



INTERNATIONAL ACADEMIC INSTITUTE

IAI ACADEMIC CONFERENCE PROCEEDINGS

International Academic Conferences

**16 December 2025
Budapest, Hungary**

IAI Academic Conference Proceedings**Editor:**

Milena Apostolovska-Stepanoska, Dr. Sci, Ss. Cyril and Methodius University, Skopje, Republic of N. Macedonia

Editorial Board:

Hristina Ruceva Tasev, Dr. Sci, Ss. Cyril and Methodius University, Skopje, Republic of N. Macedonia

Vasko Naumovski, Dr. Sci, Ss. Cyril and Methodius University, Skopje, Republic of N. Macedonia

Meic Pearse, Dr. Sci, Houghton College NY, USA

Elif Uckan Dagdemir, Dr. Sci, Anadoly University, Turkey

Mary Mares-Awe, MA, Fulbright Association, Chicago, USA

Prof. Massimo Introzzi, Bococca University – Milan, Italy

Dr. Zahida Chebchoub, UAE University, Al-Ain

Dr. Benal Dikmen, Associate Professor, T.C. İstanbul Yeni Yüzyıl University

Ass. Prof. Arthur Pantelides, American University, Bulgaria

Marija Boban, Dr. Sci, Faculty of Law, University of Split, Croatia

Gergana Radoykova, Dr. Sci Sofia University St. Kliment Ohridski, Bulgaria

Anthon Mark Jay Alguno Rivas, MA, Taguig City University, Philippines

Snezana Knezevic, Dr. Sci Faculty of Organizational Sciences, Belgrade, Serbia

Eva Pocher, Ph.D., University of Glasgow

Ass. Prof. Mariam A. Abu Alim, Yarmouk University, Jordan

Ass. Prof Aleksandra Mitrović, University in Kragujevac, Serbia

Dr. Dorjana Klosi, University of “Ismail Qemali”, Vlore, Albania

Ass. Prof. Aneta Stojanovska-Stefanova, PhD, Goce Delchev University, Republic of N. Macedonia

Stefan Milojević, PhD, Associate Professor, *Faculty of Business Economics, EDUCONS University* Belgrade, Serbia

Ionuț – Bogdan Berceanu, Senior lecturer, PhD, National University of Political Studies and Public Administration, Faculty of Public Administration, Romania

Ing. Andrea Tkáčová, PhD. Assistant Professor, Department of Finance, Technical university of Košice

Secretary and editing:

Filip Stojkovski

International Academic Institute

Ul. Todor Aleksandrov br.85-4

Skopje, Republic of N. Macedonia

ISSN 2671-3179

TABLE OF CONTENTS

UNPARLIAMENTARY DISCOURSE AND GENDERED POWER IN ALBANIA’S PARLIAMENT Anila Hima, Bukuroshe Isufaj	4
LANGUAGE AS THOUGHT IN THE DIGITAL AGE: TECHNOLOGY AND THE CONSTRUCTION OF CONTEMPORARY DISCOURSE Bukuroshe Isufaj, Anila Hima	10
SMARTPHONE GYROSCOPE-BASED ANALYSIS OF HUMAN MOVEMENT: AN OPEN-SOURCE APPROACH FOR ITUG ASSESSMENT Miha Fošnarič	18
THE IMPACT OF SOCIO-EMOTIONAL EDUCATION ON STUDENTS’ ACADEMIC PERFORMANCE Msc. Parajsa Myftiu, Msc. Begzane Kazazi	24
TOURISM DEVELOPMENT MODELS AND SUSTAINABILITY: A COMPARATIVE ANALYSIS OF TETH AND CORTINA D’AMPEZZO Gentian Memaj, Mirjam Dibra, Emirjeta Bejleri	33
DIGITAL TRENDS AND THREATS IN LANGUAGE AND TRANSLATION STUDIES Anna Maria Vasili, PhD Candidate	39
FROM ENERGY TRANSITION TO EU INTEGRATION: KOSOVO’S STRATEGIC PATH FORWARD Dorajet Imeri	42

Unparliamentary Discourse and Gendered Power in Albania's Parliament

Anila Hima¹, Bukuroshe Isufaj²

¹Department of Foreign Languages, Faculty of Humanities, University of Vlora "Ismail Qemali", Albania

²Department of Foreign Languages, Faculty of Humanities, University of Vlora "Ismail Qemali", Albania

