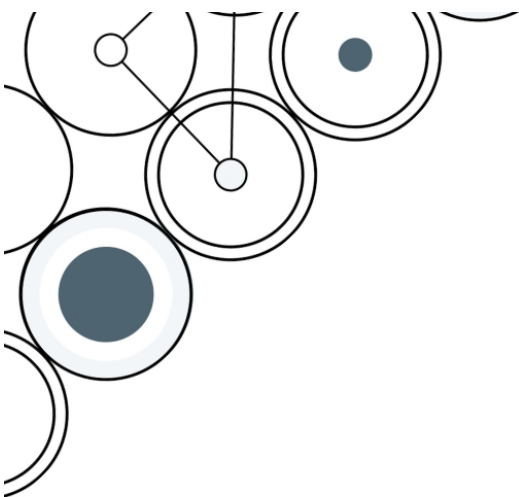


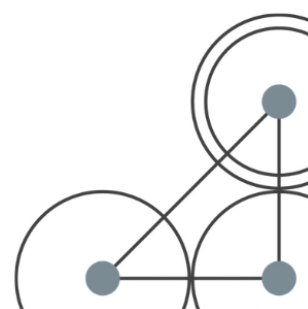


NEW TRENDS IN CULTURE, EDUCATION, AND DIGITAL TRANSFORMATION

UNINOVIS International Conference Proceedings



Laura Esteban-Segura, Ignacio Moreno-Torres Sánchez
and Miriam Seghiri (Eds.)





ADLES 2025 POWERED BY UNINOVIS

ISBN 978-2-9701733-4-2



July 2026. Editions Tradulex, Geneva

© ADLES 2025 (Art, Design, Languages, Education, and Social Work:
Innovations in Theory and Practice)

This document is downloadable from www.tradulex.com and www.uninovis.eu



ADLES 2025 POWERED BY UNINOVIS

ACKNOWLEDGEMENTS

ADLES wishes to thank and acknowledge the support of:



**Co-funded by
the European Union**



UNIVERSIDAD
DE MÁLAGA



Università
degli Studi
della Campania
Luigi Vanvitelli

THE HAGUE
UNIVERSITY OF
APPLIED SCIENCES



Tampere University
of Applied Sciences



UNIVERSITÉ
SORBONNE
PARIS NORD



ADLES 2025 POWERED BY UNINOVIS

ADLES 2025 SCIENTIFIC COMMITTEE

Dr Marijana Prodanovic, Kauno kolegija HEI (Chair), Lithuania
Dr Aušra Rimkutė-Ganusauskienė, Kauno kolegija HEI, Lithuania
Dr Ramūnas Čičelis, Kauno kolegija HEI, Lithuania
Dr Kęstutis Leveckas, Kauno kolegija HEI, Lithuania
Dr Jeffrey Michael Taylor, Kauno kolegija HEI, Lithuania
Dr Jovita Starkutė, Kauno kolegija HEI, Lithuania
Dr Valentina Demidenko, Kauno kolegija HEI, Lithuania
Dr Salomėja Karasevičiūtė, Kauno kolegija HEI, Lithuania
Dr Daniela Hasa, University of Tirana, Albania
Dr María Begoña Crespo García, University of A Coruña, Spain
Dr Ignacio Moreno-Torres Sánchez, University of Málaga, Spain
Dr Miriam Seghiri, University of Málaga, Spain

TABLE OF CONTENTS

Introduction—A word behind the event	1
Foreword—To the Book of Proceedings	3
Abromaitienė, Laima. Mediation as a conflict resolution tool in the academic community	4
Aleknaitė, Eglė. 20th-century Lithuanian painters as restorers: Discoveries and losses	8
Aleknaitė, Eglė & Vičys, Rolandas. The unique phenomenon of a double-sided painting: Iconography and restoration practice of the church banner from the Kretinga Museum	15
Bagočiūnienė, Ingrida. The role of digital communication in heritage restoration education: From the Pranas Gudynas Centre to virtual museum experiences	24
Baydal, Doğan. Hedging in AI-generated academic writing: A corpus-based linguistic analysis of epistemic modality in retracted articles	32
Ben Khalifa, Amna. Semantics of silence: Challenges of implicit meaning in machine translation.....	36
Bodža, Ilze & Mežinska, Silvija. Integrating digital technologies into fashion design education practice	42
Dadak, Angela M. Human language users (and learners) in an age of artificial intelligence.....	46
Demidenko, Valentina, Klefstad, Bjorn & Pigulevičienė, Julita. Empowering refugees through digital transformation in social work: Insights from the M9C platform evaluation	52
Dilys, Mantas. The application of content marketing in art: Aspects of crowdsourcing.....	55
Dosi, Ifigeneia. Morphology, context, and vocabulary in lexical inference: Insights into reading development and dyslexia for inclusive education	59

Genç, Esen & Civil, Melike. Empathy in translation: Translation students' practices with machine translation tools	64
Genç, Esen & Çakılcıoğlu, Şule. Digital privacy awareness among English as a Foreign Language learners	68
Kołodziejwski, Maciej & Butvilas, Tomas. Developing the Teacher Reflective-Transgressive Development Scale (TRTDS): A multidimensional model of reflective growth in education.....	72
Lukošienė, Silvija. Authenticity and technology: How restoration shapes the digital perception of art.	80
Misevičiūtė, Vaida. Unequal gains? Student perspectives on AI in language learning.....	84
Nedzinskaitė-Mačiūnienė, Rasa & Stasiūnaitienė, Eglė. Fostering creative learning through an online escape room: From qualitative insights to a data-driven perspective	88
Özcan Dost, Betül & Yuksel, Muharrem. Machine translation of news headlines on AI in education: A comparative study of Google Translate and Yandex Translate	92
Paurienė, Giedrė. Generative text as a challenge to creativity and academic ethics	97
Povilaitė, Ida D. Posthuman urban design of communication: Necessary skills.....	102
Pukienė, Asta. Digital code-switching: The case of English-Lithuanian language contact on social media.....	106
Raškauskienė, Audronė & Zhussupova, Roza. Developing English academic writing skills with AI-powered tools	111
Rimkutė-Ganusauskienė, Aušra. The concept of definition in the age of artificial intelligence	117
Serón-Navas, Ariadna. Materialising digital inclusion for migrant learners of Spanish in the Red Cross: A case study	121
Simanaitienė, Raimonda. Digitization and 3D modelling in ceramic design: The case of the work of the artist Remigijus Sederevičius.....	125



ADLES 2025 POWERED BY UNINOVIS

Škarnulienė, Kristina. Professional challenges experienced by social workers and supervision as a tool for addressing them.....	129
Starkutė, Jovita. Adaptability as a trait of organizational culture in Lithuanian general education schools in the context of educational digital transformation	134
Vasili, Anna Maria. The role of human translators in an AI-dominated landscape	140
Vasylieva, Yuliia, Ročane, Maija & Melke, Santa. Transforming language learning: The role of educational strategies and technology in overcoming linguistic barriers	144
Vora, Rovenā & Lačka, Fari. Reading between the lines: Why idioms defy artificial intelligence	150
Zargayouna, Haifa. DataViz challenge	157



ADLES 2025 POWERED BY UNINOVIS

INTRODUCTION—A WORD BEHIND THE EVENT

ADLES 2025 powered by UNINOVIS

The 2025 edition of ADLES took pride in joining forces with the UNINOVIS European university Alliance for the very first time, thus broadening both its scope and impact. Although it preserved its core topics revolving around the study programmes conducted at the Faculty of Arts and Education, Kauno kolegija HEI, the conference *founder*, the event also opened its doors to the realm of data and digitalisation—the phenomena that the Alliance puts to the fore. As a result, ADLES 2025 united scholars, practitioners, and visionaries from diverse disciplines, and over 20 countries worldwide, as a true international platform reflecting the joint ambition underpinning the Alliance.

The organising and scientific committees of the conference take great pleasure in the fact that ADLES 2025 powered by UNINOVIS themes shed some light on both perils and foes hidden behind present-day trends. Namely, while some of the sessions brimmed over with illustrations of how digital tools either empower or disrupt our practices, others depicted the challenges and opportunities of living in a multicultural world, where education, creativity, and social work are strongly influenced by technology. The motivation behind the themes selected is rooted in the recognition that sustainability, equity, and ethical responsibility should go hand in hand with innovation to serve society.

With the goal of presenting some latest, cutting-edge findings and results from different walks of life, that is, providing its audience with only the best, ADLES 2025 welcomed on board a team of reputable keynote speakers and asked them to share some of their novel discoveries, ideas, and conclusions. The presentations given by Ms Eveke de Louw (The Hague University of Applied Sciences, The Netherlands), Dr Jakub Dąbrowski (Academy of Arts in Warsaw, Poland), Dr María Bobadilla-Pérez (University of A Coruña, Spain), and Dr Anna Louise Merry (Frederick University, Cyprus), internationally recognised scientific workers, enriched the dialogue and, certainly, provoked some new thoughts and ideas.

The fruitful event, for the first time, spanned across three vibrant days in Kaunas; except for the central conference day, ADLES 2025 hosted a welcome ceremony of artistic character on the eve of the



ADLES 2025 POWERED BY UNINOVIS

conference itself. Other than that, the day after the main ceremony, characterised by vivid presentations and inspiring exchanges, UNINOVIS Research roundtable, accompanied by the launch of the Excellence, took place—putting it all into perspective and paving the way for joint activities across the Alliance and beyond.

With a firm belief that the real effects of the event are yet to be seen—resulting in novel projects, scientific ideas, publications, and a series of joint activities, we would love to extend huge gratitude to our guests, committed staff of Kauno kolegija HEI, as well as to all those who took part in its execution—be it in a direct or an indirect way.

On behalf of the Organisers,

Mr Albertas Juodeika, Faculty of Arts and Education Dean, Kauno kolegija HEI

Ms Jolanta Valiaugiene, UNINOVIS Institutional Coordinator, Kauno kolegija HEI

Dr Justina Petrulionytė-Sabonienė, Organising Committee Head, Kauno kolegija HEI

FOREWORD—TO THE BOOK OF PROCEEDINGS

A unique combination of the multidisciplinary and already *seasoned* ADLES conference and UNINOVIS university Alliance shed somewhat different light on the role that academia plays when responding to all the diverse challenges of our time.

While preserving language, art, design, education, and social work at its heart, ADLES 2025, powered by UNINOVIS, underscored the importance of interdisciplinary inquiry in a world that is highly digital and *superdiverse*. Although distinct at first sight, these dimensions revolve around some common concerns: the notions of privacy and security in the digital realm, the ethics of artificial intelligence, inclusivity in virtual realities, as well as justice within different societal norms and roles.

The Book of Proceedings that we take pride in presenting to you depicts both scientific and practical richness of the community that contributed to the event. To wit, each extended abstract unit is a contribution *sui generis* to ongoing debates, and topics buzzing around, giving academically rigorous yet applicable perspectives. Together, the units show how science can encourage practice, and how cooperation across different spheres of endeavour can empower us all to address some globally acknowledged questions.

This selection, arranged alphabetically with the goal of preserving full academic objectivity, aims to be understood as a fruitful source for reflection and further academic work rather than a mere record of the presentations given.

On behalf of the Scientific Committee, I extend my sincere gratitude to all ADLES 2025 contributors who shared their insights and conclusions with us, while being positive that these proceedings will result in further multidisciplinary dialogue, supporting all the values underpinning the Conference and the Alliance itself—creativity, responsibility, and unity in diversity.

Dr Marijana Prodanovic, Kauno kolegija HEI



ADLES 2025 POWERED BY UNINOVIS

MEDIATION AS A CONFLICT RESOLUTION TOOL IN THE ACADEMIC COMMUNITY

Laima Abromaitienė
Kauno kolegija HEI
Laima.abromaitiene@go.kauko.lt

The author, Doctor of Social Sciences (Education), is a lecturer at the Department of Pedagogy of the Faculty of Arts and Education of Kauno kolegija HEI and teaches students of the preschool education programme. She is also a practicing mediator, conducts family mediations, aiming to help find an appropriate solution in conflict situations. She is a member of the Lithuanian Chamber of Mediators.

Additionally, she has extensive experience as a supervisor (professional relationship consulting), working with groups, teams, and individuals, and is a member of the Lithuanian Association of Supervisors.

Her main research interests are education and human relations.

Abstract

Intense, information-saturated communication, regulated by various rules and requirements, occurs constantly in academic communities, affecting all members—students, lecturers, researchers, and other staff involved in scientific or study activities. Students, as primary participants in the study process, particularly experience emerging tensions. Peaceful conflict resolution practices using mediation have long been known worldwide and in Lithuania for over 25 years.

Mediation is an intermediary process where a neutral person—the mediator—helps parties reach a peaceful agreement. It is widely applied in family and administrative disputes. Global practices include examples of mediation in higher education institutions to resolve tense situations (Andreeva & Serafimova, 2022; Guiomar & Costa e Silva, 2025; Katz & Neil, 2017). The academic base of mediation in Lithuania is strengthening: the “Mediation and Sustainable Dispute Resolution” laboratory has been established at Mykolas Romeris University, and a Master’s programme is also being implemented, which promotes research and practice at the university. There are scientific publications that theoretically analyze the assumptions for the implementation of mediation in Lithuanian higher education institutions (Čiuladienė & Lasinskas, 2018). However, it has not yet been sufficiently investigated whether mediation is considered an appropriate conflict resolution tool in Lithuanian higher education institutions.

The aim of the research is to reveal whether students see mediation as a conflict resolution option in the academic community.

A standardized survey method was chosen, combining closed and open-ended questions. The survey was conducted among Kauno kolegija HEI students, with 17 respondents participating. This is a convenient sample, focusing on individuals currently participating in the study process in the field under consideration and aiming for an initial assessment of the situation.

The results of the study allow us to understand the general trends, whether students see mediation as a tool for conflict resolution in the academic community and in which cases they would trust this method of conflict resolution. 70.6% of respondents answered that they had to experience tense, conflict situations related to the study process or other issues. Of these, 35.3%—with fellow students, 5.9%—with the higher education institution administration, 17.6%—with teachers. The reasons that caused tension or conflict arose due to uneven work or differences of opinion when preparing joint work with

fellow students (35.3%), due to improper organization of lectures or exams (17.6%), and due to improper assessment (17.6%). To the question “Do you think a mediator would be of help in resolving similar conflicts?”, 76.6% of respondents answered positively. The question “Would you contact a mediator if s/he were available at your place of study?” received 70.6% positive responses. The following answers were selected to the question “Which mediator would you trust more?”: “a neutral mediator (with mediator competence), not working at the same higher education institution”—52.9%; “a mediator (with mediator competence), working at the same higher education institution”—17.6%; “a lecturer working at the same higher education institution and able to conduct mediation (having acquired the necessary competence)—11.8%; “a student studying at the same higher education institution and having special preparation for conducting mediation”—11.8%; “a student of my major who has special preparation for conducting mediation”—5.9%.

Study results indicate that mediation is acceptable to students for resolving academic conflicts. They trust neutral mediators unaffiliated professionally with the institution but also accept institution-based lecturers or peers with mediation competence.

In higher education conflicts, community members should turn to professional mediators; training in conflict management using mediation principles benefits staff, administration, and students to reduce tensions and foster a better atmosphere.

Keywords: *academic community, conflict resolution, mediation.*

References

- Andreeva, A., & Serafimova, D. (2022). Mediation in higher education – Aspects of application in conditions of digital transformation. MPRA Paper No. 113417. University Library of Munich, Germany. <https://mpra.ub.uni-muenchen.de/113417/>
- Čiuladienė, G., & Lasinskas, D. (2018). Konfliktų universitete sprendimas taikant mediaciją: pamokos Lietuvai. *Acta Paedagogica Vilnensia*, 40, 58–69. <https://doi.org/10.15388/ActPaed.2018.0.11888>
- Guiomar, P., & Costa e Silva, A. M. (2025). Mediation in higher education: A systematic literature review. *New Trends in Qualitative Research*, 21(1), e1157. <https://doi.org/10.36367/ntqr.21.1.2025.e1157>
- Katz, N. H. (2017). Mediation and dispute resolution services in higher education. In A. Georgakopoulos (Ed.), *The mediation handbook: Research, theory, and practice* (pp. 170–178). Routledge.
- Yaremko, O., & Dziubak, S. (2025). Mediation as a means of resolving conflicts in the educational environment. *Actual Problems of Law*, 2, 150–156. <https://doi.org/10.35774/app2025.02.150>

20TH-CENTURY LITHUANIAN PAINTERS AS RESTORERS: DISCOVERIES AND LOSSES

Eglė Aleknaitė

Vytautas Magnus University

egle.aleknaite@vdu.lt

Eglė Aleknaitė is a heritage professional and lecturer at Kaunas College, specialising in the conservation and restoration of easel paintings. With more than a decade of experience in museum curation, cultural project management, and preventive conservation, she has contributed to the preservation and interpretation of Lithuanian cultural heritage across several institutions. She previously served as Deputy Director and Chief Curator of the Lithuanian Museum of the History of Education and has long-standing experience as a curator and restorer at the Vytautas the Great War Museum. Aleknaitė holds a Master's degree in Art History and Criticism and is currently pursuing a PhD in Art History, focusing on the restoration of Lithuanian easel painting from the 19th to the early 20th century. She also curates exhibitions, conducts applied heritage research, and supervises student theses.

Abstract

This study explores a previously overlooked cultural phenomenon in 20th-century Lithuania: the involvement of professional painters and interdisciplinary artists in the restoration of artworks during the interwar period. At that time, the field of conservation had not yet emerged as a scientific profession in Lithuania, and the safeguarding of cultural heritage often became the responsibility of artists whose primary education lay in visual or performing arts. Painters and stage performers—driven by artistic intuition, cultural engagement, and a strong sense of national responsibility—became directly involved in restoration activities at the Kaunas State Cultural Museum.

The purpose of this research is to reconstruct this unique cultural environment, identify the main painter-restorers, analyse their methods, and evaluate both the achievements and the problematic aspects of their contributions within the broader development of Lithuanian restoration history.

This study employs a qualitative historical methodology combining archival research, museum document analysis, and scholarly literature review.

Archival documents from the Lithuanian Central State Archives (LCVA) served as the primary source base. Two major archival units related to the Kaunas State Cultural Museum include work logs, administrative correspondence, internal reports, and records of restoration activities conducted during the 1930s and early 1940s.¹

Handwritten restoration notes by painter-restorers such as Petras Kalpokas and Antanas Rūkštelė provide insight into techniques, material choices, and intervention processes.² These documents, though fragmentary, reveal practical methods and the artistic decision-making typical of the period.

Finally, interdisciplinary cultural analysis—including recent perspectives on performers and painters engaging in heritage-related activities—helps contextualize how restoration was perceived not as a technical profession, but as an extension of cultural duty.³

1. Kaunas as an Interwar Centre of Restoration

During the interwar period, the Kaunas State Cultural Museum became the primary institution responsible for the conservation of artworks. With no formally trained conservators available, the museum relied on artists with diverse backgrounds—including some with active careers in music and

performance. Among them were Petras Kalpokas, Antanas Rūkštelė, Pranas Baleniūnas, and Vaclovas Ratas.⁴

Archival records allow for a more precise identification of those who carried out restoration work at the Kaunas State Cultural Museum during the interwar period and the early Soviet era. The earliest known restorer was Bolius Trumpis, who worked until 1926, before the establishment of an official restorer's position. In July 1926, the position was officially assumed by Antanas Rūkštelė. In July 1933, Galina Pševodauskienė-Balsevičiūtė—the only known female restorer of this period—was appointed and remained in the post until March 1935. From January 1935, the well-known artist Petras Kalpokas became involved in restoration activities. Between 1938 and 1941, Pranas Baleniūnas worked at the museum, and in December 1939, Vaclovas Ratas (Rataiskis) joined the restoration team. Archival sources also mention Zenonas Ivinskis, although the exact duration of his employment remains undocumented. With the onset of the Soviet period from 1940, restoration work was continued by Pranas Kulikauskas, and in the post-war period, in 1951, Antanas Stravinskas joined the museum's team of restorers.⁵

Archival documents confirm that these individuals undertook cleaning, retouching, varnish removal, and structural stabilization of artworks at a time when Lithuanian restoration lacked unified methodology or professional training. Their work ensured the preservation of many cultural objects that might otherwise have deteriorated.⁶

2. Characteristics of painters-restorer practice

Several distinctive features define the practice of interwar painter-restorers:

- Artistic intuition dominated decision-making, replacing scientific diagnostics.
- Documentation was minimal, often limited to brief notes or absent entirely.
- Material selection was inconsistent, sometimes resulting in future conservation challenges.
- Aesthetic unity was prioritised, reflecting painterly approaches rather than conservation ethics.

Despite these limitations, their interventions often displayed sensitivity toward visual expression and a genuine commitment to cultural preservation.

3. Discoveries and losses

The legacy of painter-restorers contains both significant contributions and problematic outcomes.

Discoveries (positive contributions):

- Many artworks were saved from deterioration during a time with no professional conservators.
- Artistic sensibility enriched visual reintegration efforts.
- Early restoration traditions in Lithuania developed partly through their activity.

Losses (negative consequences):

- Use of unsuitable materials caused later conservation problems.
- Overpainting occasionally obscured original layers.
- Lack of documentation complicates modern assessment and conservation planning.

These findings illustrate the dual nature of artistic restoration: creative dedication but methodological risk.

This study is the first to focus specifically on painters as art restorers in Lithuania. While painter-restorers have been acknowledged by scholars, the contributions of painters—whose artistic identities spanned performance and visual arts—have not been systematically examined.

The research highlights both the potential value of interdisciplinary skills in heritage work and the essential need for scientific training, documentation, and ethical standards, which emerged only after the mid-20th century.

Limitations include incomplete archival records, fragmentary documentation, and the difficulty of reconstructing specific interventions. Nevertheless, existing sources allow for a reliable interpretation of this unusual phenomenon.

The participation of painters in artwork restoration during the interwar period represents a distinctive and culturally significant chapter in Lithuania's heritage history. Their contributions were shaped by artistic creativity, institutional necessity, and a deep sense of cultural responsibility. While their methods often lacked scientific rigor, their work played an essential role in preserving artworks before the establishment of professional conservation structures.



ADLES 2025 POWERED BY UNINOVIS

Painters-restorers demonstrate how artistic communities adapt to cultural needs in the absence of specialized institutions. Their activities reflect both the strengths and limitations of artistic restoration and enrich our understanding of the development of professional conservation in Lithuania.

Keywords: *artists, cultural heritage, interdisciplinary practice, interwar Lithuania, painters-restorers, restoration history, visual arts.*



Figure 1. Galina Pševodauskienė-Balsevičiūtė—the only known female restorer at the Kaunas State Cultural Museum during the interwar period (1933-1935). Photograph from the Lithuanian Central State Archives (LCVA).

Notes

- ¹M. K. Čiurlionis Art Museum archival documents (various fonds, files, administrative correspondence, 1920-1940). Kaunas.
- ²Adomonis, T., & Adomonytė, N. (1997). *History of Lithuanian art and architecture (1770-1860)*. Vilnius Academy of Arts Press.
- ³Pakštas, B., & Senvaiteinė, J. (2009). *From the history of restoration: From overpainting to tradition*. In *Care of Museum Objects (Part II), Ethnical and Aesthetic Principles of Art Restoration*. Lithuanian Art Museum.
- ⁴Pakštas, B. (2001). *Achievements and challenges of restoration at the turn of the 21st century*. In *Lithuanian Art Museum Chronicle* (Vol. 4, pp. 164–172). Lithuanian Art Museum.
- ⁵Lithuanian Central State Archives (LCVA). Administrative and operational documents of the Kaunas State Cultural Museum (fond 146, inventory 3, file 1–10), 1918-1940.
- ⁶Lithuanian Central State Archives (LCVA). Restoration documents of the Kaunas State Cultural Museum (fond 404, inventory 2, file 1–287), 1918-1940.

Archival sources

- Lithuanian Central State Archives (LCVA). (1918-1940). *Administrative and operational documents of the Kaunas State Cultural Museum* (fond 146, inventory 3, file 1–10). Vilnius.
- Lithuanian Central State Archives (LCVA). (1918-1940). *Restoration documents of the Kaunas State Cultural Museum* (fond 404, inventory 2, file 1–287). Vilnius.

Published sources

- Adomonis, T., & Adomonytė, N. (1997). *History of Lithuanian art and architecture (1770-1860)*. Vilnius Academy of Arts Press.
- M. K. Čiurlionis Art Museum archival documents (various fonds, files, and administrative correspondence, 1920-1940). M. K. Čiurlionis Art Museum.
- Pakštas, B. (2001). *Achievements and challenges of restoration at the turn of the 21st century*. In *Lithuanian Art Museum Chronicle* (Vol. 4, pp. 164–172). Lithuanian Art Museum.
- Pakštas, B., & Senvaiteinė, J. (2009). *From the history of restoration: From overpainting to tradition*. In *Care of Museum Objects (Part II), Ethnical and Aesthetic Principles of Art Restoration*. Lithuanian Art Museum.

**THE UNIQUE PHENOMENON OF A DOUBLE-SIDED PAINTING:
ICONOGRAPHY AND RESTORATION PRACTICE OF THE CHURCH
BANNER FROM THE KRETINGA MUSEUM**

Eglė Aleknaitė¹, Rolandas Vičys²

¹*Kauno kolegija HEI*

²*Kauno kolegija HEI*

¹*egle.aleknaite@go.kauko.lt*

²*rolandas.vicys@go.kauko.lt*

Eglė Aleknaitė is a heritage professional and lecturer at Kaunas College specialising in the conservation and restoration of easel paintings. With more than a decade of experience in museum curation, cultural project management, and preventive conservation, she has contributed to the preservation and interpretation of Lithuanian cultural heritage across several institutions. She previously served as Deputy Director and Chief Curator of the Lithuanian Museum of the History of Education and has long-standing experience as a curator and restorer at the Vytautas the Great War Museum. Aleknaitė holds a Master's degree in Art History and Criticism and is currently pursuing a PhD in Art History, focusing on the restoration of Lithuanian easel painting from the 19th to the early 20th century. She also curates exhibitions, conducts applied heritage research, and supervises student theses.

Rolandas Vičys is a conservator-restorer of polychrome wood and easel paintings, holding expert-level professional qualifications and extensive experience at the Pranas Gudynas Conservation Centre of the Lithuanian National Museum of Art, where he has worked since 2010. He earned Bachelor's and Master's degrees in easel painting conservation and restoration and fine art painting from the Vilnius Academy of Arts, later qualifying as a teacher of art and technology. Vičys is a laureate of multiple conservation competitions organised by the Lithuanian Conservators' Association and is an active participant in conferences, seminars, and professional training. Since 2017, he has been a lecturer at Kaunas College, teaching future conservator-restorers and supervising final theses. He is a member of both the Lithuanian Conservators' Association and the Lithuanian Artists' Association.

Abstract

This extended abstract examines an exceptional 18th-century double-sided church banner preserved in the Kretinga Museum. The object features two distinct sacred figures—Saint Michael the Archangel and Saint Catherine of Alexandria—painted on opposite sides of a single textile support. Such a dual composition is a rare phenomenon in Lithuanian sacred heritage, making the banner an important source for studying devotional practices, artistic traditions, and symbolic meanings.

The aim of the study is to analyse the banner's iconography and technological characteristics, and to document the full conservation and restoration process carried out to stabilise the fragile object and restore its devotional and artistic significance.³ Photographs of the object before restoration reveal the extent of structural degradation and pigment loss, while after-treatment photographs illustrate the successful preservation and renewed visual clarity of the artwork.⁴

The study integrates several approaches:

Iconographic analysis identified the attributes, narrative roles, and symbolic meanings of St Michael and St Catherine within Christian tradition. Their iconography reflects themes of divine protection, spiritual fortitude, and the triumph of virtue.⁵

Technological and material research relied on visual and laboratory analysis, confirming the presence of pigments typical of 18th-century ecclesiastical painting, including lead white, cinnabar (vermilion), and Berlin blue. These findings align with known workshop practices of the period.⁶

Condition assessment documented mechanical deformations, weakened canvas fibres, flaking ground and paint layers, surface contamination, and previous interventions. High-resolution photographs taken before conservation served as essential visual evidence.⁷

Conservation and restoration treatment followed principles of material compatibility, reversibility, and minimal intervention. It included consolidation of the canvas, strengthening of the ground layer, cleaning of the painted surfaces, and visually coherent reintegration of losses. After-restoration photographs (see Figure 1) demonstrate the regained structural stability and improved legibility.

The conservation process achieved the following results:

- The canvas support was structurally reinforced, stabilising weakened areas.

