Buletinul Ştiinţific al Universităţii Politehnica Timişoara
Seria Limbi moderne

Scientific Bulletin of the Politehnica University of Timişoara
Transactions on Modern Languages

Vol. 25, Issue 1 / 2026

Teaching Website Localization in the Romanian Context: An Empirical Study of Linguistic, Cultural, and Technological Competences

Izabella MALI[*] & Daniel DEJICA[**]

Abstract: In the context of increasing digitalization and global communication, website localization has become a key area at the intersection of translation, culture, and technology. While previous research has primarily focused on conceptual frameworks and technological developments, there remains a lack of empirical insight into how localization is currently taught in higher education. This study addresses this gap by investigating localization teaching practices from the perspective of university lecturers, with a focus on linguistic, cultural, and technological competences. Drawing on questionnaire data collected from five lecturers involved in localization education in Romania, the research examines course content, pedagogical approaches, perceived challenges, and the integration of CAT tools and artificial intelligence. The findings indicate a strong conceptual alignment with multidimensional competence models, but also reveal inconsistencies in technological integration and a lack of institutional support. Based on the results, the study proposes a multidimensional model of localization competence, integrating linguistic, cultural, and technological components within a broader pedagogical and institutional framework. The article contributes to advancing localization pedagogy by providing empirical evidence and supporting the development of more coherent and practice-oriented training models.

Keywords: website localization; translation pedagogy; localization competence; CAT tools and AI; intercultural communication

1. Introduction

In the context of accelerated digitalization and global communication, localization has become a key process that extends beyond traditional translation by integrating

[*] PhD candidate, Doctoral School of Humanities, West University of Timisoara, Romania, e-mail: izabella.mali96@e-uvt.ro; Prof. PhD, Department of Communication and Foreign Languages, Politehnica University Timisoara, e-mail: daniel.dejica@upt.ro

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linguistic, cultural, and technological dimensions. As recent research has shown, localization operates at the intersection of translation studies, intercultural communication, and information technology, requiring a complex set of competences that enable the adaptation of content to diverse target audiences (Esselink 2000; Pym 2012; Mali and Dejica 2025). Within this framework, website localization represents a particularly dynamic domain due to the multimodal nature of digital content and the need to reconcile linguistic accuracy with usability, design constraints, and cultural appropriateness.

Previous studies have identified significant gaps in the development of localization as an academic field in the Romanian context, including limited institutionalization, insufficient interdisciplinary training, and the partial integration of technological tools (Mali and Dejica 2025). At the same time, recent contributions have emphasized the growing impact of technology and artificial intelligence on localization workflows and competence models, highlighting the emergence of hybrid profiles that combine linguistic expertise with technological and strategic skills (Mali and Dejica 2025; Kovács and Dejica 2025a).

Despite these advances, there remains a lack of empirical research examining how localization is taught at university level. Existing literature has largely focused on conceptual frameworks and technological developments, while the pedagogical practices and challenges of localization educators have received limited attention. This gap is particularly important given the role of higher education institutions in preparing future localization professionals and aligning academic training with industry expectations.

Against this background, the present study aims to provide an empirical investigation of website localization teaching practices, with a particular focus on the linguistic, cultural, and technological dimensions of localization competence. Drawing on questionnaire data collected from university lecturers involved in localization education, the study explores key aspects such as course content, perceived student competences, pedagogical approaches, and the integration of CAT tools and artificial intelligence in the classroom. By analyzing these dimensions, the article seeks to contribute to a more comprehensive understanding of localization pedagogy and to support the development of more effective, interdisciplinary, and practice-oriented training models.

More specifically, the study addresses the following research objectives: (1) to identify the core components and competences emphasized in website localization courses; (2) to examine the main linguistic, cultural, and pedagogical challenges encountered in localization teaching; and (3) to assess the extent to which technological tools and AI-based solutions are integrated into educational practices. Through this empirical approach, the article advances the research trajectory from conceptual analysis to practical validation, offering insights that may inform both academic curriculum design and professional training in the field of localization.

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2. Literature Review and Theoretical Framework

The conceptualization of localization as a multidisciplinary field has evolved from a primarily technical extension of translation into a complex practice integrating linguistic, cultural, and technological dimensions. Within Translation Studies, localization is understood as a process that involves both the transfer of meaning and the adaptation of content to specific socio-cultural and technological environments (Esselink 2000; Pym 2012; Mali and Dejica 2025). This broader perspective positions localization at the intersection of applied linguistics, intercultural communication, and digital technologies, requiring a correspondingly diversified competence profile.

