Bogdanović, V., Topalov, J., Gak, D. (2025). Enhancing collaboration in English as a medium of instruction: Challenges for content area lecturers and ESP instructors. *Languages and Social Sciences in Contact: The Challenges of Interdisciplinarity* 1: 250–261.
- Bradford, A., Brown, H. (2017). Introduction: English-medium instruction in Japanese higher education, in *English-medium Instruction in Japanese Higher Education*, ed. A. Bradford & H. Brown (Bristol, UK: Multilingual Matters): xvii–xxiii.
- Chien, M.Y., Valcke, M. (2020). A study of the difficulties and instructional support related to spoken interaction in an EMI course for higher education students. *Journal of Educational Research and Practice* 10(1): 129–144.
- Đorđević, J. P., Blagojević, S. N. (2019). University teachers' attitudes towards the implementation of English as a medium of instruction in Serbian higher education. *Nasleđe* 44: 153–166.

- Defouz, E., Smit, U. (2021). English-medium education revisited. *European Journal of Language Policy* 13(2): 141–159.
- Evans, S., Morrison, B. (2018). Adjusting to higher education in Hong Kong: the influence of school medium of instruction. *International Journal of Bilingual Education and Bilingualism* 21(8): 1016–1029.
- Gallaway, N., Rose, H. (2021). English medium instruction and the English language practitioner. *ELT Journal* 75(1): 33–41.
- Gallaway, N., Sahan, K., McKinley, J. (2024). English for specific purposes in surging English-medium instruction contexts. *Journal of English-Medium Instruction* 3(2): 236–259.
- Gronchi, M. (2024). Language assessment in EMI: Unravelling the implicit-explicit dichotomy. *Educational Linguistics* 3(2): 238–257.
- Hejazi, S. Y., Sadoughi, M. (2023). How does teacher support contribute to learners' grit? The role of learning enjoyment. *Innovation in Language Learning and Teaching* 17(3): 593–606.
- Helm, F., Guarda, M. (2015). Improvisation is not allowed in a second language: A survey of Italian lecturers' concerns about teaching their subjects through English. *Language Learning in Higher Education* 5(2): 353–373.
- Jinghui, S. (2023). Lost in EMI trend: Language-related issues emerging from EMI practice. *SAGE Open* 13(3): 1–12.
- Kang, S. (2005). English as the medium of instruction in Korean engineering education. *The Korean Journal of Applied Linguistics* 21(1): 39–48.
- Lasagabaster, D. (2022). *English-Medium Instruction in Higher Education*. Cambridge: Cambridge University Press.
- Leger, D. S., Storch, N. (2009). Learners' perceptions and attitudes: Implications for willingness to communicate in an L2 classroom. *System* 37(2): 269–285.
- Macaro, E. (2018). *English Medium Instruction*. Oxford: Oxford University Press.
- Mišić-Ilić, B., Đorđević, J. (2023). ESP and internalization of higher education and research. *Folia linguistica et literaria* 42(2): 13–31.
- Mohd Khatib, F. M., Maarof, N. (2015). Self-efficacy perception of oral communication ability among English as a second language (ESL) teaching students. *Social and Behavioural Sciences* 204: 98–104.
- Murray, J., Smith, K., Vanderlinde, R., Lunenberg, M. (2021). Teacher educators and their professional development, in *Teacher educators and their professional development: Learning from the past, looking to the future*, ed. R. Vanderlinde, K. Smit, J. Murray, & M. Lunenberg (London: Routledge): 1–14.

- Oesterle, M. (2025). The role of transient transnational communities in the CPD of teacher educators: An analysis of European education policies and practices. *Teaching and Teacher Education* 165: 1–14.
- Ou, A.W., Hult, M. F., Gu M.M. (2022). Language policy and planning for English-medium instruction in higher education. *Journal of English-medium Instruction* 1(1): 7–28.
- Peng, J. E. (2025). *Willingness to Communicate in a Second Language*. Cambridge: Cambridge University Press.
- Popović, M., Vagić, M., Kuzmanović, M., Anđelković Labrović, J. (2016). Understanding heterogeneity of students' preferences towards English medium instruction: A conjoint analysis approach. *Yugoslav Journal of Operations Research* 26(1): 91–102.
- Radić-Bojanić, B. (2025). English as a medium of instruction as part of the internationalization strategy at the University of Novi Sad. *Current Issues in Language Planning*: 26 (5): 706–723. <https://doi.org/10.1080/14664208.2024.2405759>
- Rose, H., McKinley, J. (2024). Content and language integrated learning and English medium instruction, in *The Routledge Handbook of Applied Linguistics* (2nd ed.), ed. L. Wei, Z. Hua & J. Simpson (London: Routledge): 95–107.
- Tai, W.H. Kevin. (2022). Translanguaging as inclusive pedagogical practices in English-medium instruction science and mathematics classroom for linguistically and culturally diverse students. *Research in Science Education* 52: 975–1012.
- Taguchi, N., Naganuma, N. (2006). Transition from learning English to learning in English: Students' perceived adaptation difficulties to an English-medium university in Japan. *Asian EFL Journal* 8(4): 52–73.
- Sah, P.K. (2022). A research agenda for English-medium instruction. *Journal of English-Medium Instruction* 1(1): 124–136.
- Wingate, U., Hakim, A. (2022). Moving beyond “infancy”: Towards a cross-fertilization between EMI and EAP scholarship. *ELT Journal* 76(4): 529–537.
- Yang, M., O'Sullivan, P.S., Irby, D.M., Chen, Z., Lin, C., Lin, C. (2019). Challenges and adaptations in implementing an English-medium medical program: A case study in China. *BMC Medical Education* 19(15): 1–12.
- Zarrinabadi, N. (2014). Communicating in a second language: Investigating the effect of teacher on learners' willingness to communicate. *System* 42: 288–295.

- Zhang, Z. (2018). English-medium instruction policies in China: Internationalisation of higher education. *Journal of Multilingual and Multicultural Development* 39(6): 542–555.
- Zheng, Q., Choi, T-H. (2024). English-medium instruction as an internationalisation strategy at a second-tier Chinese University: Instructors' challenges and their shaping factors. *Asian Journal of Second Foreign Language Education* 9: 2–20.

Dragana M. Gak
Vesna Ž. Bogdanović
Univerzitet u Novom Sadu

NASTAVA NA STRANOM JEZIKU: KOMUNIKACIONI IZAZOVI U NASTAVI NA ENGLESKOM KAO JEZIKU VISOKOŠKOLSKE NASTAVE

Sažetak

Rad istražuje komunikacione izazove sa kojima se suočavaju predmetni nastavnici koji predaju na engleskom kao jeziku visokoškolske nastave (EJVIN) na univerzitetima u Srbiji. Iako poznaju i koriste EJVIN, predmetni nastavnici se često suočavaju sa različitim komunikacionim izazovima koji neposredno utiču na kvalitet nastave. Na osnovu podataka prikupljenih upitnikom koji su popunili 102 nastavnika sa Fakulteta tehničkih nauka Univerziteta u Novom Sadu, istraživanje pokazuje kako nastavnici pripremaju i realizuju nastavu na engleskom jeziku, kako prilagođavaju nastavne materijale za višejezične grupe studenata i koje strategije koriste da bi obezbedili uspešnu komunikaciju sa međunarodnim studentima. Analiza, koja kombinuje kvalitativne i kvantitativne pristupe, pokazuje da teškoće proizilaze iz jezičke kompetencije nastavnika i studenata, dizajna nastavnih programa i strategija koje nastavnici primenjuju kako bi smanjili nesporedne, kao i omogućili i unapredili komunikaciju u učionici. Iako nastavnici pokazuju značajnu inicijativu u prevazilaženju prepreka, njihovi naponi uglavnom ostaju individualni i bez institucionalne podrške. Studija naglašava potrebu za sistematskim profesionalnim usavršavanjem i institucionalnim angažmanom radi unapređenja komunikacije u EJVIN kontekstu. Zaključuje se da uspešna implementacija programa na EJVIN-u u Srbiji zavisi ne samo od jezičkih sposobnosti nastavnika, već i od trajne pedagoške i strukturalne podrške koja komunikaciju prepoznaje kao srž kvalitetne nastave i učenja u internacionalizovanom visokom obrazovanju.

Ključne reči: EJVIN, internacionalizacija visokog obrazovanja, predmetni nastavnici, jezička kompetencija, komunikacioni izazovi.

Received: 14 October 2025

Accepted: 27 October 2025

Katarina O. Lazić

Univerzitet u Beogradu

Šumarski fakultet,

Katedra za opšte predmete

katarina.lazic@sfb.bg.ac.rs

<https://orcid.org/0009-0009-3889-6352>

Original research paper

UDC 811.111'243-057.87(=581)

UDC 378.016:630

DOI: 10.19090/MV.2025.16.2.133-161

Dragana D. Ilić

Univerzitet u Beogradu

Šumarski fakultet,

Katedra za opšte predmete

dragana.ilic@sfb.bg.ac.rs

<https://orcid.org/0009-0001-8251-4579>

FORESTRY EDUCATION IN ENGLISH: INSTRUCTORS' VIEWS ON EMI FOR CHINESE STUDENTS¹

ABSTRACT: The ongoing globalisation of higher education has led to the ever-increasing use of English as a medium of instruction in a range of disciplines, including forestry. An adapted Google Forms survey investigated the perceptions of professors teaching forestry to Chinese students in English at the Faculty of Forestry in Belgrade in the autumn term of 2024/2025. The questionnaire examined instructors' views on communication and comprehension challenges in English faced by the students and their behavior in the EMI classroom, as well as teachers' own preparedness for EMI and related needs. The results reveal limited understanding of English among Chinese students, their frequent use of translation tools, and difficulties with communication in class, listening, and subject-specific vocabulary. To combat these challenges, teachers have taken steps to simplify their language and slow down the teaching pace, while also expressing a need for more EMI training. Perceptions on cultural differences and student engagement differ, pointing to the need for the application of intercultural strategies in addition to improved language skills to handle the complexity of teaching in international contexts.

Keywords: English as a medium of instruction (EMI), forestry education, Chinese students, teacher perceptions, language barriers.

¹ This research was conducted within the framework of the scientific research work funded by the Ministry of Education Science and Technological Development of the Republic of Serbia under the Grant Agreement No. 451-03-137/2025-03/ 200169 on the transfer of funds for the financing of teaching staff at accredited higher education institutions in 2025.

STAVOVI NASTAVNIKA O NASTAVI ŠUMARSTVA NA ENGLESKOM JEZIKU ZA KINESKE STUDENTE

APSTRAKT: Trenutna globalizacija visokog obrazovanja utiče na sve češću upotrebu engleskog jezika kao jezika nastave u različitim disciplinama, uključujući i šumarstvo. Prilagođenom anketom putem Gugl upitnika ispitana je percepcija profesora koji su predavali šumarstvo kineskim studentima na engleskom jeziku na Šumarskom fakultetu u Beogradu u jesenjem semestru 2024/2025. godine. Upitnikom su utvrđeni stavovi nastavnika o izazovima u razumevanju i komunikaciji na engleskom jeziku kod studenata, njihovom ponašanju u učionici i pripremljenosti samih nastavnika za nastavu na engleskom, kao i njihovim potrebama u vezi sa njom. Rezultati pokazuju ograničeno razumevanje engleskog jezika kod kineskih studenata, čestu upotrebu prevodilačkih alata na času i poteškoće u komunikaciji u učionici, slušanju kao jezičkoj veštini i upotrebi stručnih termina. Kako bi se prevazišle te poteškoće, nastavnici su pojednostavljivali jezik i usporavali tempo časa, a izrazili su i želju za dodatnom obukom za držanje nastave na engleskom jeziku. Stavovi o kulturnim razlikama i angažovanju studenata variraju, što ukazuje na potrebu da se uz unapređenje jezičkih veština primenjuju interkulturene strategije, kako bi se uspešno savladala složenost nastave koja se odvija u međunarodnom kontekstu.

Ključne reči: engleski kao jezik visokoškolske nastave (EJVIN), obrazovanje u šumarstvu, kineski studenti, percepcija nastavnika, jezičke barijere.

1. INTRODUCTION

The worldwide globalisation of universities reveals a clear trend that institutions of higher education (HEIs) are now competing internationally. Well-known HEIs are striving to be at the forefront of this internationalisation, focusing on recruiting international students and developing international curricula (Galloway et al. 2017: 4). Staff and student mobility has expanded to include the mobility of programmes with innovations such as online learning and MOOCs (Barbosa & Neves 2020: 28), while cross-cultural cooperation remains a crucial concept in higher education (Klaassen & de Graaff 2001: 282).

As higher education has internationalised, English medium instruction (EMI) has emerged as a prominent global educational phenomenon of the twenty-first century (Aizawa et al. 2023: 838), and the use of English as the *lingua franca* of instruction is seen as “the most significant trend in educational internationalisation” (Chaple 2015:1). EMI is commonly defined as “the use of the English language to teach academic subjects in countries or jurisdictions where the first language (L1) of the majority of the population is not English” (Dearden 2014: 2). The more traditional Content and Language Integrated Learning (CLIL), which emerged in the 1990s, shares some similarities with EMI (Aizawa et al. 2023: 838).

However, CLIL is essentially a pedagogical approach to teaching English as a second language (L2), aiming to teach both language and content (Đorđević & Blagojević 2019: 155), whereas EMI does not focus on students' language development (Aizawa et al. 2023: 838).

In the academic year 2010/11, 46 European countries entered the Bologna Process giving European university students the opportunity to pursue their studies in other countries (Kim 2014: 2). The growth of EMI in higher education has been recorded worldwide and measured most systematically in Europe (Macaro et al. 2018: 47). Regarding the number of English-taught programmes, the Netherlands was the leading country with 1,078 programmes and a growth of 39.3%, while Germany, Sweden, France and Denmark were not far behind (Wächter & Maiworm 2014: 16).

Higher education in Asia and Middle East countries has mirrored the growth of EMI in Europe (Nunan 2003: 600–604). In China and Japan, governments have been supporting the use of EMI at both private and public, state-funded universities (Macaro et al. 2018: 49). A clear example of rapid EMI growth can be found in South Korea, where in 2006 the Korea Advanced Institute of Science and Technology (KAIST) adopted an EMI policy for all classes (Kim 2014: 3). While EMI is well-known and accepted at European universities, it is relatively less so in the Middle East and North Africa (Alhassan et al. 2021: 1). Limited research has been conducted on EMI in Africa and Latin America, probably due to its lack of growth (Macaro et al. 2018: 50).

Following these global trends, the Serbian Ministry of Education has significantly advanced the internationalisation of higher education by approving over 150 degree programmes taught in English or other foreign languages, mainly at public universities in the fields of medicine, engineering, and IT. Certain social sciences and humanities can also be studied in English at private universities (Đorđević & Blagojević 2019: 156). The Erasmus+ and mobility projects are fully supported by the government to promote the internationalisation of Serbian higher education, with the enactment of the Higher Education Law in 2018 approving English as an official language of instruction, and reinforcing Serbia's integration into global higher education (Đorđević & Blagojević 2019: 156).

National Standard 12.4 applied in the accreditation of the international Master's degree programme *Forestry and Natural Resources Management* at the Faculty of Forestry in Belgrade required all EMI instructors to demonstrate their competence for teaching in English by submitting proof of English proficiency: a language certificate at C1 level (e.g. Cambridge Advanced Certificate in English or

IELTS), a completed university degree in English, a semester-long mobility abroad, giving invited lectures at international conferences or working as a guest lecturer giving lectures in English.

Although these EMI instructors are not language specialists, their perceptions reveal how English is used in actual EMI classrooms, unlike formal language tests. In spite of the fact that, in most cases, students' scores on standard language proficiency tests can be a predictor of their ability to meet EMI requirements (Aizawa et al. 2023: 837), other factors may play a role in how they cope with the challenges in the EMI classroom. In their research on how accurately teachers can judge student characteristics, including language ability, Urhahne and Wijnia (2021:1) empirically demonstrate that teachers sometimes may overestimate student achievement on standardised tests, while in-class interactions can provide additional accurate insights into students' abilities. In addition, in a study on the effect of EMI on students' success and motivation, Yilmaz Virlan and Demirbulak (2020: 83) note that students who scored low on English proficiency placement tests sometimes outperform expectations in EMI settings.

EMI instructors observe student performance in disciplinary contexts and their difficulties in coping with academic writing or speaking, while also providing relevant support measures. Recent research (e.g., Macaro 2018; Galloway & Rose 2021; Kamasak & Sahan 2023; Alanazi & Curle 2024) has investigated EMI instructors' perceptions of the English challenges faced by their students in several countries, resulting in EMI improvement strategies. Several recent studies (Alhamami 2023; Almusharraf et al. 2023; Kamasak & Sahan 2023; Wenjyn et al. 2023) have shown that EMI instructors often identify specific language challenges, such as vocabulary, comprehension, and academic writing, which in turn influence how they adjust their instruction. For example, Almusharraf et al. (2023: 2) noted that engineering instructors in South Korea observed "students' limited vocabulary, slow reading speeds, and poor oral comprehension when using English in EMI courses", and at engineering faculties in Turkey, Başibek et al. (2014: 1823) found that "lecturers believe that learners are not proficient enough to learn subject matter in English."

Despite the increasing focus on EMI, limited research has been conducted from the perspective of Serbian engineering professors, and particularly EMI instructors working with Chinese forestry students. Commonly studied issues include students' English proficiency and related needs, instructors' own language needs, and EMI classroom strategies. These concerns are widespread and overlap with the focus of a study on Korean engineering EMI instructors' perceptions,

investigated using a questionnaire developed by Kim (2014: 29). This questionnaire was modified and used in our study at the Faculty of Forestry in Belgrade (Appendix).

Building on recent research in this field, this study is guided by the following research questions:

1. Do the instructors believe that Chinese students have sufficient ability to cope with communication and comprehension challenges in English in their EMI classes?
2. How do the instructors think these students can be supported to improve their ability to cope with perceived English challenges to participate more effectively in EMI classes?
3. How do the instructors think their own English could be improved for more effective EMI teaching?