- The ground and paint layers were consolidated with reversible materials.
- Losses in the pictorial layer were reintegrated in a manner visually coherent yet distinguishable under close inspection.
- The double-sided nature of the banner was preserved and enhanced, allowing each side to be appreciated as an independent artwork while maintaining the integrity of the object.

Comparison of before and after photographs clearly illustrates improvements in structural stability, colour saturation, and overall readability of both paintings.

The object's double-sided construction makes it unique within Lithuanian liturgical heritage. While banners were commonly used in religious processions, few have survived with intact paintings on both sides. This case broadens the understanding of 18th-century sacred art, liturgical function, and workshop practices.

From a conservation standpoint, the project highlights:

- The necessity of pigment identification in selecting appropriate restoration methods.
- The value of comprehensive photographic documentation throughout the process.
- The technical complexity of treating multilayered textile-based polychrome objects.
- The broader importance of restoring religious artefacts as carriers of community identity and spiritual history.

The Kretinga double-sided church banner represents a distinctive example of Lithuanian sacred art. Its iconographic, technological, and conservation study revealed both the devotional significance of the saints depicted and the craftsmanship characteristic of 18th-century religious workshops.

The restoration ensured the long-term preservation of this fragile object and revitalised its cultural and spiritual meaning. The transformation documented through photographs reinforces the importance of interdisciplinary approaches in conserving complex devotional artefacts and deepens the broader discourse on safeguarding Lithuania's tangible religious heritage.

Keywords: *banner, conservation, iconography, restoration, St Catherine, St Michael.*



Figure 1. Recto of the church banner before restoration—visible paint losses, ground layer delamination, deformation of textile fibres, and surface contamination.



Figure 2. Verso of the church banner before restoration—tears, colour loss, craquelure, and earlier non-original repairs documented.



Figure 3. Recto of the church banner after restoration—stabilised ground and paint layers, improved colour coherence, and minimal retouching.



Figure 4. Verso of the church banner after restoration—enhanced iconographic legibility, reinforced textile support, and carefully integrated inpainting.

Notes

- ³Pakštas, B. (2011). Restoration. In *Universal Lithuanian encyclopedia* (p. 21). Science and Encyclopaedia Publishing Centre.
- ⁴Pakštas, B. (2006). Conservation. In *Universal Lithuanian encyclopedia* (p. 35). Science and Encyclopaedia Publishing Centre.
- ⁵Rachlevičiūtė, R. (2018). Iconography. In *Universal Lithuanian encyclopedia* (p. 122). Science and Encyclopaedia Publishing Centre.
- ⁶Berrie, B. H. (1997). Prussian blue. In E. W. FitzHugh (Ed.), *Artists' pigments* (Vol. 3, pp. 191–217). National Gallery of Art.
- ⁷Eastaugh, N., Walsh, V., Chaplin, T., & Siddall, R. (2008). *The pigment compendium: A dictionary and optical microscopy of historical pigments*. Elsevier Butterworth-Heinemann.

References

- Berrie, B. H. (1997). Prussian blue. In E. W. FitzHugh (Ed.), *Artists' pigments* (Vol. 3, pp. 191–217). National Gallery of Art.
- Clarke, G. (2015). The cave and the cross: The rise of Michaelic pilgrimage in early medieval Italy. *Studies in Church History*, 51, 1–19.
- Dailydė, K. (2004/2018). Eschatology. In *Universal Lithuanian encyclopedia* (p. 152). Science and Encyclopaedia Publishing Centre.
- Delehay, H. (1907). *The legends of the saints: An introduction to hagiography*. Longmans, Green and Co.
- Eastaugh, N., Walsh, V., Chaplin, T., & Siddall, R. (2008). *The pigment compendium: A dictionary of historical pigments*. Elsevier Butterworth-Heinemann.
- Juchnevičienė, N. (2018). Hellenism. In *Universal Lithuanian encyclopedia* (p. 165). Science and Encyclopaedia Publishing Centre.
- Pakštas, B. (2006). Conservation. In *Universal Lithuanian encyclopedia* (p. 35). Science and Encyclopaedia Publishing Centre.
- Pakštas, B. (2011). Restoration. In *Universal Lithuanian encyclopedia* (p. 21). Science and Encyclopaedia Publishing Centre.



ADLES 2025 POWERED BY UNINOVIS

Paulauskytė, T. (2007). Cult. In *Universal Lithuanian encyclopedia* (p. 64). Science and Encyclopaedia Publishing Centre.

Rachlevičiūtė, R. (2018). Iconography. In *Universal Lithuanian encyclopedia* (p. 122). Science and Encyclopaedia Publishing Centre.

THE ROLE OF DIGITAL COMMUNICATION IN HERITAGE RESTORATION EDUCATION: FROM THE PRANAS GUDYNAS CENTRE TO VIRTUAL MUSEUM EXPERIENCES

Ingrida Bagočiūnienė

*Kaunas University of Applied Sciences
ingrida.valantieute@kaunokolegija.lt*

Ingrida Bagočiūnienė is a lecturer at Kaunas University of Applied Sciences, where she teaches restoration-related subjects and contributes to the professional training of future cultural heritage conservation specialists. Her teaching focuses on practical restoration techniques, material studies, and the integration of contemporary communication principles into conservation practice.

Alongside her academic work, she is a practicing restorer at the Pranas Gudynas Restoration Centre of the Lithuanian National Museum of Art. Her professional practice involves the conservation of cultural heritage objects, material analyses, and the development of educational approaches that support public understanding of restoration processes.

Ingrida holds a Master's degree in Innovation and Technology Communication from Vilnius Gediminas Technical University. Her research interests include digital communication in the heritage sector, public engagement in conservation, and the use of virtual museum tools to address misconceptions about restoration. She is particularly interested in interdisciplinary approaches that connect restoration practice, education, and digital transformation in cultural institutions.

Abstract

The purpose of this study is to examine how digital communication tools and museum-based educational practices can enhance public understanding of professional heritage restoration, using the Pranas Gudynas Restoration Centre as a focal point. As museums undergo digital transformation, communication about restoration—traditionally confined to specialist environments—has moved into public-facing digital spaces (Marty, 2021; Parry, 2019). This shift introduces both opportunities and risks: while virtual tools and social media make restoration more visible, they also amplify misleading DIY narratives that distort the meaning of conservation (Gabrielli, 2020; Walker & Ángel, 2023). The study aims to understand how transparent, research-based communication and virtual museum experiences can counter misinformation and support critical digital literacy in heritage contexts (Kidd, 2019; López-Mencheró & Matthews, 2022). Ultimately, the research seeks to identify strategies for integrating digital storytelling, virtual reconstruction, and audience engagement tools into restoration education to strengthen cultural awareness and sustainable preservation practices.

A mixed-methods research design was employed, combining theoretical analysis with empirical investigation.

The theoretical framework draws on contemporary scholarship in digital heritage studies, conservation communication, and museology (Clark & Wise, 2018; Urbanavičienė, 2020), as well as recent work on virtual museums, audience engagement, and digital epistemologies (Aaltonen & Heikkilä, 2023; Pescarin, 2020). It includes comparative analysis of international museum communication strategies.

The empirical research consisted of three components:

Digital media content analysis of Lithuanian museums, cultural institutions, and private restorers on Facebook, Instagram, and YouTube, examining how restoration is framed, visualised, and communicated (Gabrielli, 2020).

Qualitative interviews with communication specialists and museum educators, providing insights into institutional decision-making, target audiences, and communication challenges.

A quantitative survey of visitors to the Pranas Gudynas Restoration Centre assessing knowledge acquisition, perception changes, and attitudes toward digital educational tools.

Triangulation ensured the reliability and validity of findings by integrating multiple data sources.

The study produced several significant findings.

First, misinformation in social media was found to be a major challenge. Platforms frequently present restoration as an aesthetic, decorative, or craft-based practice, conflating it with renovation, upcycling, or creative DIY reinterpretations (Gabrielli, 2020; Kidd, 2019). These distortions contribute to widespread public misconceptions about professional conservation ethics, material science, and methodology.

Second, museum-based educational programmes—especially those conducted in the restoration laboratory—were shown to be highly effective in increasing heritage literacy. Visitors demonstrated a clearer understanding of restoration principles, material decay, and the distinction between scientific conservation and aesthetic alteration (Falk & Dierking, 2000; Walker & Ángel, 2023).

Third, digital tools such as virtual tours, 3D models, step-by-step documentation, and interactive online content significantly enhanced engagement. These tools made restoration processes visible, accessible, and relatable, especially for younger audiences and those unable to visit the centre in person (Aaltonen & Heikkilä, 2023; Pescarin, 2020).

Finally, findings emphasised the crucial role of critical digital literacy. When audiences receive clear, research-based explanations of restoration, they become better equipped to recognise misleading content online and develop more informed perspectives on cultural heritage preservation (López-Menchero & Matthews, 2022; Žilinskaitė-Vytė, 2021).

This study contributes original insights by combining restoration education with digital museology and communication research—an intersection that remains underexplored in heritage scholarship. The findings highlight that digital communication is not simply a promotional instrument but a pedagogical and ethical tool essential for heritage sustainability.

Practical implications include:

- recommendations for restoration centres and museums seeking to improve communication transparency;
- strategies for integrating virtual museum tools into educational programming;

- guidelines for addressing restoration-related misinformation and enhancing audience trust (Clark & Wise, 2018; Marty, 2021);
- evidence supporting interdisciplinary collaboration between restorers, educators, and digital content creators.

Limitations include the primarily Lithuanian context and the reliance on self-reported visitor data. Broader international comparative research and longitudinal studies could further clarify behavioural impacts over time.

Digital communication plays a critical and expanding role in heritage restoration education. The Pranas Gudynas Restoration Centre demonstrates that combining professional restoration practices with digital engagement tools strengthens public understanding, counters misinformation, and fosters a deeper appreciation of cultural heritage. As museums continue to evolve digitally, virtual restoration experiences will increasingly shape how society perceives, values, and participates in cultural preservation. Strengthening digital literacy and transparent communication will therefore remain essential for the future sustainability of the heritage sector.

Keywords: *cultural heritage, digital communication, misinformation, museum education, restoration, virtual experiences, public engagement.*



Figure 1. An off-site guided tour of the exhibition led by restorers.



Figure 2. A guided tour inside the Conservation Centre itself.



Figure 3. A gilding workshop at the Pranas Gudynas Conservation Centre.

All photos are made by Gintarė Grigėnaitė (Lithuanian National Museum of Arts).

References

- Aaltonen, M., & Heikkilä, M. (2023). Digital heritage communication in museums: Strategies for engaging diverse audiences. *Museum & Society*, 21(1), 45–62.
- Clark, K., & Wise, A. (2018). *Heritage, conservation, and sustainability*. Routledge.
- Falk, J. H., & Dierking, L. D. (2000). *Learning from museums: Visitor experiences and the making of meaning*. AltaMira Press.
- Gabrielli, F. (2020). The restorer's Instagram: Social media visibility and the ethics of conservation communication. *Journal of Cultural Heritage Studies*, 12(3), 45–60.
- Harvey, D. C. (2001). Heritage pasts and heritage presents: Temporality, meaning and the scope of heritage studies. *International Journal of Heritage Studies*, 7(4), 319–338. <https://doi.org/10.1080/13581650120105542>
- Kidd, J. (2019). *Digital culture and the contemporary museum*. Routledge.
- López-Menchero, V. M., & Matthews, R. (2022). Digital heritage in the 21st century: Ethics, authenticity, and public engagement. *Journal of Digital Heritage*, 9(2), 101–119.
- Marty, P. F. (2021). Museums and digital transformation: New tools, new audiences, new expectations. *Museum Management and Curatorship*, 36(4), 323–338.
- Parry, R. (2019). *Museums in a digital age* (2nd ed.). Routledge.
- Pescarin, S. (2020). Virtual museums and 3D reconstructions: Reframing public knowledge of heritage. *Digital Applications in Archaeology and Cultural Heritage*, 18, e00154.
- Urbanavičienė, J. (2020). *Cultural heritage and identity construction in contemporary society*. Lithuanian Academy of Culture Press.
- Walker, S., & Ángel, J. (2023). Communicating restoration: Transparency and public trust in conservation practices. *International Journal of Conservation Science*, 14(2), 87–101.
- Žilinskaitė-Vytė, V. (2021). Digital tools in cultural communication: Opportunities and challenges. *Journal of Museum and Heritage Communication*, 5(2), 112–128.

HEDGING IN AI-GENERATED ACADEMIC WRITING: A CORPUS-BASED LINGUISTIC ANALYSIS OF EPISTEMIC MODALITY IN RETRACTED ARTICLES

Doğan Baydal

Ondokuz Mayıs University

doganbaydal@omu.edu.tr

I hold a PhD in General Linguistics from Hacettepe University, with research expertise in the morphology-syntax interface and psycholinguistics, focusing primarily on Turkish. I am currently affiliated with the Department of Translation and Interpreting at Ondokuz Mayıs University, where I contribute to teaching and research. My work examines how morphological structure interacts with syntactic organization and how these processes are represented in the mind. I am particularly interested in morphological parsing, sentence processing, and the cognitive mechanisms underlying language comprehension.

Abstract

Artificial Intelligence (from now on AI) tools have become so common in the last decade that it is nearly impossible to see any areas of science that do not have any relationship with any kinds of those tools. Among those areas, academic writing is one of the branches that was enormously affected by AI tools because a notable advantage of these tools is to generate large amounts of texts (Almulla, 2025; Hutson, 2021; Kung et al., 2023). However, this advantage has also sparked ethical worries about academic plagiarism and the role of AI in authorship within scholarly work (Stokel-Walker, 2022; Zhang & Crosthwaite, 2025). Regarding these advantages and worries on the role of AI in academic writing, such questions arise in academic writing: How does the language produced by AI tools look like and what are the similarities and differences between AI generated texts and human written texts? The current study aims to examine how hedging is realized in AI-generated academic writing, using a corpus of retracted articles to identify linguistic patterns and compare them with non-retracted human-authored texts.

Two datasets of research articles were collected in order to compare hedging strategies used in retracted articles because of AI-aided/generated content and non-retracted articles. For the retracted articles, Retraction Watch database (The Center for Scientific Integrity, 2018) was referred. The comparison of retracted and non-retracted articles was performed using quantitative analyses method. Based on Hyland's (1998) classification of surface features of hedging, lexical hedges were identified, marked, and compared in the two corpora to see their usage, frequency, and distribution by means of the corpus software *LancsBox* (Brezina & Platt, 2025). The findings of the study show that lexical adverbs, lexical adjectives, and modal verbs are used in the retracted corpora more. On the contrary, lexical verbs and modal nouns are used in the non-retracted corpora more. When the distribution patterns of lexical hedging items is analyzed, there is no unity on the usage of lexical hedges in AI-generated content or in human written counterparts. This is also observed in the literature: while some studies (e.g., Almulla, 2025) claim that AI-generated content relies more on hedging devices, others (e.g., Herbold et al., 2023) claim that human written essays use hedging devices more. Thus, fine-grained distinctions here are determinant on the reliance of hedging strategies. Another result is that while the journal corpus by Hyland (1998, p. 104) relies on lexical verbs (27.4%), adverbs (24.7%), and adjectives (22.1%), both AI-generated articles and their human counterparts use modal verbs (45.4%) more when compared to other hedging strategies.

These findings show that modal verbs have become the most convenient, explicit, and standardized hedging strategy in contemporary scientific writing.

In conclusion, this study demonstrates that retracted and non-retracted articles differ markedly in their deployment of hedging strategies, with each lexical category revealing distinctive patterns of epistemic stance and rhetorical control. The findings highlight that deviations from conventional hedging practices—particularly the overuse or underuse of specific hedging forms—may serve as subtle linguistic indicators of article quality, authorship integrity, and the broader credibility of scientific communication in the age of AI-assisted writing.

This study offers an original contribution by providing the first systematic, corpus-based comparison of hedging practices in AI-generated retracted articles and human-authored non-retracted articles, which reveals clear differences in epistemic stance across five lexical categories. The findings carry practical implications for editors, reviewers, and research integrity specialists by showing that hedging profiles may serve as subtle linguistic indicators of article quality and potential risks associated with AI-assisted writing. However, the study is limited by the size and disciplinary scope of the corpus, which suggests that future research should expand the dataset and incorporate qualitative analyses to capture the broader rhetorical context of hedging in scientific discourse.

Keywords: *corpus, epistemic modality, hedging, Hyland's Hedge Taxonomy, retraction.*

References

- Almulla, N. (2025). The Use of Hedging Devices and Engagement Markers in AI-Generated and Human-Written Essays: A Corpus-Based Comparison. *Open Journal of Modern Linguistics*, 15, 754–772. <https://doi.org/10.4236/ojml.2025.155044>
- Brezina, V., & Platt, W. (2025). *LancsBox X [software]*, Lancaster University. <http://lancsbox.lancs.ac.uk>
- Herbold, S., Hautli-Janisz, A., Heuer, U., Kikteva, Z., & Trautsch, A. (2023). A large-scale comparison of human-written versus ChatGPT-generated essays. *Scientific Reports*, 13(1), 18617. <https://doi.org/10.1038/s41598-023-45644-9>
- Hutson, M. (2021). Who should stop unethical AI. *The New Yorker*.
- Hyland, K. (1998). *Hedging in scientific research articles*. John Benjamins.
- Kung, T. H., Cheatham, M., Medenilla, A., Sillos, C., De Leon, L., Elepaño, C., Madriaga, M., Aggabao, R., Diaz-Candido, G., Maningo, J., & Tseng, V. (2023). Performance of ChatGPT on USMLE: Potential for AI-assisted medical education using Large Language Models. *PLOS Digital Health*, 2(2). e0000198. <https://doi.org/10.1371/journal.pdig.0000198>
- Stokel-Walker, C. (2022). AI bot ChatGPT writes smart essays-should professors worry? *Nature*. <https://doi.org/10.1038/d41586-022-04397-7>
- The Center for Scientific Integrity. (2018). The Retraction Watch Database. *Retraction Watch*. <http://retractiondatabase.org/>
- Zhang, M., & Crosthwaite, P. (2025). More human than human? Differences in lexis and collocation within academic essays produced by ChatGPT-3.5 and human L2 writers. *International Review of Applied Linguistics in Language Teaching*, 1–28. <https://doi.org/10.1515/iral-2024-0196>

SEMANTICS OF SILENCE: CHALLENGES OF IMPLICIT MEANING IN MACHINE TRANSLATION

Amna Ben Khalifa

University of Málaga / University of Sousse

emna.khlifa@gmail.com

Amna Ben Khalifa is a PhD student working at the intersection of linguistics and machine translation. She graduated with a Bachelor's degree in Arabic Language, Literature, and Civilization from the University of Sousse in Tunisia, followed by a research Master's degree in the same field. Her Master's thesis investigated Arabic compound nouns and their translation into English, examining their syntactic and semantic properties and the challenges that these structures pose across languages.

She is a member of the Semantic Studies and Computational Linguistics Laboratory, with research interests in the description and analysis of Arabic and English under both linguistic and computational approaches. Her doctoral research addresses the challenges of machine translation for Arabic-English and English-Arabic across both directions, while giving special attention to the morphological, syntactic, and semantic factors that characterize system performance, including large language models. Interests include translation quality assessment and the development of research pathways to more robust, linguistically informed solutions for Arabic-English machine translation.

Abstract

This paper discusses the problem of translating silence and implicit meaning in machine translation systems and large language models. The point of departure is a theoretical assumption: silence is not a semantic void in discourse; rather, it is a communicative act with pragmatic functions shaped by context, interactional rhythm, and the relationship between interlocutors—especially through stage cues in dramatic texts. The research then analyses how automated systems handle these phenomena.

The paper seeks to highlight the shortcomings of machine-based approaches in addressing what remains unsaid in translation. It also aims to compare machine translation outputs with human translation to identify differences in meaning construction. In this context, the study proposes a descriptive framework and analytical criteria for integrating silence and implicit meaning into machine translation quality evaluation. Finally, it suggests that silence is no less crucial than speech in pragmatic interpretation and therefore needs equal attention in machine translation research.

This study adopts a descriptive, analytical, and comparative approach. It is based on a parallel corpus of selected scenes from the original French text *En attendant Godot* by Samuel Beckett, its English version *Waiting for Godot*, and the Arabic translation في انتظار غودو. The study focuses on pragmatic phenomena related to silence and implicit meaning within the dramatic text.

Each scene was tagged using a descriptive coding system, namely SIL (silence), GES (gesture), IMP (implicit meaning), and MIX (mixed phenomena). These excerpts were then tested using machine translation systems and large language models, and the results were compared with the human translation. A qualitative analysis was conducted to observe patterns of loss, simplification, and semantic transformation, and to explore the limits of machine-based approaches in handling what is left unsaid in dramatic discourse. Based on these findings, the study proposes a descriptive framework and analytical criteria for incorporating silence into machine translation quality evaluation and for improving translation performance.

The results of this study, based on a descriptive and comparative analysis of selected extracts from *Waiting for Godot*, show that silence in dramatic discourse is not an empty space but a pragmatic mechanism that shapes meaning and guides interpretation. Comparison with human translation and the outputs of machine translation systems and large language models indicate that automated approaches

often flatten the pragmatic force of silence or treat it as secondary and tend to translate stage directions and meaningful movements too literally, missing their dramatic function. The findings also show that machine outputs may reduce intended ambiguity by making implicit meaning more explicit, which can weaken the original dramatic tension. By contrast, human translation is better able to reconstruct meaning when it depends on what is left unsaid or on what emerges through pauses, movement, and context. Building on the previous observations, the study also presents an analytical framework and criteria for evaluating the quality of machine translations when assessing dramatics based on silent and implicit meanings. Thus, the framework allows for greater emphasis on and incorporation of pragmatic considerations in the evaluation of the quality of translated dramatic texts.

The originality of this study lies in relating pragmatic silence to the evaluation of machine translation systems and large language models within a dramatic text, with a trilingual parallel corpus. It also offers a reusable descriptive coding scheme (SIL/GES/IMP/MIX) that can support further research on pragmatic phenomena in translation. Building on this, the study proposes simple and practical criteria for tracing the representation of silence in machine translation quality assessment. These criteria help verify whether machine outputs preserve markers of silence or pause when they appear in the text and preserve their pragmatic function in context, or whether they weaken or flatten their effect. They also help check if stage directions and meaningful movements are treated as functional elements contributing to the scene or translated too literally in a way that misses their dramatic function. However, test results may vary according to the machine translation system employed or the version of the language model used in this study, and focusing on one dramatic text only means that wider generalizations will have to await further studies and larger corpora.

This study concludes that silence in dramatic texts is part of meaning, shaped by scene structure, role relations, and dramatic tension rather than words alone. Tests on selected extracts from *Waiting for Godot* using machine translation systems and large language models show that the main weakness lies less in direct linguistic error and more in limited contextual understanding. While machine outputs may appear accurate on the surface, they often miss the function of silence within the scene. Compared with the human translation, successful rendering of silence depends on an interpretive reading of what the text implies as much as what it states. The study, therefore, argues for expanding machine translation quality



ADLES 2025 POWERED BY UNINOVIS

assessment to include indicators for non-verbal and pragmatic meaning in texts built on pauses, movement, and implication.

Keywords: *implicit meaning, large language models (LLMs), machine translation (MT), pragmatics and translation, silence.*

Sources

Beckett, S. (1952). *En attendant Godot*. Les Éditions de Minuit.

Beckett, S. (1954). *Waiting for Godot* (S. Beckett, Trans.). Faber and Faber.

بيكيت، صموئيل. (2009). في انتظار غودو (ترجمة: بول شاول). منشورات الجمل.

References

Dabre, R., Chu, C., & Kunchukuttan, A. (2020). A survey of multilingual neural machine translation. *ACM Computing Surveys*, 53(5), Article 99.

Ephratt, M. (2008). The functions of silence. *Journal of Pragmatics*, 40(11), 1909–1938.

Farwell, D., & Helmreich, S. (2001). Towards pragmatics-based machine translation. In S. Krauwer (Ed.), *Workshop on MT2010: Towards a road map for MT* (pp. 22-25). <https://aclanthology.org/2001.mtsummit-road/>

Jaworski, A. (1993). *The power of silence: Social and pragmatic perspectives*. SAGE.

Kouachi, R. (2018). Eloquent silences in Samuel Beckett's *Waiting for Godot* and Harold Pinter's *The dumb waiter*. *Arab World English Journal for Translation & Literary Studies*, 2(1), 172–181.

Kurzon, D. (1998). *Discourse of silence*. John Benjamins.

Marrouchi, M. (2019). Silence in Pinter's *Silence* and *The dumb waiter*. *International Journal of Language and Literary Studies*, 1(3), 112–125.

Nakane, I. (2012). Silence. In C. B. Paulston, S. F. Kiesling & E. S. Rangel (Eds.), *The handbook of intercultural discourse and communication* (pp. 158–179). Wiley-Blackwell.

Rothkegel, A. (1986). Pragmatics in machine translation. *Proceedings of the 11th conference on computational linguistics (COLING '86)*, 335–337. Association for Computational Linguistics.

Searle, J. R. (1969). *Speech acts: An essay in the philosophy of language*. Cambridge University Press.

Sulubacak, U., Caglayan, O., Grönroos, S.-A., Rouhe, A., Elliott, D., Specia, L., & Tiedemann, J. (2020). Multimodal machine translation through visuals and speech. *Machine Translation*, 34, 97–147.

Tannen, D., & Saville-Troike, M. (Eds.). (1985). *Perspectives on silence*. Ablex.

Valdeón, R. A. (2023). Automated translation and pragmatic force: A discussion from the perspective of intercultural pragmatics. *Babel*, 69(4), 447–464.



ADLES 2025 POWERED BY UNINOVIS

Wang, R., Tan, X., Luo, R., Qin, T., & Liu, T.-Y. (2021). A survey on low-resource neural machine translation. In Z.-H. Zhou (Ed.), *Proceedings of the thirtieth international joint conference on artificial intelligence (IJCAI-21)*, 4636–4643. International Joint Conferences on Artificial Intelligence Organization.

INTEGRATING DIGITAL TECHNOLOGIES INTO FASHION DESIGN EDUCATION PRACTICE

Ilze Bodža¹, Silvija Mežinska²

¹Rezekne Academy of Riga Technical University

²Rezekne Academy of Riga Technical University

¹Ilze.Bodza@rtu.lv

²Silvija.Mezinska@rtu.lv

Mg. design Ilze Bodža, lecturer at Rezekne Academy of Riga Technical University, delivers a range of design-focused study courses, including Digital Technologies in Design, Applied Graphics and Font, Sketching, among others. Academic and professional interests span a range of design disciplines and extend into broader areas of visual communication. She is curator of international exhibitions and coordinator of international exchange projects.

Mg. design, Mg.sc.ing., Mg.paed. Silvija Mežinska, lecturer, researcher, and director of the study programme Fashion Design and Technology at Rezekne Academy of Riga Technical University, delivers study courses for future designers. She is a member of the Latvian Designers' Union and is author of international scientific publications. Research interests include design in interdisciplinary research, in education; design innovation performance, advanced technologies use in clothing design.

Abstract

The research aims to explore the possibilities of integrating digital technologies into contemporary fashion design practice and design education. It also seeks to determine how digital tools improve design efficiency, accuracy, and the quality of model visualization in the design workflow.

The research combines theoretical analysis of scientific and professional literature and practical experiments using Gerber AccuMark and Clo3D programmes. The literature review presents available materials and conducted research on current practical 2D and 3D digital technologies, digital prototyping methods, and their development in the fashion industry. Practical experiments involved developing a digital prototype based on the constructive and technological design of a clothing model using digital tools such as Gerber AccuMark and Clo3D. The process included creating base patterns, modelling, developing model patterns, preparing layouts, selecting avatars, and performing digital simulations. Digital prototyping was used to evaluate the silhouette, cut, detail compliance of the model, and the properties and behaviour of the selected fabric on the avatar before the production of a physical prototype.

Theoretical research and practical experiments confirmed that traditional pattern making is associated with time-consuming manual work, but the integration of digital technologies significantly improves the efficiency of the workflow and supports more accurate decision-making, promotes creativity and productivity. Such an approach can also be successfully used in the fashion design study process. Digital prototyping using Gerber AccuMark and Clo3D programmes allows for early detection of pattern design and cut problems, reducing the need for multiple physical samples. Pattern creation and other pattern design processes become more transparent and easier to modify digitally. In this case, the final garment pattern project was developed and tested in Gerber AccuMark and Clo3D programmes and met all pattern design and technical requirements.

The conducted research has theoretical significance, gathering current information in the field of fashion design digital prototyping, and practical significance, carrying out a real process of pattern digital prototyping in Gerber AccuMark and Clo3D programmes. The results highlight the growing importance and essential role of digital technologies in modern fashion design workflows in the fashion industry and fashion design education. Through practical experiments, the authors demonstrate how digital tools directly contribute to the efficiency of the pattern design process, promote a sustainable approach in the fashion industry, and improve garment pattern design results in modern fashion design practice.