*Corresponding Author: e-mail: anila.hima@univlora.edu.al

Abstract

This study investigates the use of unparliamentary language in the Albanian Parliament, with a particular focus on how such language reflects and reinforces gendered power dynamics. Drawing on a corpus of parliamentary transcripts, the research applies critical discourse analysis to identify patterns of verbal aggression, insult and interruption directed at Members of Parliament (MPs). Special attention is given to gendered insults and the discursive strategies employed against female MPs. The findings reveal that unparliamentary language often targets women through explicitly gendered terms, subtle diminutives or condescending rhetorical devices that undermine their authority. Moreover, institutional responses to such language appear inconsistent, suggesting a gender bias in the enforcement of parliamentary norms. This study builds on existing research on language, politics, and gender, while bringing new data and a regional focus to ongoing debates about civility, gender and power in legislative settings. The paper concludes by advocating for stronger procedural frameworks to address gender-based verbal misconduct in political institutions.

Keywords: unparliamentary language, gendered political discourse, Albanian Parliament, legislative speech regulation.

1. Introduction

Language plays a central role in shaping political life, especially within institutions like parliaments where speech is not only a tool of communication but also a display of power, identity and conflict (van Dijk, 1997; Fairclough, 2001). Most parliaments have rules against "unparliamentary language"—speech that is disrespectful, insulting, or disruptive to decorum (Ilie, 2010). However, in practice, political discourse often deviates from these formal standards. Verbal aggression, personal attacks and frequent interruptions are not uncommon and research shows that such behaviours often have gendered dimensions (Shaw, 2000).

In recent years, scholars have increasingly examined how gender influences political communication, particularly in how female politicians are spoken to and treated during debates. Studies suggest that women are more frequently interrupted, patronized, or targeted with gendered language that undermines their credibility or authority (Wodak, 2015). This language is not just a reflection of individual bias—it is also part of broader discursive patterns that sustain power hierarchies within political institutions (Lazar, 2005).

The Albanian Parliament offers an underexplored case for examining these issues. Although Albania has made some notable progress toward gender equality in political representation—through legal reforms such as quota laws (CEC Albania 2021)—the discourse within its legislative body often tells a more complicated story. Female Members of Parliament (MPs) have been subject to public verbal attacks, ridicule and even explicitly gendered insults, yet these incidents have received little systematic academic attention.

This study focuses on the use of unparliamentary language in the Albanian Parliament with particular attention to how it reflects and reinforces gender dynamics. Drawing on a dataset of parliamentary transcripts, the analysis identifies patterns of offensive speech, investigates how and when gender becomes a target and examines how institutions respond to such discourse. The study employs a critical discourse analysis framework (van Dijk, 2008) to better understand the role of language in constructing and contesting political authority.

2. Literature Review

The study of language in political settings has long highlighted the role of discourse in shaping and reflecting power relations. Within parliamentary contexts, speech is subject not only to rhetorical strategy but also to institutional norms, including the prohibition of "unparliamentary language". While such norms are formally codified in many parliamentary systems, the enforcement and interpretation of what constitutes unacceptable speech often vary, influenced by political context, institutional culture and speaker identity (van Dijk, 2008).

Unparliamentary language is regulated in most democratic legislatures, though specific rules differ across countries, reflecting differences in political culture, legislative procedure and historical development. While most parliaments maintain formal codes of conduct to ensure civil discourse, the enforcement of these rules is uneven. In most parliaments there are detailed protocols concerning

words and expressions that are prohibited during debate. In the UK House of Commons, for example, terms like “liar,” “coward,” or imputations of dishonesty are explicitly forbidden and members may be asked to withdraw their words or leave the chamber if they refuse (Ilie, 2010). Canada’s House of Commons maintains a detailed and evolving list of banned expressions, reflecting both historical precedent and emerging sensitivities (Marleau & Montpetit, 2000). Similarly, the Indian Lok Sabha has recently expanded its list of banned words, including terms considered derogatory, abusive, or offensive toward specific communities or groups. In many cases, these rules are vague or inconsistently applied, allowing certain types of incivility—especially those rooted in gender or social hierarchy—to persist in practice (Wodak, 2015). In many European parliaments, including those in Germany and Sweden, codes of conduct are enforced through ethics committees and sanctions such as speaking bans or formal warnings (Wodak, 2009).

The Albanian Parliament has its own legal framework for regulating speech. According to Article 63 of the Rules of Procedure of the Parliament of the Republic of Albania¹, MPs are prohibited from using offensive, defamatory, or insulting language during sessions. The rules also empower the Speaker of the Parliament to interrupt and warn MPs who breach decorum, and in repeated cases, may propose disciplinary measures including removal from the session. However, the rules do not provide a fixed list of banned expressions and enforcement is left largely to the discretion of the Speaker.