2. LITERATURE REVIEW

2.1. Students' English ability and EMI challenges

Recent research has suggested that insufficient English proficiency among EMI students is one of the major obstacles to effective EMI implementation (Hu et al. 2014: 23; Chapple 2015: 4), which can also have detrimental effects on the quality of education (Macaro 2018: 179). A study by Aizawa et al. (2023: 837) investigated the English language proficiency thresholds that undergraduate Japanese students need to reach in each academic language skill (i.e., reading, listening, speaking, and writing) to meet EMI requirements. Researchers found that scores on the Test of English for International Communication (TOEIC) can reliably predict the difficulties that students will face in all academic language skills, and students with higher proficiency levels encountered fewer problems. TOEIC scores were converted to CEFR levels, and at the B2/C1 level, students began to experience fewer linguistic challenges associated with EMI in writing and listening (Aizawa et al. 2023: 851). However, other factors, such as prior knowledge, motivation, and the classroom environment, played a major role in how easily they coped with the international business course (Aizawa et al. 2023: 853). Finally, EMI lecturers need to recognise the language-related challenges, adjust their teaching accordingly, and provide learning space and time outside class to give less proficient students the opportunity to learn and revise (Aizawa et al. 2023: 856).

Examining the effectiveness of EMI for Chinese undergraduates, Lei and Hu (2014) investigated its impact on students' English proficiency and attitudes towards learning English in an undergraduate EMI programme. The results indicated that EMI did not significantly improve English proficiency or influence students' attitudes towards learning English, whereas intensive English listening and speaking courses in the first year did (Lei & Hu 2014: 122), which is an important insight, especially for ESP teachers. This study raises concerns about the quality of EMI in Chinese higher education and highlights the need for further research, new evaluation methods, and a thoughtful approach by educational policymakers.

Kim (2014) examined the views of 48 South Korean engineering professors on students' English abilities and needs in an EMI course, as well as their own language needs. The EMI instructors acknowledged that students often lacked sufficient English skills, but were reluctant to support expanded English language teaching (Kim 2014: 15). Similarly, although the professors themselves recognised the need for additional training in English, they were unwilling to take further steps due to their busy schedules and critical views of the school's EMI policy, which, when mandatory, can put considerable stress even on the brightest students and most experienced teaching staff (Kim 2014: 20).

2.2. EMI instructors' perceptions of students' English ability

Many recent studies (e.g., Alhamami 2023; Alanazi & Curle 2024; Jia et al. 2023; Kamasak & Sahan 2023; Wang et al. 2025) focus on EMI instructors' perceptions of how well students cope with English, with insights leading to practical improvements in the EMI classroom. For example, in a study by Alhamami (2023: 11), EMI instructors in several countries expressed concern about the role of students' English proficiency in EMI and how it complicates their teaching. The feedback forms the basis for changes in EMI teacher training, language support, and strict language-proficiency policies requiring students to achieve high test scores to enter the EMI programme.

In a study by Alanazi & Curle (2024: 3), students' low English proficiency, particularly in vocabulary and comprehension, is perceived as a major challenge by EMI instructors, who suggest adaptation through simplified language and increased repetition in the EMI classroom. In a study by Kamasak and Sahan (2023: 12), perceived language proficiency is related to students' academic performance, with writing and speaking identified as particularly problematic skills, while tailored preparatory ESP courses are proposed as a solution. Jia et al. (2023) investigate

how EMI lecturers' perceptions of using L1 and English affect their practice and discuss students' proficiency and needs. Some EMI instructors perceive students' language-related difficulties, which prevent them from delivering classes fully in English (Jia et al. 2023: 18), leading to strategic use of L1, modified discourse, and adjusted instructor expectations.

2.3. Instructors' language needs for EMI and recommended strategies

When implementing EMI policies, one obstacle is insufficient student proficiency in English, while another is the teachers' own proficiency levels (Aizawa & Rose 2019: 1127). For example, Wang et al. (2025: 28) reveal that many EMI instructors consider their linguistic skills insufficient for teaching in appropriate academic language, and recommend teacher development programmes and discipline-specific institutional support based on perceived needs. In South Korean higher education, Kim (2014: 22) notes that less than 30% of the faculty teaching staff are international, and that many EMI classes are taught by Korean professors without the necessary English proficiency or training in EMI techniques. At the Korea Advanced Institute of Science and Technology (KAIST), 92.5% of the teaching staff are Korean and face this problem daily. A more supportive approach to EMI is recommended by incentivising English-speaking instructors (Kim 2014: 23). Establishing a language support system that provides editing, training, and workshops is also advised if professors do not resist it, which highlights the need for further investigation into ways to engage more teaching staff in EMI.

Klaassen and De Graaff (2001) investigated the effectiveness of professional development workshops for Dutch EMI instructors at Delft University of Technology by examining their expectations and evaluations of the training. Lecturers in the early stages of EMI implementation gained increased awareness of their environment and greater creativity through the workshops. However, more experienced EMI instructors had already developed their own coping strategies, which made them less open to new ideas and more anxious (Klaassen & De Graaff 2001: 296). The workshops strongly influenced how these lecturers taught, provided students with the necessary support, and facilitated a smooth transition to the new EMI method.

2.4. English-medium instruction in Serbian higher education

Although research on EMI in higher education in Serbia is limited, recent studies have provided valuable insights into the topic (Antić & Milosavljević 2014; Popović et al. 2016; Đorđević & Blagojević 2019). While Antić and Milosavljević (2014) examined the potential of methods and strategies used in teaching ESP at the Niš Faculty of Medicine, Popović et al. (2016) investigated students' preferences regarding EMI-taught subjects at the Faculty of Organisational Sciences in Belgrade.

A study examining teachers' attitudes towards EMI was conducted by Đorđević and Blagojević (2019) at the Faculty of Philosophy in Niš. The findings indicated that universities in Serbia lacked formal training programmes for EMI instructors and the structured support necessary to develop both language proficiency and the required pedagogical skills (Đorđević & Blagojević 2019: 156). The study found that junior instructors placed significant value on both linguistic proficiency and teaching methods, while their senior colleagues sometimes underestimated the importance of teaching methodology.

A key step in developing Serbian EMI policy was the implementation of Tempus projects from 2013 to 2016 and from 2019 to 2024. These projects focused on training teachers from the largest state universities in Serbia in EMI. The objective was to help educators improve their English language proficiency and effectively apply teaching methods suited to an international environment, thereby building their confidence and competence. Sixty-two teachers who took the course from 2013 to 2016 reported thorough satisfaction with it, and after four cycles from 2019 to 2024, 611 teachers successfully completed the EMI training, which was a clear indication of the growing interest in EMI among Serbian university teaching staff.

3. MATERIALS AND METHODS

Based on the Agreement of Cooperation between Zhejiang Agriculture and Forestry University in Hangzhou, China, and the Faculty of Forestry in Belgrade, a group of 32 Chinese students spent the autumn term of 2024/25 at this institution, where they attended a programme consisting of five elective courses from the international Master's Degree Programme in English, *Forestry and Natural Resources Management*, and an additional ESP course, *English for Forestry*.

The elective courses taught in English were: *Forest Plantations*, *Climate Adaptive Forest Management*, *Forest Protection*, *Forest Management Planning*, and *Sustainable Forest Utilisation*. In each course, students were required to pass exams and earn five ECTS credits. The ESP course, *English for Forestry*, was a supporting component of the curriculum designed to help students maintain and further develop their communication and comprehension skills in academic English, as well as to address practical and administrative requirements, such as handling institutional documents (e.g., filling in forms) during student mobility. At the end of the ESP course, students were awarded a certificate of completion. After the programme was completed, a follow-up survey was conducted to assess students' satisfaction with teaching in all courses.

At the beginning of the ESP course, the teacher distributed the Oxford Quick Placement Test (QPT) Version 1 to all Chinese students. This standardised test, developed by Oxford University Press and UCLES (University of Cambridge Local Examinations Syndicate), is widely used by educational institutions to assess a learner's level of English. This is a common procedure at the start of all ESP courses at the Faculty of Forestry, as ESP classes are typically mixed-ability. After testing, the students were divided into low, medium, and high English language proficiency groups. The ESP teacher was interested in the progress of Chinese students and the possible correlation between their placement test results and their scores on the first domain-specific test. More precisely, ANOVA was used to test whether students' English proficiency level had a statistically significant effect on their technical vocabulary test results.

To investigate EMI instructors' perceptions of EMI in this setting, the ESP teachers (i.e., the authors of this study) created a Google Form survey (Appendix) adapted from Kim (2014: 29). In April 2025, the questionnaire was distributed by e-mail to 15 EMI instructors who taught the five elective forestry courses. The academic ranks of the respondents ranged from Teaching Assistant to Full Professor, and their teaching experience ranged from five to 25 years.

Studies in EMI research often rely on relatively small samples, particularly when focusing on a single institution, discipline, or pilot project. In their study on lecturers' perceptions of EMI in engineering departments in Turkey, Başibek et al. (2014) focused on the views of seven lecturers, while Dearden and Macaro (2016) interviewed ten higher education teachers to investigate their perceptions of EMI. Galloway, Kriukow and Numajiri (2017) used surveys with sometimes fewer than twenty instructors in their research on internationalisation, higher education, and the growing demand for English. Sahan and Rose (2022) studied EMI at

universities by interviewing between ten and twelve lecturers in some departments, while studies on discipline-specific EMI, such as medicine, engineering, or tourism, often observed between ten and twenty instructors.

Due to the small sample of 15 EMI instructors who participated in our research, the study can be considered a pilot project, highlighting areas for further research and practical improvements in EMI within forestry, an understudied discipline in this context. Although the sample was small, the study provides rich qualitative data through multiple-choice options and open-ended questions.

The questionnaire included three groups of questions, totalling 19. The first group explored lecturers' perceptions of students' abilities to cope with English language challenges in the EMI setting. The second set focused on instructors' perceptions of their own competence and skills for EMI, as well as their related needs. The third set examined instructors' views on cultural differences and student behaviour affecting EMI classroom interactions. The questionnaire combined quantitative elements, such as percentages, with qualitative elements that asked for suggestions, descriptions, or elaborations.

Quantitative data were analysed based on instructors' estimates of the proportions of students in each comprehension class, as well as the diversity and distribution of instructors' responses. Qualitative data were collected, interpreted, and synthesised to contribute to the scholarly discussion on EMI for non-native speakers.

4. RESULTS

4.1. Students' English ability and ESP in EMI

The first set of quantitative data enabled the examination of the relationship between the measured English proficiency of Chinese students and their classroom performance as perceived by the EMI instructors.

The Chinese students' English proficiency was initially assessed using the Oxford Quick Placement Test Version 1 in their ESP course. The students were divided into three groups according to their achieved CEFR level: the low proficiency group G3 (A1.2/A2) with 18.75% of the students, the medium proficiency group G2 (B1.1/B1.2) with 56.25%, and the high proficiency group G1 (B2/C1) with 25% of the enrolled students.

The ESP course teacher also asked the students to describe their experience of learning English. A total of 21 out of 32 students had been learning English since the third grade of primary school (age nine), one since the age of six, one

started learning English in middle school (7th grade), and nine students did not specify the grade.

After completing the first three units of the ESP course, the students' knowledge of technical vocabulary was assessed with a 20-question test on technical vocabulary and use of English in a series of exercises, including translation of technical terms from Chinese into English, definition writing, a gap-cloze task, and two tasks combining tenses with a subject-specific text.

A one-way ANOVA and Tukey's HSD post hoc test were used to determine whether there were statistically significant differences in the mean test scores on the technical vocabulary assessment among the three groups of students with different levels of English proficiency (low, medium, and high). The purpose of using ANOVA was to test whether English language proficiency affected students' performance on the technical vocabulary test. The results of the one-way ANOVA comparing the vocabulary test scores of the three groups of Chinese students with different levels of English proficiency are presented in Table 1.

<i>Source</i>	<i>SS</i>	<i>Df</i>	<i>MS</i>	
Between treatments	394.5477	2	197.2739	$F=15.86641$
Within - treatments	360.5694	29	12.4334	
Total	755.1172	31		
The F -ratio value is 15.86641. The p -value is 0.000022. The result is significant at $p < 0.05$				

Table 1. Results of one-way ANOVA comparing vocabulary test scores of the three groups by English language proficiency

ANOVA is appropriate for comparing means across more than two groups. The dependent variable is the score on the technical vocabulary test administered as part of the ESP course. The p -value of 0.000022 is very low and less than 0.05, indicating that the differences between the group means are statistically significant.

The analysis showed a significant effect of proficiency level on test performance, $F(2, 29) = 15.87$, $p < 0.001$. This indicates that at least one group differed significantly in vocabulary test scores, although ANOVA does not specify which groups differ.

Tukey's Honestly Significant Difference (HSD) test was conducted to determine where the differences lay. The results of the post hoc Tukey's HSD test, that is, the pairwise comparisons of group means for groups G1, G2, and G3, are shown in Table 2.

<i>Pairwise comparisons</i>		HSD _{.05} = 4.1897 HSD _{.01} = 5.3589	Q _{.05} = 3.4926 Q _{.01} = 4.4672
G ₁ :G ₂	M ₁ = 16.50 M ₂ = 13.97	2.53	Q = 2.11 (<i>p</i> = .31036)
G ₁ :G ₃	M ₁ = 16.50 M ₃ = 6.17	10.33	Q = 8.61 (<i>p</i> = .00000)
G ₂ :G ₃	M ₂ = 13.97 M ₃ = 6.17	7.81	Q = 6.51 (<i>p</i> = .00022)

Table 2. Results of the post hoc Tukey's HSD test (pairwise comparisons)

The higher proficiency groups (B1 and B2/C1) performed similarly (G1 vs G2: mean difference = 2.53 < HSD.05 = 4.19; →not significant). The lowest proficiency group (A1.2/A2) scored much lower than the highest group (G1 vs G3: mean difference = 10.33 > HSD.05 →significant), and also significantly lower than the medium proficiency group (G2 vs G3: mean difference = 7.81 > HSD.05 →significant).

In summary, the results show that the low-proficiency group (G3, A1.2/A2 CEFR levels) lagged far behind the other two proficiency groups, while those two groups did not differ significantly. Although the vocabulary test effectively distinguished lower-proficiency students from higher ones, it may not have differentiated well between the two higher proficiency groups.

4.2. Quantitative findings

The instructors' subjective estimates of the Chinese students' in-class comprehension varied considerably. It is important to note that the figures below are based on the instructors' approximate subjective estimates, not directly measured comprehension. On average, 16.7% of students were estimated to have a near-perfect understanding of the lectures (median = 15%), and 32% to perform well (median = 30%). However, a higher percentage of students (47%) were estimated to partially understand the lectures (median = 35%), while the remaining 25% (median = 25%) were seen as having low levels of understanding. The estimated percentages of Chinese students at different levels of perceived comprehension are shown in Figure 1.

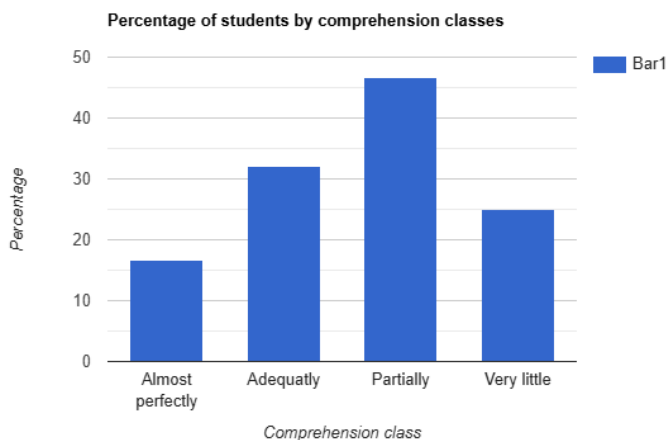


Figure 1. Estimated percentage of students in each comprehension class

These perceptions suggest that only a minority of students appeared to fully understand lectures, while many were perceived to experience varying degrees of difficulty. Variability in EMI instructors' responses regarding the perceived proportions of Chinese students in different comprehension categories is reflected in relatively large interquartile ranges (e.g., 25% for partial and minimal understanding categories), highlighting differences in instructors' perceptions, or so-called group heterogeneity. A boxplot diagram (Figure 2) was used because it provides a clear visual summary of the distribution of instructors' estimates across different comprehension categories. The boxplot illustrates not only the middle value (median) but also the spread of the responses. While responses for the lowest and highest comprehension groups are similar, they are more varied in the middle groups, as shown in Figure 2.

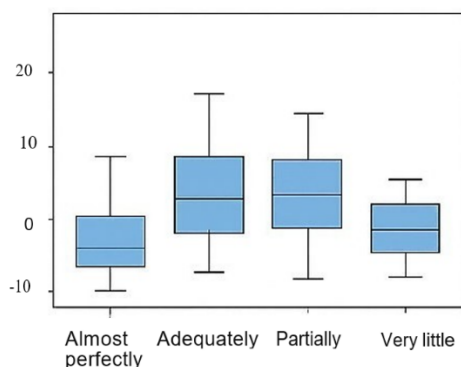


Figure 2. Boxplot of instructors' estimates of students' comprehension

The distribution of responses shows that instructors clearly identified the highest and lowest performing students, as shown in the ‘almost perfectly’ and ‘very little’ comprehension categories, where estimates show low variability. However, in the middle categories, ‘adequately’ and ‘partially’, it may be more difficult for instructors to accurately distinguish between these students. Additional tools, such as formative assessment, may be introduced to assess students’ comprehension more precisely.

All instructors reported having seen students use translation software, such as Google Translate, in the classroom. Based on their impressions, they estimated that around 31% (median = 30) of students regularly used these tools, with estimates of student reliance on translation tools ranging from 10% to 50%. Three out of 15 instructors believed that as many as half of the students used them in class to fill gaps in their comprehension. However, it should be emphasised that these figures are based on incidental observations and subjective impressions rather than systematic data collection providing actual usage rates. Nevertheless, the instructors perceived translation tools as a relatively common form of support in class.

4.3. Qualitative findings

Although EMI instructors who taught Chinese students in English at the Faculty of Forestry are not language specialists, they were asked to provide insights into the challenges these students faced in communication, comprehension, and other English language skills. This may influence the instructional methods they use and lead to recommendations for improved teaching. Although they are not formal assessments of language ability, these perceptions offer insight into authentic language use and can shape teaching practices and policies. Responses to open-ended and multiple-choice questions may provide particularly useful insights into the pedagogical challenges of EMI, while contributing to the scientific discussion on this type of instruction.