ADLES 2025 POWERED BY UNINOVIS

Available digital technologies provide designers with the opportunity to visualize clothing in 3D format, design, test, and refine clothing patterns before their physical production, allow them to express their creative vision, accelerate the design process, and significantly save time and costs. As the fashion industry transitions to more sustainable, cost-effective, and collaborative methods, digital tools are becoming indispensable in everyday operations. The practical experiment confirms that digital technologies are not only useful for optimizing design activities, as programmes help to rationalize and accelerate the work process for creating new patterns, but also essential for the efficiency and further development of modern fashion design workflows in the digital age, providing improved approaches also for consumers.

Keywords: *design, digital prototyping, digital technologies.*

References

- Amor Design Institute. (2024). *The role of technology in modern fashion design*. <https://www.amordesign.org/blog/the-role-of-technology-in-modern-fashion-design>
- Byrne, F. (2023). *How does technology impact the world of fashion?* British Academy of Fashion Design. <https://www.fashiondesignacademy.co.uk/blog/how-does-technology-impact-the-world-of-fashion->
- Deniss, A. (2024). *Digital transformation in fashion*. Whatfix. <https://whatfix.com/blog/digital-transformation-fashion>
- Fashion & Textile History Gallery. (2013). *Fashion and technology*. The Museum at FIT. <https://www.fitnyc.edu/museum/exhibitions/fashion-and-technology.php>
- Komarova, I. (2020). *Modes dizains*. <https://static1.squarespace.com/static/5f06fd23a667bb31dbca5507/t/5f58c25c7414073459bb667d/1599652476500/Modes-dizains.pdf>
- McKinsey & Company. (2022). *State of fashion technology report 2022*. <https://www.mckinsey.com/industries/retail/our-insights/state-of-fashion-technology-report-2022>
- Mežinska, S. (2021). Aspect of collaboration in the design students' involvement in textile laser processing research. *ICERI Proceedings*, 3331–3339. <https://doi.org/10.21125/iceri.2021.0819>
- Mežinska, S. (2021). Research activity of students in the application of laser processing and 3D printing technologies in Textile Fabrics. *SOCIETY. INTEGRATION. EDUCATION. Proceedings of the international scientific conference*, 4, 599–611. <https://doi.org/10.17770/sie2021vol4.6408>
- Munmun, I. A. (2023). The impact of technology on fashion design: From concept to creation. *International Journal of Advances in Engineering and Management (IJAEM)*, 5(12), 21–27. <https://doi.org/10.35629/5252-05122127>
- Rocky Mountain College of Art + Design. (2024). *Technology meets textiles: The future of fashion design*. <https://www.rmcad.edu/blog/technology-meets-textiles-the-future-of-fashion-design/>
- Sarmakari, N. (2021). Digital 3D fashion designers: Cases of ATACAC and The Fabricant. *Fashion Theory*, 27(1), 85–114. <https://doi.org/10.1080/1362704X.2021.1981657>



ADLES 2025 POWERED BY UNINOVIS

HUMAN LANGUAGE USERS (AND LEARNERS) IN AN AGE OF ARTIFICIAL INTELLIGENCE

Angela M. Dadak
European Humanities University
angela.dadak@ehu.lt

Angela M. Dadak is a multilingual writing specialist, applied linguist, and TESOL educator with over two decades of international experience in teaching, programme development, and faculty training across four continents. She holds an MATESOL from the Monterey Institute of International Studies and a PhD in English Studies from Old Dominion University, where her research examined global language variation and English as a lingua franca in online learning spaces. Currently, she teaches courses in academic, legal, and professional English at the European Humanities University in Vilnius, Lithuania. Her areas of research and teaching interest include second-language writing, language awareness, curriculum development, and faculty development. She is increasingly focused on the role of generative AI in reshaping language learning ecosystems and the competencies that educators, learners, and all language users need to cultivate in this shifting landscape. She has a passion for critical language awareness and intercultural understanding/exchanges.

Abstract

People establish relationships, express culture, navigate emotions, and push creative boundaries through the use of language. Thus, complex verbal language is a uniquely human characteristic. What does that mean in an age of generative AI? What does it mean to be a language learner in this age? This paper considers these questions by connecting ideas about human language, empirically-substantiated benefits of language learning, and current research on AI and language pedagogy.

The structure of the human brain itself establishes language as a human trait. While an understanding of all complexities of language and the brain remains incomplete, what is known has implications for language learning and teaching generally and with generative AI tools. Both the structure of the different areas of the brain, including density of grey matter and the white matter connections between them play essential roles in human language (Friederici, 2017). As discussed below, multilingualism and language learning have been shown to affect the health of these systems.

The very characteristics that make complex language a human trait are echoed in the reasons commonly held for learning another language. Common claims include enhanced communication skills, education advantages, increased job opportunities, improved brain health, and improved thinking skills. Empirical research supports these claims. A review of 20th-century research identified three main benefits of multilingualism and language learning: academic achievement, cognitive benefits, and attitudes and beliefs about other languages and cultures (Valdés et al., 2004). Fox et al.'s (2019) updated reviews added five other themes: motivation, greater earning potential, communicative and intercultural competence, positive aging, and enhanced creativity. This work calls attention to links between multilingualism and executive functioning in the brain (Fox et al., 2019).

Empirical research is currently examining generative AI in language learning, showing affordances that include personalized learning, timely feedback, and increased motivation. Many studies show improved student writing and speaking and listening skills. Students cite convenience and personalized feedback that they receive with generative AI, noting that they feel less fear of judgement. Research into educators' views show four main language teacher uses of generative AI: content provider, teaching assistant, evaluator/feedback provider, and interlocutor (Chandel & Lim, 2025; Jeon & Lee, 2023). Major concerns involve ethics, academic dishonesty, and risks of over-relying on the tools that can result in diminished thinking and creativity (Chandel & Lim, 2025).

As discussed earlier, one of the most researched benefits of language learning and multilingualism connects to the health of the brain. The recent brain imaging technologies that made those discoveries possible also allow researchers to measure activity in the brain during learning activities. A 2025 study from MIT investigated the differences between groups of students as they completed writing tasks. Students responded to essay prompts in four different sessions, with one group using large language model (LLM) AI tools in the first sessions and not in the final, and another group using no tools until the final session. The groups showed pronounced differences in neural activity patterns during the task: “brain connectivity systematically scaled down with the amount of external support” (Kosmyna et al., 2025, p. 136). The group that wrote without AI showed much higher connectivity across areas of the brain and the strongest activation in regions involved in “semantic integration, creative ideation, and executive self-monitoring” (p. 136). In the fourth round, the electroencephalogram (EEG), a measurement of electrical activity in the brain, showed increased connectivity in the AI group once they wrote without the tool, but the connectivity did not reach the levels that the non-AI group had by their latter rounds. This finding suggests that the timing of AI tool use affects brain development.

In sum, this study calls attention to three themes: early AI reliance may result in shallow encoding and not lead to deeper learning; withholding LLM tools during early stages may support memory formation and learning; metacognition is higher in groups that start a task first without generative AI as they may compare their unaided work with the AI suggestions and thus engage in more reflection and deliberate choices.

If one of the demonstrated advantages of multilingualism and language learning is denser grey matter and greater white matter activation, attention should be paid to using generative AI for language learning in ways that do not reverse the tide on that benefit. Another implication is that the ways, especially the timing, of generative AI use related to learner effort are important to consider: “these findings support an educational model that delays AI integration until learners have engaged in sufficient self-driven cognitive effort” (Kosmyna et al., 2025, p. 141). Teachers and researchers are already attending to this concern, exploring and establishing ways of optimizing use of new technologies for learning; this study offers more direction.

As for conclusions, first, there is active research activity into language teaching and generative AI, especially in the areas of attitudes and uses by students and teachers. Second, research continues to



ADLES 2025 POWERED BY UNINOVIS

describe the complementary relationship between educators and generative AI tools. Third, it will be important to follow brain research so that educators can continue to make informed decisions about the timing and extent of use of generative AI tools in language learning.

Keywords: *AI-assisted language learning, cognition, generative AI, human-AI collaboration, language pedagogy, multilingualism.*

References

- Bak, T. H. (2025). Why our brains and our world need languages to cross borders. ICC International Language Association webinar. 25 September 2025.
- Berkman, N. (2025). Why bother learning a language in the age of AI? *MLA Knowledge Commons*.
<https://natalieberkman.mla.hcommons.org/why-bother-learning-a-language-in-the-age-of-ai/>
- Chandel, P., & Lim, F. V. (2024). Generative AI and literacy development in the language classroom: A systematic review of literature. *Ubiquitous Learning*, 18(2), 31–49.
https://www.researchgate.net/publication/385726918_Generative_AI_and_Literacy_Development_in_the_Language_Classroom_A_Systematic_Review_of_Literature
- Cherry, K. (2024). Learning a new language is hard, but your brain will thank you. *Verywell Mind*.
<https://www.verywellmind.com/benefits-of-learning-a-new-language-8695564>
- Colley, S. (2024). English is the language of AI – Why teaching it matters. *Pearson blog*.
<https://www.pearson.com/languages/community/blogs/english-is-the-language-of-ai-11-24.html>
- Fox, R., Corretjer, O., & Webb, K. (2019). Benefits of foreign language learning and bilingualism: An analysis of published empirical research 2012–2019. *Foreign Language Annals*, 52(4), 699–726.
<https://doi.org/10.1111/flan.12424>
- Fox, R., Corretjer, O., Webb, K., & Tian, J. (2019). Benefits of foreign language learning and bilingualism: An analysis of published empirical research 2005–2011. *Foreign Language Annals*, 52(3), 470–490.
<https://doi.org/10.1111/flan.12418>
- Friederici, A. (2017). *Language in our brain: The origins of a uniquely human capacity*. The MIT Press.
<https://doi.org/10.7551/mitpress/9780262036924.001.0001>
- Hubbard, P., & Schulze, M. (2025). AI and the future of language teaching: Motivating sustained integrated professional development. *International Journal of Computer-Assisted Language Learning and Teaching*, 15(1), 1–17. <https://doi.org/10.4018/IJCALLT.378304>
- Jeon, J., & Lee, S. (2023). Large language models in education: A focus on the complementary relationship between human teachers and ChatGPT. *Education and Information Technologies*, 28(12), 15873–15892.
<https://doi.org/10.1007/s10639-023-11834-1>

- Kosmyna, N., Hauptmann, E., Tong Yuan, Y., Situ, J., Liao, X-H., Beresnitzky, A.V., Braunstein, I., & Maes, P. (2025). Your brain on ChatGPT: Accumulation of cognitive debt when using an AI assistant for essay writing task. [arXiv:2506.08872](https://arxiv.org/abs/2506.08872)
- Li, B., Lowell, V. L., Wang, C., & Li, X. (2024). A systematic review of the first year of publications on ChatGPT and language education: Examining research on ChatGPT's use in language learning and teaching. *Computers and Education: Artificial Intelligence*, 7. <https://doi.org/10.1016/j.caeai.2024.100266>
- Tutton, M., & Cohen, D. (2025). Reconceptualizing the role of the university language teacher in light of generative AI. *Education Sciences*, 15(1), 56. <https://doi.org/10.3390/educsci15010056>
- Valdés, G., Kibler, A., & Philipose, S. (2004). What does research show about the benefits of language learning? *American Council on the Teaching of Foreign Language*. <https://www.actfl.org/research/what-the-research-shows>

EMPOWERING REFUGEES THROUGH DIGITAL TRANSFORMATION IN SOCIAL WORK: INSIGHTS FROM THE M9C PLATFORM EVALUATION

Valentina Demidenko¹, Bjorn Klefstad², Julita Pigulevičienė³

¹*Kauno kolegija HEI*

²*Norwegian University of Science and Technology*

³*Institute of Social Projects*

¹*valentina.demidenko@jonavosspc.lt*

²*bjorn.klefstad@ntnu.no*

³*julita.piguleviciene@gmail.com*

Dr Valentina Demidenko is an Associate Professor and researcher at Kauno kolegija HEI, as well as a practising trauma psychologist. Her work combines academic inquiry with long-term practical experience in social services, refugee support, and community-based interventions. She has led social service organisations and collaborated with NGOs providing psychological assistance to forced migrants. Her current research focuses on refugee integration, trauma-informed practices, social inclusion, and the development of innovative support models for vulnerable groups. She actively contributes to national and international projects aimed at strengthening resilience and improving integration pathways.

Associate Professor Dr Bjørn Klefstad is affiliated with the Norwegian University of Science and Technology (NTNU), where he works in the field of computer science and digital education. His professional career encompasses curriculum development, digital learning environments, and competence-oriented teaching in higher education and vocational training. His research interests include transversal skills, employability, digital transformation, and innovative educational practices. He collaborates internationally on initiatives promoting digital empowerment, inclusive education, and technology-enhanced learning.

Julita Pigulevičienė is the director of the Institute of Social Projects in Lithuania, where she coordinates a variety of social, educational, and community-oriented initiatives. Her work focuses on adult education, digital inclusion, remote work adaptation, and the creation of practical training resources. She is actively engaged in EU-funded projects promoting social innovation, accessibility, and community resilience.

Abstract

This study examines how the Mastering 9 Conversations (M9C) online platform supports refugee empowerment, entrepreneurship development, and labour market integration through digitally enhanced social work practices. The research aimed to assess refugees' experiences with the platform and explore the role of trained social workers in facilitating effective use of the digital tool.

The study employed a mixed-methods design, combining a structured questionnaire with qualitative reflection analysis. Data were collected from refugees participating in M9C project activities in Lithuania, allowing for both quantitative evaluation and deeper insight into users' learning processes and digital engagement.

Refugees evaluated the M9C platform positively, emphasising its clarity, practical relevance, and suitability for self-paced learning. Findings also show that refugees' effective engagement with the tool depended on guidance from trained social workers. Digital and pedagogical competencies of practitioners were crucial for helping users navigate the platform, understand its interactive modules, and connect activities to personal integration or business development goals.

The study provides original evidence on how digital facilitation tools can enhance social work practice and refugee empowerment. Practically, it highlights the importance of training social workers to use digital tools that support entrepreneurship and integration. Limitations relate to the small and context-specific sample, suggesting the need for further cross-country research.

Digital tools such as the M9C platform can significantly strengthen refugees' capacity to articulate business ideas, plan entrepreneurial pathways, and understand labour market dynamics, provided that professional support is available. The findings contribute to the broader discussion on digital transformation in social work and demonstrate the value of technology-supported, transnational collaboration in refugee integration.

Keywords: *digital transformation, entrepreneurship, online learning, refugee integration, social work.*

References

- Aasback, A. W., & Røkkum, N. H. A. (2022). Domesticating technology in pandemic social work. *Journal of Comparative Social Work*, 16(2), 387. <https://doi.org/10.31265/jcsw.v16i2.387>
- Castillo de Mesa, J. (2021). Digital social work: Towards digital disruption in social work. *The Journal of Sociology & Social Welfare*, 48(3), Article 8. <https://doi.org/10.15453/0191-5096.4558>
- Demidenko, V. (2019). *Educational factors of forced migrants' integration into society* [Doctoral dissertation, Kaunas University of Technology]. Kaunas University of Technology eLABa. <https://epubl.ktu.edu/object/elaba:39477301/>
- Demirbaş, E. (2023). Utilisation of digital technology: Unlocking cooperation opportunities for social workers. *Turkish Journal of Applied Social Work*, 6(2), 230–239. <https://doi.org/10.54467/trjasw.1407162>
- Huang, D., Luo, Y., & Lu, J. (2024). Towards digital adaption: An exploration of Chinese social workers' experiences of digital service challenges and coping strategies in the context of COVID-19. *The British Journal of Social Work*, 55(1), 45–64. <https://doi.org/10.1093/bjsw/bcae125>
- Kirmayer, L. J., & Gómez-Carrillo, A. (2023). A cultural-ecosocial systems view for psychiatry. *Frontiers in Psychiatry*, 14, Article 1031390. <https://doi.org/10.3389/fpsy.2023.1031390>
- Petružytė, D., Gevorgianienė, V., Charenkova, J., Seniutis, M., Šumskienė, E., Žalimienė, L., & Yamaguchi, M. (2023). Integrating technology into social work practice and study: Needs, challenges, and opportunities. *Acta Paedagogica Vilnensia*, 50, 23–36. <https://doi.org/10.15388/ActPaed.2023.50.2>
- Popescu, M. L., & Libal, K. (2018). Social work with migrants and refugees: Challenges, best practices, and future directions. *Advances in Social Work*, 18(3), i–x. <https://doi.org/10.18060/22600>
- Rambaree, K., & Nässén, N. (2021). Digitalization of critical reflection with ATLAS.ti software in social work supervision. *Social Sciences*, 10(3), 95. <https://doi.org/10.3390/socsci10030095>
- Štuopytė, E., & Demidenko, V. (2021). *Kitataučių integracija: Patirtinio mokymo metodinės rekomendacijos*. UAB Spaudvita.
- Štuopytė, E., & Demidenko, V. (2024). *Interculturality in social work: Methodological guidelines*. UAB Spaudvita. https://spinstitut.lt/out_data/files/ESW_metodika_EN.pdf

THE APPLICATION OF CONTENT MARKETING IN ART: ASPECTS OF CROWDSOURCING

Mantas Dilys

Kauno kolegija HEI

mantas.dilys@kaunokolegija.lt

Mantas Dilys, PhD, is an Associate Professor at the Faculty of Business at Kauno kolegija HEI and a visiting Associate Professor at the Faculty of Public Governance and Business at Mykolas Romeris University. He defended his doctoral dissertation in Management Sciences at Vilnius University in 2015. His scientific interests focus on marketing strategies, sports organization marketing, content marketing, sustainable cooperation between sports organizations and sponsors, and sustainable innovations. The researcher actively conducts applied scientific research, publishes articles on management and marketing topics, presents scientific findings at conferences, and fosters partnerships between the academic community and the business sector. He lectures on content marketing, sport marketing and communications, entrepreneurship, and innovation. The lecturer also has experience in national and international research projects. Mantas Dilys is a member of the editorial board of the journal *Mokslo taikomieji tyrimai / Applied Research*, a member of the Lithuanian Marketing Association (LiMA), a member of the Global Higher Education Network (Businet), and an expert of the Research Council of Lithuania. Being a long-term member of the “Digital Transformation and Communication” research group at Kauno kolegija HEI, he was also a head of the “Culture and Creative Industries” research group at Kauno kolegija HEI in the period of 2020-2024. The researcher’s works can be accessed under the ORCID identification number: 0000-0003-3350-008X.

Abstract

In the media information noise, it is important to distinguish the presentation of objects of artistic value from the tactical decisions of classical marketing and to provide publicity tools that correspond to the art context. They not only create attractiveness but also increase the art value in the long term. Since scientific literature lacks generalized insights into how content marketing solutions are applied using crowdsourcing in art, the aim of the research is to analyse the specifics of the application of content marketing in art and present generalized aspects of crowdsourcing.

A scientific literature analysis method is used to analyse the existing literature on content marketing application in art through crowdsourcing.

A content marketing strategy not only presents the value of art to a wider audience but also creates conditions for the artistic narrative to develop beyond the boundaries of art presentation. Application of content marketing solutions increases the dissemination of artistic thought, which is related not only to a strategic decision to raise awareness but also to activating communication on digital channels to encourage audience participation and sharing of experiences. Content marketing solutions in the digital environment increase the value of art through the stories told by the audience and the emotional content that accompanies them. By applying content marketing solutions in the digital environment, the audience gets the opportunity to express their critical vision and thinking about the object of art. It also covers other components accompanying the presentation of art, such as environment, emotional expression, new inspirations, various projections, and emerging connections. Content marketing in art can be applied to stimulate audience interest and critical thinking, actualize the message of artistic thought, as well as motivate continuous narratives and interpretations of the artistic work, which are expressed through audience participation, sharing, and co-creation. One of the methods that creates value for an object activated with an audience and classified as content marketing and co-creation solutions in the digital environment is the use of crowdsourcing. Crowdsourcing is used in a digital environment, platform, or social networks, involving the audience in the creation of visual, musical, literary, or dramatic works of art, in order to demonstrate the relationship between collective imagination and individual artistic feelings. Crowdsourcing creates artistic participation that directly depends on the features of access. Crowdsourcing relies on the collective contribution of a large number of participants in the form of an

open call (Literat, 2012). In summary, it can be said that crowdsourcing in art creates opportunities for the value of art to grow.

The analysis of scientific literature reveals that content marketing and crowdsourcing are applied in various fields. However, the adaptation of the process in the discussed fields is more general in nature, and the conclusions focus on revealing the benefits rather than the specifics of the application of the functions. Therefore, in future research, it is appropriate to analyse specific cases to determine what kind of stimulating environments for crowdsourcing would be suitable in art.

Crowdsourcing allows the audience to creatively participate in the process and develop artistic thought by offering development perspectives and critically expressing their positions on the content. In the digital environment, crowdsourcing expands artistic expression and promotes social dialogue. By applying the crowdsourcing method, a reflection of a common, collective artistic thought is created.

Keywords: *art value, content marketing, crowdsourcing.*



ADLES 2025 POWERED BY UNINOVIS

References

- Literat, I. (2012). The work of art in the age of mediated participation: Crowdsourced art and collective creativity. *International Journal of Communication*, 6, 2962–2984.



ADLES 2025 POWERED BY UNINOVIS

MORPHOLOGY, CONTEXT, AND VOCABULARY IN LEXICAL INFERENCE: INSIGHTS INTO READING DEVELOPMENT AND DYSLEXIA FOR INCLUSIVE EDUCATION

Ifigeneia Dosi

Democritus University of Thrace

idosi@hs.duth.gr

Dr Ifigeneia Dosi, Assistant Professor of Applied Linguistics at Democritus University of Thrace, works on bilingual language development. With a focus on bilingual children's language development, she has published in high-impact scientific journals. Additionally, she has trained educators working with refugees and heritage speakers. Her research interests centre on studying the language development of bilingual children, examining the interplay of cognitive and environmental factors in both typical and atypical development.

Abstract

Understanding how children derive the meaning of unfamiliar words when reading is central to explaining reading development and learning difficulties, since lexical inference relies on the interaction of decoding, vocabulary knowledge, morphological awareness, and contextual interpretation (Carlisle, 1995; Dosi, 2025; Perfetti & Stafura, 2014; Raudszus et al., 2021). Morphological awareness has been widely identified as a key predictor of both vocabulary and reading comprehension, while lexical inference is supported by multiple interacting linguistic components, including decoding, vocabulary breadth and depth, and contextual integration (Melloni & Vender, 2022; Perfetti & Stafura, 2014; Raudszus et al., 2021). However, it remains unclear to what extent these mechanisms function similarly or differently in children with typical development (TD) and developmental dyslexia (DD), particularly in transparent, morphologically rich languages such as Greek, where direct TD-DD comparisons remain scarce (Giazitzidou & Padeliadu, 2022; Rothou & Padeliadu, 2019; Schneider et al., 2022). The present study examines the relationship between decoding, vocabulary knowledge, morphological awareness, reading comprehension, and lexical inference in Greek-speaking TD and DD readers and identifies which components best predict inferencing success in each group.

A total of 60 children aged 9-12 participated: 30 TD readers and 30 children formally diagnosed with DD. The groups were matched for age, gender, and non-verbal intelligence. Participants completed standardized tasks assessing decoding, expressive vocabulary (breadth), synonyms and antonyms (depth), morphological awareness (derivation and decomposition), and reading comprehension. The key experimental measure was a lexical inferencing task involving stories embedding pseudowords with and without morphological cues. Children were required to infer meaning from either derivational suffixes or contextual information.

Results revealed significant group differences across all measures: children with DD scored lower in decoding, vocabulary breadth, vocabulary depth, morphological awareness, reading comprehension, and lexical inferencing, with large effect sizes. Error analyses showed qualitatively different inferencing strategies: TD children made fewer and largely semantically plausible errors, while DD children more often relied on phonological similarity, frequent or concrete words, and omissions, indicating weaker lexical representations and reduced access to morphological information. In morphological tasks, DD children tended to produce alternative derivations, diminutives, or inflected forms rather than derived

targets, suggesting reliance on higher-frequency forms over abstract morphological structures. In lexical inference, DD responses frequently reflected partial semantic activation or surface-level processing rather than successful integration of morphology and context. Hierarchical regression analyses demonstrated that vocabulary depth and morphological awareness were significant predictors of inferencing in both groups. However, predictive pathways diverged. For TD children, morphological awareness and reading comprehension were the strongest contributors to inferencing, indicating efficient coordination of linguistic and contextual cues once decoding is automatized. In DD children, decoding remained a significant predictor even at this age, alongside vocabulary breadth and morphology. These findings suggest that TD readers move toward comprehension-driven strategies, integrating context and morphology, while DD readers remain constrained by decoding demands and rely more heavily on partial lexical cues. Vocabulary depth (particularly synonyms) emerged as a powerful predictor across groups. These results align with three theoretical perspectives: the Lexical Quality Hypothesis, which posits that underspecified lexical representations limit meaning construction; the Simple View of Reading, which highlights interactions between decoding and linguistic comprehension; and the Construction-Integration model, which emphasizes integration of lexical and contextual information. Together, the findings suggest shared but distinct inferencing pathways for TD and DD children and demonstrate how decoding and morphology remain intertwined in transparent orthographies.

This study offers the first integrated analysis of lexical inferencing in Greek that jointly examines decoding, vocabulary breadth and depth, morphological awareness, and comprehension in TD and DD readers. The findings reveal distinct pathways across groups and highlight practical implications for instruction, including combining decoding support with vocabulary and morphological teaching for DD readers, and deepening semantic-morphological integration for TD readers. Classroom recommendations include guided morphological analysis and strategy-based inferencing. However, the modest, cross-sectional sample and the specificity of Greek as a transparent orthography limit generalizability. Important cognitive variables and oral comprehension measures were not included, and collinearity among predictors and exploratory error analysis call for larger and longitudinal studies.

Overall, this study demonstrates that vocabulary depth and morphological awareness are central to inferencing across development, but decoding continues to constrain lexical growth in dyslexia. These



ADLES 2025 POWERED BY UNINOVIS

findings support the view that lexical inference is a multi-component process shaped by both shared and group-specific linguistic pathways.

Keywords: *context, decoding, developmental dyslexia, lexical inferencing, morphological awareness, reading, vocabulary.*

References

- Carlisle, J. F. (1995). Morphological awareness and early reading achievement. In L. B. Feldman (Ed.), *Morphological aspects of language processing* (pp. 189–210). Lawrence Erlbaum Associates.
- Dosi, I. (2025). How morphology, context, vocabulary and reading shape lexical inference in typical and dyslexic readers. *Education Sciences*, 15(10), 1266.
- Giazitzidou, S., & Padeliadu, S. (2022). Contribution of morphological awareness to reading fluency. *Annals of Dyslexia*, 72(3), 509–531.
- Melloni, C., & Vender, M. (2022). Morphological awareness in developmental dyslexia. *PLoS ONE*, 17(11), e0276643.
- Perfetti, C. A., & Stafura, J. (2014). Word knowledge in a theory of reading comprehension. *Scientific Studies of Reading*, 18(1), 22–37.
- Raudszus, H., Segers, E., & Verhoeven, L. (2021). Use of morphological and contextual cues. *Reading and Writing*, 34(8), 1513–1538.
- Rothou, K. M., & Padeliadu, S. (2019). Morphological processing influences. *Annals of Dyslexia*, 69(3), 261–278.
- Schneider, J. M., Abel, A. D., & Maguire, M. J. (2022). Vocabulary and comprehension. *Language Learning and Development*, 19(4), 369–385.

EMPATHY IN TRANSLATION: TRANSLATION STUDENTS' PRACTICES WITH MACHINE TRANSLATION TOOLS

Esen Genç¹, Melike Civil²

¹*Ondokuz Mayıs University*

²*Ondokuz Mayıs University*

¹*esen.genc@omu.edu.tr*

²*melikecivil10@gmail.com*

Esen Genç was born in Samsun, Turkey. She received education at Ondokuz Mayıs University in the Department of English Language Teaching. She graduated from university in 2007. She got a Master's degree in the same department at the same university in 2014. She got her doctoral degree in the PhD programme in English Language and Literature at İstanbul Aydın University in 2021. She is working as an Assist. Prof. Dr. at Ondokuz Mayıs University, in the Department of Translation and Interpreting.

Melike Civil was born in Samsun. She graduated from the Department of English Language Teaching at Ondokuz Mayıs University in 2006. She has been working as an English teacher for 18 years and is currently employed as an English teacher at Aziz Atik Science High School. Besides being a teacher, she is also studying for a Master's degree in English Translation and Interpreting at the same university.