This shift has led to a redefinition of translation competence, moving from predominantly linguistic models toward integrated frameworks that include extralinguistic, strategic, and technological components. The EMT competence framework (2017), for instance, emphasizes the combined role of language proficiency, intercultural awareness, technological skills, and professional adaptability. This multidimensional approach is reinforced by research in translation pedagogy, which highlights the need to align academic training with the evolving demands of the language services industry (Dejica and Dejica-Cartiş 2020; Dejica et al 2022; Grigoraș and Dejica 2025) and builds on earlier work on translator training and technology integration (Dejica-Cartiș 2012).

In the context of localization, competence models increasingly foreground technological literacy as a core component. The use of CAT tools, translation management systems, and artificial intelligence has transformed both professional workflows and educational requirements, making technological mediation a defining feature of localization practice (Mali and Dejica 2025; Kovács and Dejica 2025a). As a result, localization competence can be described as hybrid, combining linguistic accuracy, cultural sensitivity, and digital proficiency.

The linguistic dimension remains central, particularly in website localization, where translation decisions are influenced by constraints such as interface design, character limits, and user interaction. Research identifies terminological consistency, syntactic adaptation, and the management of context-dependent strings as key challenges (Klaudy 2007; Vinay and Darbelnet 1995; Mali 2025). These processes are operationalized through established translation strategies, including transposition, modulation, equivalence, and adaptation, which support functional and context-appropriate solutions.

The cultural dimension extends beyond the transfer of culture-bound elements to the broader adaptation of communicative intent. Drawing on Hofstede's cultural dimensions (2010), studies have demonstrated that cultural variables influence both textual and visual aspects of localized content, requiring holistic adaptation strategies (Hofstede et al. 2010; Singh and Pereira 2005; Mali and Dejica 2025). Consequently, cultural competence involves both analytical skills and context-sensitive decision-making aligned with target audience expectations.

At the pedagogical level, the integration of linguistic, cultural, and technological competences has led to the development of interdisciplinary approaches

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combining theoretical knowledge with practical training. Research in translation and related domains shows that effective training models must incorporate tool-based instruction, critical thinking, and adaptability to technological change (Craineanu and Dejica 2025a; Grigoraș and Dejica 2025). The growing role of artificial intelligence further reinforces the need for competences related to AI literacy, evaluation of automated output, and ethical awareness (Kovács and Dejica 2025a, 2025b; Mali and Dejica 2025).

Despite these advances, a gap persists between conceptual models of localization competence and their implementation in educational practice, particularly in emerging contexts such as Romania. While existing research provides valuable theoretical insights, there is limited empirical evidence regarding how these competences are integrated into university-level teaching. Addressing this gap requires data-driven approaches capable of linking theoretical frameworks with actual pedagogical practices.

In this context, the present study adopts a multidimensional framework encompassing linguistic, cultural, and technological competences and examines how these dimensions are reflected in localization teaching. By combining established theoretical models with empirical data from educators, the study aims to contribute to a more grounded understanding of localization pedagogy in the Romanian academic environment.

3. Methodology

The present study adopts a quantitative, exploratory research design aimed at investigating current practices in website localization teaching at university level in Romania, with a particular focus on the linguistic, cultural, and technological dimensions of localization competence. The methodological approach is grounded in the need to provide empirical evidence that complements existing conceptual and theoretical models of localization, thereby contributing to a more nuanced understanding of localization pedagogy in emerging academic contexts.

3.1 Research Design

The research is based on a structured questionnaire administered to university lecturers involved in teaching localization. The study follows a descriptive and cross-sectional design, capturing a snapshot of pedagogical practices, perceptions, and challenges at a specific point in time. This approach is consistent with recent research trends in translation pedagogy, which emphasize the importance of empirical data in informing curriculum development and competence modeling (Grigoraș and Dejica 2025; Craineanu and Dejica 2025b).

The investigation focuses on three main analytical dimensions, derived from the theoretical framework outlined in the previous section: (i) the linguistic dimension of localization teaching, (ii) the cultural dimension of localization teaching, and (iii) the technological dimension, including the integration of CAT tools and artificial intelligence.

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3.2 Research Instrument

Data were collected using a questionnaire specifically designed to capture multiple aspects of website localization education. The instrument was developed based on existing models of translation and localization competence, as well as insights derived from previous research conducted in the Romanian context (Mali and Dejica 2025).