4.3.1. Perceptions of linguistic and communicative needs

There is a consensus among instructors that Chinese students taught through EMI face significant language barriers, particularly in speaking (identified by 83.3% of instructors) and listening (by 100%), while difficulties in writing and reading were noted by about 17% of respondents. Difficulties were noted in their ability to convey ideas clearly during presentations (noted by 33.3% of instructors)

and to use technical terms correctly. From the instructors' perspective, a lack of contextual understanding can be a major hurdle, with three EMI instructors in our research observing 'the lack of understanding of context, possibly due to insufficient basic knowledge of forestry', suggesting that students may struggle with understanding the background of the forestry field. This suggests that Chinese students are dealing not only with language-related issues in EMI but also with a lack of domain-specific knowledge.

The instructors see a need for improvement in students' speaking and listening skills to achieve effective teaching in a multilingual classroom. One instructor pointed out that students have "poor pronunciation and are afraid of making mistakes", suggesting these factors deter some students from speaking out. Furthermore, the lack of proficiency in technical terminology is acknowledged, with three out of 15 respondents listing "insufficient vocabulary", especially "technical terms", as a challenge, indicating that specialised language instruction is necessary.

4.3.2. Recommendations for enhancing English language instruction

Although they are not language teachers, EMI instructors understand disciplinary discourse, and their input can ensure that ESP courses address the real academic and professional needs of students. While language teachers provide linguistic expertise, subject instructors contribute insights into terminology and authentic tasks. Curriculum design could be more effective if language and content specialists collaborated to develop relevant and practical courses.

In this study, EMI instructors' recommendations for improving English language instruction for Chinese students fall into two main categories: increasing the number of instructional hours, with 50% of EMI lecturers indicating a need for at least four hours of ESP teaching per week, and tailoring the content to students' specific needs and abilities. The instructors recommend a more nuanced approach by dividing classes into advanced and less advanced groups. Additionally, 33.3% of EMI instructors suggest that the ESP course should integrate short writing tasks to improve students' overall English language proficiency.

Several EMI instructors also recommended participation in extracurricular activities, such as joining established clubs to socialise with Serbian students (67% of instructors identified this as a good option), faculty sections (65%), or the faculty choir (50%), as an effective way for Chinese students to improve their English language proficiency. EMI instructors observed that extracurricular engagement in activities where Chinese students use English can help address the

difficulties they face in everyday communication and integration into the academic community, which can limit their participation and confidence.

4.3.3. Instructors' self-perceived language needs

The instructors were not formally tested in this research, and their input is based on self-assessment and classroom experience. As part of the accreditation for the international master's programme, they were required to provide evidence of English proficiency, and their comments in this research reflect on their professional practice.

The qualitative data reveal instructors' perceptions of their own English language proficiency and pedagogical needs. All respondents (100% of the interviewed EMI instructors) acknowledged room for improvement in their English proficiency, identifying the use of classroom-specific expressions (50%), clear presentation skills (50%), and participation in discussions (33%) as particularly challenging areas, along with academic and technical writing (17%). One noted, "The more oral and written communication I have with my colleagues from other countries and the more I read, the better I get."

EMI instructors suggested several methods for improving their English, such as self-study (e.g., using the ELSA or Grammarly applications) (60% of them), attending professional conferences (60%), or formal training (e.g., preparing for the Cambridge CAE or IELTS exams) (60%). Finally, it is clear that the instructors are aware of the need to continue learning and to use English more effectively as part of their professional development in EMI contexts.

4.3.4. Cultural and interactional dynamics

While 33% of the instructors believed that cultural factors did not affect their interactions with students, around 17% of them thought that cultural aspects influenced them to some extent. Students were described as being slightly (by 66.7% of instructors) to moderately engaged in the classroom (by 33.3%), with some interactions characterized as reserved, suggesting possible cultural differences in classroom participation norms between China and Serbia.

Instructors reported using strategies to adjust their teaching methods to meet the needs of students who are non-native speakers of English. Most of them deliberately, either significantly (66.7%) or moderately (33.3%), modified their speech tempo, vocabulary, and presentation style to adapt to students' language limitations, which aligned with best practices in EMI.

5. DISCUSSION

Challenges in coping with EMI may arise from insufficient English language proficiency (Sultana 2014: 14), and scores on English tests can predict challenges in EMI programmes (Aizawa et al. 2023: 837). Notably, only 25% of Chinese students in EMI-taught courses in our research were at the B2/C1 CEFR level, which is generally considered suitable for university entrance across Europe (Carlsen 2018: 88). The first ESP test revealed statistically significantly lower scores for the lowest English language proficiency group (A1.2/A2), which accounted for 18.75% of the class. This supports the notion that lower-proficiency students face considerably more burdensome linguistic challenges in EMI (Aizawa et al. 2023: 840). However, no statistical difference between the results of the medium (B1) and highest proficiency groups (B2/C1) aligns with the finding of Aizawa et al. (2023: 840) that even students at this higher level (B2/C1) may still be disadvantaged in terms of linguistic challenges in an EMI setting.

ESP courses organised alongside the main EMI courses may be particularly effective when their content is well integrated, as lower-proficiency students require more targeted language support (Rose et al. 2019: 2151). This finding highlights the importance of the ESP course at the Faculty of Forestry, which can enhance students' self-efficacy in preparation for content learning in the L2. Some universities in Saudi Arabia have organised preparatory English programmes (McMullen 2014: 131), and Galloway and Ruegg (2020: 2) emphasise the need for additional support for both language and academic skills in EMI settings. Future research could investigate whether better results in EMI are achieved if the ESP course is delivered in advance, rather than simultaneously with EMI courses.

Around 25% of Chinese students in our study were estimated by their EMI instructors to have low levels of comprehension in class, which aligns with the findings of Kim (2014: 22) at KAIST in South Korea, where 28% of graduate students taught through EMI were seen as having difficulties with the skills required to understand classes delivered in English. The reason may be instructors' pronunciation, accent, or intonation, and some EMI instructors, such as Dutch engineering professors studied by Vinke (1995: 54), view English courses as an opportunity to improve their own language skills, including pronunciation.

Consistent with many recent studies (e.g., Alanazi & Curle 2024; Alhamami 2023; Jia et al. 2023; Kamasak & Sahan 2023; Wang et al. 2025), which focus on EMI instructors' perceptions of how well students cope with English, EMI instructor participants in our research reported that students face challenges in

copied with English, which may limit their engagement in lectures and disciplinary tasks. Insights from EMI instructors can inform practical improvements, particularly in the listening comprehension of Chinese students, as all EMI instructor respondents identified listening as a skill needing improvement.

In our research, the distribution of instructors' responses regarding their students' in-class comprehension shows that their estimates align on the highest- and lowest-achieving students, demonstrating their ability to identify those who need immediate support. As Aizawa et al. (2023: 856) suggest, rather than imposing entry barriers to EMI studies for lower-proficiency students, better language support systems should be implemented to prepare them for content learning.

The estimated strong reliance of students on translation tools used in class (up to 50%) in our study supports Chapelle's (2001: 1) claim that everyday language use in the 21st century is closely connected to technology, with important implications for applied linguistics and second language acquisition. Unsurprisingly, a large number of students observed in our study used technology to fill gaps in class comprehension.

Although some linguistic and communicative needs of students were identified across all language skills in our study, speaking and listening were found to require the most urgent improvement, particularly in the areas of clear presentation and technical vocabulary. This aligns with the findings of Kim (2014: 18) at the South Korean KAIST institute, where EMI instructors aimed to enhance graduate students' writing and speaking skills, with an emphasis on discussion and presentation. EMI instructors in our research also highlighted students' insufficient knowledge of fundamental forestry concepts as a possible obstacle to EMI, since prior content knowledge can facilitate learning through EMI (Aizawa et al. 2023: 853). Additionally, students' performance in reading tasks may be affected by their lack of knowledge of technical terminology (Aizawa et al. 2023: 840).

Students' poor oral presentation skills may result from the difficulties in expressing content and discussing their discipline in English, a challenge acknowledged by Turkish students who rated their discipline-specific speaking as poor (Kırkgöz 2005: 117). Students often struggle with the requirement to write extended texts and meet the strict demands of written assignments at university (Aizawa et al. 2023: 840). Therefore, it is understandable that the instructors in our survey recognised the need to integrate writing tasks into the ESP course.

Instructors' recommendations for improving ESP teaching in our study include both curricular and extracurricular activities. Most EMI instructors (66.7%)

suggested increasing the number of hours of English language instruction per week. This contrasts with KAIST in South Korea (Kim 2014: 1), where, despite students lacking adequate English language skills for EMI, most instructors did not support the expansion of English language teaching.

Another recommendation from EMI instructors in our study was to adopt a more tailored approach in the ESP course for Chinese students and to divide students into advanced and less advanced groups. This is a valuable insight, as the ESP course aims to mitigate linguistic challenges and facilitate content learning in EMI courses (Aizawa et al. 2023: 841), especially for students with lower proficiency.

The recommendation for Chinese students to participate in extracurricular activities aligns with feedback from Chinese students in a follow-up survey on their satisfaction with teaching, in which they highly valued activities such as student clubs and the choir as part of their overall learning experience. Similarly, Aizawa et al. (2023: 855) suggested that difficulties with L2 proficiency can be overcome through motivated student behaviour and increased efforts in out-of-class learning, while EMI instructors at KAIST in South Korea (Kim 2014: 19) recommended group or one-on-one discussions in English, as well as extracurricular writing and speaking support services. These suggestions are consistent with sociocultural theories of language acquisition and the role of social interaction in language development, as learning occurs through collaboration and social support (Vygotsky 1987: 57).

Instructors' perceptions of their own English proficiency and related needs reveal that they all see room for improvement in classroom-specific language and phrases, pronunciation, clear presentation skills, and academic writing. This observation aligns with findings of limitations in the clarity and accuracy of expression among EMI instructors at Dutch universities, which reduced their teaching performance (Vinke et al. 1998: 391).

In addition to self-study applications and formal training courses, the EMI instructors in our study particularly valued opportunities to learn through authentic language use, such as oral and written communication with foreign colleagues and extensive reading. Similarly, Vinke et al. (1998: 392) found that professors who most easily switched from teaching in Dutch to EMI were those who had opportunities to use English in job-related tasks, frequently attended conferences, read professional articles in English, or had spent several months in an English-speaking environment. The instructors' awareness of the need for continuous development in EMI techniques, as expressed in our research, is understandable,

since they are expected to effectively manage their own language deficiencies and address the needs of non-native students (Klaassen & De Graaff 2001: 284).

Classroom interactions of Chinese students were perceived as low to moderate in our study, reflecting mixed instructors' perceptions of cultural influences in the classroom. Confucian educational traditions may have influenced these perceptions, as Chinese students who adhere to them often appear "passive" in large classroom settings (Chan & Smith 2024: 2).

Finally, EMI instructors in our study followed best practices in EMI by adapting class content to suit students' English proficiency levels (Galloway et al. 2017: 33), as they reported deliberately adjusting their speech tempo, vocabulary, and presentation style to address the observed language limitations of Chinese students.

6. CONCLUSIONS

The qualitative and quantitative data obtained in this study reveal the challenges faced by Chinese students and EMI instructors in courses taught at the Faculty of Forestry, as well as the instructors' recommendations and strategies for addressing these challenges.

Findings suggest that targeted ESP courses, such as the preparatory year English programme (McMullen 2014: 131), should be delivered before or simultaneously with the EMI courses, with a strong focus on discipline-specific vocabulary, speaking, and listening, as these were identified as the most problematic areas.

The findings suggest that, for effective ESP, students should be differentiated into at least two English language proficiency groups to provide for specifically tailored courses addressing the language challenges of each group and finally facilitate learning through EMI (Aizawa et al. 2023: 841).

Our research suggests that specialised writing tasks should be offered to help students produce discipline-specific texts, while taking into account the complexity and demands of academic writing in terms of both language and rhetoric, as suggested by Pessoa, Miller, and Kaufer (2014: 151).

Finally, it is suggested that challenges arising from students' cultural backgrounds, such as the perceived low level of classroom interactions, could be addressed through social interaction in extracurricular activities, leading to a more inclusive learning environment.

The insights from this study may contribute to the growing body of EMI research, particularly regarding EMI teaching at engineering faculties and

supporting ESP programmes designed for Chinese students. We hope that, with the increasing number of EMI programmes at the University of Belgrade, this topic will be investigated on a broader scale, as the limited sample size is a constraint of our study.

Although the estimates reported in this study are subjective and based on instructors' perceptions rather than systematically measured data, they offer insights into classroom challenges. Potential bias and the reliance of individual observers on visible student behaviour are possible limitations, but their impressions could serve as a basis for systematic empirical investigations.

Due to the small sample of EMI instructors in our study, the results are not generalisable. However, this pilot study provides specific insight into forestry, an under-researched EMI discipline. As small-scale studies prioritise qualitative depth over broad representativeness, their findings should be viewed as indicative, offering insights to inform larger studies and guide practical improvements in EMI.

REFERENCES

- Antić, Z., Milosavljević, N. (2014). Medical studies in English: Shared learning. *Acta Facultatis Medicae Naissensis* 31(2): 129–132.
- Aizawa, I., Rose, H. (2019). An analysis of Japan's English as medium of instruction initiatives within higher education: the gap between meso-level policy and micro-level practice. *Higher Education* 77(6): 1125–1142.
- Aizawa, I., Rose, H., Thompson, G., Curle, S. (2023). Beyond the threshold: Exploring English language proficiency, linguistic challenges, and academic language skills of Japanese students in an English medium instruction programme. *Language Teaching Research* 27(4): 837–861.
- Alanazi, K., Curle, S. (2024). Challenges experienced by students studying medicine through English medium instruction. *Frontiers in Education* 9: 1–13, Article 1364860. <https://doi.org/10.3389/feduc.2024.1364860>.
- Alhassan, A., Ali, N. A., Ali, H. I. H. (2021). EFL students' challenges in English-medium business programmes: Perspectives from students and content teachers. *Cogent Education* 8(1): 1888671.
- Almusharraf, N., Bailey, D., Rodrigue, H. (2023). Investigating engineering instructor characteristics associated with English medium instruction and Their Influence on Intrinsic Motivation. *Sustainability* 15: 1–15, Article 973. <https://doi.org/10.3390/su15020973>.
- Başıbek, N., Dolmacı, M., Cengiz, C., Bür, B., Dilek, Y., Kara, B. (2014). Lecturers' perceptions of English medium instruction at engineering

- departments of higher education: A study on partial English medium instruction at some state universities in Turkey. *Procedia – Social and Behavioral Sciences* 116: 1819–1825. <https://doi.org/10.1016/j.sbspro.2014.01.477>.
- Barbosa, M. L. D. O., Neves, C. E. B. (2020). Internationalization of higher education: institutions and knowledge diplomacy. *Sociologias* 22(54): 22–44.
- Carlsen, C. H. (2018). The adequacy of the B2 level as university entrance requirement. *Language Assessment Quarterly* 15(1): 75–89.
- Chan, S. T. K., Smith, G. D. (2024). Strategies for enhancing Chinese students' engagement in a large class learning environment: An interpretative phenomenological approach. *Nurse Education in Practice* 78: 104023.
- Chapelle, C. A. (2001). *Computer applications in second language acquisition: Foundations for teaching, testing, and research*. Cambridge: Cambridge University Press.
- Chapple, J. (2015). Teaching in English is not necessarily the teaching of English. *International Education Studies* 8: 1–13.
- Dearden, J. (2014). *English as a medium of instruction: A growing global phenomenon*. London: British Council.
- Dearden, J., Macaro, E. (2016). Higher education teachers' attitudes towards English medium instruction: A three-country comparison. *Studies in Second Language Learning and Teaching* 6(3): 455–474. <https://doi.org/10.14746/sllt.2016.6.3.5>.
- Dorđević, J. P., Blagojević, S. N. (2019). University teachers' attitudes towards the implementation of English as a medium of Instruction in Serbian Higher Education. *Nasleđe* 44: 153–166.
- Galloway N., Kriukow J., Numajiri T. (2017). *Internationalisation, higher education and the growing demand for English: An investigation into the English Medium of Instruction (EMI) movement in China and Japan*. London: British Council.
- Galloway, N., Ruegg, R. (2020). The provision of student support on English medium instruction programmes in Japan and China. *Journal of English for Academic Purposes* 45: 100846.
- Galloway, N., Rose, H. (2021). English medium instruction and the English language practitioner. *ELT Journal* 75(1): 33–41. <https://doi.org/10.1093/elt/ccaa063>.
- Hu, G., Li, L., Lei, J. (2014). English-medium instruction at a Chinese university: Rhetoric and reality. *Language Policy* 13: 21–40.

- Jia, W., Fu, B. X., Pun, J. (2023). How do EMI lecturers' translanguaging perceptions translate into their practice? A multi-case study of three Chinese tertiary EMI classes. *Sustainability* 15(6): 1–23, Article 4895. <https://doi.org/10.3390/su15064895>.
- Kamasak, R., Sahan, K. (2023). Academic success in English medium courses: Exploring student challenges, opinions, language proficiency and L2 use. *RELC Journal* 55(1): 49–65. <https://doi.org/10.1177/00336882231167611>.
- Kim, E. G. E. (2014). Korean engineering professors' views on English language education in relation to English-medium instruction. *Journal of Asia TEFL* 11(2): 1–34.
- Kırkgöz, Y. (2005). Motivation and student perception of studying in an English-medium university. *Journal of Language and Linguistic Studies* 1(1): 101–123.
- 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.
- Lei, J., Hu, G. (2014). Is English-medium instruction effective in improving Chinese undergraduate students' English competence? *International Review of Applied Linguistics in Language Teaching* 52(2): 99–126.
- Macaro, E. (2018). *English medium instruction*. Oxford: Oxford University Press.
- 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.
- McMullen, M. G. (2014). The value and attributes of an effective preparatory English program: Perceptions of Saudi university students. *English Language Teaching* 7(7): 131–140.
- Nunan, D. (2003). The impact of English as a global language on educational policies and practices in the Asia-Pacific Region. *TESOL Quarterly* 37(4): 589–613.
- Pessoa, S., Miller, R. T., Kaufer, D. (2014). Students' challenges and development in the transition to academic writing at an English-medium university in Qatar. *IRAL – International Review of Applied Linguistics in Language Teaching* 52: 127–156.
- Popović, M., Vagić, M., Kuzmanović, M., Anđelković Labrović, J. (2016). Understanding heterogeneity of students' preferences towards English medium instruction: A conjoint analysis approach. *Yugoslav Journal of Operations Research* 26(1): 91–102.