Abstract

As machines increasingly take over work in translation and language learning, one of the main ongoing questions is whether they are capable of comprehending and expressing feelings like humans do. Online machine translation (OMT) tools are highly accurate in their language processing but still lag in more human aspects, such as empathy, tone, and moral warmth. Even though artificial intelligence (AI) driven OMT tools can generate correct translations from a syntactical point of view, several studies tell about a systematic loss of the so-called affective meaning, especially in the cases of the texts that demand moral or emotional subtlety (Qian et al., 2023; Troiano et al., 2020).

In light of these assumptions, this study employs a qualitative research design to achieve an in-depth understanding of the phenomena. The data consist of translations of three classic fables: “The Boy Who Cried Wolf”, “The Ant and the Grasshopper”, and “The Fox and the Crow”. In these tales, emotion is the very essence of meaning, not just a decoration; thus, they are thought to be good examples to focus on emotional nuances. Three university students from the Department of Translation and Interpreting are asked to make translations in three different versions: by translating directly without using any tools, by relying directly on machine output or by using machine translation as a draft and then revising it. Their final products are then compared to show how emotional nuances, narrative voice, and moral lessons are preserved, weakened, or lost. The comparative analysis focused on the stark differences between the literal OMT tool’s version and the students’ final culturally-sensitive version, particularly regarding culture-specific elements and fixed expressions. The comparative textual analysis revealed significant findings regarding the empathy and cultural gap.

The outputs of the OMT tools were found to be consistently syntactically literal but they failed translating cultural metaphors or idioms that were embedded in the fables. This is in line with the literature according to which OMT has a problem with polysemantic words and culturally-specific issues (Qian et al., 2023; Saadany et al., 2021). The analysis indicated that the tools could not find expressions in the target language that were of the same cultural status as the source language, and instead it provided literal translations that completely obliterated the idiomatic and moral meaning.

The most prominent disparities were observed in the translation of fixed expressions. While OMT tools frequently rendered idioms literally, which led to semantic failure, human translators resorted to the use

of proper target language equivalents or cultural substitutes to the good of the moral weight and the natural flow of the narrative.

Post-editing effort was reported by participants to be, by and large, devoted to restoring the humanity of the machine translation by attending to the cultural-specific emotions where OMT had failed. This finding is in complete agreement with the conclusions of Troiano et al. (2020) and others, who maintain that human intuition is essential for the translation of the non-propositional facets of language.

The findings indicate that an uncritical dependence on OMT tools results in emotionally flat texts, whereas active revision can help restore empathy and narrative voice. Thus, the study argues that translation students should be guided to use AI tools critically as a support, rather than a replacement, of their own interpretive and empathetic skills. This study, through qualitative means, confirms the idea that empathy and cultural literacy are the uniquely human essence of language, the elements that AI systems cannot authentically replicate. The results also show that the translation students are very conscious of this limitation and thus, they spend a lot of time and energy on the correction of emotional and cultural inaccuracies that are the result of literal OMT output. In order to keep the human translators relevant in the future, translation pedagogy must decisively embrace and teach empathy plus cultural competence as fundamental pillars of translation.

Keywords: *empathy, language learning, online machine translation, translation.*

References

- Brazier, C., & Rouas, J. (2024). Conditioning LLMs with emotion in neural machine translation. *arXiv*, abs/2408.03150. <https://doi.org/10.48550/arxiv.2408.03150>
- Concannon, S., Roberts, I., & Tomalin, M. (2023). An interactional account of empathy in human-machine communication. *Human-Machine Communication*, 6, 91–111. <https://doi.org/10.30658/hmc.6.6>
- Jinyi, C. (2024). AI-driven machine translation and human creativity: A collaborative model for the future. *International Journal of English Literature and Social Sciences*, 9(5), 306–312. <https://doi.org/10.22161/ijels.95.39>
- Kumari, D., & Ekbal, A. (2024). Enhancing sentiment and emotion translation of review text through MLM knowledge integration in NMT. *J. Intell. Inf. Syst.*, 62, 1213–1237. <https://doi.org/10.1007/s10844-024-00843-2>
- Li, Q. (2024). Bridging languages: The potential and limitations of AI in literary translation: A case study of the English translation of *A pair of peacocks southeast fly*. *Advances in Humanities Research*, 8, 215–222. <https://doi.org/10.54254/2753-7080/8/2024091>
- Matan, P., & Velvizhy, P. (2025). A neuro-symbolic AI approach for translating children’s stories from English to Tamil with emotional paraphrasing. *Scientific Reports*, 15, Article 3290. <https://doi.org/10.1038/s41598-025-03290-3>
- Qian, S., Orasan, C., Carmo, F., Li, Q., & Kanojia, D. (2023). Evaluation of Chinese-English machine translation of emotion-loaded microblog texts: A human annotated dataset for the quality assessment of emotion translation. *arXiv*, abs/2306.11900. <https://doi.org/10.48550/arxiv.2306.11900>
- Troiano, E., Klinger, R., & Padó, S. (2020). Lost in back-translation: Emotion preservation in neural machine translation. *Proceedings of the 28th international conference on computational linguistics*, 4340–4354. International Committee on Computational Linguistics (ICCL). <https://doi.org/10.18653/v1/2020.coling-main.384>

DIGITAL PRIVACY AWARENESS AMONG ENGLISH AS A FOREIGN LANGUAGE LEARNERS

Esen Genç¹, Şule Çakılcioglu²

¹*Ondokuz Mayıs University*

²*Ondokuz Mayıs University*

¹*esen.genc@omu.edu.tr*

²*sulecakilcioglu@hotmail.com*

Esen Genç was born in Samsun, Turkey. She received education at Ondokuz Mayıs University in the Department of English Language Teaching. She graduated from university in 2007. She got a Master's degree in the same department at the same university in 2014. She got her doctoral degree in the PhD programme on English Language and Literature at İstanbul Aydın University in 2021. She is working as an Assist. Prof. Dr. at Ondokuz Mayıs University, in the Department of Translation and Interpreting.

Şule Çakılcioglu was graduated from Anadolu University ELT department, now she is studying on her Master's degree at Ondokuz Mayıs University in the Department of Translation and Interpreting. Therefore, she is interested in common ground of ELT and translation

Abstract

Today, almost every language user in the digital age uses online language platform systems and artificial intelligence (AI) programmes as part of their learning and getting to their goal of being a language user. AI is a game changer for educational purposes due to the productivity gains that it brings as well as the ability to create user-specific or customized language learning solutions (Amin, 2023; St. Fountoulakis, 2024; Lo et al., 2024). Using these new advantages, when applied correctly, could be one of the best contributions to the language-learning field. However, when incorrectly used or misused by the learner or the company running the platform, it has the potential to be damaging. For language learners, what privacy protection is afforded to them from using an online platform has not been disclosed in most cases. These platforms require access to user data to provide their services, yet how they collect data, what kinds of data they collect, and what they do with the data are not known by most learners (Dahabiyeh et al., 2025; Khowaja et al., 2023; Xu et al., 2024). Therefore, this paper aims to point out the data privacy awareness deficiency among language learners and how it can be gained in the classroom.

This study adopted a qualitative design to investigate English as a Foreign Language (EFL) learners' perceptions and understandings of digital data privacy. Data were collected through semi-structured interviews with 30 (N = 30) language learners studying at EFL departments at a university. The semi-structured interview involved open-ended questions aiming to explore learners' knowledge and feelings about digital privacy. The qualitative approach helped to examine learners' experiences and responses. Braun and Clarke's (2006) thematic analysis was used to scrutinize the responses of learners.

According to the interview answers, 28 of 30 people use online platforms and AI bots for language learning purposes. However, only three people have read the privacy policies of these tools. When it comes to knowing whether these tools store their data or not, half of them stated that they know while the other half stated that they do not. Two of 30 people feel comfortable sharing only text data with digital platforms, 12 out of 30 people feel completely comfortable sharing written, recorded and textual data while 18 people do not feel comfortable sharing their data at all. Only one person was not sure if this awareness should be raised by teachers while all the other people agree that it definitely should be raised. The results have indicated that there is an awareness gap among language learners yet they all are willing to gain this awareness with instructors' help.

There is a lot of research studying AI's effect on learning or discussing the good sides of online tools, yet there is a limited number of studies that emphasizes the lack of digital privacy awareness, addressing its problematic sides and how to integrate this skill into classroom practice. This study displays a clear view with real language learners' perceptions while pointing out the obvious privacy unawareness among them and offers ways to raise this skill in the classroom. However, this study was carried out with limited numbers of learners; in the future it can be expanded.

To conclude, nearly all of the EFL learners experience a lack of digital privacy awareness, yet according to the interview results, they want to be educated about it. Therefore, digital privacy awareness would be an essential skill for teachers to integrate into their classroom practices. Privacy policies could also be incorporated into reading and writing compliant tasks (Mohamed, 2024; Xu et al., 2024). This research provides direct insight into the thinking of actual language learners, indicating privacy unawareness and providing methods to develop the skill in classrooms. Additionally, since this study used a small number of students, future research may expand on the findings.

Keywords: *awareness gap, data privacy, digital literacy, language learning, privacy awareness.*

References

- Amin, M. (2023). AI and Chat GPT in language teaching: Enhancing EFL classroom support and transforming assessment techniques. *International Journal of Higher Education Pedagogies*, 4(4), 1–15. <https://doi.org/10.33422/ijhep.v4i4.554>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Dahabiyeh, L., Taha, N., Thneibat, M., & Bhat, M. (2025). Privacy awareness in generative AI: The case of ChatGPT. *Interactive Technology and Smart Education*. <https://doi.org/10.1108/itse-01-2025-0009>
- Dissanayake, H., Manta, O., Iddagoda, A., & Palazzo, M. (2025). Artificial intelligence and management education: Bibliometric analysis. *International Journal of Management in Education*, 23(3), 1–16. <https://doi.org/10.1016/j.ijme.2025.101222>
- Gayeta, J., & Khammash, A. (2025). Revolutionizing education: Leveraging large language models for personalized learning and teaching at a selected private school. *Pantao: International Journal of the Humanities and Social Sciences*, 4(2), 2492–2502. <https://doi.org/10.69651/pijhss0402229>
- Khowaja, S., Khuwaja, P., & Dev, K. (2023). ChatGPT needs SPADE (Sustainability, PrivAcy, Digital divide, and Ethics) evaluation: A review. *arXiv*, abs/2305.03123. <https://doi.org/10.1007/s12559-024-10285-1>
- Mohamed, M. (2024). Exploring ethical dimensions of AI-enhanced language education: A literature perspective. *Technology in Language Teaching & Learning*, 6(3), 1–11. <https://doi.org/10.29140/tltl.v6n3.1813>
- Selvam, M., & Vallejo, R. (2025). Ethical and privacy considerations in AI-driven language learning. *LatIA*, 3, 328–342. <https://doi.org/10.62486/latia2025328>
- St. Fountoulakis, M. (2024). Evaluating the impact of AI tools on language proficiency and intercultural communication in second language education. *International Journal of Second and Foreign Language Education*, 3(1), 12–26. <https://doi.org/10.33422/ijsfle.v3i1.768>
- Vaccino-Salvadore, S. (2023). Exploring the ethical dimensions of using ChatGPT in language learning and beyond. *Languages*, 8(3), 191–197. <https://doi.org/10.3390/languages8030191>
- Xu, X., Su, Y., Zhang, Y., Wu, Y., & Xu, X. (2024). Understanding learners' perceptions of ChatGPT: A thematic analysis of peer interviews among undergraduates and postgraduates in China. *Heliyon*, 10(4), 1–13. <https://doi.org/10.1016/j.heliyon.2024.e26239>

DEVELOPING THE TEACHER REFLECTIVE-TRANSGRESSIVE DEVELOPMENT SCALE (TRTDS): A MULTIDIMENSIONAL MODEL OF REFLECTIVE GROWTH IN EDUCATION

Maciej Kołodziejski¹, Tomas Butvilas²

¹*The Mazovian University in Plock*

²*Kauno kolegija HEI, Alytus Faculty*

¹*macieja.kolodziejski@gmail.com*

²*tomas.butvilas@go.kauko.lt*

Dr Habil. Maciej Kołodziejski is a Polish educator and musician, university professor specializing in music education, early childhood education, and Edwin E. Gordon's Music Learning Theory. He is a professor at the Mazovian Academy in Płock and Head of the Department of Foundations of Education, Care, and Therapy. He is the author and co-author of over 140 scholarly publications, widely cited in national and international research (Google Scholar). He also serves as an expert for the Ministry of Education and Science, the National Centre for Research and Development, and the Polish National Agency for Academic Exchange.

Dr Tomas Butvilas is an associate professor and researcher at Kauno kolegija HEI Alytus Faculty (Lithuania), where he is actively involved in teaching and academic leadership. Also, Tomas actively participates in doctoral-level training. His academic work focuses on social sciences, including psychosocial support, education, motivation, leadership, and quantitative research methodologies. Dr Butvilas has supervised and evaluated master's and doctoral research, developed university study modules, and delivered national seminars for educators and social professionals. He has authored and co-authored more than 136 scientific publications and regularly prepares academic presentations and research-based training for higher education and professional audiences.

Abstract

Reflection remains a foundational yet under-conceptualized element of educators' professional development (Georgii-Hemming, 2020; Mohamed, 2022).

The Teacher Reflective-Transgressive Development Scale (further in the text TRTDS) is proposed as a theoretically grounded and empirically testable framework for exploring the multidimensional nature of reflection among high school teachers. Drawing upon Schön's (1983) reflective practitioner model, Mezirow's (1991) transformative learning theory, and Koziol's (2001) theory of transgression, the TRTDS integrates cognitive, emotional, critical, pragmatic, ethical-social, developmental, and transgressive dimensions of reflective practice.

As shown in Figure 1, the model depicts reflection as a progressive process: from analytical awareness to creative transformation and professional self-transcendence in teaching. Recent data underscores the need for such multidimensional models, positioning reflection as a creative, affective, and ethical act rather than a merely technical skill (Rinholm et al., 2023; Sandberg-Jurström, 2022). Within the domain of education, this developmental continuum highlights how teachers engage in continuous cycles of self-inquiry, emotion regulation, ethical reasoning, and artistic experimentation.

Planned validation of the TRTDS will include exploratory and confirmatory factor analyses among Lithuanian and Polish educators to ensure content, construct, and criterion validity. By embedding reflection within a transgressive perspective, the transformation, comprehensive tool for mapping professional growth as both pedagogical refinement and creative transformation will be developed—bridging educational artistry with the reflective professionalism (as indicated in Figure 1).

This model/tool integrates seven interrelated dimensions—cognitive, emotional, critical, pragmatic, ethical-social, developmental, and transgressive—illustrating how reflective practice evolves toward transformative and transgressive learning in education. Drawing on Schön (1983), Mezirow (1991), and Koziol (2001), the framework conceptualizes reflection as a progressive and integrative process leading to creative transformation and professional self-transcendence.

Reflection has long been recognized as central to teacher professionalism, yet its conceptual boundaries remain inconsistent across educational research (Georgii-Hemming, 2020; Mohamed, 2022). Dewey (1933) provided the earliest systematic foundation, framing reflective thinking as disciplined inquiry that

enables teachers to examine assumptions and interpret classroom experience. Building on this, Schön (1983) introduced the distinction between reflection in action and reflection on action, emphasizing the dynamic, situational, and improvisational nature of professional judgment. These foundational accounts established reflection as a cognitive process oriented toward problem solving and professional reasoning.

Later frameworks broadened reflection to include ethical, emotional, and critical dimensions. Mezirow's (1991) transformative learning theory positioned reflection as a catalyst for perspective transformation, wherein educators challenge embedded assumptions and reconstruct their meaning structures. Hatton and Smith (1995) further articulated reflective levels ranging from descriptive to dialogic and critical reflection, highlighting its developmental character. Contemporary perspectives stress that reflection is not purely intellectual but involves affective and relational processes shaped by identity, values, and social context.

Korthagen (2017) argues for a holistic view of teacher learning that integrates cognitive, emotional, and motivational layers. Similarly, research in the arts and music education fields demonstrates that reflective processes involve meaning making shaped by affective engagement, dialogic interaction, and artistic exploration (Sandberg-Jurström, 2022; Rinholm et al., 2023). These findings align with Day's (2004) work on teacher identity, which underscores the interplay between emotions, commitment, and reflective growth.

As teaching contexts become increasingly complex, scholarship highlights the need for reflective models that capture creativity, adaptability, and ethical reasoning (Beauchamp, 2015; Ryan & Ryan, 2013). This creates space for incorporating theories that extend beyond classical conceptions. Koziol's (2001) theory of transgression introduces a unique dimension by framing development as crossing boundaries, exceeding established norms and actively transforming the self. Applying a transgressive lens to teacher development highlights processes of professional self-renewal, creative experimentation and ethical responsibility.

The Teacher Reflective-Transgressive Development Scale (TRTDS) integrates these theoretical perspectives into a multidimensional structure encompassing cognitive, emotional, critical, pragmatic, ethical social, developmental, and transgressive domains. This approach positions reflection as a progressive continuum rather than a skill set, ranging from analytical awareness through critical evaluation to creative boundary crossing and professional self-transcendence. The TRTDS responds to

the limitations of existing reflective scales, which often prioritize technical or cognitive aspects while neglecting emotional, ethical, and transformative dimensions (see Figure 2).

By synthesizing diverse theoretical contributions, the TRTDS offers a comprehensive conceptualization of teacher reflection that acknowledges its epistemic, affective, and moral components. It is designed to support empirical research on teacher learning, inform professional development programs, and expand conceptual understandings of reflective professionalism within contemporary education systems.

Summing up, the theoretical foundations of the TRTDS demonstrate that teacher reflection is a multidimensional and developmental process that moves beyond technical problem solving toward deeper critical, emotional, and ethical engagement. Integrating Schön's reflective practitioner model, Mezirow's perspective transformation theory, and Koziol's theory of transgression, the TRTDS conceptualizes teacher growth as a trajectory from analytical awareness to transformative action and creative boundary crossing. This integration reflects contemporary understandings of teaching as a complex and adaptive profession requiring flexible thinking, emotional intelligence, and reflective courage.

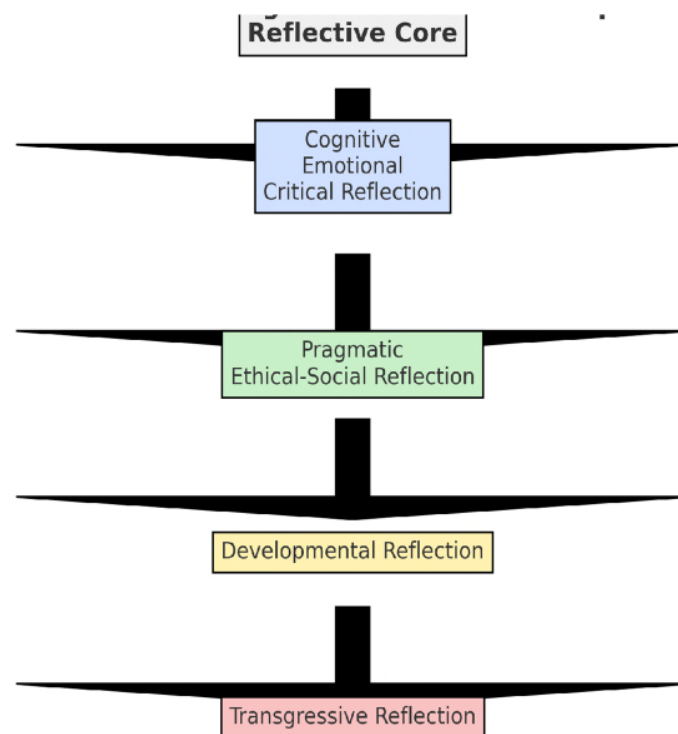
The expanded model addresses growing recognition that reflective practice encompasses identity formation, ethical reasoning, emotional processing, and innovation. By embedding a transgressive dimension within reflection, the TRTDS foregrounds creativity, experimentation, and professional self-renewal. This makes the model particularly relevant for educational environments characterized by rapid change, socio-emotional demands, and shifting pedagogical expectations.

Future validation studies will enable assessment of the TRTDS psychometric properties, including factor structure, reliability, and cross-national applicability. Once validated, the scale will offer researchers and practitioners a robust instrument for mapping reflective transgressive development across diverse contexts. Ultimately, the TRTDS contributes an innovative conceptual and methodological framework that advances understanding of reflective professionalism and supports meaningful teacher development.

Keywords: *a multidimensional model of reflective growth, education, Teacher Reflective-Transgressive Development Scale (TRTDS), teacher.*

Ethical statement

The preparation of this manuscript followed the ethical standards for research integrity and academic authorship. All sources have been properly cited according to APA 7 guidelines. AI tools were used solely to support linguistic refinement and formatting, accounting for approximately 7% of the total text generation process. All conceptual, analytical, and theoretical content originates from the authors.



*Progressive deepening and transformation
of professional identity in music education*

Figure 1. Conceptual model of reflective-transgressive teacher development in general education.

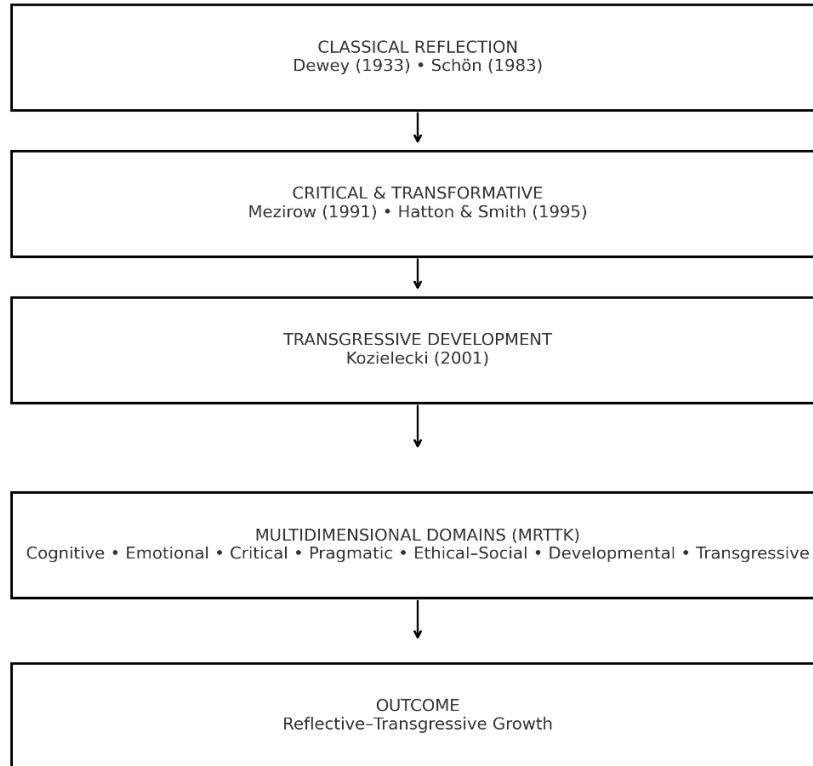


Figure 2. Theoretical framework underpinning the TRTDS.

References

- Beauchamp, C. (2015). Reflection in teacher education: Issues emerging from a review of current literature. *Reflective Practice*, 16(1), 123–141. <https://doi.org/10.1080/14623943.2014.982525>
- Boud, D., Keogh, R., & Walker, D. (1985). *Reflection: Turning experience into learning*. Kogan Page.
- Day, C. (2004). *A passion for teaching*. Routledge.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. D.C. Heath.
- Fook, J., & Gardner, F. (2007). *Practising critical reflection*. Open University Press.
- Georgii-Hemming, E. (2020). Reflection in higher music education. *Music Education Research*, 22(2), 245–256. <https://doi.org/10.1080/14613808.2020.1766006>
- Grushka, K., McLeod, J., & Reynolds, R. (2005). Reflecting on image. *Reflective Practice*, 6(1), 91–104.
- Hatton, N., & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching and Teacher Education*, 11(1), 33–49.
- Korthagen, F. A. J. (2017). Inconvenient truths about teacher learning. *Teachers and Teaching*, 23(4), 387–405. <https://doi.org/10.1080/13540602.2016.1211523>
- Kozielecki, J. (2001). *Psychotransgresjonizm: Nowy kierunek psychologii*. Żak.
- Larrivee, B. (2008). Development of a tool to assess teachers' reflective practice. *Reflective Practice*, 9(3), 341–360.
- Leitch, R., & Day, C. (2000). Action research and reflective practice. *Educational Action Research*, 8(1), 179–193.
- Mezirow, J. (1991). *Transformative dimensions of adult learning*. Jossey-Bass.
- Mohamed, M. (2022). Conceptualising the complexity of reflective practice in education. *Reflective Practice*, 23(4), 435–451. <https://doi.org/10.1080/14623943.2022.2078963>
- Moon, J. A. (1999). *Reflection in learning and professional development*. Routledge Falmer.
- Osterman, K. F., & Kottkamp, R. B. (2004). *Reflective practice for educators*. Corwin Press.

- Rinholm, H., Fredriksen, B., & Onsrud, S. V. (2023). Critical reflection in music teacher education: Contradictions and dilemmas in theory, policy, and practice. *Action, Criticism & Theory for Music Education*, 22(3), 41–72. <https://doi.org/10.22176/act22.3.41>
- Ryan, M. E., & Ryan, M. (2013). Theorising a model for teaching and assessing reflective learning. *Higher Education Research and Development*, 32(2), 244–257.
- Sandberg-Jurström, R. (2022). Creating space for reflection: Meaning-making feedback in instrumental/vocal lessons. *Frontiers in Education*, 7, 842337. <https://doi.org/10.3389/feduc.2022.842337>
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. Basic Books.
- Tummons, J. (2011). Teacher learning, critical reflection and teacher education. *Studies in Continuing Education*, 33(3), 289–300.
- van Manen, M. (1995). On the epistemology of reflective practice. *Teachers and Teaching*, 1(1), 33–50.
- Zeichner, K. M., & Liston, D. P. (1996). *Reflective teaching*. Lawrence Erlbaum Associates.

AUTHENTICITY AND TECHNOLOGY: HOW RESTORATION SHAPES THE DIGITAL PERCEPTION OF ART

Silvija Lukošienė
Kauno kolegija HEI
silvija.lukosiene@go.kauko.lt

Silvija Lukošienė is a painting conservator and lecturer. She completed her Bachelor's degree in 2019 and her Master's degree in easel painting conservation in 2021 at the Vilnius Academy of Arts. In 2018, she was awarded the Milda and Romualdas Kaminskas Prize for "Professional Ethics and Maturity in Conservation."

In her master's thesis, she investigated the properties of the synthetic polymer Beva, used for lining oil paintings. The results were presented in 2023 at the International Baltic States Triennial Conservators' Meeting. In 2021, she received a certificate of appreciation from the Vilnius Academy of Arts for her master's thesis on the restoration of the 19th-century painting Saint Anthony of Padua by an unknown artist, recognizing the professionalism and rigour of her research.

Since 2021, she has been working at the Pranas Gudynas Conservation Centre of the Lithuanian National Museum of Art, participating in academic conferences and presenting research on conservation methods, material aging, and painting technologies. She is also a member of the Lithuanian Conservators' Association.

Since 2023, she has been teaching in the Object Conservation and Restoration programme at the Kauno kolegija HEI, Faculty of Arts and Education, and continues to supervise students' final theses. In 2025, she obtained the First Qualification Category in easel painting conservation from the Lithuanian Ministry of Culture.

Her academic and professional interests include the application of conservation methods, material analysis, and the study of artwork condition. She publishes articles and presents conservation projects in journals and at conferences, combining practical experience with academic research. She also contributes to the dissemination of knowledge on artwork authenticity, aging processes, and conservation techniques.

Abstract

In contemporary cultural contexts, an increasing number of artworks are viewed digitally—on websites, virtual exhibitions, digital archives, or AI-generated images. This shift changes art perception and raises questions regarding the maintenance of artwork authenticity and materiality in digital spaces. Conservation acts as a crucial intermediary between the physical artwork and its digital representation. This paper explores how conservation technologies and practices enhance understanding of artwork authenticity and how this information is integrated into the digital environment. The study examines differences between physical art experiences and digital reproductions, analyses challenges in virtual environments, and explores opportunities offered by artificial intelligence to enrich viewer experiences.

The methodology integrates several approaches to investigate how conservation technologies contribute to digital presentation and deepen the understanding of artwork authenticity. First, a literature review was conducted on international museum and conservation publications addressing digitisation technologies and their impact on presentation and authenticity perception (Blooloo, 2023; Elkhuijzen et al., 2019; Faries, 2005; LIMIS, n.d.; Targowski et al., 2009).