The questionnaire consists of five main sections:

- Section A: Demographics and Professional Background, gathering information on participants' age, gender, academic affiliation, specialization, and academic rank;
- Section B: Teaching Experience and Pedagogical Approaches, focusing on course content, competences targeted, materials used, and institutional support;
- Section C: Linguistic Aspects in Localization Teaching, addressing key linguistic challenges, strategies, and quality issues encountered in localization practice;
- Section D: Cultural Aspects in Localization Teaching, examining the treatment of cultural elements, realia, and culturally sensitive content;
- Section E: CAT Tools and AI in Localization Teaching, investigating the use, perceived benefits, and challenges associated with technological tools and artificial intelligence.

The majority of the questionnaire items are closed-ended, allowing for multiple responses, ranking (e.g., "Top 5" selections), or Likert-scale evaluation, complemented by a limited number of open-ended responses. This structure enables both quantitative analysis and qualitative insights into respondents' experiences and perceptions.

3.3 Participants

The study sample consists of five university lecturers actively involved in teaching localization-related courses. The participants are affiliated with higher education institutions in Romania and related academic environments and represent disciplines such as Translation Studies and Philology. In terms of academic rank, the sample includes associate professors and full professors, reflecting a relatively experienced group of educators. Participants also display varying levels of teaching experience in localization, ranging from 1–3 years to more than 10 years, which allows for a diversified perspective on pedagogical practices. Although the sample size is limited, it is consistent with exploratory studies in emerging research areas and provides valuable insights into current practices within a relatively under-researched academic context. The findings are therefore interpreted as indicative rather than representative, highlighting trends and patterns that warrant further investigation on a larger scale.

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3.4 Data Collection Procedure

The questionnaire was distributed online using a digital survey platform, allowing participants to complete it remotely. Respondents were informed about the purpose of the research, the voluntary nature of participation, and the confidentiality of their responses. The data collection process was carried out over a defined period, ensuring that participants had sufficient time to provide detailed and considered responses.

The use of an online questionnaire facilitated efficient data collection and ensured consistency in responses, while also allowing for the automatic aggregation and visualization of results.

3.5 Data Analysis

The collected data were analyzed using descriptive statistical methods, including frequency counts and percentage distributions. The results were further interpreted through thematic grouping, corresponding to the three main analytical dimensions of the study: linguistic, cultural, and technological aspects of localization teaching. Where appropriate, graphical representations generated by the survey platform were used to support the interpretation of results. In addition to quantitative analysis, selected qualitative responses were considered to provide contextual depth and to illustrate specific pedagogical practices and challenges. The analytical approach combines statistical description with interpretive commentary, aiming to identify recurring patterns, dominant trends, and potential gaps in localization pedagogy. This method aligns with current research practices in translation studies, which advocate for mixed-method approaches capable of capturing both measurable data and experiential insights (Kovács and Dejica 2025b; Grigoraș and Dejica 2025).

4. Results and discussion

The analysis of the questionnaire data provides a comprehensive overview of current practices in website localization teaching, revealing significant patterns across linguistic, cultural, and technological dimensions. Although the sample size is limited (N = 5), the results offer valuable exploratory insights that both confirm and extend previous conceptual findings in the literature.

4.1 Profile of Localization Educators

The respondent group consists predominantly of experienced university lecturers, with most participants holding senior academic positions (associate professors and full professors) and advanced qualifications (PhD or postdoctoral levels). In terms of disciplinary background, the majority of respondents are affiliated with Translation Studies and Philology, indicating a strong linguistic and translational orientation of localization teaching in the analyzed context. The distribution of teaching experience shows notable variability, ranging from 1–3 years to more than 10 years, suggesting a heterogeneous pedagogical landscape in which both emerging and established teaching practices coexist. This profile reflects a field that is still consolidating institutionally, with varying levels of experience and limited standardization, a

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finding that aligns with earlier observations regarding the emerging status of localization in the Romanian academic environment (Mali and Dejica 2025).

4.2 Localization Teaching Practices

The analysis of course content indicates a strong convergence around core localization components, including: localization concepts and terminology, translation strategies and techniques, cultural adaptation, CAT tools, and AI-related topics (Fig. 1).