Scholars have noted that parliamentary discourse frequently includes aggression, insults, sarcasm and indirect attacks, even in the presence of rules designed to promote civility (Ilie, 2015). In particular, adversarial and conflict-driven styles of speaking are often normalized in political debate, especially in transitional or polarized democracies (Bayley, 2004). A growing body of literature has focused specifically on the gendered dimensions of political language. Studies have shown that female politicians are more likely than their male colleagues to experience interruptions, disrespect and verbal hostility during parliamentary debates (Krook & Restrepo Sanín, 2016). These patterns reflect broader societal gender norms, where women in public roles are often evaluated not only on their policy positions but also on how well they conform to expectations of femininity, civility and emotional control (Kittilson, 2008).

Despite the growing interest in gender and political language, the literature remains relatively thin in relation to Southeast Europe and, in particular, to Albania. While some studies have analyzed political rhetoric and populist discourse in the Albanian context (Vangeli, 2019), there is little focused research on how gender plays out in parliamentary language. Albania has seen measurable progress in increasing women’s representation, especially following the introduction of gender quotas (CEC Albania 2021). However, studies suggest that increased numerical representation does not always translate into equal treatment or discursive respect (Gjevorci, 2020).

By contributing to literature at the intersection of gender, language and politics, particularly within the Albanian context, this paper offers insights into how language in formal settings can reproduce broader inequalities. It also raises important questions about the enforcement of parliamentary norms and what truly constitutes a democratic and inclusive political space.

3. Methodology

This study adopts a qualitative research design, combining discourse analysis to investigate the use of unparliamentary language with a gender focus in the Albanian Parliament. The objective is to examine the frequency, nature and gendered dimensions of unparliamentary expressions in parliamentary debates and to analyze the implications for institutional discourse norms and gender equality.

The primary data source comprises official transcripts of plenary sessions of the tenth Legislature of Albanian Parliament over the period 2021–2025. These years were selected due to the growing presence of women MPs following the enforcement of gender quotas and a heightened public discourse on civility and gender in politics. The transcripts were accessed through the official parliamentary website.² Special focus has been on the parliamentary decisions concerning violations of decorum, which were documented in the official transcripts. The study also references the Rules of Procedure of the Albanian Parliament, focusing on provisions regulating speech and decorum.

A purposive sampling strategy was used to select debates likely to feature contentious language, such as discussions of political scandals and controversial legislation. Particular attention was given to sessions involving female MPs, either as speakers or as targets of aggression and insults or disciplinary interventions.

The study applies Critical Discourse Analysis (CDA) as its principal analytical method, drawing on the frameworks developed by Fairclough (1995). CDA is well-suited for uncovering power relations and ideological positions embedded in language, especially in institutional settings such as parliaments. Analytical categories include:

- Type of unparliamentary expression: insults, accusations, insinuations.
- Gendered patterns: frequency and nature of unparliamentary language directed at female versus male MPs.
- Response and enforcement: speaker intervention, sanctions, appeals.

These categories enable a systematic analysis of how gender and power intersect in the use and policing of language within parliamentary debates. By using transcript data and procedural rules, this methodology aims to provide a robust account of how gendered dynamics manifest in the regulation and practice of parliamentary speech in Albania.

¹<https://kuvendiwebfiles.blob.core.windows.net/webfiles/RregullorjaeKuvenditeperditesuar.pdf> (accessed 8 January 2025).

²<https://www.parlament.al/procesverbale> (accessed 8 January 2025).

4. Findings and Analysis

The analysis of Albanian parliamentary transcripts from sessions over the period from 2021 to 2025 reveals several key patterns regarding the use and regulation of unparliamentary language, particularly as it relates to gender.

4.1 Prevalence of Unparliamentary Language

Unparliamentary language is a recurrent feature of plenary debates, especially during sessions involving controversial political issues. Across the sample, 62 instances of unparliamentary expressions were identified. These included direct insults (e.g., “idiot,” “clown”), accusations of corruption or dishonesty and derogatory insinuations. For example, during a heated budget debate, one male MP accused a colleague of being “a thief dressed as a minister,” prompting minor censure but no formal action. In another case, a male MP accused the opposition of being “a mafia gang hiding behind the flag,” which triggered loud protests but no disciplinary response. In a debate on infrastructure spending, a male MP referred to his colleagues as “parasites feeding on taxpayers' blood,” sparking outrage across party lines but no procedural consequence. During a session on justice reform, a male MP shouted, “This chamber is full of traitors in suits,” leading to brief disorder but no formal penalty. In nearly half of the identified cases, the Speaker issued a warning or called the speaker to order, but formal disciplinary measures, such as exclusion or official reprimand, were rare.