Second, both traditional methods—ultraviolet (UV) luminescence, infrared (IR) reflectography, X-ray (XR) radiography, microscopic analyses—and digital technologies, such as 2D and 3D scanning, were reviewed to study artwork structure, authenticity, and digital representation potential (Elkhuijzen et al., 2019; Targowski et al., 2009).

Third, case studies of digital exhibitions and projects, including VR museum tours (e.g., the Sistine Chapel or the interactive study of the Mona Lisa), were analysed. Combining these methods allows for comparison of physical and digital experiences, highlighting differences, possibilities, and limitations in virtual art perception.

Conservation technologies reveal features of artworks invisible to the naked eye. UV imaging visualizes luminescence patterns that reveal surface characteristics, conservation marks, and material properties, helping to distinguish overpaints and varnish layers, as well as to verify authenticity (Targowski et al., 2009). IR reflectography uncovers underdrawings and compositional changes, distinguishing freehand painting from grid-assisted techniques (Faries, 2005). X-ray radiography reveals overpainting, hidden paint layers, canvas or wood structure, and traces of previous restorations (ArtNet News, 2022). High-

resolution 2D scanning captures texture, brushstrokes, and cracks without shadow artefacts (Elkhuizen et al., 2019), while 3D scanning creates surface relief maps, allowing virtual “touch” of brushstrokes and paint layer irregularities (Elkhuizen et al., 2019).

Digital technologies expand the viewer experience. VR projects, such as the Louvre’s *Mona Lisa: Beyond the Glass*, allow viewers to examine the panel’s texture and former cracks virtually (Bloolooop, 2023). Digital archives like Lithuania’s LIMIS system provide access to 36 virtual museum tours (LIMIS, n.d.). Additionally, the award-winning 5D film *Angely takais* creates a multisensory, interactive experience (Angely takais, n.d.).

However, digital presentation has limits. It often fails to convey true scale, relief, lighting nuances, or the experience of physical presence (Loaiza Carvajal et al., 2020; Lin & Kang, 2024; Reymond et al., 2020). Screen parameters affect colour accuracy, and even VR film experiences cannot fully replicate surface texture, shadows, or the “immediacy” of an artwork.

This paper is original in integrating conservation research methods with digital art experiences, positioning conservation principles as a methodological bridge between the material artwork and its digital representation. Practical implications include enabling museums, educators, and researchers to integrate conservation research into virtual exhibits. Digital layers such as UV/IR/XR, or changes observed during conservation treatments, can be dynamically presented, allowing viewers to follow transformations and deepen critical art perception.

In contemporary cultural contexts, conservation not only preserves artworks but actively shapes digital representation and the perception of authenticity. Technologies based on research—UV, IR, XR imaging, and 2D/3D scanning—reveal internal layers, surface uniqueness, and conservation traces, enriching the digital experience and providing insight into artwork authenticity. VR, 3D, and 5D technologies offer unique multisensory experiences. Nevertheless, digital representation cannot fully replicate texture, scale, or physical presence, meaning viewers miss part of the “immediacy” of the artwork. Despite this, digital technologies provide educational value, allowing integration of conservation research into virtual exhibitions and platforms, and enhancing informed and critical engagement with art.

Keywords: *artwork authenticity, digital art representation, IR reflectography, material analysis, restoration techniques, 2D/3D scanning, UV imaging, virtual reality (VR) tours, X-ray radiography.*

References

- Angelių takais. (n.d.). *Kaunas – Angelių takais*. <https://angelutakais.lt/kaunas/>
- ArtNet News. (2022, September 27). *Art history is full of buried treasure: Here are 11 stunning images that experts found hidden beneath famous paintings*. ArtNet News. <https://news.artnet.com/art-world/hidden-paintings-x-ray-2176965>
- Bloolooop. (2023, May 10). *Virtual museum tours: Exploring museums online*. <https://bloolooop.com/museum/in-depth/virtual-museum-tours>
- Elkhuizen, W. S., Callewaert, T. W. J., Leonhardt, E., Vandivere, A., Song, Y., Pont, S. C., Geraedts, J. M. P., & Dik, J. (2019). Comparison of three 3D scanning techniques for paintings, as applied to Vermeer's *Girl with a pearl earring*. *Heritage Science*, 7(1), 89. <https://doi.org/10.1186/s40494-019-0331-5>
- Faries, M. (2005). Analytical capabilities of infrared reflectography: An art historian's perspective. In National Academy of Sciences (Ed.), *Scientific examination of art: Modern techniques in conservation and analysis* (pp. 87–104). National Academies Press. <https://doi.org/10.17226/11413>
- LIMIS. (n.d.). *Virtualūs muziejų turai Lietuvoje [Digital tours]*. <https://turai.limis.lt/>
- Lin, C.-L., & Kang, Y.-Y. (2024). Exploring the impact of virtual reality on painting appreciation. *Applied Sciences*, 14(16), 7335. <https://doi.org/10.3390/app14167335>
- Loaiza Carvajal, D. A., Morita, M. M., & Bilmes, G. M. (2020). Virtual museums. Captured reality and 3D modeling. *Journal of Cultural Heritage*, 45, 234–239. <https://doi.org/10.1016/j.culher.2020.04.013>
- Reymond, C., Pelowski, M., Opwis, K., Takala, T., & Mekler, E. D. (2020). Aesthetic evaluation of digitally reproduced art images. *Frontiers in Psychology*, 11, Article 615575. <https://doi.org/10.3389/fpsyg.2020.615575>
- Targowski, P., Iwanicka, M., Tymińska-Widmer, L., Sylwestrzak, M., & Kwiatkowska, E. A. (2009). Structural examination of easel paintings with optical coherence tomography. *Accounts of Chemical Research*, 43(6), 826–836. [10.1021/ar900195d](https://doi.org/10.1021/ar900195d)

UNEQUAL GAINS? STUDENT PERSPECTIVES ON AI IN LANGUAGE LEARNING

Vaida Misevičiūtė
Kauno kolegija HEI
Vaida.miseviciute@go.kauko.lt

Vaida Misevičiūtė is an English language lecturer at Kauno kolegija HEI and Vytautas Magnus University. A dedicated practitioner, she has long been deeply engaged in the craft of teaching and the evolving dynamics of language education. Her recent work reflects a growing research interest in the integration of technologies and artificial intelligence into English language learning. Through projects and training initiatives, she has explored how AI tools can support language development without compromising fairness and ethical use. Since AI is here to stay, the mission is to understand it better and help teachers and students use it wisely—positioning AI not as a replacement for teaching, but as a resource that enriches and transforms learning.

Abstract

Artificial intelligence (AI) is increasingly woven into the daily rhythms of teaching and learning through tools such as translation software, grammar checkers, chatbots, gaming applications, and adaptive learning platforms. While these technologies promise to enhance language acquisition, they also raise pressing questions of fairness and equity.

This study investigates how first-year English students at Kauno kolegija HEI perceive the role of AI in English language learning, focusing on both its potential benefits and disadvantages. The study raises five questions: (1) awareness of AI tools for language learning; (2) unequal access to AI and impact; (3) teachers' training in AI and student outcomes; (4) biases in educational AI; and (5) AI knowledge and use in schools and job prospects.

An anonymous quantitative survey using Google Forms was conducted to capture students' experiences and attitudes toward AI in their language classes, examining its impact on learning, personal uses for tasks such as grammar, vocabulary, chatbots, and assignments, and reflections on fairness shaped by access, digital skills, and teacher support. To get deeper insight, semi-structured interviews were conducted with L2 first-year students during the 2025 fall semester. Four open-ended questions were discussed and then written reports were analysed to help gain deeper understanding of how students perceive AI.

The survey revealed that students are actively engaging with AI tools for language learning on a daily basis. However, their usage is predominantly skewed toward individual, text-based support—such as translation applications and ChatGPT for vocabulary building or text clarification—rather than interactive, communicative practice tools specifically designed for language acquisition (such as Gliglish or Mizou for speaking, Immersive Reader for reading fluency, Natural Reader for pronunciation, etc.).

Respondents expressed critical concerns about AI use, particularly regarding the accuracy of information, the loss of critical thinking skills, risks of plagiarism, and growing dependency on these tools. However, issues such as ethics and inequality generated by AI were not considered a top priority among students.

When asked about teachers' use of AI for feedback, testing, or exercise creation, students were equally divided, reflecting ambivalence toward its role in language instruction.

The interviews, however, painted a more negative and critical picture. Respondents voiced strong concerns that AI fosters cultural uniformity, marginalizes smaller languages, and undermines linguistic diversity. The most forceful criticisms were directed at teachers' use of AI: students feared that reliance on AI would make teachers obsolete, diminish their creativity and passion for teaching, and ultimately lead to student demotivation and loss of respect for educators.

This research contributes to ongoing debates about the ethical and pedagogical implications of AI in education, yet it is small in scope showing a need for a more extensive conversation and understanding of this reality.

These findings reveal that teachers desperately need to model smart, purposeful AI use to aid learning, helping students grasp its benefits and limitations without compromising critical thinking, creativity, and integrity. Not only stronger teacher involvement but also clearer institutional and departmental policies are needed to ensure a fair, transparent, and supportive way.

Keywords: *artificial intelligence, fairness, language learning, student perspectives.*

References

- Aliakbari, M., Barzan, P., & Sayyadi, M. (2025). Automated feedback vs. human feedback: A study on AI-driven language assessment. *AI and Tech in Behavioral and Social Sciences*, 3(2), 113–126.
- Daukšaitė-Kolpakovienė, A. (2024). Lithuanian university students' opinions on and experiences of using AI tools for learning English as a foreign language. *Language Education and Technology (LET Journal)*, 4(2), 136–150.
- Kim, J., Lee, H., & Cho, Y. H. (2022). Learning design to support student-AI collaboration: Perspectives of leading teachers for AI in education. *Education and Information Technologies*, 27(5), 6069–6104.
<https://doi.org/10.1007/s10639-021-10831-6>
- Kundu, A., & Bej, T. (2025). Transforming EFL teaching with AI: A systematic review of empirical studies. *International Journal of Artificial Intelligence in Education*, 35, 2281–2314.
<https://doi.org/10.1007/s40593-025-00470-0>
- Mananay, J. A. (2024). Integrating artificial intelligence (AI) in language teaching: Effectiveness, challenges, and strategies. *International Journal of Learning, Teaching and Educational Research*, 23(9), 361–382.
<https://doi.org/10.26803/ijlter.23.9.19>
- Schluer, J. (2024). *Digital feedback in higher education: Teaching practices, student voices, and research findings* (1st ed.). transcript Verlag. <https://doi.org/10.1515/9783839475713>

FOSTERING CREATIVE LEARNING THROUGH AN ONLINE ESCAPE ROOM: FROM QUALITATIVE INSIGHTS TO A DATA-DRIVEN PERSPECTIVE

Rasa Nedzinskaitė-Mačiūnienė¹, Eglė Stasiūnaitienė²

¹*Vytautas Magnus University, Education Academy*

²*Vytautas Magnus University, Education Academy*

¹*rasa.nedzinskaite-maciuniene@vdu.lt*

²*egle.stasiunaitiene@vdu.lt*

Rasa Nedzinskaitė-Mačiūnienė, Dr, is an Associate Professor and Senior Researcher at the Education Academy, Vytautas Magnus University. She is a member of the Young Academy of the Lithuanian Academy of Sciences. She is involved in teaching at the BA, MA, and PhD levels in the field of education management and leadership. She has published more than 22 articles and book chapters. She has had internships in international research and study institutions (e.g., Latvia, Taiwan, Iceland). Her research interests include education management, leadership, and practice.

Eglė Stasiūnaitienė, Dr, is an Associate Professor at the Academy of Education, Vytautas Magnus University. She has co-authored five monographs, over 30 scientific articles, and 13 methodological textbooks. Her research focuses on experiential learning, assessment and recognition of non-formal and informal learning outcomes, and teacher education. She also contributes as an expert to various national and international educational projects. The researcher is a lecturer in the national retraining programme for teachers and support professionals “Inclusive Education in Universal Design for Access to Education”.

Abstract

The concept of creative learning has become a cornerstone of contemporary higher education, emphasizing students' ability to apply knowledge in complex, uncertain, and context-dependent situations. Following Beghetto's (2016, 2021) perspective, creative learning represents a synthesis of knowledge, reflection, and action, enabling the generation of new, personally and socially meaningful understandings. Such an approach calls for innovative pedagogical strategies that integrate academic content with emotional engagement and self-reflection. One promising direction for promoting creative learning is the use of gamified educational strategies, where knowledge is developed through active, challenge-based participation. Game-inspired learning environments encourage creative problem-solving, collaboration, and experimentation, while transforming assessment into a formative and reflective process. They also allow learners to test their understanding in dynamic, low-risk settings that support self-assessment and sustained motivation. This presentation introduces an online escape room model designed as a tool for creative learning and self-assessment before the final exam in higher education (MA level).

During the pilot stage, qualitative data were collected to explore students' learning experiences and perceptions, providing insights that informed subsequent improvements to the game's structure and task logic. The data were analysed using a deductive thematic analysis (Braun & Clarke, 2006). In the second stage, a quantitative analysis was conducted to examine the relationship between learners' engagement in the escape room environment (<https://genially.com>) and their academic achievement (final exam results) data. The data from the Genially platform and the Moodle virtual learning environment were analysed using an AI-powered data analysis and visualization platform: <https://julius.ai/>. In both stages first-year postgraduate students (N = 113) attending the course *Management of Education Organisations and Organisational Learning* (6 ECTS) participated.

The qualitative findings show that students perceived the online escape room as a unique, imaginative, and useful tool for enhancing learning outcomes. Furthermore, the use of the online escape room changed the learning process passive knowledge intake to its creative and active application. Students were able to improve not just their study skills but also their creative thinking, problem-solving abilities, and comprehensive understanding of knowledge. Although the quantitative data analysis shows that playing

the online escape room increases student engagement, it does not have a significant impact on final exam results.

This study shows how creative, game-based environments can serve as effective tools for promoting reflection, engagement, and creative thinking in the higher education context.

The qualitative analysis shows that students perceive the escape room as a positive and engaging form of self-assessment. They note that it helps them to identify knowledge gaps, sustain motivation, and structure their learning process. However, the quantitative results reveal no meaningful statistical relationship between performance in the escape room and final examination scores. This suggests that escape rooms are not a direct predictor of academic achievement. They are more likely to function as one component within a broader, creatively designed instructional strategy.

Keywords: *creative learning, gamified learning environment, higher education, online escape room.*

References

- Beghetto, R. A. (2016). Creative learning: A fresh look. *Journal of Cognitive Education and Psychology*, 15(1), 6–23.
- Beghetto, R. A. (2021). Creative learning in education. In M. L. Kern & M. L. Wehmeyer (Eds.), *The Palgrave handbook of positive education* (pp. 473–491). Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-64537-3_19
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3, 77–101.

MACHINE TRANSLATION OF NEWS HEADLINES ON AI IN EDUCATION: A COMPARATIVE STUDY OF GOOGLE TRANSLATE AND YANDEX TRANSLATE

Betül Özcan Dost¹, Muharrem Yüksel²

¹*Ondokuz Mayıs University*

²*Ondokuz Mayıs University*

¹*betul.ozcan@omu.edu.tr*

²*24282430@stu.omu.edu.tr*

Betül Özcan Dost was awarded with a scholarship from Yeditepe University, and she received education at this university in the Department of Translation and Interpreting (English-Turkish). She graduated from the university in 2009 by ranking first in the department. She got a Master's degree in the same department at İstanbul University in 2013. She received her PhD degree on Translation and Cultural Studies in English at Gazi University in 2018. She is working as Assistant Professor in the Department of Translation and Interpreting in English at Ondokuz Mayıs University. She knows English at advanced level and Spanish at upper-intermediate level. She has prepared academic publications and presentations on several fields of translation. Her areas of expertise include cultural translation, artificial intelligence and translation, and audiovisual translation.

Muharrem Yüksel graduated from Mardin Artuklu University in 2004 and is presently an MA student at the Department of Translation and Interpreting at Ondokuz Mayıs University. His research interests primarily focus on translation technologies, sociolinguistics, and he is currently working on the intersection of media discourse and automated translation systems.

Abstract

In the current globalized media landscape, news circulates rapidly from one language to another. This accelerated spread has increased interest in Machine Translation (MT) tools to enable dissemination of news across linguistic and cultural boundaries. Despite the recent advances made by MT systems, translating news headlines remains a distinct challenge due to their concise nature, use of rhetorical devices, and reliance on cultural knowledge. Drawing on the current relationship between translation and MT tools, this exploratory study aims to analyse comparatively the efficiency of two leading MT tools, Google Translate and Yandex Translate, in translating English news headlines on AI in Education into Turkish. The research focuses on this specific field of study to determine how much semantic precision, idiomatic richness, and journalistic tone the selected tools can currently retain in the selected language pair.

This study employs a qualitative comparative analysis to evaluate the data. To analyze the translations of the selected news on the connection between artificial intelligence and education, this study examines 30 randomly selected digital news headlines published between 2022 and 2025 from various internationally recognized journals, including *The Guardian*, *Reuters*, *Associated Press News*, and *Business Insider*.

The news headlines in English were uploaded to Google Translate and Yandex Translate without any editing and the outputs in Turkish were also handled without any post-editing to reveal what the exact experience of an individual using machine translation tools might be like in real-life situations. The data were analysed using three theoretically informed dimensions: (1) *Semantic Accuracy* (adequacy of meaning transfer), (2) *Naturalness* (syntactic fluency and grammatical correctness in Turkish), and (3) *Genre Appropriateness* (conformity to Turkish news headline conventions). The problematic issues encountered in the analysis were classified into categories as *Semantic and Idiomatic Issues*, *Stylistic and Register Issues*, and *Syntactic and Punctuation Issues*.

The comparative analysis revealed that both tools are capable of translating simple declarative sentences, but exhibit significant limitations in rendering the subtle semantic and pragmatic nuances of news headlines.

Semantic and Idiomatic Issues: Yandex Translate frequently resorted to literal translations that distorted the intended meaning. For instance, the metaphorical phrase “death knell” in Headline 18 was translated by Yandex as “büyüler” (casts a spell), creating a nonsensical output, while Google Translate conveyed the meaning as “anlamına geliyor”, which was actually meant in the source text.

Stylistic and Register Issues: Both tools struggled to capture the concise nature of headlines. However, Google Translate generally maintained a more consistent journalistic and educational tone. Yandex Translate often failed to recognize the appropriate tense for headlines, translating dynamic present continuous verbs into simple present tense (e.g., translating “multiply” as “çoğalır” instead of “çoğalıyor”), which diminishes the sense of immediacy in the news.

Syntactic and Punctuation Issues: A notable finding was Yandex Translate’s tendency to omit or misuse punctuation, occasionally turning questions into statements (Headline 4) or misusing quotation marks. Google Translate demonstrated superior parsing of complex sentence structures, whereas Yandex often fragmented noun phrases or mistook objects for subjects (Headlines 30 and 21).

This study is interdisciplinary in nature as it combines Translation Studies and MT. It focuses on how MT tools, which are increasingly becoming leading interlingual and intercultural communication tools in our daily lives, perform in the context of news on Artificial Intelligence in Education. The restriction of the analysis to this specific thematic domain constitutes a limitation of the study. Another limitation of the study is that it is restricted to headlines. Future research could expand the text corpus to include full news articles, allowing for a more comprehensive analysis of consistency and coherence throughout the entire news articles. Practical results demonstrate that machine translation can be utilized for drafting news articles; however, “human intervention” in the form of post-editing remains indispensable to ensure accuracy, cultural appropriateness, and adherence to genre conventions. The outputs can also serve as an exemplary resource for future work, providing examples of problematic issues in MT, which might also be guiding for courses on MT and post-editing in translator training.

The study demonstrates that, despite significant advances in neural networks, MT tools remain limited in translating news headlines. In this context, rhetorical and stylistic nuances are as significant as factual information, which makes the process challenging. For the English-Turkish language pair in specific, Google Translate proved more effective in preserving semantically equivalent structures than Yandex Translate. By contrast, Yandex Translate’s literal renderings and punctuation issues resulted in inaccurate



ADLES 2025 POWERED BY UNINOVIS

transfer of information and stylistic inconsistencies. Consequently, professional human post-editing remains essential to bridge the gap between algorithmic processing and the communicative intent of human translators in case of translation of news headlines.

Keywords: *artificial intelligence in education, Google Translate, machine translation, news translation, Yandex Translate.*

References

- AP News. (2025). *AI goes to school*. <https://apnews.com/article/ai-school-chromebook-gaggle-goguardian-securlly-25a3946727397951fd42324139aaf70f>
- Cassidy, C. (2023, April 16). Australian universities split on using new tool to detect AI plagiarism. *The Guardian*. <https://www.theguardian.com/australia-news/2023/apr/16/australian-universities-split-on-using-new-tool-to-detect-ai-plagiarism>
- Google. (n.d.). *Google Translate*. <https://translate.google.com>
- Kenny, D. (2021). *Machine translation for everyone: Empowering users in the age of artificial intelligence*. Language Science Press.
- Lefevere, A. (1992). *Translation, rewriting, and the manipulation of literary fame*. Routledge.
- Özcan Dost, B. (2024). Haber çevirisinde makine çevirisi araçlarının kullanımına yönelik bir inceleme: Google Translate ve DeepL örneği. *Söylem: Dil, Anlam ve İletişim Araştırmaları Dergisi*, 9(1), 255–274. <https://doi.org/10.29110/soylemdergi.1414417>
- Reuters. (2023, September 7). *Unesco seeks regulation in first guidance on GenAI use in education*. Reuters. <https://www.reuters.com/technology/unesco-seeks-regulation-first-guidance-genai-use-education-2023-09-07/>
- Vermeer, H. J. (1989). Skopos and commission in translational action. In A. Chesterman (Ed.), *Readings in translation theory* (pp. 173–187). Oy Finn Lectura Ab.
- Yandex. (n.d.). *Yandex Translate*. <https://translate.yandex.com>

GENERATIVE TEXT AS A CHALLENGE TO CREATIVITY AND ACADEMIC ETHICS

Giedrė Paurienė

Mykolas Romeris University

pauriene@mruni.eu

Dr Giedrė Paurienė is a researcher and lecturer at Mykolas Romeris University (Vilnius, Lithuania) whose academic work explores the intersections of ethics, language, and digital culture in contemporary education and society. Her scholarly interests include professional ethics, language education, gender equality, communication, and national security, with her recent research focusing on the ethical and creative implications of artificial intelligence (AI) in academia and knowledge production. Since the early 2000s, Dr Paurienė has been teaching Professional Ethics and German for Specific Purposes to students of law, police, and public security. She is among the pioneers of biographical learning research in Lithuania. In her doctoral dissertation *Development of teachers' professional competence through informal learning* (2017), she developed a conceptual framework of informal and self-directed learning as a foundation for professional identity and ethical awareness. Her research spans four interrelated domains: professional ethics and responsibility in public security and law enforcement; language education and cultural identity in professional contexts; gender equality and social inclusion as dimensions of national security; AI, authorship, and academic integrity, exploring how generative AI reshapes creativity, responsibility, and ethical reasoning in higher education. Dr Paurienė has authored over 30 scientific publications in national and international peer-reviewed journals indexed in Clarivate Analytics Web of Science, Scopus, DOAJ, and CEEOL databases. Dr Paurienė actively participates in international academic networks and has presented her research in conferences across Germany, Latvia, Poland, and Ukraine.

Abstract

Generative artificial intelligence (AI) tools based on large language model (LLM) technology are fundamentally transforming processes of creation, writing, and learning. These systems are capable of generating coherent, logically structured, and stylistically consistent texts, often indistinguishable from those written by humans. As such, they no longer serve merely as technical aids but emerge as active collaborators in meaning-making processes, blurring the traditional boundaries between author and tool. Their integration into academic, artistic, and pedagogical contexts compels a reconsideration of long-held notions of authorship, originality, intellectual ownership, and moral responsibility (Cheng et al., 2025; Watson et al., 2025; Yoo, 2025). In creative and scholarly settings, generative AI introduces a dual dynamic. It simultaneously enhances cognitive productivity, enabling users to produce and refine complex texts with unprecedented efficiency and challenges epistemic integrity, as authorship becomes increasingly distributed across human and algorithmic agency. This shift raises new philosophical and ethical questions: Who is the true author when AI contributes to the structure, style, and argumentation of a text? Consequently, generative AI is not only reshaping academic communication and creative expression but also redefining the ethical landscape of knowledge production. Its use requires new frameworks for transparency, reflection, and responsibility—demanding that institutions and individuals alike cultivate ethical literacy and an awareness of how human and artificial contributions intersect within the evolving ecology of digital creation. This study aims to reveal how the use of generative text reshapes the understanding of creative activity and academic ethics, with a focus on challenges emerging in educational and research contexts.

The study is based on a qualitative analytical methodology that enables a comprehensive exploration of the impact of generative AI on creativity, academic ethics, and language culture. This methodological approach combines the analysis of sources in academic ethics, philosophy of language, and digital culture with the interpretation of practical examples from the fields of language teaching, translation, and academic writing. Such an approach allows the study to integrate theoretical reflection with empirical insight, examining how technology transforms the human relationship with text, authorship, and responsibility.

These practical observations align with broader academic research trends suggesting that AI use requires a new understanding of authorship and ethical transparency.

The insights from studies suggest that AI is not merely a technological development but a cultural and ethical challenge, transforming conceptions of authorship, responsibility, and the creative process. To preserve ethical balance, academia must not only learn how to use these tools but also reflect critically on their impact on human creativity and moral awareness. Three main trends can be identified:

- Transformation of authorship—the human creator increasingly takes on the role of editor or coordinator, overseeing algorithmic input (Cheng et al., 2025; Watson et al., 2025).
- Reorientation of responsibility—even when text is generated by AI, human authors must retain final responsibility for content, methodology, and ethical transparency (Yoo, 2025).
- Cultural shift in academia—a move from prohibition (“AI use is banned”) to a culture of accountability emphasizing transparency, reflection, and digital literacy (Bittle & El-Gayar, 2025; Đerić et al., 2025).

Recent studies (Bittle & El-Gayar, 2025; Bozkurt, 2024; Watson et al., 2025) emphasise that generative AI is not merely a technological innovation but a cultural and ethical phenomenon. The author’s role is being redefined from an independent creator to an editor and coordinator overseeing algorithmic input. Human responsibility for content remains essential, underscoring the importance of ethical transparency and technological literacy.

This study contributes to current discourse by integrating ethical theory, linguistic philosophy, and empirical evidence to conceptualise generative AI not merely as a technological tool but as a catalyst of epistemic and cultural transformation. Its originality lies in combining philosophical interpretation with case-based analysis in language and translation education, illustrating how AI-mediated co-creation reshapes authorship and ethical responsibility. Practically, the findings highlight the urgent need for universities to establish transparent guidelines for AI-assisted writing, develop ethical literacy training, and redefine assessment criteria to reflect process-oriented authenticity rather than product-based originality. However, the research is limited by its qualitative and interpretive focus, which, while providing depth, restricts the generalizability of findings. Future studies should expand cross-cultural comparisons and explore the longitudinal effects of AI integration on academic identity, creativity, and ethical reasoning.

Generative text reshapes the paradigm of academic creativity: authorship, responsibility, and ethics become dynamic and shared categories. Instead of prohibitions, institutions should foster a culture of ethical reflection and accountability in which AI is treated as a creative partner. Ethical literacy—the ability to disclose, reflect upon, and critically evaluate AI contributions—becomes a core element of modern academic competence. These insights are particularly relevant in the fields of languages, education, and social sciences, where AI is already reshaping the ethics of creative and intellectual work.