- Rose, H., Curle, S., Aizawa, I., Thompson, G. (2019). What drives success in English medium taught courses? The interplay between language proficiency, academic skills, and motivation. *Studies in Higher Education* 45(11): 2149–2161. <https://doi.org/10.1080/03075079.2019.1590690>.
- Sultana, S. (2014). English as a medium of instruction in Bangladesh's higher education: Empowering or disadvantaging students? *Asian EFL Journal* 16: 11–52.
- Vinke, A. A. (1995). *English as the medium of instruction in Dutch engineering education* (unpublished doctoral dissertation). Delft: Delft University of Technology.
- Vinke, A. A., Snippe, J., Jochems, W. (1998). English-medium content courses in non-English higher education: A study of lecturer experiences and teaching behaviours. *Teaching in Higher Education* 3(3): 383–394.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, Mass: Harvard University Press.
- Wächter, B., Maiworm, F. (Eds.). (2014). *English-taught programmes in European higher education: The state of play in 2014*. Bonn: Lemmens Medien GmbH.
- Wang, K., Yuan, R., De Costa, P. (2025). A critical review of English medium instruction (EMI) teacher development in higher education: From 2018 to 2022. *Language Teaching* 58: 1–32. <https://doi.org/10.1017/S0261444824000351>.
- Yılmaz Virlan, A., Demirbulak, D. (2020). EMI or TMI? A Study on the Effect of English medium instruction on students' success and motivation. *International Journal of Academic Research in Education* 6(1): 76–85. <https://doi.org/10.17985/ijare.836119>.

Katarina O. Lazić
Dragana D. Ilić
Univerzitet u Beogradu

STAVOVI NASTAVNIKA O NASTAVI ŠUMARSTVA NA ENGLESKOM JEZIKU ZA KINESKE STUDENTE

Sažetak

Globalizacija visokog obrazovanja utiče na sve veću upotrebu engleskog kao jezika visokoškolske nastave (EJVIN) u različitim disciplinama, uključujući i šumarstvo. Istraživanje u radu sprovedeno je putem prilagođene ankete u formi Gugl upitnika, sa

ciljem ispitivanja stavova profesora Šumarskog fakulteta u Beogradu koji su tokom zimskog semestra školske 2024/2025. godine držali nastavu iz šumarstva kineskim studentima na engleskom jeziku. Upitnik ispituje mišljenje nastavnika o izazovima sa kojima se studenti suočavaju pri razumevanju i komunikaciji na engleskom i njihovom ponašanju u EJVIN učionici, kao i o sopstvenoj pripremljenosti za izvođenje nastave na engleskom jeziku i potrebama u vezi sa tom nastavom. Rezultati ukazuju na ograničeno razumevanje engleskog jezika kod kineskih studenata, čestu upotrebu prevodilačkih alata tokom časa, kao i izražene poteškoće u komunikaciji, posebno u slušanju, razumevanju i upotrebi stručne terminologije. Kako bi prevazišli te izazove, profesori su pribegavali pojednostavljivanju jezika i usporavanju tempa tokom predavanja. Takođe, izrazili su potrebu za dodatnom obukom za izvođenje nastave na engleskom jeziku. Percepcija kulturnih razlika i nivoa angažovanosti studenata na času razlikovala se kod različitih predavača. Nivo angažovanosti studenata, koji je loše ocenjen od strane nekih profesora, ukazuje na značaj primene interkulturnih strategija u učenju i podučavanju, uz paralelno unapređenje jezičkih kompetencija, kako bi se nastava u međunarodnom okruženju odvijala uspešno i efikasno. Izazovi koji potiču od toga što studenti i predavači pripadaju različitim kulturama, kao što je manjak interakcije u učionici primećen u ovom istraživanju, mogli bi se prevazići kroz društvenu interakciju tokom vannastavnih aktivnosti, što bi doprinelo stvaranju podsticajnog i inkluzivnog okruženja za učenje. Saznanja do kojih je istraživanje došlo mogu doprineti sve većem korpusu istraživanja u oblasti primene engleskog kao jezika visokoškolske nastave (EJVIN), posebno kada je reč o nastavi na tehničkim fakultetima i programima na EJVIN-u, kao i kursevima engleskog jezika struke namenjenim kineskim studentima.

Ključne reči: engleski kao jezik visokoškolske nastave (EJVIN), obrazovanje u šumarstvu, kineski studenti, percepcija nastavnika, jezičke barijere.

Received: 1 September 2025

Accepted: 10 October 2025

APPENDIX

English as the language of instruction in working with Chinese students: EMI instructors' views on students' and their own English-related challenges

QUESTIONNAIRE

1. Name, surname and title of the respondent

• _____

1a. What percentage (%) of Chinese students almost perfectly understand the classes you teach in English?

• _____

1b. What percentage (%) of Chinese students sufficiently understand the classes you teach in English?

• _____

1c. What percentage (%) of Chinese students partially understand the classes you teach in English?

• _____

1d. What percentage (%) of Chinese students understand very little of the classes you teach in English?

• _____

2. Have you noticed that Chinese students use apps such as Google Translate for better understanding during classes?

- Yes
- No
- I am not sure.

2a. What percentage of Chinese students used apps in class?

• _____

3. Which language and communication skills do you think Chinese students need to improve the most?

- Writing
- Reading
- Speaking
- Presentation skills
- Listening
- Other

3a. If you choose 'Other', please specify which skills exactly.

• _____

4. What is your opinion on awarding a certificate of completion for the ESP course English for forestry (without exam) to Chinese students?

- It's too much.

- It is reasonable.
 - I am not sure.
5. What do you think about the weekly number of English language lessons (3 hours) for Chinese students?
- It is too much.
 - Is it reasonable.
 - That is too little.
 - I am not sure.
6. How many hours of English language teaching per week do you think would be advisable?
- 1 hour
 - 2 hours
 - 3 hours
 - 4 hours
 - 6 hours
7. Should academic writing be a mandatory part of the ESP course for Chinese students?
- Yes
 - No
 - I am not sure.
- 7a. What writing skills do you think students need the most?
- Writing theses/scientific articles
 - Technical writing (projects, reports)
 - Other
- 7b. If you choose 'Other', please specify which skills exactly.
- _____
8. What would you suggest to improve the teaching of English to Chinese students?
- _____
9. What could be offered to Chinese students in addition to teaching?
- English learning club
 - Club for socialising with students from Serbia
 - Faculty sections or choir
 - Other
- 9a. If you choose 'Other', please specify what exactly.
- _____
10. As an EMI lecturer, can you improve your own knowledge of the English language?
- Yes
 - No
 - I am not sure.

11. What aspects of your own English language skills do you feel you need to improve?

- Pronunciation
- Classroom phrases
- Presentation skills
- Asking questions
- Feedback
- Discussions
- Academic writing
- Technical writing
- None of the above
- Other

11a. If you choose 'Other', please specify which aspects exactly.

- _____

12. How could you progress in English?

- Self-guided study
- Applications (ELSA, WordUp, etc.)
- Conferences/seminars
- English language course
- Participation in discussions
- International projects
- Cambridge/IELTS/TOEFL preparation
- Reading of field-specific publications
- Listening to or reading authentic materials
- Specialised course (e.g. Coursera)
- Other

12a. If you choose 'Other', please specify what exactly.

- _____

13. How long do you think your English improvement activities should last?

- A day
- One week
- A month
- One term
- A year
- Other

13a. If you choose 'Other', please specify how long exactly.

- _____

14. When is the best time for your English improvement activities?

- At weekends
- On working days
- During summer vacation
- During winter break
- Other

14a. If you choose 'Other', please specify when exactly.

- _____

15. What would you recommend to teachers to improve English as a language of instruction?

- _____

16. Do you modify the way you speak in class to adapt to Chinese students?

- Considerably
- Moderately
- No
- I am not sure

17. What language barriers have you noticed in Chinese students?

- _____

18. Do cultural differences affect the interactions of Chinese students in the EMI class?

- Yes, to a large extent
- To some extent
- No
- I am not sure

19. How do you assess the level of engagement of Chinese students in the EMI class?

- Very engaged
- Moderately engaged
- Slightly engaged
- Not engaged

Milena Z. Škobo
Sinergija University
Faculty of Philology, Anglistics
Bosnia and Herzegovina
mskobo@sinergija.edu.ba
<https://orcid.org/0000-0001-8427-2051>

Original research paper
UDC 378.016:811.111]:004.8
DOI: 10.19090/MV.2025.16.2.163-184

Milena V. Šović
University Business Academy in Novi Sad
Faculty of Economics and Engineering
Management,
PhD Studies of Business Economics
milena.sovic@gmail.com
<https://orcid.org/0009-0009-5774-5672>

UNIVERSITY TEACHERS' PERSPECTIVES ON USING THE TESLA CHATBOT IN EMI COURSES: A CASE STUDY FROM SINGIDUNUM UNIVERSITY

ABSTRACT: As English-medium instruction (EMI) expands in Serbian higher education, university teachers who are non-native English speakers face unique challenges in engaging international students. This study presents a pilot initiative involving a multilingual AI chatbot modeled on the persona of Nikola Tesla, designed to support student motivation, interaction, and informal language practice in English. The chatbot was implemented at Singidunum University in Belgrade, where ten subject-specialist professors, native speakers of Serbian, used the tool while teaching international students enrolled in the university's *Studies in English* programs. The paper examines teachers' reflections on the chatbot's technical usability, its perceived impact on student engagement, and its contribution to pedagogical innovation and creativity. Rather than positioning the chatbot as a replacement for traditional teaching methods, the study emphasizes its role as a supplementary tool that can enrich EMI delivery. It calls for further research into teacher-driven perspectives on digital augmentation in multilingual classrooms, particularly with respect to refining chatbot design to meet the specific pedagogical demands of different academic disciplines.

Keywords: AI tools, educational chatbots, Tesla chatbot, EMI courses, higher education, teacher perspectives, instructional innovation.

PERSPEKTIVE UNIVERZITETSKIH NASTAVNIKA O UPOTREBI TESLINOG ČETBOTA U IZVOĐENJU NASTAVE NA ENGLESKOM JEZIKU: STUDIJA SLUČAJA UNIVERZITETA SINGIDUNUM

APSTRAKT: Kako nastava na engleskom jeziku postaje sve prisutnija u visokom obrazovanju u Srbiji, univerzitetski nastavnici, čiji maternji jezik nije engleski, suočavaju se sa specifičnim izazovima u radu sa međunarodnim studentima. Ova studija predstavlja pilot istraživanje koje uključuje upotrebu višejezičnog četbota zasnovanog na veštačkoj inteligenciji (VI) i modelovanog prema ličnosti Nikole Tesle, razvijenog sa ciljem da podstakne motivaciju, interakciju i neformalno učenje na engleskom jeziku. Alat je primenjen na Univerzitetu Singidunum u Beogradu, gde je deset nastavnika, izvornih govornika srpskog jezika i stručnjaka u svojim oblastima, koristilo četbot tokom izvođenja nastave u okviru studijskih programa na engleskom jeziku. U radu se analiziraju njihova zapažanja o upotrebljivosti alata, njegovom uticaju na angažovanje studenata i doprinosu inovativnosti u nastavi. Zaključuje se da ovakvi alati mogu obogatiti izvođenje nastave na engleskom jeziku i ukazuje se na potrebu za daljim istraživanjima, posebno u pogledu usavršavanja obrazovnih četbotova kako bi se u većoj meri prilagodili specifičnim pedagoškim zahtevima pojedinačnih nastavnih predmeta.

Ključne reči: alati veštačke inteligencije, obrazovni četbotovi, Teslin četbot, kursevi na engleskom kao jeziku visokoškolske nastave, visoko obrazovanje, perspektive nastavnika, inovacije u nastavi.

1. INTRODUCTION

The global expansion of English-Medium Instruction (EMI) has transformed higher education landscapes, especially in non-Anglophone countries seeking greater international visibility and academic competitiveness (Dearden 2014; Hultgren et al. 2015). EMI is now viewed not merely as a linguistic shift but as a structural and pedagogical transformation aligned with broader goals of internationalization, mobility, and employability (Hultgren 2014; Phillipson 2009). However, in many contexts, including Serbia, EMI remains underdeveloped, inconsistently implemented, and insufficiently supported through policy, training, or pedagogical innovation.

Within the Serbian higher education system, EMI remains a relatively recent and unevenly implemented development. Đorđević and Blagojević (2019) point to two key challenges: insufficient English language proficiency among university teachers and a persistent reliance on traditional, teacher-centered instructional methods. Their claims are echoed by more recent studies such as Janković, Beko and Paris (2025), who underline conceptual ambiguities in defining EMI and note that instructional practices are often fragmented and lack clear pedagogical direction.

Despite these challenges, innovative digital tools may offer opportunities to support EMI delivery, especially in contexts where institutional support and formal training are lacking. This study addresses a gap in the literature by exploring the use of an AI-powered educational chatbot based on the persona of Nikola Tesla, implemented as a multilingual tool in EMI courses at Singidunum University in Belgrade. The chatbot was designed not to replace traditional instruction, but to support informal learning, enhance student engagement, and foster creativity and interaction in English-language academic environments.

Focusing on the perspectives of ten university teachers who used the chatbot while delivering courses in English to international students, this paper examines the perceived pedagogical value, usability, and motivational potential of AI tools in EMI settings. In a system where EMI is often adopted superficially and where academic staff may lack both linguistic and didactic support (Dearden 2014; Phillipson 2006), this case study introduces a teacher-centered approach to integrating digital tools that support engagement and communicative competence. To contextualize this intervention, the following section reviews relevant literature on EMI implementation, instructional challenges, and the evolving role of educational technology in higher education.

2. LITERATURE REVIEW

As EMI becomes more widespread, educators and researchers have increasingly turned their attention to the practical challenges it poses in classroom settings – particularly in relation to academic support, pedagogical strategies, and technology use. Defined broadly as the use of English to teach academic subjects in contexts where it is not the first language, EMI remains a relatively new and evolving instructional model. Its definitions vary across literature, and unlike CLIL, EMI often prioritizes subject content over language development, leading to ongoing debates about its scope and instructional balance (Janković et al. 2025; Smit 2023). Among emerging responses to these challenges, generative AI tools have drawn significant interest for their potential to enhance instruction, support student engagement, and reduce teacher workload in multilingual environments.

Recent studies have examined how instructors and students interact with AI applications such as ChatGPT and machine translation tools in EMI courses. From the educator's perspective, successful AI integration often hinges on experience, training, and openness to innovation. Zimotti et al. (2024) found that teachers with prior experience using ChatGPT were significantly more optimistic about its classroom potential than those with no such background. Yet concerns

about over-reliance and unsupervised student use persist, particularly in EMI contexts that lack formal policy frameworks. Studies by Pokrivcakova (2022) and Belda-Medina and Calvo-Ferrer (2022) report that while pre-service teachers recognize the usefulness and interactivity of AI tools, many remain hesitant to incorporate them into formal instruction, citing the irreplaceable value of human guidance and communicative nuance. In addition, instructors in EMI settings often resist assuming responsibility for students' language development, viewing themselves primarily as content specialists rather than language teachers – a stance that complicates the integration of language and content in practice (Anđelkov 2022).

Structural limitations within EMI systems also drive interest in AI-based support. Many higher education institutions face a shortage of qualified EMI instructors who possess the necessary language proficiency, content knowledge, and pedagogical expertise (Galloway & Ruegg 2022). In this context, digital tools are increasingly viewed not as replacements for teachers, but as supplemental aids capable of easing the burdens placed on both educators and students.

Empirical evidence from recent AI-in-EMI studies suggests that AI use correlates with academic performance more than language proficiency alone. In a study involving 142 students, Kikuchi (2024a) found that stronger academic achievers engaged with AI tools more meaningfully, regardless of their English level. These findings suggest that while AI tools may be accessible to all learners, their educational impact depends on users' prior skills and engagement patterns – an insight that has implications for equity and digital literacy in EMI.

Kikuchi's more recent study (2024b) further explored both student and teacher perceptions of AI integration in EMI. Students primarily used AI for basic tasks like translation and grammar correction, while higher-order functions were limited to digitally fluent individuals. Teachers, in turn, emphasized AI's utility in administrative and differentiation tasks but raised concerns about grading fairness, academic honesty, and the erosion of interpersonal teaching. These studies collectively advocate for thoughtful, guided implementation, with clear boundaries and pedagogical goals.

While these individual studies offer valuable insights, broader overviews also confirm that AI in EMI remains an emerging field. A systematic review by Bannister, Urbietta and Peñalver (2023), which analyzed 68 recent studies, emphasized the scarcity of empirical work directly linking generative AI to EMI pedagogy. The majority of the reviewed literature focuses on generalized uses such

as writing support or assessment, with no studies at the time addressing chatbot use in EMI specifically. This reinforces the exploratory value of the present research.

Lasagabaster (2022) complements these concerns by pointing to the broader risks and opportunities generative AI brings to EMI: from altering how language proficiency is assessed to reshaping expectations in intercultural communication and academic authorship. These pedagogical concerns are especially relevant in EMI classrooms, where instructors and students are handling complex linguistic and ethical terrains.

This study examines the use of a multilingual, persona-based chatbot – modeled after Nikola Tesla – as a general-purpose support tool in EMI courses at a Serbian university. The chatbot is not designed to address subject-specific content but aims to enhance communication, classroom engagement, and creative interaction. Rather than solving discipline-specific challenges, this pilot study explores whether such a tool can be meaningfully integrated into EMI contexts, paving the way for future research into the development of chatbots tailored to particular academic fields and linguistic demands.