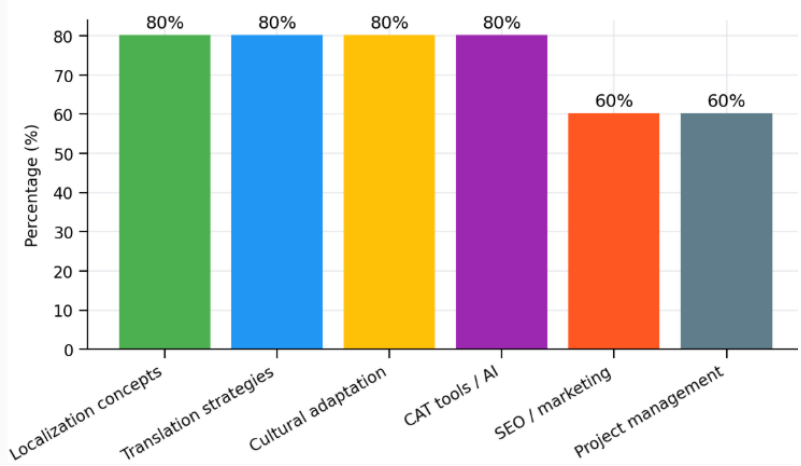


Figure 1. Core components of localization courses (% of respondents)

At the level of competences, all respondents identified a broad spectrum of essential skills, including bilingual and transfer competence, cultural and extralinguistic competence, instrumental and technological competence, and strategic and professional competence. Notably, several competence categories were selected by 100% of respondents, indicating a shared understanding of localization as a multidimensional competence framework, consistent with EMT (2017) and recent research on hybrid translator roles (Dejica and Dejica-Cartiş 2020; Grigoraș and Dejica 2025).

4.3 Institutional and Pedagogical Challenges

One of the most significant findings concerns the lack of institutional support for localization teaching. A large majority of respondents (80%) reported receiving no formal support in developing course materials or accessing resources, while some support (20%) was reported by some of the respondents. In addition, respondents identified several recurring challenges: rapid technological change, limited access to professional tools, lack of authentic teaching materials, time constraints and curriculum overload. These findings reinforce the deficit-based observations in earlier research, confirming that localization education is constrained by structural

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limitations affecting both pedagogy and curriculum development (Mali and Dejica 2025).

4.4 Linguistic Dimension of Localization Teaching

The linguistic component of localization teaching emerges as a central area of concern, particularly in relation to terminological consistency and context-dependent translation problems, as illustrated in Figure 2. The data indicate that respondents consistently identify these aspects as the most challenging for students, reflecting the complexity of working with fragmented, interface-bound content and the necessity of maintaining coherence across multilingual environments. (Fig. 2).

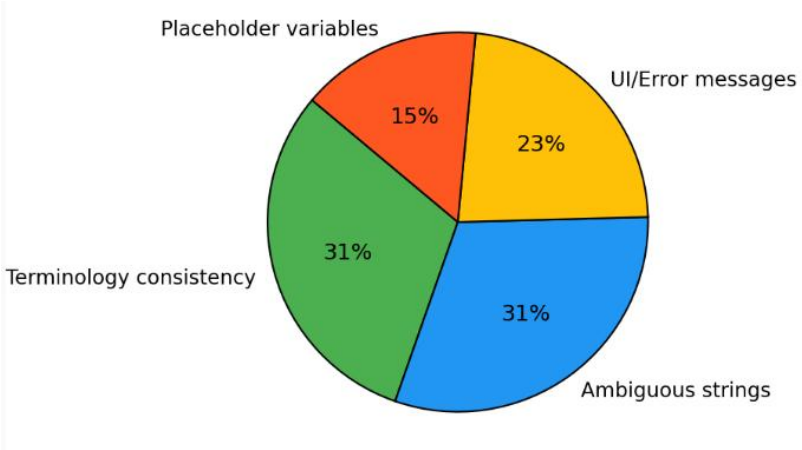


Figure 2. Major linguistic challenges (% of respondents)

The prominence of such challenges can be explained by the specific nature of website localization, where meaning is often distributed across strings, menus, and micro-texts that lack sufficient contextual support. In such environments, ambiguity becomes more frequent, and maintaining terminological consistency across multiple segments requires both systematic approaches and technological support. The results therefore suggest that linguistic competence in localization is closely tied to the ability to manage discontinuous text units and to reconstruct meaning within constrained and highly functional communicative contexts.

In line with these challenges, the linguistic elements that receive the greatest pedagogical attention are terminology, syntax, grammar, and collocations. This focus reflects a continued reliance on core translation competences, adapted to the specificities of digital content. Terminology is particularly emphasized due to its central role in ensuring consistency and usability, especially in domains where specialized vocabulary must be aligned with user expectations and interface conventions. At the same time, syntax and grammar remain essential for ensuring

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clarity and fluency, while collocational patterns contribute to the naturalness and acceptability of localized content.

To address these issues, pedagogical practices rely predominantly on structured and systematic approaches, such as glossary development, the application of standardization strategies, and the adaptation of content to target audience expectations. Glossary building enables students to consolidate terminological knowledge and to ensure consistency across translations, while standardization practices introduce them to professional workflows that prioritize uniformity and accuracy. Adaptation to the target audience further reinforces the communicative dimension of localization, encouraging students to move beyond literal translation and to consider usability and reader reception as key criteria.