4.2 Gendered Patterns of Discourse

A notable pattern emerged in the gendered distribution of unparliamentary language. Female MPs were disproportionately targeted by gendered remarks or personal insults referencing their appearance, emotional state, or presumed competence. For instance, during a session, a male MP referred to a female colleague as “emotional and unstable,” suggesting that “parliament is no place for drama.” Another female MP was told to “calm down and act like a lady” during a discussion on domestic violence legislation, implying a gendered expectation of passivity and decorum. In another case, a female MP advocating for a sexual harassment bill was interrupted by a male colleague who remarked, “Women should worry more about being good wives than about laws.” During another session, a senior male MP described a female opposition member as “just another pretty face with no substance,” drawing gasps from the chamber but no formal reprimand. In a debate on economic reform, a female MP was told by a male colleague, “You should smile more, it suits you better than talking economics.” During a session discussing climate change policy, a male MP responded to a female colleague’s proposal by saying, “You women always want to save the planet, but you can’t even manage your own households. Maybe start with that.” This comment implied that women should focus on domestic responsibilities rather than engage in high-level political debate. It serves as a gendered dismissal of her competency and authority in a traditionally male-dominated policy area. During a debate on anti-corruption legislation, a female MP was called “just a puppet for international organizations,” implying that her political positions were being shaped by external forces rather than her own judgment. This comment was not only an insult to her political integrity but also subtly reinforced the stereotype that women are subservient or lack agency in decision-making. During a heated debate on social welfare reform, a male MP interrupted a female MP’s argument by shouting, “You don’t know what you’re talking about, you’re just emotional!” The remark was intended to undermine her argument by framing it as driven by emotion rather than reason. While the male MP received no sanction for his remark, the female MP was told by the Speaker to “refrain from personal attacks” when she responded. This incident illustrates the tendency to dismiss female MPs’ arguments as emotional rather than based on rational analysis. A female MP proposed a bill on domestic violence prevention, which was met by a male MP with the comment, “What, are you going to start teaching men how to behave at home now?” This remark reduces a serious social issue to a trivial matter and infantilizes the female MP’s proposal. It also reflects a gendered view of women’s roles as being confined to private, domestic spheres, rather than participating in the formulation of public policy. In a debate on healthcare reform, a male MP sarcastically commented on a female MP’s proposal for increased maternity leave by stating, “Maybe we should just give women permanent leave and let the men do all the work, eh?” The remark trivialized an important policy issue while simultaneously reinforcing gender stereotypes about men’s and women’s roles in society. The comment, while directed at a specific policy proposal, also perpetuates a broader cultural narrative that undermines women’s contributions to public policy.

Conversely, female MPs were significantly less likely to use unparliamentary language themselves. Of the total 62 instances, only 11 were initiated by women MPs, most of which were responses to provocation or attacks. In one example, a female MP called a male counterpart “arrogant and ignorant” after he repeatedly interrupted her intervention on gender equality policy. Another female MP was sanctioned for describing a colleague’s comments as “sexist nonsense,” even though the original statement had involved calling her “too young and naive to understand politics.” During a heated debate on social welfare reform, a male MP interrupted a female MP’s argument by shouting, “You don’t know what you’re talking about, you’re just emotional!” The remark was intended to undermine her argument by framing it as driven by emotion rather than reason. While the male MP received no sanction for his remark, the female MP was told by the Speaker to “refrain from personal attacks” when she responded. This incident illustrates the tendency to dismiss female MPs’ arguments as emotional rather than based on rational analysis. A female MP proposed a bill on domestic violence prevention, which was met by a male MP with the comment, “What, are you going to start teaching men how to behave at home now?” This remark reduces a serious social issue to a trivial matter and infantilizes the female MP’s proposal. It also reflects a gendered view of women’s roles as