2.1. EMI in Serbian tertiary education

In settings like Serbia – where EMI implementation is still in its early stages, institutional support remains limited, and digital innovation is gradually emerging – there is a pressing need to understand how educators engage with new technologies. This section addresses that gap by situating the present study within the Serbian higher education landscape. In recent years, Serbia has joined broader European efforts toward the internationalization of higher education, resulting in a notable increase in study programs delivered in English. According to Đorđević and Blagojević (2019), over 150 accredited programs across Serbian universities are now taught entirely or partially in English or other foreign languages, especially in medicine, engineering, ICT, and increasingly in the humanities and social sciences – particularly within private institutions. However, more recent work by Janković et al. (2025) emphasizes that this expansion is uneven and often lacks alignment with national curricular standards or clearly defined pedagogical strategies.

This expansion has been supported by Serbia's *Law on Higher Education* (*Zakon o visokom obrazovanju*, Official Gazette RS, No. 88/2017, 27/2018), which introduced frameworks for internalization and EMI programs, as well as by mobility initiatives such as Erasmus+. Despite this growth, systematic support for EMI remains underdeveloped. Most Serbian higher education institutions still lack

structured training for faculty who teach in English, and research on EMI practices within the local context remains limited (Antić & Milosavljević 2014; Popović et al. 2016). This research gap is compounded by the interchangeable use of terms like EMI, CLIL, and ESP/EAP – creating conceptual ambiguity and further complicating curriculum development (Janković et al. 2025).

Some progress has been made through externally funded projects. The Tempus-funded FUSE project (2013–2016) developed a dedicated EMI training course for non-native English-speaking university teachers, combining language and methodology training. Participant feedback was highly positive, especially regarding the inclusion of practical teaching simulations, and many requested that the course be institutionalized and offered regularly (FUSE 2016, as cited in Đorđević & Blagojević 2019). However, such initiatives remain isolated, and broader institutional strategies to support EMI are still lacking.

Instructor preparedness and pedagogical mindset are key challenges. Research shows that many Serbian university teachers – especially those from non-linguistic disciplines – perceive EMI primarily as a matter of language proficiency, neglecting the need for methodological adjustment (Ball & Lindsay 2013; Đorđević & Blagojević 2019; Helm & Guarda 2017). This reluctance is compounded by instructors' professional identities, as many resist assuming responsibility for students' language development (Anđelkov 2022). However, as international and regional evidence suggests, EMI success depends not only on linguistic fluency but also on adopting inclusive, student-centered, and multilingual teaching strategies.

Structural ambiguities also persist. Questions remain about who is responsible for EMI delivery (content vs. language teachers), how assessment is conducted (in L1, L2, or both), and whether instructional materials and outcomes are adjusted to students' English proficiency levels (Janković et al. 2025). These gaps mirror broader challenges in EMI implementation across Europe, where institutional strategies are often driven more by internationalization goals than by pedagogical reform (Costa & Coleman 2013).

Despite increasing interest in digital support, the integration of AI tools – particularly generative AI and chatbots – into EMI courses in Serbia remains undocumented. No peer-reviewed studies to date have explored the use of multilingual or persona-based AI tools in Serbian higher education. This lack of localized empirical evidence points to the importance of the present pilot study, which offers an initial exploration of how chatbots might support EMI delivery in Serbian universities.

3. RESEARCH METHODOLOGY

3.1. Research objectives and hypotheses

The Tesla chatbot is a multilingual, persona-based educational tool developed to simulate human-like dialogue with a virtual representation of Nikola Tesla. Designed for both Serbian and English speakers, it enables integration into English-medium instruction (EMI) environments, particularly in contexts where diverse student populations and non-native English-speaking faculty intersect. The chatbot draws on verified biographical sources to maintain historical accuracy and linguistic authenticity, while its open-ended, text-based dialogue invites users to explore Tesla's legacy through reflective, imaginative, and thematic questions. In addition to Serbian and English, the chatbot is equipped to provide output in Hungarian, French, and German, supporting its use in cross-cultural or multilingual educational settings.

The current version supports the following functionalities: text-based natural language conversation (no voice interaction at this stage), multilingual response generation (Serbian, English, Hungarian, French, German), pre-loaded content modules inspired by Tesla's biography, inventions, and values (e.g., science, innovation, ethics), open-ended Q&A capabilities that support exploratory, student-driven inquiry, and adaptability to informal, curricular, or cross-curricular teaching contexts.

Although the tool is not subject-specific, its flexible architecture enables it to be used across various EMI courses (e.g., business, IT, humanities) to strengthen language-mediated interaction, stimulate student curiosity, and promote innovative pedagogical practice. The chatbot is freely accessible at: <https://nikolatesla.live/>.

The aim of this study is to examine whether such persona-based AI chatbot, even without direct curricular alignment, can meaningfully support EMI instruction. In particular, the study focuses on teacher perceptions of its technical usability and ease of classroom integration, its potential to enhance student engagement and curiosity, and its capacity to promote pedagogical innovation in university settings.

Although the chatbot references Tesla's life and inventions, the goal is not to assess students' factual knowledge, but rather to examine the broader instructional value of persona-based AI tools in multilingual academic environments. The model is treated as a prototype for potential future development and scaling of culturally embedded educational chatbots.

Based on this objective, the following hypotheses were formulated:

- H1: Teachers perceive the Tesla chatbot as easy to use and effective in supporting classroom communication and instructional flow.
- H2: Teachers consider the chatbot a valuable tool for enhancing students' motivation and engagement.
- H3: Teachers consider the chatbot a valuable tool for introducing pedagogical innovation into EMI instruction, regardless of subject-specific alignment.

3.2. Research Design and Instrument

A quantitative, descriptive research design was adopted. Data were collected using a structured questionnaire composed of two sections. The first section gathered socio-demographic data (gender, age, academic title, years of teaching experience, and academic field). The second section comprised 20 Likert-scale items grouped into five thematic areas: (1) User experience and technical usability, (2) Perceived usefulness in supporting instruction, (3) Observed student motivation and engagement, (4) Pedagogical innovation and openness to AI integration, and (5) Suggestions for improvement and desired chatbot features (e.g., adaptive responses, voice interaction, multimedia support). All items were rated on a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). The questionnaire was anonymous and used solely for academic research purposes.

3.3. Sample

The sample consisted of ten university teachers (professors and teaching assistants holding doctoral degrees) employed at Singidunum University in Belgrade. All participants were native Serbian speakers currently teaching international students in English as part of the university's "Studies in English" undergraduate programs. The AI-powered Tesla chatbot was introduced during the spring semester of 2025, and participants were invited to use it as a flexible supplementary classroom tool during regular class sessions prior to completing the survey.

Although not tied to specific course content, the chatbot was primarily used in real time during instruction, typically in segments dedicated to discussion or review. Instructors encouraged students to interact with the chatbot either individually or in pairs, and its integration was left to the discretion of each teacher. This ensured organic use aligned with each instructor's teaching style, while also

allowing for observation of student engagement and interaction in a low-pressure context.

Among the participants, six were female and four were male. Seven held professorial positions, while three were teaching assistants who held doctoral degrees. The age distribution included four participants aged 30–39, four aged 40–49, and two aged 50 or older. In terms of teaching experience, three participants had 5–10 years, five had and 20 years, and two had more than 20 years of experience. As for institutional tenure, four had worked at their current university for 1–5 years, four for 6–10 years, and two for over 10 years. The participants taught within the following areas: Business Economics (2 participants), Tourism (2), Information Technology (2), Environment and Sustainable Development (1), Software and Data Engineering (1), and Applied Artificial Intelligence (2).

3.4. Data Analysis

Descriptive statistics were used to analyze the survey data. Percentages, means, medians, modes, and standard deviations were calculated to summarize teacher responses across the five key thematic areas. Full Likert-scale distributions (e.g., “strongly agree,” “somewhat agree,” “neutral,” etc.) were presented for all areas to ensure comparability and transparency.

For thematic areas 1–3 responses were primarily analyzed using percentage breakdowns, as these sections address more concrete evaluative judgments related to user experience, perceived usefulness, and observed student engagement. Thematic areas 4 and 5 were examined using a more statistical approach, including measures of central tendency (means, medians, modes) and dispersion (standard deviations). This choice was driven by the exploratory and forward-looking nature of these two areas, which closely align with H3, focusing on pedagogical innovation beyond immediate utility or motivation. Since these sections explored abstract, developmental, or speculative aspects of AI integration (e.g., openness to future chatbot features such as adaptive responses or voice interaction), capturing the spread and central tendencies of responses offered deeper insight into teacher preferences, variability, and potential areas of consensus or divergence.

All results were interpreted in relation to the stated hypotheses and used to assess the broader applicability and educational potential of the chatbot across diverse EMI contexts and subject domains.

4. INTERPRETATION OF RESULTS

The results across the first three thematic areas – usability, instructional support, and student engagement – demonstrate overwhelmingly positive perceptions of the Tesla chatbot among university teachers in EMI courses. Under Theme 1 (usability), 50% of respondents strongly agreed and 40% somewhat agreed that the chatbot was easy to use. Similarly, 50% somewhat agreed and 30% strongly agreed that its responses were accurate and relevant. The tool was seen as technically stable and time-saving: 40% somewhat agreed and 30 % strongly agreed that it facilitated faster responses to student questions and supported the explanation of Tesla-related content.

In Theme 2 (pedagogical support), 40% of participants strongly agreed and 40% somewhat agreed that the chatbot enhanced students' understanding of Tesla's life and inventions, even in non-STEM contexts. A large majority (50% strongly agreed, 30% somewhat agreed) affirmed that it enabled informal learning by offering supplementary educational materials, while 30% strongly agreed and 40% somewhat agreed that it facilitated a more personalized teaching approach – especially valuable in multilingual EMI classrooms.

Theme 3 (student engagement and motivation) yielded similarly strong results. A full of 80% of teachers (50% strongly agreed, 30% somewhat agreed) observed increased student interest in using the chatbot. Moreover, 40% strongly agreed and 40% somewhat agreed that the chatbot enhanced classroom engagement and improved peer collaboration. Regarding content-specific interest, 40% strongly agreed and 40% somewhat agreed that the chatbot heightened students' interest in Tesla's life and work, while 30% strongly agreed and 50% somewhat agreed that it encouraged critical thinking beyond surface-level interaction.

These findings offer strong support for Hypothesis 1 and Hypothesis 2, confirming that the Tesla chatbot was perceived by teachers as both easy to use and effective in facilitating classroom communication, and as a valuable tool for enhancing student motivation and engagement. A summary of key descriptive statistics is presented in Table 1.

Item/Statement	Strongly disagree (%)	Somewhat disagree (%)	Neutral (%)	Somewhat Agree (%)	Strongly agree (%)
Tesla's chatbot was easy to use in the classroom			10	50	40
The chatbot provided accurate and relevant responses			20	50	30
It expedited addressing students' questions		10	20	40	30
It helped explain Tesla-related content			20	40	40
The chatbot improved understanding of Tesla's life and work		10	20	30	40
It provided additional educational material		10	10	30	50
It supported a personalized approach to teaching		10	20	40	30
Students showed clear interest in using the chatbot		10	10	30	50
It enhanced student engagement		10	10	40	40
It improved student collaboration		10	10	40	40
It increased student interest in Tesla's work		10	10	40	40
It encouraged critical thinking		10	10	50	30

Table 1. Summary of teachers' responses (thematic areas 1-3)

Findings from Theme 4 indicate strong support among instructors for integrating Tesla's chatbot into instructional practice, particularly in EMI contexts. Despite being non-native English speakers, participants expressed a general openness to adopting AI tools in their teaching. This affirms the potential of AI to enrich higher education environments even where linguistic and technological barriers may exist. For EMI instructors who are not native speakers of English, adopting new digital tools can introduce additional challenges, such as interpreting chatbot responses, handling technical terminology, or feeling confident in

classroom AI use. The fact that participants expressed enthusiasm rather than hesitation suggests a notable level of digital resilience and openness to innovation, reinforcing the feasibility of AI-supported instruction in linguistically diverse academic settings.

When asked whether “*I believe I can easily integrate a chatbot like Tesla’s into my curriculum,*” 70% of participants strongly agreed, 20% somewhat agreed, and 10% remained neutral. Notably, none disagreed. The corresponding descriptive statistics (Table 2) show some degree of variability, with a mean of 2.47 and a relatively high standard deviation (2.18). The mode of 5.0 aligns with the most frequent response category, confirming that the dominant sentiment was strong agreement. The median value of 3.0 suggests some variation in perceived ease, possibly due to different levels of confidence or institutional readiness.

Statistical indicator	Value
Mean	2.47
Median	3.00
Mode	5.00
Standard deviation	2.18

Table 2. Statistical overview of responses on chatbot integration ease

These findings provide clear support for Hypothesis 3, which posited that instructors would perceive the Tesla chatbot as a feasible and valuable tool for pedagogical innovation in EMI instruction – even when not directly tied to course-specific content. The absence of negative responses further points to a high level of general acceptance and readiness to experiment with AI-based methodologies.

Support for instructional enrichment was even more consistent. All participants agreed with the statement “*Using a chatbot like Tesla’s would enrich my teaching methods,*” with 70% selecting “somewhat agree” and 30% “strongly agree.” Participants saw the chatbot as a practical ally in making their classrooms more engaging, bridging linguistic gaps and encouraging a more participatory learning experience.

Quantitative indicators further validate this trend: the mean response was 4.30, with both the median and mode at 4.0, and a low standard deviation of 0.48, indicating strong agreement with minimal variability (Table 3). These results reinforce the idea that Tesla’s chatbot is not only accepted in EMI settings but is actively seen as a catalyst for innovative pedagogical approaches.

Statistical indicator	Value
Mean	4.30
Median	4.00
Mode	4.00
Standard deviation	0.48

Table 3. Perceptions of chatbot's contribution to enriching teaching

When asked about combining chatbots with traditional teaching, responses revealed cautious optimism. To the statement *"I would prefer to combine a chatbot with traditional teaching methods rather than rely solely on traditional methods,"* 20% of teachers strongly agreed, 40% somewhat agreed, and the remaining 40% remained neutral. No respondents disagreed, but the relatively high rate of neutral responses may reflect a lack of prior experience with AI-supported blended learning or institutional hesitation. The statistical overview confirms a moderate level of agreement: mean = 3.80, median = 4.0, mode = 3.0, and standard deviation = 0.79, showing some variation in confidence and preference (Table 4).

Statistical indicator	Value
Mean	3.80
Median	4.00
Mode	3.00
Standard deviation	0.79

Table 4. Preferences for blending chatbots with traditional instruction

Tesla's chatbot also appeared to serve as a pedagogical catalyst. In response to *"Using the chatbot inspired me to explore new ways of integrating artificial intelligence into teaching,"* 40% strongly agreed, 20% somewhat agreed, and 20% remained neutral. No one disagreed. These results suggest that, beyond practical utility, the chatbot encouraged educators to reflect on AI integration as part of their long-term instructional strategy. The mean score was 4.20, with a median and mode of 4.0, and a standard deviation of 0.79, indicating generally high but slightly varied enthusiasm (Table 5).

Statistical indicator	Value
Mean	4.20
Median	4.00
Mode	4.00
Standard deviation	0.79

Table 5. Statistical overview of chatbot-inspired AI innovation in teaching

These results offer robust support for Hypothesis 3, confirming that the Tesla chatbot was perceived not only as a practical classroom tool, but also as a driver of innovation and professional growth in EMI contexts.

In EMI environments, where both conceptual clarity and linguistic accessibility are critical, teachers identified several desirable improvements to enhance the chatbot's educational potential (Theme 5). Three key areas were identified: adaptive response capability, voice interaction, and multimedia support.

Regarding adaptivity, 80% of respondents expressed a positive attitude toward having the chatbot tailor its responses to students' knowledge levels – 30% somewhat agreed and 50% strongly agreed. The remaining 20% expressed neutrality, which may stem from limited familiarity with adaptive AI systems or uncertainty about their practical classroom integration. This feedback aligns with inclusive pedagogy goals and highlights the importance of differentiated instruction in international classrooms. The statistical results support this strong consensus: mean = 4.30, median = 4.50, mode = 5.0, and standard deviation = 0.82 (Table 6).

Statistical indicator	Value
Mean	4.30
Median	4.50
Mode	5.00
Standard deviation	0.82

Table 6. Preferences for chatbot response adjustment according to students' knowledge level

Voice interaction also received favorable responses. While 30% of participants remained neutral – perhaps due to unfamiliarity with voice-enabled technology in academic settings – 20% somewhat agreed and 50% strongly agreed that voice communication would facilitate learning. This hesitancy may also reflect infrastructural limitations or a lack of institutional support for voice-enabled tools, suggesting a need for further professional development in this area. The results also indicate that speech-enabled AI could increase accessibility and comfort, especially for international students operating in a second language. Mean = 4.20, median = 4.5, mode = 5.0, and standard deviation = 0.92 reflect solid, if slightly more varied, endorsement (Table 7).

Statistical indicator	Value
Mean	4.20
Median	4.50
Mode	5.00
Standard deviation	0.92

Table 7. Attitudes toward voice interaction as a tool for facilitating learning

The most enthusiastically supported enhancement was multimedia integration. All respondents agreed that *“Multimedia content (videos, animations, graphics) in the chatbot’s responses would help with understanding complex concepts,”* with 40% selecting “somewhat agree” and 60% “strongly agree.” Such feedback highlights that EMI instructors prioritize visual scaffolding as a way to bridge linguistic gaps and facilitate content comprehension. The statistical indicators confirm a strong consensus: mean = 4.60, median and mode = 5.0, and a very low standard deviation of 0.50 (Table 8).

Statistical indicator	Value
Mean	4.60
Median	5.00
Mode	5.00
Standard deviation	0.50

Table 8. Attitudes toward the use of multimedia content in chatbot responses

These results reflect a clear pedagogical vision: EMI instructors seek chatbots that are adaptive, interactive, and multimodal – features essential for addressing the linguistic, cultural, and academic diversity typical of EMI classrooms. Their preferences also suggest that instructors do not view AI chatbots as static tools, but rather as evolving pedagogical partners – capable of responding to diverse learner needs, supporting inclusive strategies, and enabling interactive, multimodal learning experiences. Future iterations of Tesla’s chatbot, or similar AI tools, should integrate these enhancements to support deeper engagement, broader accessibility, and more effective instructional outcomes.