These approaches reflect a strong alignment with established translation frameworks, particularly Klaudy's transfer operations (2007) and Vinay and Darbelnet's translation procedures (1995), which provide a structured basis for linguistic decision-making. By integrating such models into teaching practices, educators facilitate the development of analytical skills that allow students to justify their choices and to apply appropriate strategies depending on the communicative and technical constraints of the task.

At the level of quality assessment, respondents highlight recurrent issues such as inconsistent terminology, grammar and syntax errors, inadequate cultural adaptation, and the loss of meaning or nuance. These findings indicate that linguistic errors in localization are rarely isolated phenomena and often intersect with cultural and functional aspects. For instance, inadequate terminology may affect user comprehension, while syntactic awkwardness can disrupt interface usability. Similarly, the loss of nuance is frequently associated with insufficient contextualization, reinforcing the need for integrated approaches that combine linguistic accuracy with cultural and pragmatic awareness.

Overall, the results confirm that linguistic competence in localization extends beyond traditional notions of correctness and involves achieving functional adequacy and communicative effectiveness within constrained and multimodal environments. More specifically, the ability to manage terminological consistency and to resolve context-dependent ambiguities emerges as a defining feature of localization expertise. This explains why pedagogical practices tend to prioritize structured resources, controlled language strategies, and context-sensitive decision-making, all of which contribute to preparing students for the realities of contemporary localization workflows.

4.5 Cultural Dimension of Localization Teaching

The cultural component of localization teaching is widely recognized as essential but remains complex to operationalize in pedagogical contexts. Respondents identified the following as the most sensitive cultural elements: humor and wordplay, idioms and fixed expressions, images and visual representations, social norms and cultural values (Fig. 3).

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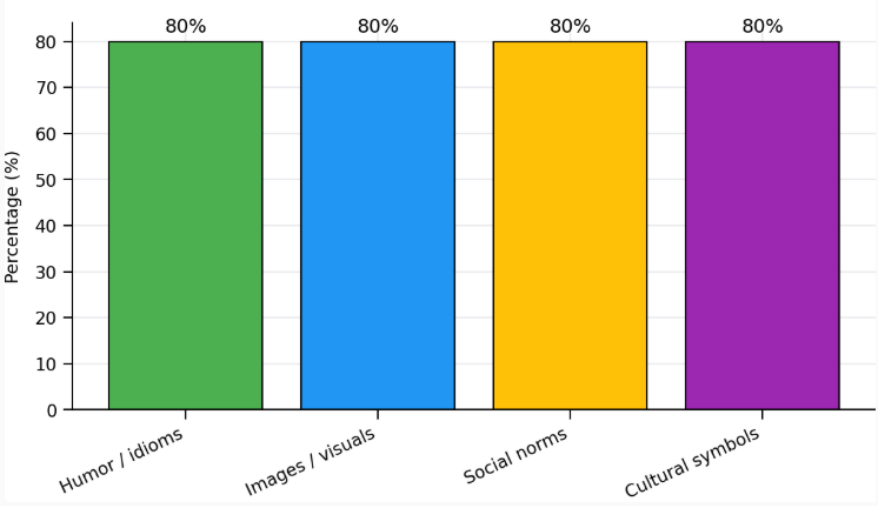


Figure 3. Cultural elements requiring adaptation in website localization (% of respondents)

To address these challenges, educators employ a range of strategies that emphasize both analytical comparison and contextual awareness. In particular, teaching practices frequently involve the comparative analysis of localized websites, which allows students to observe how similar content is adapted across different linguistic and cultural contexts. This is complemented by the use of case studies illustrating both successful and unsuccessful localization outcomes, enabling learners to critically assess decision-making processes and their impact on user reception. In addition, the analysis of culturally specific media provides further insight into how meaning is shaped by cultural conventions, while classroom discussions centered on intercultural misunderstandings encourage reflective engagement with real-world communication breakdowns and their potential resolutions.

Teaching practices related to realia and culture-specific references tend to combine explicit instruction with applied activities. Educators introduce key concepts and categories through direct instruction, ensuring that students develop a clear understanding of culture-bound elements and their translational implications. This theoretical grounding is then reinforced through translation exercises, which require learners to apply strategies in context-sensitive situations. The use of glossaries and cultural databases further supports this process by offering structured resources that facilitate informed decision-making and consistency in handling culturally embedded content.