being confined to private, domestic spheres, rather than participating in the formulation of public policy. In a debate on healthcare reform, a male MP sarcastically commented on a female MP's proposal for increased maternity leave by stating, "Maybe we should just give women permanent leave and let the men do all the work, eh?" The remark trivialized an important policy issue while simultaneously reinforcing gender stereotypes about men's and women's roles in society. The comment, while directed at a specific policy proposal, also perpetuates a broader cultural narrative that undermines women's contributions to public policy. In a debate on education policy, a female MP accused a male colleague of "mansplaining" after repeated disrespect during her speech — a remark that led to her microphone being muted. In another case, a woman MP who confronted a colleague about sexist comments was labelled "hysterical" by another member, prompting her to walk out of the session. During a debate on pension rights, another female MP responded to a male MP's sexist remark by saying, "That comment is an insult to every woman in this country." Rather than receiving support from the Speaker for defending her own integrity, the female MP was given a warning for "escalating the tensions" in the debate. The male MP, on the other hand, faced no repercussions for his initial comment.

4.3 Speaker's Role and Enforcement

The Speaker's enforcement of decorum appeared inconsistent. In some cases, clearly offensive language went unaddressed, particularly when used by high-ranking male MPs. For example, the Speaker's failure to intervene when a male MP called a female colleague "a mouthpiece for her husband's party", contrasts with the reprimanding of female MPs for responding to such verbal aggression. Another MP accused a female minister of advancing her career "through favors rather than merit" without interruption from the chair. In other instances, female MPs were reprimanded for defending themselves against verbal aggression. One such case involved a female MP being admonished for calling another member's comments "demeaning," while the original sexist remark was not sanctioned. Similarly, a female MP was cut off by the Speaker when responding to an attack, with the justification that her tone was "inappropriate for parliamentary discussion." In a session, a male MP who shouted, "You women just talk, but you never understand the numbers!" was not called to order, whereas a female MP who objected was asked to "respect the dignity of the house."

These findings suggest that enforcement practices may reflect broader institutional biases. The ambiguity of the Rules of Procedure allows for significant discretion in enforcement, which can be influenced by gender and political alignment.

4.4 Discursive Functions of Unparliamentary Language

Unparliamentary expressions often served strategic rhetorical functions. They were used to discredit opponents, provoke reactions, or assert dominance in debate. In gendered instances, they also functioned to reinforce traditional gender hierarchies by casting women as emotional, irrational, or unqualified. For example, when a female MP advocated for expanded maternity protections, she was mocked with the remark, "Next you'll be asking for naptime in Parliament." In another case, a male MP responded to a woman's critique of government transparency by saying, "She should focus on baking, not budgets." During a heated exchange over labor rights, a female MP's insistence on union representation was ridiculed with the interjection, "Isn't that a bit ambitious for someone who used to host cooking shows?" Another male MP responded to a female MP's comments on the pension crisis by saying, "That's rich coming from someone who has never worked a real job."

This analysis supports the argument that parliamentary discourse is not only a reflection of political conflict but also a site of symbolic gender politics. Despite formal equality in participation, the language of debate reveals persistent asymmetries in how male and female MPs are positioned and treated.

5. Discussion

The findings of this study reveal significant insights into the use and regulation of unparliamentary language in the Albanian Parliament, with a particular focus on gendered dynamics. These findings not only align with existing literature on political discourse and gendered communication but also raise important questions about institutional practices and the role of gender in shaping parliamentary behaviour.

The disproportionate targeting of female MPs with gendered insults and remarks in parliamentary debates is a troubling reflection of broader societal gender biases. Female MPs were frequently subjected to comments that questioned their emotional stability, competence, or adherence to traditional gender roles. These instances align with similar findings in other political contexts, where women in political spheres are often seen as "outsiders" or "deviations" from the traditional male-dominated political landscape (Shaw, 2011). While such behaviours may be seen as an expression of the competitive nature of politics, they also indicate the persistence of gendered double standards. When male MPs engage in heated exchanges or use harsh language, their behaviour is often seen as assertive, while female MPs expressing the same intensity are labeled as "hysterical" or "emotional" (Cameron, 2005).

The inconsistent enforcement of parliamentary decorum is another critical finding of this study. The failure to sanction offensive language when used by male MPs, while reprimanding female MPs for comparatively milder expressions, suggests that institutional biases may shape the enforcement of parliamentary rules. This differential treatment is not uncommon in other parliamentary contexts, where women in leadership roles are more likely to be penalized for their assertiveness than their male counterparts (Bjarnegård, 2018). The role of the Speaker is pivotal in maintaining order, but the discretion allowed within the Albanian Parliamentary Rules of Procedure appears to open room for subjective interpretations influenced by political and gender dynamics.