5. TOWARDS A CONCLUSION: LIMITATIONS, CONTRIBUTIONS, AND FUTURE DIRECTIONS

The findings of this study provide strong empirical support for all three proposed hypotheses. First, EMI instructors perceived the Tesla chatbot as technically reliable, easy to use, and effective in supporting classroom communication and instructional flow (H1). Teachers consistently reported that the

tool helped them manage class interaction, answer student questions, and supplement EMI instruction with clear and relevant explanations, particularly around Tesla-related content.

Second, the chatbot was seen as an engagement-driven, motivational aid that stimulated student interest and encouraged collaborative learning (H2). Most participants observed a noticeable rise in student curiosity and classroom interaction. Importantly, this enthusiasm extended beyond content-specific engagement, suggesting the chatbot's ability to serve as a broader cognitive and social stimulus in EMI classrooms.

Third, results strongly support Hypothesis 3. The majority of instructors expressed a clear willingness to integrate chatbots into their long-term instructional strategies, with several affirming that using the Tesla chatbot had already inspired them to rethink how artificial intelligence could enrich their teaching. This openness is particularly significant in the EMI context, where both technological experimentation and linguistic clarity are essential. These results emphasize the chatbot's dual role: a responsive classroom assistant and a catalyst for AI-informed pedagogical change.

The study represents the first empirical investigation of an AI-powered chatbot in EMI courses within the Serbian higher education system. Although EMI programs are gradually expanding in Serbia, there has been little to no documented research on the use of chatbots or similar generative AI tools in these contexts. The Tesla chatbot was not designed to teach subject-specific content about Nikola Tesla, but rather to serve as a pedagogical prototype – a starting point for evaluating how multilingual, persona-based AI tools could support classroom innovation, interaction, and student motivation in internationalized academic environments. Its function in this pilot was therefore exploratory, laying the groundwork for future discipline-specific chatbot development tailored to the needs of particular study programs.

Several limitations of the study must be acknowledged. First, the study was small-scale and institution-specific, involving only ten university teachers from a single Serbian university. This limited scope constrains the generalizability of the findings. Second, the study focused solely on teacher perspectives, without triangulation through student feedback, classroom observations, or performance metrics. Prior research emphasized the importance of capturing both teacher and student experiences to comprehensively assess chatbot impact (Winkler & Söllner 2018; Wollny et al. 2021). Third, the Tesla chatbot's design – centered on a single

historical persona – may limit its applicability across diverse disciplinary contexts, where other topics and figures might be more relevant.

Despite these constraints, the study makes several contributions to the emerging literature on AI in EMI instruction. It reinforces the idea that chatbots can serve not just as knowledge-delivery tools but also as catalysts for engagement, motivation, and higher-order thinking in multilingual classrooms. In line with Smutny and Schreiberova (2020), participants described the chatbot as easy to use and beneficial for individualized learning and real-time classroom communication. Its persona-based format appeared especially compatible with internationalized, interdisciplinary teaching settings, offering a culturally and linguistically inclusive interface (Zawacki-Richter et al. 2019).

This is further supported by recent research from Xu et al. (2025) who found that chatbots were most effective when intentionally embedded into structured course activities aligned with learning objectives – mirroring the present study's finding that instructional framing is critical to success. Xu et al. (2025) also observed greater chatbot engagement in the humanities and social sciences compared to STEM, reinforcing the idea that chatbot utility may be discipline-dependent.

The findings also align with Kikuchi's (2024a, 2024b) work, which stresses the importance of integrating AI tools like ChatGPT into EMI environments with attention to academic integrity, digital literacy, and pedagogical relevance. Participants in this study echoed similar concerns, while also expressing a strong demand for adaptive, multimodal, and personalized chatbot features. These are harmonized with broader trends in conversational agent development, including those identified by Belpaeme et al. (2018) and Winkler and Söllner (2018), who emphasize the importance of personalization, affective responsiveness, and voice and visual capabilities.

Future research should adopt mixed-methods or longitudinal designs to assess both teacher and student outcomes over time. Larger and more diverse samples, including multiple institutions and disciplines, would allow for broader generalization and exploration of context-specific needs. Comparative studies evaluating general-purpose versus persona-based chatbots could also provide insight into how narrative framing and cultural embodiment influence learning. Experimental designs exploring the integration of chatbots into full curricula, not only as supplements, would further clarify their long-term pedagogical value.

Though preliminary in nature, this pilot study offers a solid foundation for future inquiry into chatbot-supported EMI instruction. It highlights the importance

of contextualized, Serbia-specific research in understanding how generative AI tools can be ethically and effectively embedded in multilingual university teaching. It also invites researchers, educators, and developers to co-create AI-enhanced tools that are not only technologically advanced but also pedagogically grounded and responsive to the evolving needs of international higher education.

REFERENCES

- Anđelkov, S. (2022). Learning and assessment of content and language in EMI in higher education: is integration possible? Multiple case study (unpublished doctoral dissertation). Universitat Autònoma de Barcelona.
- Antić, Z., Milosavljević, N. (2014). Medical studies in English: Shared learning. *Scientific Journal of the Faculty of Medicine in Niš* 31(2): 129–132.
- 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 at universities. Global challenges*, eds. A. Doiz, D. Lasagabaster & J. M. Sierra (Bristol: Multilingual Matter): 44–61.
- Bannister, P., Urbieto, A. S., Peñalver, E. A. (2023). A systematic review of generative AI and (English medium instruction) higher education. *Aula Abierta* 52(4): 401–409.
- Belda-Medina, J., Calvo-Ferrer, J. R. (2022). Preservice teachers' knowledge and attitudes toward digital-game-based language learning. *Education Sciences* 12(3): 182. <https://doi.org/10.3390/educsci12030182>
- Belpaeme, T., Kennedy, J., Ramachandran, A., Scassellati, B., Tanaka, F. (2018). Social robots for education: A review. *Science Robotics* 3(21): eaat5954. <https://doi.org/10.1126/scirobotics.aat5954>
- Costa, F., Coleman, J. A. (2013). A survey of English-medium instruction in Italian higher education. *International Journal of Multilingual Education and Multilingualism* 16(1): 3–19.
- Dearden, J. (2014). *English as a medium of instruction – a growing global phenomenon*. Oxford: British Council.
- Dorđević, J. P., Blagojević, S. N. (2019). University teachers' attitudes towards the implementation of English as a medium of instruction in Serbian higher education. *Nasleđe* 44: 153–166.
- Galloway, H., Ruegg, R. (2022). English Medium Instruction (EMI) lecturer support needs in Japan and China. *System* 105: 1012728. <https://doi.org/10.1016/j.system.2022.102728>

- Helm, F., Guarda, M. (2017). A survey of lecturers' needs and feedback on EMI training, in *Sharing perspectives on English-medium instruction, Linguistic Insights*, Vol. 222, eds. K. A. M. Guarda & F. Helm (Bern: Peter Lang): 167–194.
- Hultgren, A., K. (2014). Whose parallellingualism? Overt and covert ideologies in Danish university language policies. *Multilingua: Journal of Cross-Cultural and Interlanguage Communication* 33(1–2): 61–87.
- Hultgren, A. K., Jensen, C., Dimova, S. (2015). *English-medium instruction in European higher education: From the north to the south*. Berlin: Walter de Gruyter.
- Janković, N., Beko, L., Paris, K. (2025). LSP, CLIL & EMI: Major or minor?, in *Jezik struke: pristupi i strategije: zbornik radova* 6(4), eds. D. Đorović, M. Mirić & V. Stojičić (Beograd: Društvo za strane jezike i književnosti Srbije): 53–64. <https://doi.org/10.18485/lsp.2025.6.ch4>
- Kikuchi, H. (2024a). Transforming English Medium Instruction (EMI): The role of generative AI in overcoming EMI challenges and enhancing learning environments, in *Proceedings of EdMedia + Innovate Learning*, ed. T. Bastiaens (Brussels, Belgium: Association for the Advancement of Computing in Education (AACE)): 1046–1051. Accessed on 17 July 2025. URL <<https://www.learntechlib.org/primary/p/224625/>>.
- Kikuchi, H. (2024b). Generative AI as a tool for enhancing English Medium Instruction, in *CALL for Humanity – EUROCALL 2024 Short Papers*, eds. Y. Choubasaz, P. Díez-Arcón, A. Gimeno-Sanz, J. Hriňák, X. Liashuk, S. Pokrivčáková & H. Vančová (València: Editorial Universitat Politècnica de València): 87–97. <https://doi.org/10.4995/EuroCALL2024.2024.19027>
- Lasagabaster, D. (2022). *English-Medium Instruction in Higher Education*. Cambridge: Cambridge University Press.
- Phillipson, R. (2006). English, a cuckoo in the European higher education nest of languages? *European Journal of English Studies* 10(1): 13–32.
- Phillipson, R. (2009). English in higher education: Pancea or pandemic? in *English in Denmark: Language policy, internationalization and university teaching [Angles on the English-speaking world 9]*, ed. P. Harder (Copenhagen: Museum Tusculanum): 29–57.
- Pokrivcakova, S. (2022). Teacher trainees' attitudes towards integrating chatbots into foreign language classes. In *INTED2022 Proceedings – 16th International Technology, Education and Development Conference*, eds. L. G. Chova, A. Lopez & I. C. Torres (Valencia: IATED): 8294–8302.

- Popović, M., Vagić, M., Kuzmanović, M., Anđelković Labrović, J. (2016). Understanding heterogeneity of students' preferences towards English medium instruction: A conjoint analysis approach. *Yugoslav Journal of Operations Research* 26(1): 91–102.
- Smit, U. (2023). English-medium instruction (EMI). *ELT Journal* 77(4): 499–503. <https://doi.org/10.1093/elt/ccad018>
- Smutny, P., Schreiberova, P. (2020). Chatbots for learning: A review of educational chatbots for the Facebook Messenger. *Computers & Education* 151: 103862. <https://doi.org/10.1016/j.compedu.2020.103862>
- Winkler, R., Söllner, M. (2018). Unleashing the potential of chatbots in education: A state-of-the-art analysis. *Academy of Management Annual Meeting (AOM)* 1: 15903.
- Wollny, S., Schneider, J., Di Mitri, D., Weidlich, J., Rittberger, M., Drachsler, H. (2021). *Are We There Yet? – A Systematic Literature Review on Chatbots in Education*. *Frontiers in Artificial Intelligence* 4, Article 654924. <https://doi.org/10.3389/frai.2021.654924>
- Xu, B., Wu, L., Yuan, Y., Xian, L., Wang, W. (2025). Exploring the application of AI chatbot tools in higher education: Evidence from the Duke University student survey. *Safety Emergency Science* 1(2): 9590013. <https://doi.org/10.26599/SES.2025.9590013>
- Zawacki-Richter, O., Marín, V. I., Bond, M., Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education – where are the educators? *International Journal of Educational Technology in Higher Education* 16: 39. <https://doi.org/10.1186/s41239-019-0171-0>
- Zimotti, G., Frances, C., Whitaker, L. (2024). The future of language education: Teachers' perceptions about the surge of AI writing tools. *Technology in Language Teaching & Learning* 6(2): 1136–1136.

Milena Z. Škobo
Univerzitet Sinergija

Milena V. Šović
Univerzitet Poslovna akademija u Novom Sadu

PERSPEKTIVE UNIVERZITETSKIH NASTAVNIKA O UPOTREBI TESLINOG
ČETBOTA U IZVOĐENJU NASTAVE NA ENGLJESKOM JEZIKU: STUDIJA
SLUČAJA UNIVERZITETA SINGIDUNUM

Sažetak

Kako izvođenje nastave na engleskom jeziku postaje sve zastupljenije u visokom obrazovanju u Srbiji, posebno u programima namenjenim studentima kojima ni srpski ni engleski nisu maternji jezici, nastavnici se suočavaju sa izazovom da predavanja učine i jezički dostupnim i intelektualno podsticajnim. Podučavanje složenih akademskih sadržaja na engleskom jeziku u multikulturalnom okruženju zahteva nove pristupe koji podstiču razumevanje, motivaciju i interakciju.

Kao odgovor na te izazove, autori su pokrenuli pilot istraživanje sa ciljem da ispituju potencijal alata zasnovanih na veštačkoj inteligenciji u obrazovnom kontekstu u okviru kojeg se nastava izvodi na engleskom jeziku. Razvijen je višejezični četbot zasnovan na ličnosti Nikole Tesle, osmišljen da podstakne neformalnu konverzaciju na engleskom jeziku i omogućiti interaktivniji pristup nastavnim sadržajima. Cilj nije bio specifično učenje o Tesli, već testiranje njegove vrednosti kao pedagoškog alata u nastavi na engleskom jeziku.

Četbot je primenjen u okviru studija na engleskom jeziku na Univerzitetu Singidunum. Kvantitativno istraživanje obuhvatilo je deset nastavnika koji su koristili alat tokom nastave. Rezultati pokazuju visok stepen prihvatanja: 90% ispitanika ocenilo je četbot kao jednostavan za upotrebu, 80% kao koristan za objašnjavanje sadržaja, dok je 80–85% uočilo veću motivaciju i angažovanje studenata. Ispitanici su iskazali i spremnost da uvedu alate zasnovane na veštačkoj inteligenciji (VI) u šire nastavne tokove i izrazili interesovanje za dalji razvoj četbota. Posebno su naglašeni zahtevi za unapređenje funkcionalnosti, uključujući odgovore prilagođene kontekstu, mogućnost glasovne interakcije i integraciju multimedijalnog sadržaja. Nalazi ukazuju na potrebu za razvojem rešenja usklađenih sa specifičnim zahtevima nastavnih oblasti i jezika podučavanja.

Ovo istraživanje predstavlja prvi dokumentovani primer primene četbota u okviru kurseva i programa na kojima se nastava izvodi na engleskom jeziku u Srbiji i otvara prostor za dalja istraživanja usmerena ka razvoju alata zasnovanih na veštačkoj inteligenciji, prilagođenih različitim akademskim disciplinama. Studija ne nameće upotrebu obrazovnog četbota kao univerzalno rešenje, već ima za cilj da podstakne širu raspravu o ulozi manjih, niskobudžetnih alata zasnovanih na VI u visokom obrazovanju. Autori zastupaju stav da takvi alati mogu pružiti značajnu podršku i studentima i nastavnicima, posebno u kontekstima koji su do sada bili nedovoljno istraženi.

S obzirom na to da u Srbiji do sada nije sprovedeno nijedno empirijsko istraživanje o primeni četbotova u kursovima i programima u okviru kojih se nastava izvodi na engleskom jeziku, ovaj rad predstavlja pionirski doprinos razumevanju njihove upotrebe i potencijala u lokalnom obrazovnom kontekstu. Dobijeni nalazi upućuju na potrebu za

daljim interdisciplinarnim i institucionalno raznovrsnim istraživanjima, kako bi se razvili alati zasnovani na VI koji ne samo da obogaćuju nastavni proces, već i odgovaraju na konkretne pedagoške zahteve različitih studijskih programa.

Ključne reči: alati veštačke inteligencije, obrazovni četbotovi, Teslin četbot, kursevi na engleskom kao jeziku visokoškolske nastave, visoko obrazovanje, perspektive nastavnika, inovacije u nastavi.

Received: 4 August 2025

Accepted: 2 October 2025

V ДОДАЦИ

METODIČKI VIDICI
FILOZOFSKI FAKULTET U NOVOM SADU

PROPOZICIJE ZA TEHNIČKO UREĐENJE RADA¹

Rad se šalje u elektronskoj formi (.doc OBAVEZNO, nikako .docx) kao atačment na adresu metodicki.vidici@ff.uns.ac.rs tokom cele godine. Rad može biti pisan na svim jezicima koji se izučavaju na Filozofskom fakultetu u Novom Sadu.

* * *

Rad treba da sadrži sledeće elemente:

Ime srednje slovo prezime autora

Naziv ustanove u kojoj je autor zaposlen navodi se sledećim redom:

Univerzitet

Fakultet, Odsek/ departman/ katedra

Imejl adresa²

Orcid broj

PRIMER:

Petra B. Nedeljković

Univerzitet u Novom Sadu

Filozofski fakultet, Odsek za anglistiku

petranedeljkovic@ff.uns.ac.rs

<https://orcid.org/0000-0000-0000-0000>

UKOLIKO JE AUTOR STUDENT DOKTORSKIH STUDIJA, AFILIJACIJU NAVODI OVAKO:

Univerzitet u Novom Sadu

Filozofski fakultet

Doktorske studije filozofije / jezika i književnosti / istorije / sociologije / pedagogije itd.

Imejl adresa

¹ Molimo Vas da ovaj dokument koristite kao obrazac.

² Navodi se isključivo poslovna imejl adresa.

NASLOV RADA³

APSTRAKT: Apstrakt rada na jeziku na kome je rad. Apstrakt pisati fontom Times New Roman, veličine 10, sa uvučenom levom ivicom ispod naslova rada, jednostruki prored. Apstrakt treba da ima 100–150 reči.

Ključne reči: ključne reči napisati u nastavku apstrakta u novom redu; navesti najviše 10 ključnih reči.

TITLE OF THE PAPER

ABSTRACT: The same abstract as in Serbian above, translated into English. Font Times New Roman, point 10, single spacing, 100–150 words long.

Keywords: translated from Serbian.

Tekst rada; dužina rada 4.000–7.000 reči (uključujući apstrakt, literaturu i sažetak na stranom jeziku); veličina strane A4; font Times New Roman; veličina slova 12; prored 1,5; fusnote⁴; kraći citati se navode u tekstu u kontinuitetu, a duži citati (3 ili više redova) se izdvajaju iz teksta (nov red, uvučeno 1,5 cm, pod navodnicima); izvori citata daju se u zagradama u samom tekstu rada – neophodni podaci su prezime autora, godina izdanja i strana, npr. (Filipović 1986: 25). Ako se u zagradi navodi više autora, redosled izvora je hronološki (Johnson 1987; Peters 1998; Tomašević 2001). Rad treba da bude podeljen na numerisane odeljke (npr. 1. UVOD – sve velikim slovima) i pododeljke (npr. 3.1. *Opis uzorka* – početno veliko slovo, kurziv). Radovi koji se bave stranim jezicima i književnostima pišu se na engleskom ili na jeziku o kojem je reč.