Keywords: *academic ethics, artificial intelligence (generative), authorship, creativity, digital transformation.*

References

- Bittle, K., & El-Gayar, O. (2025). Generative AI and academic integrity in higher education: A systematic review and research agenda. *Information*, 16(4), 296. <https://doi.org/10.3390/info16040296>
- Bozkurt, A. (2024). GenAI et al.: Cocreation, authorship, ownership, academic ethics and integrity in a time of generative AI. *Open Praxis*, 16(1), 1–10. <https://search.informit.org/doi/pdf/10.3316/informit.T2024030500022600105330542>
- Cheng, A., Calhoun, A., & Reedy, G. (2025). Artificial intelligence-assisted academic writing: Recommendations for ethical use. *Advances in Simulation*, 10, 22. <https://doi.org/10.1186/s41077-025-00350-6>
- Đerić, E., Frank, D., & Vuković, D. (2025). Exploring the ethical implications of using generative AI tools in higher education. *Informatics*, 12(2), 36. <https://doi.org/10.3390/informatics12020036>
- Watson, S., Brezovec, E., & Romic, J. (2025). The role of generative AI in academic and scientific authorship: An autopoietic perspective. *AI & Society* 40, 3225–3235. <https://doi.org/10.1007/s00146-024-02174-w>
- Yoo, J.-H. (2025). Defining the boundaries of AI use in scientific writing: A comparative review of editorial policies. *Journal of Korean Medical Science*, 40(23). <https://doi.org/10.3346/jkms.2025.40.e187>

POSTHUMAN URBAN DESIGN OF COMMUNICATION: NECESSARY SKILLS

Ida D. Povilaitė
Kauno kolegija HEI
ida.povilaite@kaunokolegija.lt

Ida Daiva Povilaitė is an author, translator, communication specialist, and emerging scholar working at the intersection of modern literature, creative practice, and contemporary theory. Currently, she works as a researcher and lecturer in creative writing and communication at Kauno kolegija HEI, also in School of Lithuanian Army. She researches posthumanism culture changes in contemporary literature, communication, and modern Baltic cities. Her academic background spans two Master's degrees (EMBA and Educational Technologies), also Modern World Literature (Harvard, 2018), Creative writing: Writing Novels (University of British Columbia, 2020).

Before entering academia, Ida Povilaitė spent over 15 years in international strategic communication and marketing across Lithuanian, Norwegian, Danish, Swedish, and U.S. organizations, later shifting toward cultural and literary work. She is the author of the novel *Homo Office* (2021) and currently is releasing another novel *Three*, both supported by the Lithuanian Council for Culture, as well as translating contemporary literature.

Abstract

This study investigates the abilities that urban inhabitants need to meaningfully and responsibly navigate posthuman urban environments—cities increasingly shaped not only by humans but also by algorithms of ecological processes and multispecies entanglements. While most existing research focuses on designers, planners, and technological infrastructures, this work shifts attention to the citizen perspective, asking: What competencies must everyday inhabitants develop to live effectively in more-than-human cities?

The research employs a qualitative, theory-driven methodology grounded in recent posthumanist scholarship (Braidotti, 2019; Ferrando, 2023; Gabrys, 2020), more-than-human ethnographies (Pink et al., 2022), and urban AI studies. Analytical lenses include posthuman subjectivity, multispecies relationality, and citizen sensing. The study uses conceptual synthesis and speculative urban scenarios to identify emerging forms of citizenship, complemented by illustrative examples from climate adaptation, sensor-based urban systems, and algorithmic governance.

The study identifies four core abilities needed by inhabitants of posthuman cities:

1. Relational Awareness—recognising oneself as part of multispecies and technological networks rather than as an isolated individual.
2. Systems Literacy—understanding the basic workings and implications of algorithmic infrastructures, sensor ecologies, and climate-responsive systems.
3. Adaptive and Speculative Orientation—developing capacity to navigate uncertainty, respond to rapid ecological or technological change, and imagine alternative future modes of living.
4. Ethical Multispecies Responsibility—engaging with the city as a shared habitat and acknowledging obligations to nonhuman species and planetary systems.
5. Together, these abilities support more resilient, inclusive, and ecologically attuned forms of urban citizenship.

This research is original in reframing posthuman urbanism from the inhabitant's perspective, expanding the concept of citizenship beyond human-centred rights and responsibilities. Practically, the findings suggest new directions for civic education, participatory governance, and community engagement,



ADLES 2025 POWERED BY UNINOVIS

helping citizens interpret algorithmic systems, respond to climate pressures, and cultivate multispecies ethics. Limitations include the conceptual nature of the study and the need for further empirical work to test how these abilities manifest across diverse cultural and socio-economic contexts.

The study concludes that posthuman urban conditions demand a fundamental shift in how inhabitants understand themselves and their environments. Relational, systemic, adaptive, and ethical competencies are no longer optional but essential for navigating rapidly evolving cities shaped by ecological interdependence and technological complexity. Developing these abilities can foster more responsible, imaginative, and resilient forms of urban life, supporting the emergence of posthuman citizenship suited to the challenges and possibilities of the 21st century.

Keywords: *future urban life, more-than-human cities, posthuman awareness, posthuman cities, urban inhabitants.*

References

- Alaimo, S. (2018). *Exposed: Environmental politics and pleasures in posthuman times*. University of Minnesota Press.
- Amin, A., & Thrift, N. (2018). *Seeing like a city* (Updated ed.). Polity Press.
- Braidotti, R. (2019). *Posthuman knowledge*. Polity Press.
- Braidotti, R. (2022). *Posthuman feminism*. Polity Press.
- Clark, N., & Szerszynski, B. (2021). *Planetary social thought: The Anthropocene challenge to the social sciences*. Polity Press.
- Ferrando, F. (2019). *Philosophical posthumanism*. Bloomsbury.
- Ferrando, F. (2023). *The art of being posthuman: Who are we in the 21st century?* Polity Press.
- Gabrys, J. (2020). *Citizen sensing: A posthuman ecology*. MIT Press.
- Heimstadt, M., & Bowker, G. (2022). Urban AI: Reconfiguring urban life through algorithmic governance. *Urban Studies*, 59(14), 2877–2895. <https://doi.org/10.1177/00420980211067011>
- Neal, M., & Murthy, D. (2023). More-than-human cities: Urban life beyond the human. *Environment and Planning D: Society and Space*, 41(4), 777–795.
- Pink, S., Sumartojo, S., & Lupton, D. (2022). *The lived experience of climate change: A more-than-human ethnography of futures*. Routledge.
- Tsing, A. L., Mathews, A., & Bubandt, N. (Eds.). (2019). *Patchwork ethnography: Multispecies methods for precarious worlds*. Duke University Press.
- Wilde, P., & Sylvia, J. J. (2024). Posthuman media studies and urban futures. *Journal of Posthumanism*, 5(3), 169–176.



ADLES 2025 POWERED BY UNINOVIS

DIGITAL CODE-SWITCHING: THE CASE OF ENGLISH-LITHUANIAN LANGUAGE CONTACT ON SOCIAL MEDIA

Asta Pukienė

Kauno kolegija HEI

asta.pukiene@kaunokolegija.lt

Asta Pukienė is a full-time lecturer at the Language Centre of the Faculty of Arts and Education at Kauno kolegija HEI and a PhD student in Philology. Her primary research interests include applied linguistics, sociolinguistics, language evolution, communication in digital media, and translation. She has published several academic papers and actively collaborated with researchers from Lithuanian and international institutions. Her recent focus is laid upon the issues of language vitality, peripheral dialect variation, and the impact of globalisation on multilingual practices. She also contributes to studies on figurative language, discourse analysis, and translation quality assessment.

Abstract

The research aims to examine the impact of the growing dominance of English on social media in smaller language communities, with a special focus on the Lithuanian language. It intends to determine whether digital code-switching between English and Lithuanian marks linguistic innovation or the decline of the native language.

The research provides the theoretical background for the unprecedented phenomenon of Global English, the concept of code-switching, its variations and functions. The methodological framework is grounded in established theories of language evolution (Aitchison, 2001; Crystal, 2000, 2003; Dressler et al., 2006; Mufwene, 2017; Thomason, 2015; and others) and code-switching, relying particularly on Myers-Scotton's (1993) Markedness Model and Poplack's (1980) typology of code-switching, which provide the basis for categorising and interpreting the linguistic data. In addition, the research discusses insights from contemporary scholarship, including recent sociolinguistic studies of digital communication and identity construction (Berruto, 2005; Ignotaitė, 2020; Leppänen et al., 2014; Mufwene, 2017; Nilep, 2003; Siebenhütter, 2024; and others), which highlight how code-switching serves not only structural but also pragmatic and stylistic functions in online discourse. Together, these classic and modern perspectives allow for a more comprehensive analysis of patterns, motivations, and communicative strategies observed in the dataset. The scope of the empirical part covers more than 200 Instagram and Facebook posts from various Lithuanian influencers, collected in the second half of 2025. A descriptive linguistic approach was applied to process the collected data. A quantitative analysis was conducted to assess the frequency and typology of inserted English elements, while a qualitative discourse analysis explored the pragmatic and stylistic functions of code-switching between the two languages.

The findings reveal that code-switching among Lithuanian influencers represents a deliberate and flexible strategy, as well as the evolving nature of digital communication. Words and phrases in English (some fully adapted into Lithuanian morphology, for example, *outfitukas* [outfit], *soldautas* [sold out], *dealas* [deal, special offer], *unboxingas* [unboxing], *hackas* [hack], *oferis* [offer], *challengė* [challenge], *junk foodas* [junk food], *experienė* [experience], *red flagas* [red flag], etc. and some without modification, like *game changer*, *so-so*, *done*, *awkward*, *next level* etc.) mostly act as symbols of identity and cultural affiliation. They tend to be used because they are more concise and better convey the intended meaning than their Lithuanian equivalents. Therefore, from a practical standpoint, English

is a way to emphasise ideas or convey precision in areas such as fashion (e.g., *must-have*, *street stailas*, *oversizas*, *trendas*), lifestyle, and sports (e.g., *chillinu*, *back on track*, *preworkautas*, *gyimas*, *gymo diena*) or technology (e.g., *e-shopas*, *live'as*, *reelsas*, *playlistas*, *hackas*, *podcastas*, *tune in*, *skrolinti*, *airbudsai*) and to fill in the lexical vacuum where Lithuanian offers no concise equivalent. On a stylistic level, code-switching is used to express humour, emotion, and informality (e.g., *aš tokia excited*, *jis so cute*, *energijos crashai*, *vaibas*, *crazy idėja*, *partners in crime*, *perfect atostogos*, *migrena is back*, *OMG*, *POV*) to an already familiar tone that appeals to online audiences. English is also preferred by influencers as it helps to present themselves as modern cosmopolitans and as members of a globalised digital culture. It increases the communicative reach by making their content more accessible to people beyond the Lithuanian-speaking community.

This research is highly relevant because it illustrates current trends and patterns of digital communication. The practical implications of the findings can be applied to various fields by suggesting effective communication strategies, promoting cross-cultural understanding, and recognising the value of multilingual expression in digital contexts.

The conducted analysis of the cases of code-switching of Lithuanian social media influencers reveals a complex linguistic phenomenon, predetermined by the needs and norms of modern online communication. It appears that the use of English vocabulary and grammatical elements, whether fully integrated into Lithuanian conventions or retained in their original form, does not reflect linguistic deficiency. Instead, they serve as social denotations that reflects one's identity, helps to be more expressive, and facilitate social interaction.

Keywords: *code-switching, English dominance, language contact, language shift, social media discourse.*

References

- Aitchison, J. (2001). *Language change: Progress or decay*. 3rd ed. Cambridge University Press.
- Androutsopoulos, J. (2013). Code-switching in computer-mediated communication. In S. C. Herring, D. Stein & T. Virtanen (Eds.), *Handbook of pragmatics of computer-mediated communication* (pp. 667–694). De Gruyter Mouton.
- Androutsopoulos, J. (2015). Networked multilingualism: Some language practices on Facebook and their implications. *International Journal of Bilingualism*, 19(2), 185–205.
- Berruto, G. (2005). Dialect/standard convergence, mixing, and models of language contact: The case of Italy. In P. Auer, F. Hinskens & P. Kerswill (Eds.), *Dialect change: Convergence and divergence in European languages* (pp. 81–95). Cambridge University Press.
- Crystal, D. (2000). *Language death*. Cambridge University Press.
- Crystal, D. (2003). *English as a global language*. 2nd ed. Cambridge University Press.
- Dressler, W. U., & Cillia, R. (2006). Language maintenance, language decline and language death. In U. Ammon, N. Dittmar, K. J. Mattheier & P. Trudgill (Eds.), *Sociolinguistics: An international handbook of the science of language and society* (pp. 2258–2271). Vol. 3. De Gruyter Mouton.
- Ignotaite, I. (2020). Code-switching through the embedding of English idiomatic expressions into the matrix Lithuanian text. *LOGOS*, 102(1), 189–199. <https://doi.org/10.24101/LOGOS.2020.19>
- Leppänen, S., Kytölä, S., Jousmäki, H., Peuronen, S., & Westinen, E. (2014). *Social media discourse, (dis)identifications and diversities*. Routledge.
- Mufwene, S. S. (2008). *Language evolution: Contact, competition and change*. Continuum.
- Mufwene, S. S. (2017). Language vitality: The weak theoretical underpinnings of what can be an exciting research area. *Language*, 93(4), e202–e223.
- Myers-Scotton, C. (1993). Common and uncommon ground: Social and structural factors in codeswitching. *Language in Society*, 22(4), 475–503.
- Nilep, C. (2006). Code-switching in sociocultural linguistics. *Colorado Research in Linguistics*, 19(1), 1–22.
- Poplack, S. (1980). Sometimes I'll start a sentence in Spanish y termino en español: Toward a typology of code-switching. *Linguistics*, 18(7–8), 581–618.



ADLES 2025 POWERED BY UNINOVIS

Siebenhütter, S. (2024). *Minority language and identity in the digital age*.
<https://www.researchgate.net/publication/392515306>

UNESCO (2003). *Language vitality and endangerment (LVE) guideline*. <https://www.unesco.org/en>

DEVELOPING ENGLISH ACADEMIC WRITING SKILLS WITH AI-POWERED TOOLS

Audronė Raškauskienė¹, Roza Zhussupova²

¹*Kauno kolegija HEI*

²*L.N. Gumilyov Eurasian National University*

¹*audrone.raskauskiene@kaunokolegija.lt*

²*rozazhusupova@gmail.com*

Audronė Raškauskienė completed doctoral studies at the University of Warsaw, Poland, and was awarded a PhD degree in 2001. She spent the spring semester of 1992 at California State University, Northridge, and studied Gestalt therapy at the Pacific Gestalt Institute in Los Angeles, California, from 2003 to 2006. Assist. Prof. Audronė Raškauskienė is the author and co-author of numerous scientific articles and books and has actively participated in a range of international scientific conferences and projects, showcasing her research in English for specific purposes (academic writing focus), intercultural communication, language teaching methodology (EFL focus), literary studies, and translation. She is affiliated with the Language Center at Kauno kolegija HEI and with the Department of Foreign Language, Literary, and Translation Studies at Vytautas Magnus University in Kaunas, Lithuania. During the period 2002-2018, Audronė Raškauskienė was a visiting lecturer at a range of universities, including the University of Turin, Italy (2002), the University of Cologne, Germany (2008), the Jagiellonian University in Kraków, Poland (2009), Johannes Gutenberg University Mainz, Germany (2009, 2011, 2012, 2013), the University of Vigo, Spain (2011), the University of Turku, Finland (2011), and Hebei Foreign Studies University, Shijiazhuang, China (2017-2018). Audronė Raškauskienė is a member of the Association of English Language Teachers of Lithuanian Universities (LAUTE), the European Society for the Study of English (ESSE), and Lithuanian Gestalt Association (LGA).



ADLES 2025 POWERED BY UNINOVIS

Roza Zhussupova, an Associate Professor in the Department of Theory and Practice of Foreign Languages at the Graduate School of Education, L. N. Gumilyov Eurasian National University in Astana, Kazakhstan, has been shaping the landscape of English language education for over three decades.

Her dedication to education has been nationally recognized with prestigious accolades, including the Medal and Grant from the Kazakh Ministry of Education and the “Best Teacher at the High School” award in 2009 and 2024. From 2017 to 2020, she was an integral part of the research group for the State Project of the Ministry of Education of Kazakhstan, “Multilingual Personality of a New Type”. Professor Zhussupova’s expertise extends to international collaborative projects. She participated in the U.S. Embassy’s “Blended Learning” Project (2012), the British Council’s Updated Education Project (2017), the 400th Anniversary of W. Shakespeare Project (2016), the U.S. Embassy RELO’s “American English MOOC Facilitated Sessions” Project (2019-2020), and the British Council Project “OTC” (2024). A prolific scholar, she has authored nearly 100 scientific articles presented at international conferences and seminars, as well as 20 research papers published in Scopus- and Web of Science-indexed journals, achieving an H-Index of 4. Her editorial achievements include 11 educational textbooks, three monographs, and five e-books. She is also a highly sought-after reviewer for leading Scopus and Web of Science journals for more than 10 years.

Abstract

Academic writing plays a highly important role in the language development of English language learners. As research demonstrates, students learning English as their second or foreign language have some difficulty in following the requirements of academic writing conventions in English. Previous research on the application of AI technology in education, particularly in the context of language teaching and learning, has consistently shown positive outcomes and has found that AI-based writing tools significantly improve students' writing skills (Polakova & Klimova, 2024; Rahmi et al., 2024; Song & Song, 2023; Zaheer et al., 2025).

The aim of the present paper is to discuss the use of AI-powered writing tools in teaching and learning academic writing at the tertiary level, focusing on first-year English major students' attitudes towards these tools, based on a joint small-scale quantitative study conducted at two higher education institutions in Kaunas, Lithuania, and at a university in Astana, Kazakhstan. The study, contributing to ongoing discussions on the responsible integration of AI in academic settings, was designed in two stages, each addressing a specific objective. The first objective was to strengthen students' academic writing skills by developing their ability to formulate effective prompts for AI-powered writing tools. These prompts were intended to elicit personalized instantaneous feedback that would help students revise their academic texts. 30 students of six nationalities aged 18-36 contributed to the study by writing an in-class essay.

Students' essays demonstrated culture-bound rhetorical patterns which differed from academic writing conventions in English. Personalized instantaneous feedback on their essay writing skills from ChatGPT helped students edit their essays according to the conventions of academic writing in English in terms of text organization and layout, cohesion and coherence, language formality, grammar, and punctuation.

The second objective was to investigate students' overall use of AI in their studies, with particular focus on the use of AI-powered tools in academic writing. Special attention was given to students' perceptions of the advantages and limitations of using AI, as well as to ethical concerns related to its use in academic context. For this purpose, 73 students of six nationalities aged 18-27 answered the questionnaire using Google Forms.

The results obtained from the study under discussion show that the primary goal of teachers teaching academic writing still remains to help students adhere to the requirements of the academic writing style

in English, enabling them to write according to international rhetorical conventions and become independent-minded researchers who can actively participate in global academic discourse. To achieve this goal, AI-powered writing tools proved to be of great help to both the teachers of academic writing and the students. At the same time, concerns related to students' overreliance on AI, ethical implications, and the need for pedagogical guidance were identified. Therefore, when using AI in academic writing, the challenge is to do it critically, responsibly, and in ways that benefit both teachers and students.

Keywords: *academic writing, AI-powered writing tools, culture-bound rhetorical patterns, ESL/EFL.*

References

- Akgun, S., & Greenhow, C. (2022). Artificial intelligence in education: Addressing ethical challenges in K-12 settings. *AI and Ethics*, 2, 431–440. <https://doi.org/10.1007/s43681-021-00096-7>
- Aljuaid, H. (2024). The impact of artificial intelligence tools on academic writing instruction in higher education: A systematic review. *Arab World English Journal (AWEJ)*. Special issue on ChatGPT. <https://doi.org/10.24093/awej/ChatGPT.2>
- Bhutoria, A. (2022). Personalized education and artificial intelligence in the United States, China, and India: A systematic review using a human-in-the-loop model. *Computers and Education: Artificial Intelligence*, 3, 100068. <https://doi.org/10.1016/j.caeai.2022.100068>
- Campbell, M. (2019). Teaching academic writing in higher education. *Education Quarterly Reviews*, 2(3), 608–614. <https://doi.org/10.31014/aior.1993.02.03.92>
- Dja'far, V.H., & Hamidah, F.N. (2024). The effectiveness of AI technology in improving academic English writing skills in higher education. *Journal of Language and Literature Studies*, 4(3), 579–593. <https://doi.org/10.36312/jolls.v4i3.2031>
- Gayed, J. M., Carlon, M. K. J., Oriola, A. M., & Cross, J. S. (2022). Exploring an AI-based writing assistant's impact on English language learners. *Computers and Education: Artificial Intelligence*, 3, 100055. <https://doi.org/10.1016/j.caeai.2022.100055>
- Gillett, A. (2025). English for academic purposes: Academic writing. *UEfAP*. <https://www.uefap.org/writing/>
- Kaplan, R. (1966). Cultural thought patterns in intercultural education. *Language Learning*, 16, 1–20.
- Polakova, P., & Klimova, B. (2024). Implementation of AI-driven technology into education – A pilot study on the use of chatbots in foreign language learning. *Cogent Education*, 11(1). <https://doi.org/10.1080/2331186X.2024.2355385>
- Rahmi, R., Amalina, Z., Andriansyah, & Rodgers, A. (2024). Does it really help? Exploring the impact of AI-generated writing assistant on the students' English writing. *Studies in English Language and Education*, 11(2), 998–1012. <https://doi.org/10.24815/siele.v11i2.35875>
- Song, C, and Y. Song (2023). Enhancing academic writing skills and motivation: Assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Psychology*, 14, 1–14. <https://doi.org/10.3389/fpsyg.2023.1260843>



ADLES 2025 POWERED BY UNINOVIS

Zaheer, S., Ma, C., Zhu, Y., & Vasinda, S. (2025). GenAI in academic writing - Empowering learners or redefining traditional pedagogical practices? A systematic review from 2019-2023. *International Journal of Artificial Intelligence (AI) in Teaching and Learning*, 1(1), 1–34. <https://doi.org/10.4018/IJAITL.373582>

THE CONCEPT OF DEFINITION IN THE AGE OF ARTIFICIAL INTELLIGENCE

Aušra Rimkutė-Ganusauskienė
Kauno kolegija HEI
ausra.ganusauskiene@go.kauko.lt

Aušra Rimkutė-Ganusauskienė is a Doctor of Humanities (PhD). She completed her Bachelor's studies in Lithuanian Philology and later earned a Master's degree in Lithuanian Philology (Linguistics) with distinction. From 2007 to 2011, she pursued her doctoral studies in a joint programme of the Institute of the Lithuanian Language and Vytautas Magnus University (supervisor: Dr Jonas Klimavičius). In 2012, she defended her doctoral dissertation, entitled *Religious terminology of the catechisms from 1883-1916*. In 2013-2015, she undertook a postdoctoral fellowship at Vytautas Magnus University and, in 2015, published the research monograph *Religious terminology of the catechisms from 1800-1882*.

Her main research interests include terminology theory and practice, term definitions and their structural models, as well as the terminology of clothing, religion, and contemporary cultural fields, including animation. She has authored scientific articles published in peer-reviewed Lithuanian and international journals and prepared the academic study *Clothing names: On the basis of sources from the second decade of the 21st century* (2023). She continues her research in these areas.

Aušra Rimkutė-Ganusauskienė actively participates in academic conferences in Lithuania and abroad, delivering papers on terminology, language culture, and related topics, and collaborates with researchers and professional institutions. In addition to her research activities, she teaches at Kauno kolegija HEI, where she examines issues of terminology practice, language standardisation, and usage.

Her scholarly work reflects a sustained commitment to developing Lithuanian terminology studies, analysing term definitions, and contributing to the standardisation, organisation, and creation of contemporary Lithuanian terminology.

Abstract

The paper examines the concept of definition in the age of artificial intelligence (AI), drawing on an analysis of the structural models of definitions for animation terms and contemporary theories of terminology. The purpose of the study is to identify the constituent elements that shape definitions in the animation field and to assess whether AI systems, relying on these structural components, can produce definitions that meet established terminological requirements.

The empirical material consists of 145 definitions of animation-related terms, documented in animation glossaries and term collections. Two principal methods were applied. The analytical-descriptive method enabled the identification of the types of definitions and their structural models, and the comparative method was used to examine differences between definitions formulated by humans and those generated by AI systems.

The analysis of the data reveals that 56% of the definitions of animation-related terms are systemic, most of them following intensional or extensional structures. Intensional definitions are constructed by specifying a generic term and essential distinguishing characteristics, whereas extensional definitions are based on listing subordinate concepts. These types of definitions clearly situate a concept within a system and provide a foundation for terminological consistency. Semi-systemic definitions constitute 30% of the material. These include encyclopaedic, mixed, and incomplete definitions that combine elements of logical definitions with additional contextual, historical, or cultural information. Non-systemic definitions (14%) include synonymous, referential, and descriptive definitions. Although they do not conform to the structure of a logical definition, they reflect actual language use, terminological variation, and the evolution of ambiguous or emerging concepts.

The comparative analysis shows that AI-generated definitions typically follow the intensional model; however, they often rely on a generic term that is too broad or imprecise, and distinguishing features are presented superficially. For example, when defining the term “stop-frame” (animation), AI usually describes it as an “animation technique” yet fails to clarify its relationship to other stop-frame technologies (e.g., object animation, puppet animation). In defining “cel animation”, AI accurately conveys historical and technological context. Such elaboration, however, aligns more with an encyclopaedic than a logical definition, diminishing the abstraction level and systemic relations characteristic of a terminological definition. These findings suggest that AI is effective at identifying

general characteristics of terms but not as capable of determining the essential distinguishing features required in strict terminology. As a result, AI-generated definitions tend to be informative, yet not terminologically precise.

This study is the first systematic analysis of animation terminology in Lithuania, a domain previously scarcely examined from a terminological perspective. The research identifies the types of definitions used in this field and establishes their most common structural models. The study also has practical implications: it demonstrates the potential of using AI as an initial tool for generating term definitions, particularly in the early stages of dictionary or terminology database development. AI can assist in identifying semantic fields, recognizing synonymic relations, and providing encyclopaedic or historical context. Nonetheless, the final, terminologically sound definition must be formulated by a human expert (such as a subject specialist or terminologist). The limitations of the study stem from current AI systems' lack of sufficient semantic sensitivity to identify fine-grained distinguishing features, understand concept system structures, and ensure logical precision. Consequently, AI-generated definitions may reflect statistical associations in text corpora rather than the rigorous logic and principles of terminology science.

Artificial intelligence can serve as an effective auxiliary tool for formulating term definitions; however, it cannot replace the work of a terminologist when a logical, systematic, and structurally grounded definition is required. AI-generated definitions are useful as drafts only when clear structural criteria are applied, and the results are reviewed by a specialist. The prevailing tendency today is not the replacement of humans by AI, but rather a collaboration between humans and AI—a synergy which has become a key factor in contemporary term creation.

Keywords: *animation terminology, artificial intelligence, definition structure, terminological definitions, terminology models.*

References

- Arntz, R., Picht, H., & Mayer, F. (2002). *Einführung in die Terminologearbeit*. Georg Olms Verlag AG.
- De Bessé, B. (1997). Terminological definitions. In S. E. Wright & G. Budin (Eds.), *Handbook of terminology management: Vol. 1. Basic aspects of terminology management* (pp. 63–74). John Benjamins.
- Gaivenis, K. (2002). *Lietuvių terminologija: teorijos ir tvarkybos metmenys*. LKI leidykla.
- Gaivenis, K. (2004). Sudėtinių terminų pateikimas ir aiškinimas terminų žodynuose. In A. Aukšoriūtė (Ed.), *Terminologijos istorijos ir dabarties problemos: straipsnių rinkinys Kazimierui Gaiveniui atminti* (pp. 85–117). Lietuvių kalbos instituto leidykla.
- Gaivenis, K. (2014). *Rinkiniai raštai* (J. Gaivenytė-Butler, Ed.). Lietuvių kalbos institutas.
- International Organization for Standardization. (2022). *ISO 704:2022 (E) Terminology work—Principles and methods*. ISO.
- Locke, J. (2024). *An essay concerning humane understanding* (Part 2). Gutenberg eBook. <https://www.gutenberg.org/cache/epub/10616/pg10616-images.html>
- Löckinger, G., Kockaert, H. J., & Budin, G. (2015). Intensional definitions. In H. J. Kockaert & F. Steurs (Eds.), *Handbook of terminology* (Vol. 1, pp. 60–81). John Benjamins. <https://doi.org/10.1075/hot.1>
- Nilsson, H. (2015). Enumerations count: Extensional and partitive definitions. In H. J. Kockaert & F. Steurs (Eds.), *Handbook of terminology* (Vol. 1, pp. 82–100). John Benjamins. <https://doi.org/10.1075/hot.1>
- Sager, J. C. (1990). *A practical course in terminology processing*. John Benjamins.
- San Martín, A. (2022). A flexible approach to terminological definitions: Representing thematic variation. *International Journal of Lexicography*, 35(1), 53–74. <https://doi.org/10.1093/ijl/ecab013>
- San Martín, A. (2025). Optimizing contextonym analysis for terminological definition writing. *Information*, 16(4). <https://doi.org/10.3390/info16040257>
- Temmerman, R. (2000). *Towards new ways of terminology description: The sociocognitive approach*. John Benjamins.