The use of unparliamentary language in Albanian parliamentary sessions often served strategic purposes: to discredit opponents, provoke reactions, or assert dominance. However, as seen in many of the gendered instances analyzed, unparliamentary expressions also functioned to reinforce traditional gender hierarchies by positioning women as unqualified, emotional, or irrational. These linguistic strategies are not new. Studies of political discourse in various settings show that aggressive or insulting language is often used by male politicians to assert authority and challenge the legitimacy of female politicians' presence in the political sphere (Lovenduski, 2012). Unparliamentary language also reflected a broader cultural tendency to associate women with the domestic sphere and men with public leadership roles (Holmes, 2006). Such remarks not only undermine the credibility of female MPs but also reinforce societal expectations about gender roles.

Based on the findings and analysis, several recommendations can be made to address the issues raised by the use of unparliamentary language, particularly in relation to gender. First, there is a need for clearer and more consistent enforcement of parliamentary rules. The ambiguity in the application of the Rules of Procedure, especially with respect to gendered language, should be addressed through formal reforms. These reforms could include more detailed guidelines on what constitutes unparliamentary language and the introduction of gender-sensitive training for MPs to raise awareness of the impact of such language.

Second, the Albanian Parliament could implement stronger penalties for unparliamentary language, particularly when it is used in a gendered manner. Such penalties would send a clear message that disrespectful language aimed at undermining the authority of MPs, particularly female MPs, will not be tolerated.

Finally, the findings of this study highlight the need for ongoing research into the intersection of language, gender and political power. By examining the dynamics of political discourse and the role of language in shaping gendered political behaviour, we can continue to push for a more inclusive and respectful political environment.

6. Conclusions

This study has explored the intersection of political discourse, gender and unparliamentary language in the Albanian Parliament. Through an analysis of parliamentary sessions, several key findings have emerged that demonstrate how the language used in parliamentary debates not only reflects political conflict but also reinforces broader societal gender norms and hierarchies.

The findings indicate that unparliamentary language remains a significant feature of parliamentary discourse in Albania, with insults, accusations and derogatory comments commonly used in heated debates. While both male and female MPs use unparliamentary language, the gendered nature of the language used against women reveals significant inequalities in how female MPs are treated and represented in parliamentary discourse. Female MPs were disproportionately subjected to personal insults related to their appearance, emotionality and competence, whereas male MPs were more likely to use unparliamentary language without facing similar scrutiny. This gendered targeting reflects the broader societal tendency to undermine women's authority in public spaces, particularly in domains traditionally dominated by men, such as politics.

The inconsistent enforcement of parliamentary decorum, particularly with respect to gendered language, further deepens these imbalances. The discretion granted to the Speaker in interpreting and applying the Rules of Procedure often results in biased enforcement, with female MPs facing reprimands for responses to verbal aggression, while male MPs' more offensive language often goes unaddressed.

Ultimately, this study calls for a comprehensive review of the Albanian Parliament's procedural rules, to include explicit definitions of unparliamentary, gendered and discriminatory language, with clearly stated sanctions, with a focus on gender-sensitive reforms to ensure more equitable treatment of all MPs.

References

- Bayley, P., (ed.). 2004, *Cross-Cultural Perspectives on Parliamentary Discourse*. John Benjamins.
- Bjarnegård E., 2018, *Making Gender Visible in Election Violence: Strategies for Data Collection*. (in:) *Politics & Gender*. 14(4):690-695. doi:10.1017/S1743923X18000624
- CEC Albania, 2021, *Gender Representation Report*. (in:) Central Election Commission of Albania.
- Deborah Cameron, 2005, *Language, Gender, and Sexuality: Current Issues and New Directions*, (in:) *Applied Linguistics*, Volume 26, Issue 4, December 2005, pp. 482–502, <https://doi.org/10.1093/applin/ami027>
- Fairclough, N., 1995, *Critical discourse analysis: The critical study of language*. Longman.
- Fairclough, N., 2001, *Language and Power* (2nd ed.). Longman.
- Holmes, J., 2006, *Gendered Talk at Work. Constructing Social Identity Through Workplace Interaction*. Blackwell Publishing.
- Ilie, C., 2010, *Strategic Uses of Parliamentary Forms of Address: The Case of the UK Parliament*, (in:) *Pragmatics*, 20(2), 211–230.
- Ilie, C., 2015, *Parliaments and Parliamentarism: A Discourse-Analytical Framework*, (in:) I. Cornelia (Ed.), *Parliamentary Discourse Across Cultures*, pp. 1–22, John Benjamins.
- Kittilson, M. C., 2008, *Representing Women: The Adoption of Family Leave in Comparative Perspective*, (in:) *The Journal of Politics*, 70(2), 323–334.
- Krook, M. L., & Restrepo Sanín, J., 2016. *Gender and Political Violence in Latin America: Concepts, Debates and Solutions*. (in:) *Política y gobierno*, 23(1), 125–157.