ILUSTRACIJE I TABELE

Tekst u tabelama i grafikonima: font Times New Roman, veličina 10, normal.

³ Neophodno je naznačiti da li je pripremljen rad sa nekog projekta, npr. Ministarstva za obrazovanje, nauku i tehnološki razvoj Republike Srbije.

Ukoliko je rad zasnovan na seminarskom radu sa doktorskih studija, ili je deo nekog drugog seminarskog, masterskog rada ili doktorata, potrebno je u fusnoti navesti i tu informaciju.

⁴ U fusnotama daju se komentari i napomene autora.

Legenda ispod ilustracija (grafički prikazi, slike): font Times New Roman, veličina 10, normal, centralno poravnanje, oznaka: Tabela 1, Slika 1, Grafikon 1 i sl.

IZVORI I LITERATURA⁵

Times New Roman 12, prored 1,5, uvučena donja ivica (hanging indent 1,25 cm). Donja ivica se ne sme uvlačiti tabom ili razmacima, već u Paragraph obeležiti hanging indent.

U spisku literature se nalaze samo izvori koji su u radu eksplicitno navedeni. Prvo se navode korišćeni izvori, a zatim spisak korišćene literature, u dva odvojena odeljka: IZVORI i LITERATURA. Ako je rad pisan latinicom (na srpskom ili stranom jeziku), prvo se navode latinične jedinice, a zatim ćirilične, a ako je pisan ćirilicom (na srpskom ili stranom jeziku), prvo ćirilične jedinice, a zatim latinične. U oba slučaja ćirilične jedinice transliterovati na latinicu u uglastim zagradama.

Knjiga:

Radovanović, M. (1986). *Sociolingvistika*. Novi Sad: Književna zajednica Novog Sada – Dnevnik.

Бечановић, Б., Јеврић, Ј., Петровић, З. (2011). *Историја 7: уџбеник за седми разред основне школе*. Београд: Клетт. [Bečanović, B., Jevrić, J., Petrović, Z. (2011). *Istorija 7: udžbenik za sedmi razred osnovne škole*. Beograd: Klett.]

Rad u časopisu:

Reynolds, S. (1983). Medieval origins: Gentium and the community of the realm. *History* 68: 375–390.

Radovanović, M. (2012). O logici jezičke promene. *Glas* 28: 29–42.

Filipović, J., Vučo, J., Đurić, Lj. (2007). Critical review of language education policies in compulsory primary and secondary education in Serbia. *Current issues in language planning* 8 (1): 222–242.

Rad u monografskoj publikaciji:

Sperber, D. (1990). The epidemiology of beliefs, in *The social psychological study of widespread beliefs*, ed. C. Fraser & G. Gaskell (Oxford: Clarendon Press): 25–44.

⁵ Literatura (bibliografija, izvori) se navodi uz poštovanje APA standarda.

Radovanović, M. (2015). Predrag Piper o jeziku i prostoru, u *U prostoru lingvističke slavistike*, ur. Lj. Popović, D. Vojvodić, M. Nomaći (Beograd: Filološki fakultet): 25–34.

Elektronska izdanja:

Limb, P. (1992). Alliance strengthened or diminished?: Relationships between labour & African nationalist/liberation movements in Southern Africa. Pristupljeno 7. 5. 2010. URL: <http://neal.ctstateu.edu/history/world_history/archives/limb-l.html>.

Beelen, J., & Jones, E. (2015). Redefining internationalisation at home, in *The European higher education area*, eds. A. Curaj, L. Matei, R. Pricopie, J. Salmi, P. Scott (Cham: Springer). https://doi.org/10.1007/978-3-319-20877-0_5

Publikacije u rukopisu:

Ilić Rajković A. (2013). Radna škola u Srbiji (1880–1940) (doktorska disertacija). Beograd: Filozofski fakultet.

Ime i prezime

Naziv ustanove na engleskom⁶

NASLOV RADA NA ENGLESKOM

Summary

Rezime rada (na engleskom jeziku); Font Times New Roman, veličina slova 10, jednostruki prored. Rezime treba da bude proširena verzija apstrakta (oko 300 reči).

Keywords: prevedene ključne reči sa početka rada.

Biografija autora do 100 reči na srpskom jeziku (datum rođenja, profesija, mesto/država stanovanja, uža naučna oblast, glavne publikacije).

RADOVI KOJI NE BUDU POŠTOVALI TEHNIČKA UPUTSTVA BIĆE VRAĆENI AUTORU NA DORADU.

⁶ Navodi se skraćena afilijacija, tj. ime i prezime autora i samo naziv i sedište univerziteta.

METODIČKI VIDICI (Methodological Perspectives)
FACULTY OF PHILOSOPHY, NOVI SAD

STYLESHEET¹

The paper can be submitted no throughout the entire year in the electronic form as an email attachment (.doc, NOT .docx) to metodicki.vidici@ff.uns.ac.rs. The paper can be written in all the languages studied at the Faculty of Philosophy in Novi Sad.

* * *

The paper has to have the following elements:

Name Middle Initial Surname of the author

Affiliation in the following order

University

Faculty, Department

Email address²

Orcid

EXAMPLE:

Petra B. Nedeljković

Univerzitet u Novom Sadu

Filozofski fakultet, Odsek za anglistiku

petranedeljkovic@gmail.com

<https://orcid.org/0000-0000-0000-0000>

IF THE AUTHOR IS A DOCTORAL STUDENT, THE AFFILIATION IS LISTED IN THE FOLLOWING ORDER:

University of Novi Sad

Faculty of Philosophy

PhD Studies of Philosophy / Language and Literature / History / Sociology /

Pedagogy etc.

E-mail address

¹ Please use this document as a template.

² The authors should give only their institutional email address.

TITLE OF THE PAPER³

ABSTRACT: Abstract and key words (in the language of the paper). Font Times New Roman, size 10, with the indent below the title, line spacing 1. The abstract should be 100–150 words long.

Keywords: cite the keywords after the abstract, new line; cite up to 10 words.

TITLE OF THE PAPER IN SERBIAN

APSTRAKT: Abstract in Serbian, translated from English, the same as the English version above.

Ključne reči: Keywords in Serbian, the same as above.

Text of the paper; length 4.000–7.000 words (including the abstract, references and the summary in Serbian); size A4; font Times New Roman; font size 12; spacing 1.5; footnotes;⁴ short citations are kept in-text and longer citations (3 or more lines) are separated from the text (new line, 1.5 cm indent); citation sources (author's surname, year of publication and page number) are given in brackets e.g. (Filipović 1986: 25). If more than one source is listed in the parentheses, the order is chronological (Johnson 1987; Peters 1998; Tomašević 2001). The paper should have numbered sections (e.g. 1. INTRODUCTION – all caps) and subsections (e.g. 3.1. *Research sample* – initial capital, italics). Papers that focus on foreign languages and literatures should be written in English or in the language which is analyzed.

ILLUSTRATIONS AND TABLES

Text in diagrams and tables: Font Times New Roman, size 10, normal.

Caption under illustrations (graphs, images): Font Times New Roman, size 10, normal, central alignment, marked as: Table 1, Image 1, Diagram 1, etc.

³ It is necessary to note if the paper is part of a project (e.g. Ministry of Education, Science and Technological Development). If the paper is based on a seminar paper, an MA thesis or a PhD thesis, this piece of information should be stated in the footnote.

⁴ Footnotes should contain only the author's comments.

SOURCES AND REFERENCES⁵

Times New Roman 12, spacing 1.5, hanging indent. Ordered alphabetically.

The list should contain only the sources that were explicitly mentioned in the paper.

The author should first list all sources and then references in two separate segments: SOURCES and REFERENCES. If the paper is written in Latin alphabet (in Serbian or a foreign language), the author should first list all sources written in Latin alphabet and then those in Cyrilic. If the paper is written in Cyrilic alphabet (in Serbian or a foreign language), the author should first list all sources written in Cyrilic alphabet and then those in Latin.

Books:

Radovanović, M. (1986). *Sociolingvistika*. Novi Sad: Književna zajednica Novog Sada – Dnevnik.

Бечановић, Б., Јеврић, Ј., Петровић, З. (2011). *Историја 7: уџбеник за седми разред основне школе*. Београд: Клет.

Papers in journals:

Reynolds, S. (1983). Medieval Origins: Gentium and the Community of the Realm. *History* 68: 375–390.

Radovanović, M. (2012). O logici jezičke promene. *Glas* 28: 29–42.

Filipović, J., Vučo, J., Đurić, Lj. (2007). Critical review of language education policies in compulsory primary and secondary education in Serbia. *Current Issues in Language Planning* 8 (1): 222–242.

Papers in proceedings:

Sperber, D. (1990). The Epidemiology of Beliefs, in *The Social Psychological Study of Widespread Beliefs*, ed. C. Fraser & G. Gaskell (Oxford: Clarendon Press): 25–44.

Radovanović, M. (2015). Predrag Piper o jeziku i prostoru, in *U prostoru lingvističke slavistike*, ur. Lj. Popović, D. Vojvodić, M. Nomaći (Beograd: Filološki fakultet): 25–34.

⁵ References are listed alphabetically after the APA standard.

Electronic publications:

Limb, P. (1992). *Alliance Strengthened or Diminished?: Relationships between Labour & African Nationalist/Liberation Movements in Southern Africa*. Accessed on 7. May 2010. URL: <http://neal.ctstateu.edu/history/world_history/archives/limb-l.html>.

Beelen, J., & Jones, E. (2015). Redefining internationalisation at home, in *The European higher education area*, eds. A. Curaj, L. Matei, R. Pricopie, J. Salmi, P. Scott (Cham: Springer). https://doi.org/10.1007/978-3-319-20877-0_5

Manuscripts:

Ilić Rajković A. (2013). *Radna škola u Srbiji (1880–1940)* (doktorska disertacija). Beograd: Filozofski fakultet.

Author's name and surname

Affiliation in Serbian⁶

TITLE OF THE PAPER IN SERBIAN

Sažetak (in Serbian)⁷

Summary of the paper in Serbian; Font Times New Roman, font size 10, single spacing. The summary should be an extended version of the abstract (up to 300 words).

Keywords: keywords from the beginning of the article, translated in Serbian.

Author's biography of up to 100 words in Serbian (date of birth, profession, town/country of residence, field of interest, main publications).

PAPERS THAT DO NOT FOLLOW THE STYLESHEET SHALL BE RETURNED TO THE AUTHOR FOR CORRECTION.

⁶ The author should give the short version of their affiliation, i.e. only their name, the name of the university and its seat.

⁷ The authors who do not speak Serbian will be provided a translation of their summary into Serbian. They just have to send a summary of cca. 300 words in the language of the paper.

METODIČKI VIDICI (Methodische Perspektiven)
PHILOSOPHISCHE FAKULTÄT NOVI SAD, NOVI SAD

HINWEISE ZUR FORMATIERUNG DER AUFSÄTZE¹

Sie können uns Ihre Aufsätze ganzjährig in elektronischer Form (NUR DOC-Format, DOCX-Format ist nicht zulässig) als E-Mail-Anhang über die E-Mail-Adresse metodicki.vidici@ff.uns.ac.rs zukommen lassen. Der Aufsatz kann in allen Sprachen verfasst werden, die an der Philosophischen Fakultät angeboten werden.

* * *

Der Aufsatz soll folgende Elemente enthalten:

Vorname, Anfangsbuchstabe des Vaters- oder Muttersnamens, Familienname des Autors

Der Name der Institution, an der der Autor tätig ist, wird in der folgenden Reihenfolge angegeben

Universität

Fakultät, Abteilung

E-Mail Adresse²

Orcid

BEISPIEL:

Petra B. Nedeljković

Univerzitet u Novom Sadu

Filozofski fakultet, Odsek za anglistiku

petranedeljkovic@gmail.com

<https://orcid.org/0000-0000-0000-0000>

HANDELT ES SICH BEI AUTOREN UM DOKTORANDEN, WIRD DIE AFFILIATION AUF FOLGENDE WEISE ANGEGEBEN:

Universität Novi Sad

Philosophische Fakultät

Doktorstudium der Philosophie/ Sprache und Literatur/ Soziologie/

Erziehungswissenschaft

E-Mail-Adresse

¹ Verwenden Sie bitte dieses Dokument als Vorlage zur Gestaltung Ihres Manuskripts.

² Es soll ausschließlich Geschäfts-E-Mail-Adresse angegeben werden.

TITEL DES AUFSATZES³

ABSTRACT: Abstract des Aufsatzes (ca. 100-150 Wörter) und die Stichwörter werden in der Sprache des Artikels verfasst. Font Times New Roman (10pt), mit dem Einzug unter dem Titel, einzelzeiliger Zeilenabstand.

Stichwörter: im Anschluss an Abstract sollten sie in der neuen Zeile geschrieben (bis 10 Stichwörter).

TITEL DES AUFSATZES AUF ENGLISCH

ABSTRACT: Abstract des Aufsatzes soll auf Englisch übersetzt werden - Font Times New Roman (10pt), mit dem Einzug unter dem Titel, einzelzeiliger Zeilenabstand, ca. 100-150 Wörter.

Keywords: übersetzt auf Englisch.

Der Text des Aufsatzes; Länge zwischen 4000-7000 Wörter (einschließlich des Abstracts, der Literatur und der Zusammenfassung auf Serbisch); Papierformat A4, Font Times New Roman (12pt); Zeilenabstand 1,5; Fußnoten⁴; kürzere Zitate werden im Text behalten, längere Zitate (3 oder mehrere Zeilen) werden vom Text getrennt (neue Zeile, Einzug 1,5 cm, in Anführungszeichen); Die Quellen für Zitate werden im Text in Klammern angegeben – notwendige Informationen sind der Name des Autors, Erscheinungsjahr und Seite, zum Beispiel (Filipovic 1986: 25). Der Artikel soll in Abschnitten eingeteilt werden (zum Beispiel 1. DIE EINFÜHRUNG – Großbuchstaben) und Unterabschnitten (zum Beispiel 3.1 Untersuchungsprobe – große Anfangsbuchstaben).

Aufsätze, die sich mit einer Fremdsprache und deren Literatur befassen, sollten auf Englisch oder in der jeweiligen Fremdsprache verfasst werden.

³ Es ist notwendig anzugeben, wenn der Aufsatz das Ergebnis eines Projekts ist. Falls es sich beim Aufsatz um eine Seminararbeit handelt, die im Rahmen eines Master- oder Doktorstudiums verfasst wurde oder falls der Aufsatz selbst ein Teil einer Master- oder Doktorarbeit ist, sollte dies in der Fußnote angegeben werden.

⁴ Fußnoten enthalten nur Kommentare und Anmerkungen des Autors.

ILLUSTRATIONEN UND TABELLEN

Beschriftung graphischer Darstellungen (Tabellen und Diagramme):
Schrift Times New Roman, 10 pt, normal.

Legenden unter Diagrammen oder Bildern: Schrift Times New Roman, 10 pt, normal, zentriert, Bezeichnung: Tabelle 1, Bild 1, Diagramm 1 usw.

QUELLEN UND LITERATUR⁵

Times New Roman (pt 12), Zeilenabstand 1,5, hängender Einzug.

Im Literaturverzeichnis werden nur Quellen angegeben, die im Artikel explizit erwähnt wurden. Zuerst werden benutzte Quellen angegeben, und anschließend die benutzte Literatur und zwar in zwei getrennte Abschnitte: QUELLEN UND LITERATUR. Wenn der Aufsatz in lateinischer Schrift verfasst wurde (auf Serbisch oder in einer Fremdsprache), sollten zuerst die Quellen in lateinischer und dann in kyrillischer Schrift angegeben werden. Wenn der Aufsatz in kyrillischer Schrift verfasst wurde (auf Serbisch oder in einer Fremdsprache), sollten zuerst die Quellen in kyrillischer und danach in lateinischer Schrift angegeben werden.

Bücher:

Radovanović, M. (1986). *Sociolingvistika*. Novi Sad: Književna zajednica Novog Sada – Dnevnik.

Бечановић, Б., Јеврић, Ј., Петровић, З. (2011). *Историја 7: уџбеник за седми разред основне школе*. Београд: Клет.

Zeitschriftenaufsatz:

Reynolds, S. (1983). Medieval Origins: Gentium and the Community of the Realm. *History* 68: 375–390.

Radovanović, M. (2012). O logici jezičke promene. *Glas* 28: 29–42.

Filipović, J., Vučo, J., Đurić, Lj. (2007). Critical review of language education policies in compulsory primary and secondary education in Serbia. *Current Issues in Language Planning* 8 (1): 222–242.

⁵ Das Literaturverzeichnis wird alphabetisch nach Namen der Autoren geordnet, mit der Einhaltung des APA Standards.

Monographien:

Sperber, D. (1990). The Epidemiology of Beliefs, in *The Social Psychological Study of Widespread Beliefs*, ed. C. Fraser & G. Gaskell (Oxford: Clarendon Press): 25–44.

Radovanović, M. (2015). Predrag Piper o jeziku i prostoru, in *U prostoru lingvističke slavistike*, ur. Lj. Popović, D. Vojvodić, M. Nomaći (Beograd: Filološki fakultet): 25–34.

Internet-Dokument:

Limb, P. (1992). Alliance Strengthened or Diminished?: Relationships between Labour & African Nationalist/Liberation Movements in Southern Africa. Zugriff am 7. 5. 2010. URL: <http://neal.ctstateu.edu/history/world_history/archives/limb-l.html>.

Vorname und Name

Name der Institution auf Serbisch⁶

TITEL DES AUFSATZES AUF SERBISCH

Zusammenfassung (auf Serbisch)⁷

Die Zusammenfassung des Aufsatzes soll auf Serbisch verfasst werden, Font Times New Roman (10pt), einzeliger Zeilenabstand. Die Zusammenfassung soll eine erweiterte Version des Abstracts sein (ca. 300 Wörter).

Stichwörter: Stichwörter vom Anfang des Aufsatzes in der serbischen Übersetzung.

Biographie des Autors bis 100 Wörter auf Serbisch (Geburtsdatum, Beruf, Wohnort/Land, Forschungsgebiet, wichtigste Publikationen)

AUFSÄTZE, DIE DIESE AUTORENHINWEISE NICHT BERÜCKSICHTIGEN, WERDEN ZUR ÜBERARBEITUNG AN DIE AUTOREN ZURÜCKGESCHICKT.