MATERIALISING DIGITAL INCLUSION FOR MIGRANT LEARNERS OF SPANISH IN THE RED CROSS: A CASE STUDY

Ariadna Serón-Navas
University of Málaga
ariadnasn@uma.es

Ariadna Serón-Navas works as an interim lecturer at the University of Málaga (Spain) as part of the Language, Arts, and Sports Teaching Department. Her research interests are related to plurilingualism, bilingual education, and second language acquisition in a context of cultural diversity and innovative/active methodologies. She is now focused on the impact that new technologies and other AI-powered tools have on teen and adult students. She holds a PhD from the University of Seville in postcolonial literatures and the Master's degrees in Secondary Education from the University of Málaga and Teaching Spanish as a Foreign Language offered by Pablo de Olavide University. She has taught in several Spanish learning institutions, schools, and refugee centres managed by international NGOs.

Abstract

Adult migrants who are learning a foreign language upon their arrival to the receiving country face multiple challenges. Particularly, for those who attempt to learn Spanish in the context of non-profit organisations, they face methodological, pedagogical, and material limitations, together with deficient teacher preparedness, partially due to the fact that volunteering teachers lack proper training (Loureiro González & Calatayud Álvarez, 1998), and that the refugee centres to which they belong lack the necessary resources to successfully learn the target language. In this article, we will examine how adult migrants learn Spanish in the context of the Red Cross Málaga in an effort to identify their learning needs and to propose a number of pedagogical initiatives that can be implemented to improve their heterogeneous learning experience(s) from a digital perspective, that is, by incorporating AI-powered applications. Migrant students are usually provided with printed materials that prioritise the linguistic competence and deliberately ignore the socio-cultural factors of the Spanish society or the intercultural dialogue that can be established between the members of the group. We have also observed a tendency to homogenise the migrant learning experience without incorporating the different learning styles or paces that they present. We will analyse the textbook designed by this NGO, *Manéjate en español* (2022), to identify its main handicaps, and then, we will suggest several adaptations to promote communication and active participation and to ensure an equitable learning environment. We firmly believe that this can be done by incorporating the digital component. Firstly, we propose the use of gamified activities and AI-based tools such as Langotalk, ChatGPT or Google Translate in order to generate tailored content, design inclusive tasks paced adaptively, and address other learning difficulties and needs (Simos & Katsiampoura, 2025; Wei, 2023). Secondly, we will create AI-powered cooperative simulations that allow students to encounter authentic and contextualised material, to develop social skills and autonomy, and to bolster motivation and self-confidence (Liu, 2023). We aim to design digital learning situations as part of a spiral curriculum that grant them a better grasp of administrative and job-related procedures, and that enhance both cognitive and social development. As tentative conclusions, we consider that this proposal is relevant because the activities designed for this community of marginalised students lead to access to meaningful and tailored learning due to the endless opportunities to practice the foreign language; to the empowerment of adult learners from a digital point of view; and it also aims to build a strong sense of belonging and community, which directly impacts on the idea of social integration and inclusion.



ADLES 2025 POWERED BY UNINOVIS

Keywords: *AI, digital tools, foreign language teaching, individualised learning, migrant students, social integration.*

References

- Liu, M. (2023). Exploring the application of artificial intelligence in foreign language teaching: Challenges and future development. *SHS Web of Conferences*, 168, 1–4.
- Loureiro González, R., & Calatayud Álvarez, L. (1998). La enseñanza del español a colectivos e individuos migrantes. *CITE de CCOO de Santiago de Compostela. ASELE Actas IX*, 233–237.
- Mata, J. L., & Fuster, S. (2022). *Manéjate en español. Guía del alumnado*. Cruz Roja.
- Serón-Navas, A. (2025). *La enseñanza del español a alumnado inmigrante adulto en la Cruz Roja: Análisis contrastivo de manuales y propuesta didáctica* [End-of-Master's degree tesis]. Pablo de Olavide University.
- Simos, C., & Katsiampoura, I. (2025). The use of digital tools to enhance inclusion in the classroom. *World Journal of Advanced Engineering Technology and Sciences*, 17(1), 465–477.
- Villalba Martínez, F., & Hernández García, M. (n.d.). *Atención educativa al inmigrante. Análisis y propuestas de actuación*. Centro Virtual Cervantes. https://cvc.cervantes.es/ensenanza/biblioteca_ele/inmigracion/documentos/informe.htm
- Wei, L. (2023). Artificial intelligence in language instruction: Impact on English learning achievement, L2 motivation, and self-regulated learning. *Frontiers in Psychology*, 14, 1–14.

DIGITIZATION AND 3D MODELLING IN CERAMIC DESIGN: THE CASE OF THE WORK OF THE ARTIST REMIGIJUS SEDEREVIČIUS

Raimonda Simanaitienė

Vytautas Magnus University / Kauno kolegija HEI

raimonda.simanaitiene@vdu.lt, raimonda.simanaitiene@go.kauko.lt

Raimonda Simanaitienė is an art critic. Her areas of interest are contemporary Lithuanian applied arts (art glass, ceramics, textiles). She has written several books (for example, *Vaclovas Miknevičius. Feet in clay; We paint on the hill of owls; A century of professional Lithuanian glass art*) and many articles on these topics, and has curated a number of exhibitions of contemporary glass, ceramics, textiles authors. For many years, she has been an art historian and has taught various courses in Global Architecture and Art History and Lithuanian Art History at Vytautas Magnus University and Kaunas College.

Abstract

The processes taking place in contemporary Lithuanian ceramics demonstrate a growing attention to modern technologies and their use in both artistic and educational processes. Over time, ceramists have used computers to calculate the composition of glazes and clay, and a computer-based addition to an electric kiln has allowed them to control the duration, temperature, and maintenance of ceramic firing. But about a decade ago, two more new and significant digital technologies began to be used in Lithuania: decals and 3D ceramic printing. The presentation of the latter technological principle is the goal of this report, which is realized based on the example of the work of professional ceramist Remigijus Sederevičius. The report is prepared based on formal, material, and case analysis, and aims to increase the awareness of this technology, which is still not widely used among Lithuanian ceramists.

R. Sederevičius studied ceramic design at the Kaunas S. Žukas Applied Arts Technical School and the Kaunas Faculty of the Lithuanian Academy of Arts. In 2022, to celebrate the centenary of the Kaunas Art School, he was invited to organize his personal exhibition as one of the school's famous graduates at the "Pelėdų kalnas" gallery of the Kauno kolegija Academy of Arts. The artist is a well-known creator and educator: for many years R. Sederevičius has been working as an associate professor at the Lithuanian Academy of Arts, heads the ceramics department, is a laureate of various exhibitions, and a long-time curator of the international porcelain symposium "Idea". At the same time, the artist is famous as a pioneer in the use of 3D technology in ceramics in Lithuania and as one of the few authors who have consistently, since 2016, exploited this technological principle.

Among the foreign authorities in 3D ceramic modelling, one could mention artists Michael Eden (UK), Olivier van Herpt (Netherlands), Tom Lauerman, Bryan Czibesz (USA), and others. In Lithuania, it has also recently been tried by Vilnius ceramists Rokas Dovydenas, Neringa Akcijonaitytė, Uršulė Baužaitė, and others. The Vilnius and Kaunas faculties of the Lithuanian Academy of Sciences have several operating 3D printers. These are the Delta 700 3D Clay printer, made in Estonia, the 3D Potterbot 10 Pro, made in the USA, the Delta Wasp 2024 clay from Italy, and the Lutum 4.6 from the Netherlands. They operate on slightly different principles and use slightly different materials. For example, Delta-type and Lutum printers require fairly liquid clay, while the Potterbot printer models clay of a fairly solid consistency. Working with a more fluid, sticky clay is easier than, say, porcelain, which has less adhesion and therefore requires additional procedures. However, in 3D modelling, the workflow is similar: using

3D software, a three-dimensional model is created on the computer screen, which is processed by the author and sent to the printing machine.

When discussing artistic specifics, we can state that ceramic design solutions enabled by 3D technology usually turn into minimalist, suggestive series of works. 3D printing technique in ceramics has its own advantages (speed, possibility of reproduction, visual intrigue), but it also has certain disadvantages. For example, it can express uniformity of form, similarity of the product to a factory-made object, small-scale production, monotony of material plasticity, segmentation. However, in the work of R. Sederevičius, all the above-mentioned limitations do not cause a negative connotation. On the contrary, 3D plasticity has become an identifier of this artist's style in recent years, affecting the viewer with fragility, oriental moderation. 3D modelling is undoubtedly worth using as one of the possibilities of artistic expression; it has the potential to turn into a unique creative method. This is clearly illustrated by the works of famous world-class ceramic professionals, as well as the works created by R. Sederevičius and his students.

In summary, the following conclusions should be made: digital technologies in ceramics activate work processes. 3D printing is a modern method that expands ceramic forming techniques, giving objects a unique design style. In educational processes, it can become an attractive tool for implementing students' designed ideas.

Keywords: *artist Remigijus Sederevičius, ceramic design, 3D printing.*



Figure 1. Remigijus Sederevičius, vase shapes from the exhibition “Nearby elements”, ceramic, 3D printing, 2025.

PROFESSIONAL CHALLENGES EXPERIENCED BY SOCIAL WORKERS AND SUPERVISION AS A TOOL FOR ADDRESSING THEM

Kristina Škarnulienė

Kauno kolegija HEI / Alytus City Social Services Centre

kristina.skarnuliene@go.kauko.lt

Lecturer at Kaunas College and social work practitioner, head of the Alytus City Social Services Centre, with many years of experience in the fields of social support organization and social services administration. Professional work experience was gained while working in local government institutions, in the social support system, consistently deepening knowledge about social assistance processes and the development of social services. Academic and professional interests focused on developing the professionalism of social workers, factors supporting emotional well-being, and preventing professional burnout. The current area of interest is related to the analysis of the accessibility of social services and the role of non-governmental organizations in the social services system.

Abstract

In today's constantly changing global society, with the pace of life accelerating, demographic processes taking place around the world, and technology advancing, ever higher demands are being placed on the provision of social services. Žalimienė et al. (2024) argue that threats (the Covid-19 pandemic, the war in Ukraine, illegal migration) are giving rise to new social problems that are forcing changes in established formal social service systems and requiring change. Markovič (2024) notes that the Covid-19 pandemic has accelerated the use of digital technologies in the social services sector. Changes in the social services sector also affect the professional activities of social workers, as the social work profession is subject to high standards and constantly faces difficult client situations. Social workers experience constant physical, emotional, and psychological stress, which can lead to stress and burnout. Iosim et al. (2022) note that burnout among social workers working with people experiencing difficulties can be prevented through professional supervision. Tu et al. (2023) studied the impact of supervision on the psychological state of social workers and found that supervision reduces the negative emotions experienced by social workers, improves their psychological state, and is particularly effective for employees who face high job demands. Lithuanian legislation stipulates that social workers must participate in supervision for at least eight academic hours per calendar year. Based on researchers' insights into the professional challenges faced by social workers, the constant need to adapt to changing situations and problems, the stress experienced, professional burnout, and taking into account the fact that participation in supervision is mandatory for social workers, the following problematic questions arise: What professional difficulties do social workers face? How does supervision contribute to solving the difficulties that arise? The aim of the study is to reveal the professional difficulties experienced by social workers and the influence of supervision on their resolution.

In order to reveal the difficulties experienced by social workers and the impact of supervision on solving their problems, a qualitative study was chosen. This method allows us to understand social phenomena and people's experiences based not on the researcher's assumptions, but on the participants' own interpretations, thus making it possible to reveal unexpected and unplanned information. The study employed theoretical methods involving the analysis of scientific literature and documents related to the research topic, as well as empirical methods based on a qualitative research approach using semi-structured interviews as the research instrument. The study was conducted between September and

November 2025. Participants were selected based on the following criterion: social workers with at least three years of experience in social work. The participants were informed about the purpose, objectives, and ethics of the study, and the benefits of the study for science were explained to them, namely that their experiences would be employed for the analysis of the study, which would be used to draw conclusions and make recommendations. Seven social workers participated in the study, working in institutions located in different cities with different client groups: families facing difficulties, people with addictions, people with disabilities, elderly people, and people experiencing crisis situations.

Regardless of who the social worker's clients are—people with addictions, patients in healthcare institutions, problem families and the children growing up in them, people with disabilities, refugees, and homeless people—their professional activities involve complex challenges, stressful situations, and tension. Social workers face difficulties in organizing their work, complex client situations, personal emotional problems, and the threat of professional burnout. Two themes emerged from the empirical study. First, the difficulties experienced by social workers in their professional activities are analysed, and then an attempt is made to describe how supervision influences the resolution of these difficulties. It has been revealed that social workers encounter a wide variety of complex difficulties and problems in their professional activities. These include difficulties related to clients, difficulties related to the organization of work, and difficulties related to the well-being of social workers. Supervision is identified as a tool that helps to overcome professional challenges, as it involves analysing complex situations that arise at work, strengthening employees emotionally and professionally, and preventing professional burnout. The study revealed that there are limitations to professional development, supervision is still not freely available to social workers, it is organized sporadically in workplaces, and the expectations of social workers are not taken into account.

The study stands out in that it uses empirical data to comprehensively analyse the difficulties experienced by social workers and the role of supervision in resolving them. It reveals social workers' attitudes toward the availability and quality of supervision, which is rarely analysed in the Lithuanian context. The study has real practical value for improving the activities of social service institutions, preventing professional burnout among social workers, and planning supervision, ensuring its regularity and responsiveness to employee needs. The study may serve as a basis for further research on the effectiveness of supervision and the professional resilience of social workers. The limitations of the study include a limited sample

size. The study was conducted in only a few institutions, so the data obtained may not reflect the situation of social workers throughout the country.

Social workers, operating at the micro, meso, and macro levels, face various external and internal challenges that can lead to professional burnout. External challenges arise from problems with work organization, heavy workloads, lack of client motivation, resistance or aggression, unreasonable demands from relatives, and low professional prestige. Internal problems are caused by constant physical, emotional, and psychological stress, role conflicts, and disappointment with professional activities. Supervision, by performing educational, administrative, and supportive functions, helps to manage these difficulties. The supportive function of supervision is particularly evident, providing emotional support, a safe space to reflect on experiences, and reduce tension. This makes supervision an effective tool for helping social workers avoid burnout, reduce negative emotions, and improve their psychological well-being.

The results of the study reveal that social workers encounter three main groups of difficulties in their professional activities: challenges in working with clients, obstacles in organizing work, and problems with emotional well-being. The professional difficulties experienced cause significant emotional stress and the risk of professional burnout. Supervision is identified in the study as an effective tool for addressing these challenges, as it provides an opportunity to analyse complex situations and strengthens social workers' emotional resilience and professional competencies. The availability of supervision remains limited—it is organized inconsistently, episodically, and often without taking into account the needs and expectations of employees.

Keywords: *burnout, social worker, supervision.*

References

- Iosim, I., Runcan, P., Dan, V., Nadolu, B., Runcan, R., & Petrescu, M. (2022). The role of supervision in preventing burnout among professionals working with people in difficulty. *International Journal of Environmental Research and Public Health*, 19(1), 1–16.
- Khan, A. H. (2022). Tough times and the professional social work practice: Hits and misses. *Revista de Asistentă Socială*, 21(2), 5–15.
- Liang, M. J. (2025) The impact of supervision function and the development of new social work professional knowledge and ability on service performance~Taking the case management service for individuals with disabilities in Taiwan A city as an example. *Journal of Social Work and Social Welfare Policy*, 3(1), 1–9.
- Maddock, A. (2024). The relationships between stress, burnout, mental health and well-being in social workers. *British Journal of Social Work*, 54(2), 668–686.
- Markovič, D. (2024). Digital social work or e-social work? Towards social work in a digital environment. *SHS Web of Conferences*, 184, 1-10. <https://doi.org/10.1051/shsconf/202418405005>
- Naujanienė, R., Eidukevičiūtė, J., & Ruškus, J. (2018). Socialinių darbuotojų lūkesčiai supervizijai kaip atsakas į praktikos lauko kompleksiskumą ir neapibrėžtumą. *Socialinis darbas. Patirtis ir metodai*, 22(2), 35–62.
- Pocienė, K., & Baltutienė, R. (2023). Socialinio darbuotojo patiriami sunkumai dirbant su asmenimis, turinčiais priklausomybę. *Mokslo taikomieji tyrimai Lietuvos kolegijose*, 19(2), 80–88.
- Ratcliff, M. (2024). Social workers, burnout, and self-care: A public health issue. *Delaware Journal of Public Health*, 10(1), 26–29.
- Raudeliūnaitė, R., & Buškevičiūtė, E. (2014). Socialinių darbuotojų veiklos ypatumai teikiant socialines paslaugas sveikatos priežiūros įstaigose: socialinių darbuotojų patirties analizė. *Socialinis darbas*, 13(2), 204–220.
- Stasiūnaitienė, E., & Mažeikaitė, S. (2015). Socialinio darbuotojo patiriamos problemos dirbant su socialinės rizikos šeimomis. *Sveikatos mokslai*, 25(5), 13–17.
- Tu, B., Huang, Ch., Sitar, S., & Wang, Y. (2023). Supervision effects on negative affect and psychological distress: Evidence from social workers in China. *International Journal of Environments Research and Public Health*, 20(3), 1–11.
- Žalimienė, L., Dunajevs, E., Gevorgianienė, V., Šumskienė, E., & Genienė R. (2024). Asmeninės socialinės paslaugos išorinių grėsmių kontekste: socialinės sistemos atsparumo analizės rėmai. *Filosofija. Sociologija*, 35(4), 434–445.

ADAPTABILITY AS A TRAIT OF ORGANIZATIONAL CULTURE IN LITHUANIAN GENERAL EDUCATION SCHOOLS IN THE CONTEXT OF EDUCATIONAL DIGITAL TRANSFORMATION

Jovita Starkutė

*Kauno kolegija HEI / Mykolas Romeris University
jovita.starkute@kaunokolegija.lt*

Dr Jovita Starkutė is an educator, doctor of social sciences, lecturer, and researcher specializing in educational management, organizational culture, leadership, and the creation of an inclusive school culture. She works at Kaunas College, teaching courses in educational management, entrepreneurship, creativity, and the organization of preschool education activities, and supervising teachers' internships and final projects.

She is currently doing a postdoctoral internship at Mykolas Romeris University, where she is conducting research on "The application of neurodidactic principles in creating an inclusive school culture". This work is a continuation of her 2024 doctoral dissertation, *The expression of organizational culture traits in Lithuanian general education schools*, which developed a model of organizational culture traits and provided detailed recommendations for school leaders in the process of creating and improving culture.

Dr Jovita Starkutė seeks to combine science with practice, cooperates with Lithuanian education centres, develops and implements non-formal education programmes that strengthen leadership, organizational culture, and change management competencies. In her professional practice, she consults educational institutions and conducts training for education managers and teachers.

Her research interests include organizational culture, learning organization development, neurodidactics, inclusive education, and the dynamics of educational organization management and human transformation. Dr J. Starkutė seeks to combine research-based practice with innovative solutions that strengthen school culture and management decisions.

Abstract

The digital transformation of education has become one of the main challenges of the 21st century, changing the principles of school operations, teaching and learning processes, and the professional roles of teachers (OECD, 2021; Redecker, 2017). Lithuanian general education schools are increasingly faced with the need to systematically integrate digital technologies, strengthen teachers' digital competences, and create an organizational culture capable of adapting to constantly changing conditions (Masiliauskienė et al., 2021). In order for the processes of digital transformation in education to be sustainable, it is necessary not only to implement technologies but also to strengthen an adaptive, open, learning-oriented organizational culture that encourages innovation, reflection, and collaboration (Schein, 2017).

Digital transformation in education involves not only the introduction of technology but also cultural and organizational changes in schools. It requires a new approach to pedagogical practice, leadership, and collaboration in order to ensure an inclusive and sustainable learning environment (UNESCO, 2023). Research shows that the introduction of technology without cultural and organizational change often remains superficial and does not provide real added value to education (Kampylis & Redecker, 2017). The digital transformation of education requires schools to become adaptive learning organizations that are able to continuously reflect on their practices and update their pedagogical and administrative procedures (Redecker, 2017). In this context, organizational culture acts as a key factor in determining whether innovations will be successfully implemented and sustainably integrated into everyday educational practice (Denison, 2000; Schein, 2017).

Organizational cultural adaptability—as a trait—is understood as the ability to create and sustain change, learn from experience, and transform acquired knowledge into new practices (Argyris & Schön, 1996; Denison & Mishra, 1995). This means the flexibility of the organization, the ability to interpret signals from the external environment and to change structures, processes, and orientation towards education participants accordingly (Starkutė, 2023, 2024). In the context of Lithuanian education, this means that schools must not only implement technologies but also create a culture that encourages experimentation, collegial learning, and reflection to ensure that the changes brought about by the digital transformation of education are meaningful and sustainable.

The purpose of this report is to present the characteristics of adaptability and the indicators that comprise it—change implementation, organizational learning, and customer (students)—in the organizational culture of Lithuanian general education schools, which was conducted using the internationally recognized Denison Organizational Culture Survey (DOCS) instrument.

The results of the study (Starkutė, 2023, 2024) show that the adaptability of the organizational culture of schools is quite high, but it manifests itself unevenly. The most strongly expressed indicator is organizational learning, while the indicators of change implementation and customer focus are lower. This shows that although schools are ready to learn and reflect, they still face the challenge of systematically implementing change and ensuring student orientation in a digital learning environment. The analysis also showed that the assessments of adaptability and its indicators (especially organizational learning and customer focus) by managers and administrative staff are more favourable than those of teachers. The change implementation indicator does not differ between these groups. Older teachers rate adaptability slightly more favourably than younger teachers, but no statistically significant differences were found based on age, length of service, or school type.

International research shows that organizational culture types, such as adhocracy or market, are related to the intensity of digital education transformation (Rutihinda, 2019). Schools that implement digital innovation tend to have a culture that is oriented toward learning, open leadership, structural change, and technology integration (Lukito et al., 2024; Raptis, 2024). Leadership and institutional support are key elements in the process of digital progress (OECD, 2021; Schleicher, 2020). However, although projects implemented in the Lithuanian context promote the development of teachers' digital competences, the implementation of digital teaching and learning solutions, and the testing of innovations in schools, research shows that many schools have not assessed their level of digital maturity and therefore lack the data needed to make informed decisions (OECD, 2021; UNESCO, 2023). Therefore, strengthening the adaptability of organizational culture is essential for the effective integration of technological initiatives.

In summary, the adaptability of the organizational culture of Lithuanian general education schools is a necessary element for the success of the digital transformation of education. Schools must encourage leadership, open communication, collegial learning, experimentation with digital innovations, and a student-centred approach. Only in this way can the digital transformation of education become not only



ADLES 2025 POWERED BY UNINOVIS

a technological upgrade but also a cultural and pedagogical change that ensures a sustainable, inclusive, and innovative learning environment.

Keywords: *adaptability, change implementation, customer focus, digital transformation of education, organizational culture, organizational learning, teachers' digital competences.*

References

- Argyris, C., & Schön, D. (1996). *Organizational learning II: Theory, method, and practice*. Addison-Wesley.
- Denison, D. R. (2000). *Organizational culture: Can it be a key lever for driving organizational change?* In S. Cartwright & C. L. Cooper (Eds.), *The handbook of organizational culture* (pp. 347–372). Wiley.
- Denison, D. R., & Mishra, A. K. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*, 6(2), 204–223.
- Kampylis, P., Punie, Y., & Devine, J. (2015). *Promoting effective digital-age learning: A European framework for digitally competent educational organisations* (DigCompOrg). European Commission, Joint Research Centre.
- Lukito, D., Perdhana, M. S., & Jayanti, S. T. (2024). Digital organizational culture: Concept and scale development. *The Winners*, 26(1), 73–84. <https://doi.org/10.21512/tw.v26i1.13405>
- Masiliauskienė, E., Daugirdaitė, V., & Lenkauskaitė, J. (2021). Expression of the digital competence of preschool teachers. *EDULEARN21 Proceedings*, 10456–10463. <https://doi.org/10.21125/edulearn.2021.2073>
- OECD (2021). *Digital education outlook 2021: Pushing the frontiers with AI, blockchain and robots*. OECD Publishing.
- OECD (2023). *Digital education outlook 2023: Towards an effective digital education ecosystem*. OECD Publishing.
- Raptis, N. (2024). Examining the role of school leadership in the digital advancement of educational organizations. *European Journal of Education and Pedagogy*, 5(2), 99–103. <https://doi.org/10.24018/ejedu.2024.5.2.817>
- Redecker, C. (2017). *European framework for the digital competence of educators: DigCompEdu*. Publications Office of the European Union.
- Rutihinda, C. (2019). Digital transformation and organizational culture of small and medium size enterprises. *Archives of Business Research*, 7(8), 282–288. <https://doi.org/10.14738/abr.78.6879>
- Schein, E. H. (2017). *Organizational culture and leadership* (5th ed.). Wiley.
- Schleicher, A. (2020). *The impact of the COVID-19 pandemic on education: Insights from Education at a glance 2020*. OECD Publishing.
- Starkutė, D. (2023). Expression of the trait of adaptability in the organizational culture of Lithuanian general education schools. *Acta Paedagogica Vilnensia*, 51, 128–143. <https://doi.org/10.15388/ActPaed.2023.51.6>



ADLES 2025 POWERED BY UNINOVIS

Starkutė, J. (2024). *Organizacinės kultūros bruožų raiška Lietuvos bendrojo ugdymo mokyklose / Expression of the traits of organizational culture in general education schools in Lithuania* [Doctoral dissertation, Vilnius University]. <https://doi.org/10.15388/vu.thesis.606>

UNESCO. (2023). *Technology in education: A tool on whose terms?* UNESCO Publishing.

THE ROLE OF HUMAN TRANSLATORS IN AN AI-DOMINATED LANDSCAPE

Anna Maria Vasili
University of Tirana
anna.maria@unitir.edu.al

I have completed a Bachelor's degree in Translation and Interpreting (English Language) and a Master of Science in Technical-Literary Translation and Interpreting (English Language), both at the Faculty of Foreign Languages, University of Tirana.

I am currently in the final stage of my doctoral studies in Linguistic Sciences, specializing in Translation and Interpreting Studies.

For the past six years, I have been working as Adjunct Lecturer at the Department of English, Faculty of Foreign Languages, University of Tirana, where I have been involved in teaching and research activities.

My professional interests focus on further specialization in translation and interpreting, as well as continuous engagement with innovations and developments in this field. I aim to contribute to academic and professional discourse in the field by engaging with emerging methodologies, technological developments, and interdisciplinary applications of translation. In addition, I remain committed to promoting high-quality academic work and fostering constructive collaboration within the translation and interpreting community.

Abstract

The rapid advancement of artificial intelligence (AI) and machine translation technologies has significantly reshaped the contemporary landscape of translation, prompting profound shifts in professional practices, ethical expectations, and theoretical understandings of linguistic mediation. Over the past decade, neural machine translation (NMT) systems have achieved unprecedented levels of fluency, producing output that often approximates human accuracy in speed and grammatical coherence (Bahdanau et al., 2015; Koehn, 2020). These developments have fuelled debates about automation, labour displacement, and the future relevance of human translators. However, despite these technological breakthroughs, AI continues to face substantial limitations in areas that require cultural literacy, contextual interpretation, pragmatic judgment, and creative reimagining of meaning (Munday, 2022).

This extended abstract examines the evolving position of the human translator in an AI-saturated environment, arguing that rather than being rendered obsolete, human expertise is increasingly central to ensuring the quality, ethical integrity, and cultural authenticity of translated texts.

The study draws on interdisciplinary research from translation studies, computational linguistics, and digital humanities to illustrate the complex dynamics between automated systems and human translators. Examples from literary translation, international organizations, and multilingual communication demonstrate how AI functions not as a replacement for human labour but as a complementary tool requiring ongoing human supervision, correction, and refinement (Kenny & Doherty, 2014; Moorkens, 2018). Human translators increasingly assume roles that extend beyond traditional text rendering: they act as post-editors who evaluate and improve machine output, as cultural mediators who bridge intercultural gaps that AI cannot recognize, and as ethical gatekeepers responsible for preventing distortions, biases, or harmful misinterpretations generated by automated systems (O'Brien, 2022).

Furthermore, the paper examines emerging hybrid models of translation that integrate human creativity with machine efficiency. These models involve iterative cycles of machine-assisted drafting, human revision, and adaptive learning, which enhance productivity while preserving interpretive depth (Lagarde & Langlais, 2021). However, the adoption of such models also raises critical questions about professional identity, training requirements, and the redistribution of cognitive labour. Translators must now cultivate interdisciplinary competences that span linguistics, technology, ethics, and domain-specific knowledge (Pym, 2019). The transformation of the translator's role thus reflects broader changes in knowledge

economies, where human judgment becomes more, not less, valuable in contexts of technological acceleration.