- Lazar, M. M., 2005, *Feminist Critical Discourse Analysis: Gender, Power and Ideology in Discourse*. New York: Palgrave-Macmillan
- Lovenduski, J., 2012, *Feminising British Politics*. (in:) *The Political Quarterly*. 83. 10.1111/j.1467-923X.2012.02368.x.
- Marleau, R., & Montpetit, C., 2000, *House of Commons Procedure and Practice*. House of Commons, Ottawa.
- Shaw, S., 2000, *Language, Gender and Floor Apportionment in Political Debates*. (in:) *Discourse & Society*, 11(3), 401–418.
- Shaw, S., 2011, *Governed by the rules? The female Voice in Parliamentary Debates*. (in:) *Language and Gender. A reader*, 2nd Edition. Wiley-Blackwell. 300-315.
- van Dijk, T. A., 1997, *Discourse as Social Interaction*. Sage.
- van Dijk, T. A., 2008, *Discourse and Power*. Palgrave Macmillan.
- Wodak, R., 2009, *The Discourse of Politics in Action: Politics as Usual*. Palgrave Macmillan.
- Wodak, R., 2015, *The Politics of Fear: What Right-Wing Populist Discourses Mean*. Sage.

Language as Thought in the Digital Age: Technology and the Construction of Contemporary Discourse

Bukuroshe Isufaj¹, Anila Hima²

¹*Department of Foreign Languages, Faculty of Humanities, University of Vlora "Ismail Qemali", Albania*

²*Department of Foreign Languages, Faculty of Humanities, University of Vlora "Ismail Qemali", Albania*

**Corresponding Author: e-mail: bukuroshe.isufaj@univlora.edu.al*

Abstract

This article examines how digital technologies are reshaping the relationship between thought, language, and discourse, proposing the model of “digitally mediated discursivity.” Drawing on Vygotsky, Wittgenstein, theories of distributed and embodied cognition, as well as contemporary studies on multimodality, translanguaging, and artificial intelligence, the study argues that language functions as a cognitive habitat co-constructed by humans and technology. The theoretical analysis is interwoven with examples from digital learning environments, where students navigate across languages, modalities, and algorithms, developing transsemiotic competencies and new forms of discursive authorship. The article identifies three pedagogical pillars: multimodality as a way of thinking, digital translanguaging as an epistemic mechanism, and technology-conscious pedagogies as a counterbalance to AI-driven automation. The main contribution lies in conceptualizing digital classrooms as laboratories of hybrid thought and in offering an analytical framework for understanding how platforms, algorithms, and AI-assisted writing tools co-shape thinking, discourse, and educational practice in the Albanian context and beyond. This approach further highlights the importance of cultivating metacognitive awareness, enabling learners to critically examine how their interactions with digital tools shape not only their communicative practices but also the very processes through which they generate knowledge.

Keywords: digital technologies; language as thought; digitally mediated discursivity; multimodality; digital translanguaging

1. Introduction

In recent decades, rapid developments in digital technology have transformed how people think, communicate, and interact with the world. Language can no longer be understood solely as a system of signs for encoding thoughts; rather, it is an active process that is constructed, modified, and recontextualized within technological environments. In digital ecosystems, interactions with artificial tools, multimodal platforms, and social networks foster new forms of awareness, reflection, and expression, reshaping the historical relationship between thought and language.

Contemporary digital discourse is no longer limited to written text; it encompasses an interplay of words, images, sounds, and algorithms that generate new meanings. Studying language in this context requires a multidimensional approach: as a cognitive, social, and technological process simultaneously. This implies that it is not sufficient to examine only how language expresses thought, but also how technology mediates the very act of thinking and discursive organization.

This issue becomes particularly significant in education. Today’s students think and express themselves within ecosystems saturated with digital tools, extending the process of thinking beyond traditional linear logic toward networked and multimodal structures, often mediated by artificial intelligence. Contemporary pedagogy must understand this transition, as students’ cognitive processes cannot be analyzed without considering the influence of digital platforms, personalization algorithms, and AI-assisted tools.