When addressing culturally sensitive material, respondents indicate a preference for adaptive and context-oriented approaches. Content is typically adjusted to align with the values and expectations of the target culture, reflecting an emphasis on audience-oriented communication. At the same time, consultation with cultural experts is considered an important strategy in cases where nuanced understanding is required, particularly in specialized or potentially sensitive domains. Furthermore,

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adherence to client guidelines plays a significant role in shaping localization decisions, highlighting the professional dimension of the process and the need to balance creativity with external constraints.

These findings confirm that cultural competence in localization is procedural and decision-oriented rather than purely knowledge-based. Effective localization requires the ability to navigate between competing priorities such as fidelity to the source text, acceptability within the target culture, and the overall communicative impact of the final product. This perspective is consistent with functionalist approaches in translation studies, which emphasize purpose-driven translation and the importance of adapting strategies to specific communicative contexts (Nord 1997).

4.6 Technology, CAT Tools, and AI in Localization Teaching

The role of technology in localization education reveals a complex and partly inconsistent landscape. Although familiarity with CAT tools is relatively high among respondents, their systematic integration into teaching practices remains uneven. Approximately 60% of participants report using CAT tools on a regular basis, while 40% indicate only occasional use, suggesting that technological competence is acknowledged as important but not yet fully embedded in pedagogical routines.

In terms of functionality, respondents consistently associate CAT tools with ensuring terminological consistency through translation memories, managing specialized terminology, enhancing productivity, and simulating professional workflows. These uses reflect the alignment of teaching practices with industry expectations, where efficiency, process optimization, and workflow management play a central role (Pașcalău and Dejica 2021). At the same time, several structural barriers limit the effective integration of such tools. Around 80% of respondents identify issues related to cost and licensing, lack of institutional support, technical difficulties, and students' limited technical skills as significant constraints. These factors contribute to a fragmented adoption of technology, despite its recognized importance.

The integration of artificial intelligence in localization teaching follows a similar pattern. Approximately 60% of respondents report incorporating AI-based tools into their teaching, while 40% indicate that they do not use such technologies. Among those who do, AI is primarily employed for generating initial translations, supporting post-editing activities, assisting with terminology, and demonstrating the capabilities of machine translation systems. These applications suggest that AI is mainly used as a complementary tool within existing workflows rather than as a fully integrated pedagogical framework.

From a pedagogical perspective, AI is generally perceived as enhancing efficiency and supporting the development of critical evaluation skills, particularly in relation to machine-generated output. It is also valued for its potential to facilitate students' understanding of contemporary localization workflows. However, the results indicate that AI integration remains exploratory and uneven, reflecting broader uncertainties regarding its role in translation and localization pedagogy. This situation is consistent with recent research highlighting the ongoing transformation of

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translation practices under the influence of AI, as well as the challenges associated with adapting educational models to these changes (Kovács and Dejica 2025a; Mali and Dejica 2025; Kovács and Dejica 2026).

5. Towards an Integrated Model of Localization Competence in Education

The results of the study point toward a tri-dimensional model of localization competence that integrates linguistic, cultural, and technological components. Linguistic competence encompasses terminology management, syntactic and stylistic adaptation, and the implementation of appropriate translation strategies, reflecting the need for precision and functional adequacy in localized content. Cultural competence involves the adaptation of culture-specific elements, the management of intercultural communication, and audience-oriented decision-making, highlighting the importance of contextual and culturally sensitive choices in localization processes. Technological competence includes the use of CAT tools and artificial intelligence, workflow management, and digital literacy, aligning with the increasing role of technology in shaping contemporary localization practices. In addition, the findings emphasize the significance of a fourth, transversal dimension—the pedagogical and institutional dimension—which supports and frames the development of the other competences through curriculum design, access to resources, and collaboration with industry, thereby ensuring the alignment of academic training with professional requirements (Fig. 4).