At the same time, the increasing reliance on AI introduces ethical challenges that demand scrutiny. Issues such as algorithmic bias, data privacy, authorship, accountability, and the potential homogenization of cultural expression raise concerns about the uncritical use of machine translation in sensitive or high-stakes communication (Birhane, 2021; Tatman, 2017). The abstract highlights the risk of overreliance on automated systems in legal, diplomatic, medical, and literary settings, where nuances of meaning carry significant implications. The human translator's role as an ethical actor is therefore essential, ensuring that translations respect cultural diversity, represent marginalized voices responsibly, and avoid the miscommunication that can arise from flawed AI-generated interpretations.

Ultimately, this extended abstract reaffirms the indispensable human dimension of translation. While AI continues to revolutionize the speed and scale of multilingual communication, it lacks the embodied experience, emotional intelligence, and interpretive creativity required to fully apprehend and transform meaning across cultural and linguistic boundaries. Translation, understood as a deeply social, intellectual, and ethical activity, cannot be reduced to mechanistic substitution. Instead, the digital age is fostering a redefinition, rather than a reduction, of human involvement. Human translators remain vital as creators, analysts, and custodians of meaning who guide technological tools toward responsible and contextually grounded communication.

Keywords: *algorithmic bias, artificial intelligence, contextual interpretation, cultural mediation, digital transformation, ethical gatekeeping, human translation, hybrid translation models, interdisciplinary competence, linguistic creativity, machine translation, multilingual communication, neural machine translation, post-editing, professional identity, translation ethics, translation technology.*

References

- Bahdanau, D., Cho, K., & Bengio, Y. (2015). Neural machine translation by jointly learning to align and translate. *Proceedings of the international conference on learning representations (ICLR 2015)*, 1–15. International Conference on Learning Representations.
- Birhane, A. (2021). Algorithmic injustice: A relational ethics approach. *Patterns*, 2(2), 100205.
- Kenny, D., & Doherty, S. (2014). Statistical machine translation in the translation curriculum: Overcoming challenges and identifying opportunities. *The Interpreter and Translator Trainer*, 8(2), 276–294.
- Koehn, P. (2020). *Neural machine translation*. Cambridge University Press.
- Lagarde, L., & Langlais, P. (2021). Post-editing neural machine translation: Efficiency, quality, and cognitive effort. *Machine Translation*, 35(1), 23–48.
- Moorkens, J. (2018). Under pressure: Translation in times of automation. *Perspectives*, 26(3), 311–321.
- Munday, J. (2022). *Introducing translation studies: Theories and applications* (6th ed.). Routledge.
- O’Brien, S. (2022). Translation technology and ethics: A framework for analysis. *Journal of Specialised Translation*, 37, 1–16.
- Pym, A. (2019). *Translation solutions for many languages: Histories of a flawed dream*. Bloomsbury.
- Tatman, R. (2017). Gender and dialect bias in YouTube’s automatic captions. In D. Hovy, S. Spruit, M. Mitchell, E. M. Bender, M. Strube & H. Wallach (Eds.), *Proceedings of the first ACL workshop on ethics in natural language processing*, 53–59. Association for Computational Linguistics.

TRANSFORMING LANGUAGE LEARNING: THE ROLE OF EDUCATIONAL STRATEGIES AND TECHNOLOGY IN OVERCOMING LINGUISTIC BARRIERS

Yuliia Vasylieva¹, Maija Ročāne², Santa Melķe³

¹*Riga Technical University Liepaja Academy*

²*Riga Technical University Liepaja Academy*

³*Riga Technical University Liepaja Academy*

¹*yuliia.vasylieva@rtu.lv*

²*maija.rocane@rtu.lv*

³*santa.melke@rtu.lv*

Yuliia Vasylieva, PhD student in Educational Sciences, Centre of Pedagogy and Social Work, Riga Technical University Liepaja Academy (Latvia). Research interests: language education, educational integration, multilingual identity, educational environment, pedagogic theory, ecological perspective. ORCID: 0009-0004-1941-397X.

Maija Ročāne, PhD paed Assoc. Prof., Centre of Pedagogy and Social Work, Riga Technical University (Latvia). Research interests: educational psychology, positive psychology, health psychology, educational theory, language education, pedagogic theory. ORCID: 0000-0002-4701-5491.

Santa Melķe, Mg. paed., Centre of Pedagogy and Social Work, Riga Technical University (Latvia). Research interests: professional competence, social welfare, social work education, value of education, social work profession, promotion of the profession. ORCID: 0000-0001-5685-4222.

Abstract

Contemporary language learning represents a multifaceted process developing under conditions of dynamic transformational changes, where traditional approaches are complemented by diverse linguistic concepts, integrated language practices, and digital tools aimed at expanding learners' opportunities and developing competencies. However, mastering a new language remains a labour-intensive and prolonged process that requires considerable effort, attention, motivation, continuous involvement, and auxiliary resources to achieve linguistic autonomy (Gardner, 2000; Krashen & Terrell, 1983; Mercer, 2018; Noels et al., 2020). Moreover, immersion in a language environment and skill development are often associated with difficulties caused by internal or personal barriers, such as fear of making a mistake, limited vocabulary, absence of an authentic language environment, low self-confidence, and lack of supportive tools, which hinder overcoming language barriers (Andriani et al., 2019; Mega & Sugiarto, 2020; Suparlan, 2021; Wati et al., 2022).

The integration of innovative digital solutions into language learning reflects academic transformations and new trends. Digitalization not only expands access to interactive resources but also establishes new competency standards (Chen et al., 2025; Saikia, 2020). On the one hand, this requires revisiting established methodological approaches and determining optimal strategies for technology integration (Li & Lan, 2022; Park et al., 2016). On the other hand, the implementation of digital and interactive tools requires a critical assessment of their effectiveness and real impact on the formation of sustainable motivation and progress of students (Li & Lan, 2021; Van Deusen-Scholl, 2015). Nevertheless, technological innovations do not exclude the significance of the learning context, where the real language environment plays a key role by ensuring authentic interaction and supporting the development of competencies. Such an environment transforms language from a simple object of study into a mechanism of sociocultural interaction and meaningful communication (Brown, 2018; Johnson & Swain, 1997).

The current generation, shaped within a digital ecosystem, requires structured and contextually adapted educational models that maintain engagement, remove barriers, and emphasize linguistic relevance. This is particularly relevant in a monolingual educational system that integrates learners with diverse linguistic backgrounds (Barros et al., 2020; Hofer & Jessner, 2025; Zappa-Hollman & Duff, 2014). In Latvia, following amendments to the Education Law in 2022, Latvian was established as the sole language of instruction, marking the beginning of a monolingual education system, and initiating a complex phased

transition from 2023 to 2025 for all public schools (Ministry of Education and Science of Latvia, 2023; Saeima of the Republic of Latvia, 2022). These changes raised concerns about ensuring equal opportunities and creating favourable conditions for language acquisition among students with different linguistic repertoires. The aim of this study was to determine which methods are most effective for language learning among students with varied linguistic repertoires, based on formal educational methods, authentic environments, and modern digital tools.

Based on the developed conceptual model presented in Figure 1, which displays 13 different methods of engagement in language learning, the model is focused on three main directions: Authentic Communication Environment (M₁-M₄), Formal Educational Methods (M₅-M₉), and Digital Methods (M₁₀-M₁₃). The study used a quantitative cross-sectional survey that contributed to evaluating the effectiveness of each method (M) on a 5-point Likert scale (1 = very low influence, 5 = very high influence). To ensure the accuracy of responses among participants, anonymous questionnaires were administered. The survey involved (N = 647) students from various Latvian public schools (grades 4-12), grouped by linguistic background: Latvian, Russian, and Ukrainian-speaking. Based on the conceptual model (Figure 1) and group profiles (Figure 2), these methods were summarized and compared using SPSS analysis. Kruskal-Wallis tests and Dunn-Bonferroni post hoc procedures were applied to separate students by linguistic background and identify the most effective methods. Across all groups, consistently high expected effectiveness was observed for M₂ (using the language in everyday life) and M₃ (attending multicultural events). The data also demonstrate that digital methods (M₁₀-M₁₃) are perceived mainly as supplementary, serving to support the language learning process but rarely ranking among the top positions in terms of expected influence. Thus, SPSS analysis revealed the most effective methods (M₂, M₃) and context-specific priorities for each group.

The originality of applying a conceptual model that integrates formal approaches, modern digital tools, and real-world language conditions makes it possible to identify the most effective language immersion methods among diverse groups of learners. Comparative profiles of expected influence (Figure 2) reveal clear patterns that can be used for differentiated instructional planning. The sharp contrast between the consistently high scores of Ukrainian-speaking students and the more moderate scores of their Latvian-speaking peers indicates that perceived effectiveness is not uniform across language groups. This highlights the need for more flexible structures tailored to the specific needs of each group. However, it

should be noted that this conceptual model was tested within a single country during a language transition, and its applicability in different sociolinguistic contexts remains to be explored.

The study demonstrates that language learning in a monolingual educational system requires a balanced integration of authentic communicative practices, formal instruction, and supportive digital tools. Although real-world interaction emerges as the most influential factor, the variability in perceived effectiveness across linguistic groups highlights the importance of adaptive strategies that reflect sociocultural diversity. These findings reinforce the need for flexible, context-sensitive approaches to language education during systemic transitions.

Keywords: *effective methods, linguistic adaptation, monolingual environment, transforming language learning.*

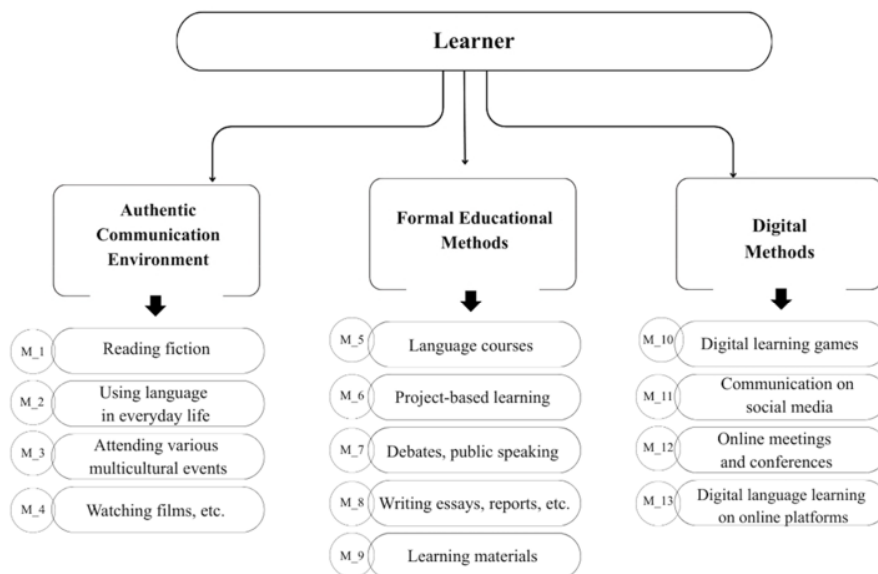


Figure 1. Methods of engaging language learning among students with diverse linguistic backgrounds.

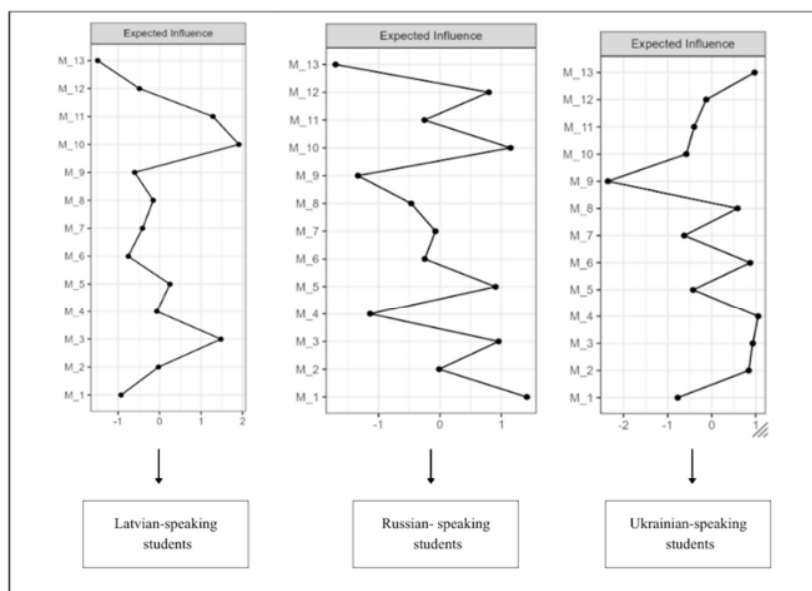


Figure 2. Variation in perceived effectiveness of language learning methods.

References

- Andriani, A., Mega, T., & Sugiarto, B. (2019). Overcoming language barriers in EFL classrooms. *Asian EFL Journal*, 21(2), 120–135.
- Barros, S., Domke, L. M., Symons, C., & Ponzio, C. (2020). Challenging monolingual ways of looking at multilingualism: Insights for curriculum development in teacher preparation. *Journal of Language, Identity & Education*, 20(4), 239–254. <https://doi.org/10.1080/15348458.2020.1753196>
- Brown, J. D. (2018). Standardized and proficiency testing: Assessment and evaluation, types of testing and assessment. In C. A. Chapelle (Ed.), *The encyclopedia of applied linguistics*. Wiley. <https://doi.org/10.1002/9781118784235.eelt0832>
- Chen, Z., Zhai, W., Liao, J., Zhao, X., & Zhao, X. (2025). A survey of task planning with large language models. *Intelligent Computing*, 4, Article 0124. <https://doi.org/10.34133/icomputing.0124>
- Gardner, R. C. (2000). Correlation, causation, motivation, and second language acquisition. *Canadian Psychology*, 41(1), 10–24. <https://doi.org/10.1037/h0086854>
- Hofer, B., & Jessner, U. (2025). Research agenda: From monolingual to multilingual norms in multilingual classrooms. *Language Teaching*, 1–16. <https://doi.org/10.1017/S0261444825000023>
- Johnson, K. E., & Swain, M. (1997). Immersion education: A category within bilingual education. In K. E. Johnson & M. Swain (Eds.), *Immersion education: International perspectives* (pp. 1-16). Cambridge University Press. <https://doi.org/10.1017/CBO9781139524667.003>
- Krashen, S. D., & Terrell, T. D. (1983). *The natural approach: Language acquisition in the classroom*. Pergamon Press.
- Li, P., & Lan, Y.-J. (2021). Digital language learning (DLL): Insights from behavior, cognition, and the brain. *Bilingualism: Language and Cognition*, 25(3), 361–378. <https://doi.org/10.1017/S1366728921000353>
- Mega, T., & Sugiarto, B. (2020). Learner motivation and language acquisition. *Indonesian Journal of Applied Linguistics*, 10(1), 45–58. <https://doi.org/10.17509/ijal.v10i1.25000>
- Mercer, S. (2018). Psychology for language learning: Spare a thought for the teacher. *Language Teaching*, 51(4), 504–525. <https://doi.org/10.1017/S0261444817000258>
- Ministry of Education and Science of Latvia. (2023). *Pāreja uz vienotu skolu [Transition to a unified school in the state language]*. Retrieved from <https://www.izm.gov.lv/lv/pareja-uz-vienotu-skolu>

- Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, 50(1), 57–85. <https://doi.org/10.1111/0023-8333.00111>
- Saeima of the Republic of Latvia. (2022). *Saeima supports transition to Latvian as the only language of instruction*. Retrieved from <https://www.saeima.lv/en/news/saeima-news/31457-saeima-supports-transition-to-latvian-as-the-only-language-of-instruction>
- Saikia, P. (2020). Digitalization in language learning: Opportunities and challenges. *Journal of Language and Education*, 6(2), 45–56. Retrieved from <https://www.saeima.lv/en/news/saeima-news/27891-foreign-/31457-saeima-supports-transition-to-latvian-as-the-only-language-of-instruction>
- Suparlan, S. (2021). Language learning challenges in multilingual settings. *Journal of Education and Practice*, 12(5), 33–40. Retrieved from <https://www.iiste.org>
- Van Deusen-Scholl, N. (2015). Assessing outcomes in online foreign language education: What are key measures for success? *Foreign Language Annals*, 48(3), 511–520. <https://doi.org/10.1111/flan.12150>
- Varghese, M. M., Motha, S., Park, G., Reeves, J., & Trent, J. (2016). In this issue. *TESOL Quarterly*, 50(3), 545–571. <https://doi.org/10.1002/tesq.333>
- Wati, P., Yustina, Y., Mardatilla, M., Mahadi, I., & Syafi'i, W. (2022). The effectiveness of problem-based learning through e-learning on students' critical thinking skills during the COVID 19 pandemic. In J. Priyana & N. K. Sari (Eds.), *Proceedings of the 9th international conference on education research, and innovation (ICERI 2021)* (ASSEHR, Vol. 705). Atlantis Press. https://doi.org/10.2991/978-2-494069-67-1_20
- Zappa-Hollman, S., & Duff, P. A. (2014). Academic English socialization through individual networks of practice. *TESOL Quarterly*, 49(2), 333–368. <https://doi.org/10.1002/tesq.188>

READING BETWEEN THE LINES: WHY IDIOMS DEFY ARTIFICIAL INTELLIGENCE

Rovena Vora¹, Fari Laçka²

¹*University of Tirana*

²*University of Tirana*

¹*rovena.vora@unitir.edu.al*

²*fari_lacka.fgjhutdr@unitir.edu.al*

Rovena Vora is an Associate Professor in the Department of English at the Faculty of Foreign Languages, University of Tirana. She has established herself as a dedicated scholar and educator in the fields of Intercultural Education, Linguistics, and English for Specific Purposes (ESP). At the undergraduate and graduate levels, she teaches a wide range of courses, including Intercultural Education, U.S. History, Academic Writing, Text Analysis, and several ESP modules such as English for Law, Medicine, Engineering, and the Sciences. Her teaching is characterized by an emphasis on developing students' academic literacy, critical thinking, and intercultural competence.

With a strong academic background and sustained scholarly engagement, she has published numerous articles in national and international peer-reviewed journals. Her research spans Intercultural Communication, Applied Linguistics, curriculum design and development, ESP methodology, and teacher training. She is particularly interested in how language, culture, and identity interact in contemporary educational contexts, as well as how pedagogical innovation can support more equitable and culturally responsive learning environments.

Beyond her research and teaching responsibilities, she contributes actively to academic life at the University of Tirana through curriculum development initiatives, mentorship of early-career educators, and participation in conferences, workshops, and professional projects. She remains committed to advancing the study of foreign language education in Albania and fostering cross-cultural dialogue through her interdisciplinary work.



ADLES 2025 POWERED BY UNINOVIS

Fari Laçka is a Lecturer of Linguistics and French at Beder University, Tirana, Albania, and an English Language Lecturer at the German Professional College of Technology (Kolegji Profesional Gjerman i Teknologjisë), Albania.

He is currently pursuing a PhD in Linguistics at the Faculty of Foreign Languages, University of Tirana, Albania, with a research focus on the study of idioms. He holds a Master's degree in French Language and Literature from the Faculty of Foreign Languages, University of Tirana, and a Master's degree in English Language and Literature from Beder University, Tirana.

His academic and professional experience centres on the teaching of English and French as foreign languages, including service as a secondary school teacher of both languages. In addition to teaching, he works as a professional translator of books (fiction, non-fiction, and technical texts), as well as films and documentaries. He serves as an interpreter at conferences, workshops, meetings, and other professional events.

His research interests include foreign language education, translation studies, idiom studies, and intercultural communication.

Abstract

The purpose of this study is to investigate why idiomatic expressions continue to pose significant challenges for artificial intelligence despite advances in natural language processing. The research aims to clarify the cognitive, cultural, and contextual dimensions of idioms that resist computational modelling. Specifically, the study examines the gap between human interpretive mechanisms—such as inferencing, metaphorical mapping, and pragmatic reasoning—and AI’s reliance on statistical correlations. By analysing how idioms function as culturally embedded and context-dependent linguistic units, the study seeks to demonstrate that idioms reveal fundamental limitations in current AI language systems and highlight the ongoing need for human-centred linguistic insight.

This research employs a qualitative and comparative methodology. It begins with a conceptual review of idioms from linguistic, cognitive, and cultural perspectives. The study then analyses samples of idiomatic misinterpretation in English and the Albanian language produced by contemporary AI translation and generation systems. Data include outputs from widely used machine translation tools and large language models, selected for variation in idiom type, cultural origin, and contextual complexity. These outputs are examined using discourse-based error analysis, with particular attention to semantic distortion, literal mistranslation, and pragmatic mismatch. The comparative component contrasts AI interpretations with human translations to highlight systematic differences in processing figurative language.

The findings indicate that AI systems frequently misinterpret idioms when contextual cues are vague, culturally specific, or metaphorically dense. Errors typically occur when models default to literal translation or rely on statistically probable but semantically inaccurate patterns. The analysis shows that AI can reproduce idioms in familiar contexts but struggles in ambiguous, cross-cultural, or low-frequency situations. Additionally, models often fail to recognize the pragmatic function of idioms—such as humour, emotion, or rhetorical emphasis—leading to tone shifts or inappropriate register. These findings suggest that current AI lacks the experiential grounding and cultural literacy necessary for robust idiom comprehension.

This study contributes original insight by positioning idioms as a diagnostic tool for examining the limits of AI language understanding in English and Albanian. It underscores the importance of cultural context and embodied cognition in linguistic interpretation, offering implications for the development of more culturally aware NLP systems. Practically, the findings may inform improvements in AI translation tools,

language-learning technologies, and cross-cultural communication platforms. However, the study is limited by its qualitative design and the selective nature of its data set. Future research using larger corpora and multilingual idiom inventories may provide broader generalizability and deeper comparisons across language families.

The study concludes that idioms illuminate a fundamental divide between human and machine language processing. Whereas humans rely on shared cultural knowledge, lived experience, and flexible reasoning to interpret figurative meaning, AI systems depend on patterns within training data and lack an embodied understanding of social context. As a result, idioms continue to defy reliable computational interpretation. The research highlights the necessity of integrating cultural, cognitive, and contextual models into future AI development and reinforces that human linguistic competence still surpasses AI in tasks requiring nuance, creativity, and cultural intelligence.

Keywords: *artificial intelligence, cultural context, figurative language, human translation, idioms.*

References

- Absar, M. (2023). Cross-lingual idiom sense clustering in German and English. *Proceedings of the first workshop on NLP tools and resources for translation and interpreting applications (NLP4TIA 2023)*, 13–19. INCOMA Ltd.
- Azizov, D. (2024). From idioms to algorithms: Translating culture-specific expressions in AI systems. *Iconic Research & Engineering Journals*, 7(10), 543–551.
- Baldwin, T., & Kim, S. N. (2010). Multiword expressions. In N. Indurkha & F. J. Damerau (Eds.), *Handbook of natural language processing* (2nd ed., pp. 267–292). CRC Press.
- Cacciari, C., & Tabossi, P. (1988). The comprehension of idioms. *Journal of Memory and Language*, 27(6), 668–683.
- Chu, Z., Yang, Z., Cui, Y., Chen, Z., & Liu, M. (2022). HIT at SemEval-2022 Task 2: Pre-trained language model for idioms detection. *Proceedings of the 16th international workshop on semantic evaluation (SemEval-2022)*, 218–224. Association for Computational Linguistics.
- Fernando, C. (1996). *Idioms and idiomaticity*. Oxford University Press.
- Gibbs, R. W. (1994). *The poetics of mind: Figurative thought, language, and understanding*. Cambridge University Press.
- Kövecses, Z. (2010). *Metaphor: A practical introduction* (2nd ed.). Oxford University Press.
- Lakoff, G., & Johnson, M. (2003). *Metaphors we live by*. University of Chicago Press.
- Nedumpozhimana, V., Klubička, F., & Kelleher, J. D. (2022). Shapley idioms: Analysing BERT sentence embeddings for general idiom token identification. *Frontiers in Artificial Intelligence*, 5, Article 813967. <https://doi.org/10.3389/frai.2022.813967>
- Nunberg, G., Sag, I. A., & Wasow, T. (1994). Idioms. *Language*, 70(3), 491–538. <https://doi.org/10.2307/416483>
- Omer, S. K., & Hassani, H. (2025). Idiom detection in Sorani Kurdish texts. *arXiv preprint*.
- Shutova, E. (2010). Models of metaphor in NLP. *Proceedings of the 48th annual meeting of the Association for Computational Linguistics*, 688–697. Association for Computational Linguistics.
- Tayyar Madabushi, H., Gow-Smith, E., Scarton, C., & Villavicencio, A. (2021). Astitchinlanguagemodels: Dataset and methods for the exploration of idiomaticity in pre-trained language models. *arXiv preprint*.

- Tedeschi, S., Martelli, F., & Navigli, R. (2022). ID10M: Idiom identification in 10 languages. *Findings of the Association for Computational Linguistics: NAACL 2022* (pp. 2715–2726). Association for Computational Linguistics.
- Tedeschi, S., & Navigli, R. (2022). NER4ID at SemEval-2022 Task 2: Named entity recognition for idiomaticity detection. *Proceedings of the 16th international workshop on semantic evaluation (SemEval-2022)*, 204–210. Association for Computational Linguistics.
- Tien-Ping Tan, J. J., & Dong, J. J. (2021). Translating idioms using paraphrasing, machine translation and rescoring. *Turkish Journal of Computer and Mathematics Education*, 12(3), 1942–1946.
- Vossen, P., & Fellbaum, C. (2020). *Computational approaches to lexical semantics: Representing, understanding, and generating idiomatic expressions*. Springer.
- Yayavaram, A., Yayavaram, S., Upadhyay, P. D., & Das, A. (2024). BERT-based idiom identification using language translation and word cohesion. *Proceedings of the joint workshop on multiword expressions and universal dependencies (MWE-UD) @ LREC-COLING 2024*, 220–230. ELRA and International Committee on Computational Linguistics.



ADLES 2025 POWERED BY UNINOVIS

DATAVIZ CHALLENGE

Haïfa Zargayouna
Sorbonne Paris Nord University
haifa.zargayouna@sorbonne-paris-nord.fr

Dr Haïfa Zargayouna is an associate professor in computer science at Sorbonne Paris Nord University. She conducts her research at the Laboratoire d'Informatique de Paris Nord (LIPN) and teaches at the University Institute of Technology of Villetaneuse (IUT). Her research interests focus on information retrieval, natural language processing, and knowledge engineering. At the IUT, she is a member of both the Computer Science Department and the Data Science Department, where she oversees the local organization of the DataViz challenge. Within the Data Science Department, she teaches data visualization and reporting at both introductory and advanced levels.

Abstract

In the Data Science Bachelor's programme (BUT Science des Données), students undertake a three-year curriculum centred skill-based approach in data processing, statistical analysis, and data valorization. Within this framework, first-year students are required to participate in the national DataViz challenge, an annual pedagogical initiative designed to contextualize learning in an authentic, professionally oriented setting.

The challenge is coordinated by the 15 University Institutes of Technology (IUTs) across France that host Data Science programmes. Each edition is implemented in partnership with a professional actor from either the public or private sector, who takes on the role of data provider by supplying real-world datasets. In addition, a data expert is made available across participating campuses, ensuring technical support, and enabling student teams to refine their methodological choices throughout the activity.

Pedagogically, the challenge serves as an integrative mechanism allowing students to operationalize their competencies across multiple domains. It requires them to engage in data preprocessing and statistical modelling, to select analytically sound approaches, and to articulate their findings through effective visualization strategies. The activity also places students in a collaborative setting, teams of six to seven individuals, working with a strict temporal constraint (a seven-hour session excluding the lunch break). The format aims to foster teamwork, autonomy, and decision-making under pressure. At the conclusion of the event, each team submits a dashboard and discusses it during an oral presentation to a local jury. The best team is nominated for the national-level jury.

This talk will start with an overview of Sorbonne Paris Nord University, with particular emphasis on the University Institute of Technology of Villetaneuse as a participating institution. The challenge will then be analysed within a competency-based pedagogical framework. We will discuss the four editions of the event (2022-2025, see Zargayouna, 2023, 2025, for example), examining both local implementation and national coordination. Finally, we will reflect on outcomes, highlight recurring patterns across editions, and present key lessons learned regarding the integration of authentic data-driven tasks into undergraduate education in data science.

Keywords: *challenge, dashboard, data visualization, reporting.*



ADLES 2025 POWERED BY UNINOVIS

References

- Zargayouna, H. (2023). 2023 *DataViz challenge*. <https://www-info.iutv.univ-paris13.fr/dokuwiki/doku.php?id=but-stid-s204:start-2023>
- Zargayouna, H. (2025). 2025 *DataViz challenge*. <https://www-info.iutv.univ-paris13.fr/dokuwiki/doku.php?id=but-stid-s204:start-insee>