⁶ Der Autor sollte seine Affiliation in Kurzform angeben, also nur seinen Namen, den Namen der Universität und deren Sitz.

⁷ Die Redaktion wird die Zusammenfassungen der Autoren ohne Serbischkenntnisse übersetzen lassen.

METODIČKI VIDICI (Perspectives didactiques)
FACULTÉ DE PHILOSOPHIE, NOVI SAD

CONSIGNES AUX AUTEURS¹

Les contributions doivent être soumises sous forme électronique (obligatoirement au format .doc, dans aucun cas au format .docx) et envoyées en pièce jointe à l'adresse suivante : metodicki.vidici@ff.uns.ac.rs au cours de toute l'année. Les contributions peuvent être écrites dans toutes les langues étudiées à la Faculté de Philosophie de l'Université de Novi Sad.

* * *

Chaque contribution doit contenir les éléments suivants :

Prénom, initiale du prénom d'un des parents, nom de l'auteur

Affiliation de l'auteur devrait être donnée comme ci-dessous :

Université

Faculté, Département

Adresse électronique²

Orcid

EXEMPLE:

Petra B. Nedeljković

Univerzitet u Novom Sadu

Filozofski fakultet, Odsek za anglistiku

petranedeljkovic@gmail.com

<https://orcid.org/0000-0000-0000-0000>

SI L'AUTEUR EST UN DOCTORANT, L'AFFILIATION DEVRAIT ÊTRE
DONNÉE COMME CI-DESSOUS :

Université

Faculté, Département

Études doctorales en philosophie / en langue et littérature / en histoire / en sociologie /
en pédagogie, etc.

Adresse électronique

¹ Veuillez utiliser ce document comme modèle.

² Veuillez indiquer uniquement l'adresse électronique professionnelle.

TITRE DE LA CONTRIBUTION³

ABRÉGÉ: Abrégé et mots-clés (en langue originale du texte de la contribution). Police de caractères Times New Roman, 10 points, retrait positif de première ligne au-dessous du titre, interligne simple. L'abrégé doit contenir entre 100 et 150 mots.

Mots-clés: écrire les mots-clés à la ligne, dans la suite de l'abrégé; citer au maximum 10 mots-clés.

TITLE OF THE PAPER IN ENGLISH

ABSTRACT: The same abstract as above, translated into English. Font Times New Roman, point 10, single spacing, 100–150 words long.

Keywords: translated from French.

Texte de la contribution ; longueur du texte entre 4.000 et 7.000 mots (y compris l'abrégé, la bibliographie et le résumé en langue étrangère) ; format de papier A4 ; police de caractères Times New Roman ; 12 points ; interligne 1,5 ; des notes de bas de page⁴ ; les citations courtes sont intégrées au corps du texte tandis que les citations longues (3 lignes ou plus) sont présentées en paragraphe indépendant (à la ligne, un retrait positif de 1,5 cm) ; les références des citations (nom de l'auteur, année de l'édition et numéro de page) sont incorporées dans le texte, entre parenthèses, par ex. (Filipović 1986: 25). Le texte de la contribution doit être réparti en sections (par ex. 1. INTRODUCTION – avec un titre de section en majuscules) et en sous-sections (par ex. 3.1. Échantillon de recherche – avec majuscule initiale). Les contributions portant sur les langues et les littératures étrangères doivent être rédigées soit en anglais soit dans la langue étrangère analysée.

³ Il est nécessaire de noter si une contribution fait partie d'un projet de recherche particulier (par exemple, du Ministère de l'Éducation, de la Science et du Développement technologique de la République de Serbie). S'il s'agit d'une contribution issue d'un travail de séminaire fait au cours des études de master ou des études doctorales, d'un mémoire de master ou d'une thèse de doctorat, cette information doit être indiquée dans une note en bas de page.

⁴ Les notes de bas de page ne sont réservées qu'aux commentaires des auteurs.

ILLUSTRATIONS ET TABLES

Le texte dans les illustrations graphiques (tables, schémas) : police de caractères Times New Roman ; 10 points ; normal.

Les légendes au-dessous des illustrations (illustrations graphiques, images) : police de caractères Times New Roman ; 10 points ; normal ; centré ; titre : Table 1, Image 1, Graphique 1, etc.

SOURCES ET RÉFÉRENCES BIBLIOGRAPHIQUES⁵

Times New Roman 12, interligne 1,5, retrait négatif de première ligne.

La liste des sources et des références bibliographiques doit contenir seulement celles explicitement citées dans la contribution. L'auteur devrait d'abord répertorier toutes les sources puis les références bibliographiques utilisées dans sa contribution dans deux sections séparées : SOURCES et RÉFÉRENCES BIBLIOGRAPHIQUES. Si une contribution est écrite en alphabet latin (en serbe ou dans une langue étrangère), l'auteur devrait d'abord lister toutes les références écrites en alphabet latin, puis celles en cyrillique. Si une contribution est écrite en alphabet cyrillique (en serbe ou dans une langue étrangère), l'auteur devrait d'abord lister toutes les références écrites en alphabet cyrillique [avec une translittération en alphabet latin entre crochets], puis celles en alphabet latin.

Un ouvrage :

Radovanović, M. (1986). *Sociolingvistika*. Novi Sad: Književna zajednica Novog Sada – Dnevnik.

Бечановић, Б., Јеврић, Ј., Петровић, З. (2011). *Историја 7: уџбеник за седми разред основне школе*. Београд: Клет.

Un article de périodique :

Reynolds, S. (1983). Medieval Origins: Gentium and the Community of the Realm. *History* 68: 375–390.

Radovanović, M. (2012). O logici jezičke promene. *Glas* 28: 29–42.

Filipović, J., Vučo, J., Đurić, Lj. (2007). Critical review of language education policies in compulsory primary and secondary education in Serbia. *Current Issues in Language Planning* 8 (1): 222–242.

⁵ Il faut donner les références bibliographiques dans l'ordre alphabétique, en respectant les normes de l'APA.

Un article dans un recueil :

Sperber, D. (1990). The Epidemiology of Beliefs, dans le *The Social Psychological Study of Widespread Beliefs*, ed. C. Fraser & G. Gaskell (Oxford: Clarendon Press): 25–44.

Des éditions électroniques :

Limb, P. (1992). Alliance Strengthened or Diminished?: Relationships between Labour & African Nationalist/Liberation Movements in Southern Africa. Consulté le 7. avril 2010. URL: <http://neal.ctstateu.edu/history/world_history/archives/limb-l.html>.

Prénom et nom de l’auteur

Affiliation en serbe⁶

TITRE DE LA CONTRIBUTION EN SERBE

Sažetak (en serbe)⁷

Résumé en serbe ; police de caractères Times New Roman, 10 points, interligne simple. Le résumé doit être une version élargie de l’abrégé (d’environ 300 mots).

Mots-clés: mots-clés de l’abrégé de la contribution, traduits en serbe.

Biographie de l’auteur de 100 mots au maximum en serbe (date de naissance, profession, ville/pays de domicile, domaine scientifique, publications principales).

LES CONTRIBUTIONS NE RESPECTANT PAS LES CONSIGNES TECHNIQUES DONNÉES CI-DESSUS SERONT RENDUES À L’AUTEUR POUR UN REMANIEMENT.

⁶ L’auteur devrait donner une version abrégée de son affiliation, c’est-à-dire uniquement son prénom et son nom, le nom de l’université et son siège.

⁷ Si les auteurs ne parlent pas serbe, la rédaction s’engage de faire la traduction de leurs résumés. Dans ce cas-là, les auteurs doivent envoyer leurs résumés d’environ 300 mots en langue originale de la contribution.

БИОГРАФСКИ ПОДАЦИ О АУТОРИМА

Аница Р. Радосављевић Крсмановић (рођена 8. октобра 1984) запослена је на Филолошко-уметничком факултету Универзитета у Крагујевцу у звању доцента за ужу научну област Методика наставе енглеског језика. Њена научна интересовања обухватају примењену лингвистику и методику наставе енглеског језика, укључујући индивидуалне карактеристике у процесу учења страних језика. Објавила је више десетина радова у домаћим и међународним зборницима и часописима и учествовала на више домаћих и међународних научних конференција. Живи у Крагујевцу, у Србији.

Бранка Л. Миленковић (рођена 13. децембра 1976) запослена је на Филолошко-уметничком факултету Универзитета у Крагујевцу у звању доцента за ужу научну област Методика наставе енглеског језика. Научна интересовања аутора обухватају области примењене лингвистике, методике наставе енглеског језика, академског писања и академског дискурса, у оквиру којих је објавила преко 30 научних радова у националним и интернационалним зборницима и часописима. Учествовала је на бројним националним и међународним конференцијама, у међународним рецензентским комисијама за избор награђених научних радова. Члан је више међународних асоцијација и учесник у бројним стручним обукама и међународним пројектима. Живи у Крагујевцу.

Весна Ж. Богдановић (рођена 24. октобра 1975). Докторирала је филолошке науке на Филозофском факултету у Новом Саду. Запослена је као редовни професор на Факултету техничких наука Универзитета у Новом Саду, где више од двадесет пет година предаје предмете из области енглеског језика струке и академског енглеског језика. Ауторка је и коауторка научних радова из области метадискурса, анализе и евалуације уџбеника, монографије о метадискурсу и неколико уџбеника енглеског језика струке за студенте грађевинарства и студенте графичког инжењерства и дизајна. Области њених интересовања обухватају анализу квалитетних и прагматично усмерених уџбеника енглеског језика струке, проучавање различитих категорија метадискурса и прагматичне аспекте академског енглеског језика. У новије време интересовање јој је усмерено на енглески као

језик високообразовне наставе (ЕЈВИН) и процес интернационализације високошколских установа.

Даница М. Јеротијевић Тишма (рођена 19. септембра 1985, Јагодина) дипломирала је на Филолошко-уметничком факултету у Крагујевцу 2009. године, где и данас ради као ванредна професорка за ужу научну област Енглески језик и лингвистика. Докторат из области Фонетике и фонологије одбранила је 2017. године на матичном факултету. Највише је интересују фонетика и фонологија енглеског и српског, али и других светских језика. Објавила је више десетина радова из области фонетике, међујезичке фонологије, примењене и контрастивне лингвистике и учествовала на више домаћих и међународних научних конференција. Ауторка је уџбеника и монографије из области англистичке лингвистике.

Дејан М. Каравесовић (рођен 28. марта 1977) је доцент на ФИЛУМ-у. Његове главне области интересовања обухватају синтаксу и семантику енглеских глаголских облика, контрастивну анализу енглеског и српског језика, како у теоријском домену, тако и у домену примењене лингвистике, али и теме везане за интернационализацију у високом образовању и употребу енглеског језика у наставне сврхе. Објавио је бројне радове из теоријске лингвистике у реномираним часописима лингвистичке тематике и тематским зборницима са међународних научних скупова. Живи у Крушевцу.

Драгана М. Гак (рођена 27. септембра 1975, Сомбор) је докторирала на Филозофском факултету у Новом Саду, где је завршила и основне и магистарске студије. Запослена је као доцент на Факултету техничких наука, где држи курсеве општег и пословног енглеског језика. Области њеног интересовања су: метадискурс у пословном енглеском језику, академско писање, пословна комуникација у индустријском инжењерству, ЕЈВИН и интернационализација универзитета. Ауторка је и коауторка већег броја радова и учесница неколико регионалних научних пројеката.

Драгана Д. Илић (рођена 24. августа 1971, Београд) је дипломирала енглески језик и књижевност и завршила мастер студије на Филолошком факултету. Од 1998. године предаје енглески језик струке на Шумарском факултету Универзитета у Београду, а од 2003. до 2021. предавала је пословни енглески у Високој хотелијерској школи. Ауторка је уџбеника *Learn about Trees* (2012) и *Planting the seeds of*

knowledge (2023) прилагођених студентима шумарских струка. Бави се превођењем и сарађује са часописима *Шумарство* и *Одржливо шумарство*. Од 2014. године ангажована је у Министарству просвете као председница испитних комисија за лиценце наставника енглеског језика. Њена истраживачка интересовања обухватају енглески језик струке, методику наставе и израду наставних материјала.

Зора Д. Трнинић (рођена 29. априла 1977) предаје страни језик за економисте на Економском факултету у Суботици Универзитета у Новом Саду. У својим истраживањима бави се унапређењем наставе страног језика сазнањима из примењене лингвистике, усложњавањем језичког система одраслих и применом лингвистичких увида у области економије. Неке од публикација су и следеће: Trninić, Z. (2023). Creating effective brand names with sound symbolic mappings. *Strategic Management*. Faculty of Economics in Subotica, University of Novi Sad; Trninić, Z. (2023). Applying cognitive approach to teaching prepositions in business English: a case study. *The Annals of the Faculty of Economics in Subotica*.

Ивана Д. Мишкељин (рођена је 21. априла 1979, Зрењанин) је звање професора енглеског језика и књижевности стекла 2003. године на Филозофском факултету Универзитета у Новом Саду, где је и магистрирала 2007. године и докторирала из области теоријске лингвистике 2016. Ванредна је професорка за ужу научну област Лингвистичке науке – Енглески језик на Одсеку за језик и књижевност Педагошког факултета у Сомбору, Универзитет у Новом Саду. Области њених интересовања су теоријска и контрастивна лингвистика и методика наставе енглеског језика.

Јагода П. Топалов (рођена 27. 7. 1981, Сомбор) ванредна професорка на Одсеку за англистику на Филозофском факултету у Новом Саду, где предаје курсеве из области методике наставе енглеског језика и језичких вештина. У средишту њеног истраживања су настава и учење енглеског као страног у контексту индивидуалних разлика, с фокусом на афективне факторе. Тежиште њеног истраживања чине и истраживачке парадигме, методе и технике применљиве у методици наставе енглеског. Самостално и у коауторству објавила је три монографије (*Мотивација у настави страног језика, Истраживања афективних фактора у високообразовном образовању и Читање на страном језику – улога саморегулације у разумевању текста*).

Катарина О. Лазих (рођена 27. јануара 1977, Београд) дипломирала је на Катедри за енглески језик и књижевност Филолошког факултета у Београду (2001). Радилa је као предавачица енглеског језика струке на Шумарском факултету (2008–2010), а потом одбранила мастерску тезу (2010) и докторску дисертацију (2017) на Филолошком факултету у Београду на тему учесталих лексичких спојева у енглеском језику биотехничких наука. Од 2011. године координира међународну сарадњу на Шумарском факултету, где такође предаје енглески језик струке и сарађује са часописом *Гласник Шумарског факултета*. Коауторка је једног терминолошког речника и универзитетског уџбеника. Изабрана је за доцента 2019, а за ванредног професора 2024. године. Њена истраживачка интересовања крећу се у области енглеског језика струке, корпусне и когнитивне лингвистике и примене резултата корпусних истраживања у настави.

Љиљана Ј. Кнежевић (рођена 29. марта 1972, Нови Сад) је звање професора енглеског језика и књижевности стекла је 1996. године на Филозофском факултету Универзитета у Новом Саду. На истом факултету магистрирала је 2002. године и одбранила докторску дисертацију из области примењене лингвистике 2013. године. Ванредна је професорка на Природно-математичком факултету Универзитета у Новом Саду, где предаје енглески језик струке и науке. Област њеног интересовања су настава енглеског као страног језика, настава језика струке, академски енглески језик и развијање академских вештина. Ауторка је два универзитетска уџбеника и једне монографије, као и низа истраживачких радова.

Милена В. Шовић (рођена 3. октобра 1977) ради као стратег за вештачку интелигенцију и промпт инжењер. Тренутно похађа докторске студије из области бизниса и економије на Факултету за економију и инжењерски менаџмент у Новом Саду. Ужа научна област јој је примена вештачке интелигенције у економији, образовању и култури. Искуство је стекла као професор математике на више колеца у САД, где је примењивала вештачку интелигенцију у настави. Коауторка је радова *The impact of artificial intelligence on the economic productivity of enterprises* и *The digital Doppelgängers of Nikola Tesla and Branislav Nušić*. Живи у Сједињеним Америчким Државама.

Милена З. Шкобо (рођена 18. августа 1986, Београд) докторирала је на Филолошком факултету Универзитета у Београду на смеру Језик,

књижевност, култура, где је завршила и основне и мастер студије. Њена ужа научна област је англофона књижевност, а посебно се бави применом вештачке интелигенције у настави језика и књижевности. Ауторка је више од 50 научних радова и 2 универзитетска уџбеника под називом *A Glimpse into Victorian Literature with a Study Guide* (2021) и *Modernism in English Literature with a Study Guide* (2024). Рецензенткиња је Националног тела за акредитацију ВШУ Србије (НАТ), Агенције за високо образовање Р. Српске и стручњак у области акредитације ВШУ у БиХ.

Мирна М. Видаковић (рођена 6. новембра 1976) је тренутно у звању доцента на предмету Енглески језик за економисте на Економском факултету у Суботици, Универзитет у Новом Саду. У погледу научног рада, њена интересовања обухватају следеће области: страни/енглески језик струке, методику наставе, употребу информационих технологија у настави, кооперативно учење у интернационалном окружењу, стручно усавршавање наставника и сл. Учествовала је у бројним конференцијама и има објављене радове у домаћим и међународним часописима. 2025. године је објавила монографију под називом *Настава пословног енглеског језика у терцијарном образовању* у издању Филозофског факултета у Новом Саду.

УНИВЕРЗИТЕТ У НОВОМ САДУ
ФИЛОЗОФСКИ ФАКУЛТЕТ НОВИ САД

21000 Нови Сад
Др Зорана Ђинђића бр. 2
www.ff.uns.ac.rs

Штампа
Сајнос
Нови Сад

Тираж
100

CIP - Каталогизација у публикацији
Библиотека Матице српске, Нови Сад

371.3:80/82
316.77

Методички видици: часопис за методику филолошких и других друштвено-хуманистичких предмета / главни и одговорни уредник Биљана Радић-Бојанић. - 2010, бр. 1- . - Нови Сад: Филозофски факултет, 2010- - 22 cm

Годишње.
ISSN 2334-7465 (Online)
ISSN 2217-415X (Штампано изд.)
COBISS.SR-ID 258963207