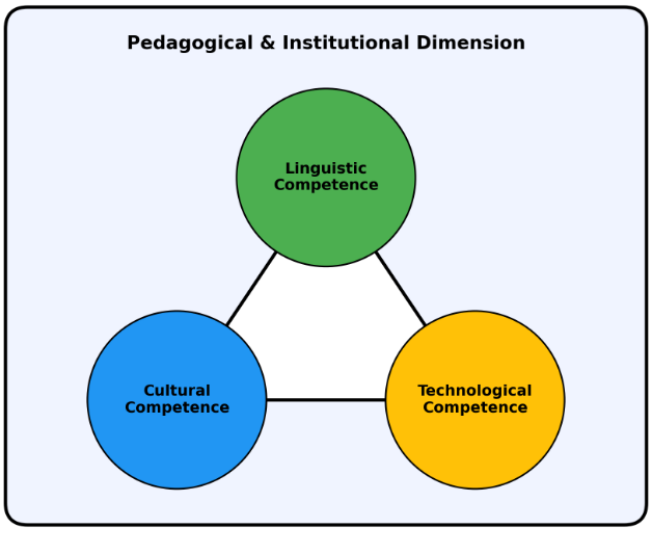


Figure 4. A multidimensional model of localization competence in education

This model reflects the ongoing shift from traditional translation competence to hybrid, technology-mediated competence frameworks, consistent with recent developments in translation pedagogy and professional practice (Dejica and Dejica-Cartiș 2020; Grigoraș and Dejica 2025; Dejica and Grigoraș 2026).

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At the same time, the study reveals a persistent gap between theoretical models and pedagogical implementation, particularly in relation to technological integration and institutional support. This gap underscores the need for more systematic curriculum development, increased collaboration with industry, and enhanced investment in educational resources.

Overall, the results confirm that website localization teaching is characterized by conceptual coherence but operational fragmentation, requiring further empirical research and pedagogical innovation to achieve full alignment with the evolving demands of the localization industry.

6. Conclusion

The present study set out to investigate current practices in website localization teaching, with a particular focus on the linguistic, cultural, and technological dimensions of localization competence. The findings provide empirical support for the view that localization education is inherently multidimensional, requiring the integration of core competences that go beyond traditional translation skills. Across all dimensions, the results indicate a strong conceptual awareness among educators, who consistently emphasize the importance of combining linguistic precision, cultural sensitivity, and technological proficiency in the training of future professionals.

At the same time, the study highlights a number of structural and pedagogical challenges that continue to shape localization education. These include limited institutional support, uneven access to technological resources, and the partial integration of CAT tools and artificial intelligence into teaching practices. While educators demonstrate a clear understanding of the role of technology in contemporary workflows, its practical implementation remains inconsistent, reflecting broader tensions between theoretical developments and classroom realities. In this respect, the results confirm earlier research pointing to a gap between the evolving demands of the localization industry and the current state of academic training (Mali and Dejica 2025; Kovács and Dejica 2025a).

One of the main contributions of this study lies in the formulation of a multidimensional model of localization competence, structured around linguistic, cultural, and technological components and supported by a transversal pedagogical and institutional dimension. This model captures both the interdependence of competences and the role of educational context in their development, offering a framework that may inform curriculum design and future research in localization pedagogy. More broadly, the findings contribute to advancing the research trajectory from conceptual and theoretical discussions to empirically grounded insights, thereby strengthening the academic foundation of localization studies in the Romanian context.

The study also has a number of limitations that must be acknowledged. The most significant constraint concerns the small sample size, which limits the generalizability of the findings. However, this limitation is closely linked to the specific context under investigation, as the number of university lecturers actively

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engaged in teaching localization in Romania remains relatively low. As such, the study reflects the realities of an emerging academic field, where expertise is still being developed and institutional frameworks are not yet fully established. Despite this, the results are valuable in that they provide a rare empirical perspective on localization teaching practices and highlight key trends and challenges that are likely to be relevant beyond the immediate sample.

Future research should aim to expand the empirical scope of such investigations by including a larger number of participants, as well as perspectives from students and industry professionals. Longitudinal studies may also offer insight into how localization competences evolve over time and how educational practices adapt to technological advancements. In addition, further work is needed to explore the integration of artificial intelligence into localization pedagogy, particularly in relation to ethical considerations, assessment models, and the redefinition of professional roles.

In conclusion, the study demonstrates that, although localization education in Romania faces important structural challenges, it is characterized by a high level of conceptual coherence and a growing awareness of the need for interdisciplinary and practice-oriented training. By providing empirical evidence and proposing a structured competence model, the article contributes to the development of more informed, flexible, and future-oriented approaches to localization teaching.

References

Craineanu, Florentin, and Daniel Dejica. 2025a. "English for Medical Purposes: Evolution, Pedagogy, and Future Directions." *Scientific Bulletin of the Politehnica University of Timişoara, Transactions on Modern Languages* 24 (1): 353–366.

Craineanu, Florentin, and Daniel Dejica. 2025b. "Interdisciplinary Approaches to Teaching Medical English: Integrating Humanities, Art, and Technology." *Professional Communication and Translation Studies* 18: 207–214.

Dejica, Daniel. 2016. "A Standards-Based Contrastive Analysis of Online and Printed Technical Translations in Romanian." In *Language in the Digital Era: Challenges and Perspectives*, edited by Daniel Dejica, Gyde Hansen, Peter Sandrini, and Iulia Para, 14–28. Warsaw and Berlin: De Gruyter Open.

Dejica, Daniel. 2026. "Technical and Scientific Translation." In *International Encyclopedia of Language and Linguistics*, 3rd ed., edited by Hilary Nesi and Petar Milin. Amsterdam: Elsevier. https://doi.org/10.1016/B978-0-323-95504-1.01407-1

Dejica, Daniel, and Anca Dejica-Cartiș. 2020. "The Translation Process: Traditional Approaches and Contemporary Challenges." In *Encounters across Linguistic, Cultural and Professional Contexts: In Honorem Professor Elena Croitoru*, edited by Antoanela-Marta Mardar, 119–136. Cluj-Napoca: Casa Cărţii de Ştiinţă.

Dejica, Daniel, and Patricia Grigoraș. 2026. "Technical Translation Pedagogy in Romanian Universities: Survey Evidence on Competence Development and Technology Use." *Swedish Journal of Romanian Studies* 9 (2): 190–205.

Dejica, Daniel, Loredana Pungă, Georgiana Badea, and Titela Vîlceanu. 2022. "Cercetarea traductologică doctorală din România." In *O istorie a traducerilor în limba română*

BUPT

(secolul al XX-lea), Vol. II, edited by Muguraș Constantinescu, Daniel Dejica, and Titela Vîlceanu. București: Editura Academiei Române.
Dejica-Cartiș, Daniel. 2012. "Developing the Electronic Tools for Translators Syllabus at Politehnica University of Timișoara." *Procedia – Social and Behavioral Sciences* 46: 3614–3618.
Esselink, Bert. 2000. *A Practical Guide to Localization*. Amsterdam: John Benjamins.
European Master's in Translation (EMT) Expert Group. 2017. *EMT Competence Framework 2017*. Brussels: European Commission.
Grigoraș, Patricia, and Daniel Dejica. 2025. "Bridging Knowledge and Practice: Pedagogical Strategies and Research Directions for Technical Translation in the Digital Age." *Studii de Știință și Cultură* 21 (3): 147–158.
Hofstede, Geert, Gert Jan Hofstede, and Michael Minkov. 2010. *Cultures and Organizations: Software of the Mind*. 3rd ed. New York: McGraw-Hill.
Klaudy, Kinga. 2007. *Languages in Translation: Lectures on the Theory, Teaching and Practice of Translation*. Budapest: Scholastica.
Kovács, Zoltán, and Daniel Dejica. 2025a. "Medical Translation in the Age of Neural Machine Translation: Standards, Assessment Models, and Romanian Perspectives." *Analele Universităţii Ovidius din Constanţa. Seria Filologie* 36 (2): 912–926.
Kovács, Zoltán, and Daniel Dejica. 2025b. "From Standards to Hybrid Workflows: Automatic Post-Editing and Translation Quality Assessment for English-Romanian Medical Texts." *Professional Communication and Translation Studies* 18: 136–145.
Kovács, Zoltán, and Daniel Dejica. 2026. "Machine Translation, Post-Editing, and Quality Assessment in English–Romanian Medical Translation: Insights from Professional Practice." *Scientific Bulletin of the Politehnica University of Timişoara, Transactions on Modern Languages* 25 (1): 69-83.
Mali, Izabella, and Daniel Dejica. 2025. "Localization in the Romanian Context: Addressing Research Deficits and Advancing Linguistic and Cultural Adaptation." *Analele Universităţii Ovidius din Constanţa. Seria Filologie* 36 (1): 431–454.
Mali, Izabella, and Daniel Dejica. 2025. "Localization, Technology and AI: Transforming Global Communication." *Studii de Știință și Cultură* 21 (3): 226–237.
Nord, Christiane. 1997. *Translating as a Purposeful Activity: Functionalist Approaches Explained*. Manchester: St. Jerome.
Pașcalău, Raul, and Daniel Dejica. 2021. "The Efficient Translation Flow, a Key to Successful Business." *Scientific Bulletin of the Politehnica University of Timișoara. Transactions on Modern Languages* 20 (1): 51–57.
Pym, Anthony. 2012. *On Translator Ethics: Principles for Mediation between Cultures*. Amsterdam: John Benjamins.
Singh, Nitish, and Arun Pereira. 2005. *The Culturally Customized Web Site: Customizing Web Sites for the Global Marketplace*. Burlington, MA: Elsevier.
Vinay, Jean-Paul, and Jean Darbelnet. 1995. *Comparative Stylistics of French and English: A Methodology for Translation*. Amsterdam: John Benjamins.

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