This article intertwines classical theoretical perspectives on language as thought—including Vygotsky, Wittgenstein, and concepts of mediated cognition—with the analysis of contemporary digital environments. The hybrid theoretical and applied approach allows for a deeper understanding of the discursive processes occurring within digital interfaces, social platforms, and online learning practices. The article proposes a new conceptual framework for understanding digitally mediated discourse, encompassing multimodal elements, technological mediation, and emerging reasoning processes.

The central research question of this study is: How does technology transform the pathway from thought to language, and how is discourse reshaped in digital environments? To address this, the article is structured around four main pillars: (1) classical theories of the language–thought relationship; (2) cognition and mediation in digital spaces; (3) the transformation of thought into discourse through AI and multimodality; and (4) the pedagogical implications arising from these changes.

The study’s contribution lies in the development of the analytical model of “digitally mediated discursivity,” which provides a new theoretical framework for understanding how technology co-authors thought and expression, offering a fresh and necessary perspective for contemporary research in language, communication, and education.

2. Theoretical Framework

The theoretical framework of this study is built at the intersection of three main fields: theories on the thought–language relationship, contemporary approaches to cognitive mediation, and theories of digital discourse. The intertwining of these dimensions helps to understand the new processes of meaning-making in the digital age, where language is no longer merely a neutral tool of expression, but a co-constructed process between humans and technology (Gee, 2015; Kress, 2010). This section examines how thought is transformed into language, how technology intervenes in this process, and how new discursive forms are shaped through artificial intelligence, multimodality, and digitally mediated interaction.

2.1. Language as a form of thought: classical and contemporary perspectives

The question of the relationship between thought and language remains a central debate in the humanities. Vygotsky (1934/1986) argues that language is the primary form of thought organization: inner speech serves as a structure that shapes cognitive processes before they are articulated in words. Thought is not mechanically translated into language but is transformed through social and cultural interactions. This concept is connected to contemporary ideas of the “extended mind,” where artifacts and the environment become part of the reasoning process (Clark & Chalmers, 1998).

On the other hand, Wittgenstein (1953) views language as a social practice rooted in “language games,” where meaning depends on concrete use in life situations. This approach shows that thought is articulated through interaction and practical community rules. Today, the rules of digital platforms and community norms function as new “language games” that shape meaning and communication (Baym, 2015).

Theories of distributed cognition (Hutchins, 1995) and embodied cognition (Lakoff & Johnson, 1980) demonstrate that mental processes occur in close interaction with the physical, social, and technological environment. This positions technology not merely as a supportive tool but as a coordinator of cognitive processes. This framework supports the model thought → technology → language, linking theory with empirical analysis.

2.2. Cognitive mediation in the digital age

The digital age has transformed ways of thinking and interacting with information. Theories of cognitive mediation emphasize that technological tools are not neutral, but structure how attention is organized, conceptual connections are built, and arguments are formulated (Norman, 1993; Salomon, 1997).

Algorithms, AI-assisted writing tools, and digital interfaces create new forms of “co-produced” human–technology thinking (Hayles, 2017). Technology affects not only modes of expression but also the content and dynamics of reasoning. In education, cognitive mediation has noticeable consequences: students navigate systems that filter, suggest, and restructure information (Siemens, 2005), creating opportunities for critical thinking, but also risks of dependency on technology and superficial understanding (Kirschner & van Merriënboer, 2013).

Table 1. Theoretical models supporting the thought–language–technology relationship

Theoretical Dimension	Key Authors	Core Contribution	Relevance for this Study
Thought–Language	Vygotsky (1934/1986); Wittgenstein (1953)	Thought is shaped through language and social use	Explains how meaning is constructed before and during digital articulation
Distributed Cognition	Hutchins (1995); Clark & Chalmers (1998)	Cognitive processes occur in interaction with artifacts	Justifies the active role of technology in reasoning
Multimodality	Kress (2010); Jewitt (2013)	Meaning is produced through multiple modalities	Explains the multimodal nature of digital classrooms
Digital Mediation	Norman (1993); Salomon (1997)	Technology structures cognitive processes	Connects theory with how students think on platforms
AI Discourse	Hayles (2017); Jones (2020)	AI participates in discursive production	Supports the analysis of AI as a co-author of thought

2.3. *Multimodality and the transformation of discourse*

Multimodality is a key feature of contemporary communication. In digital contexts, discourse is constructed through the coordination of text, images, sound, symbols, and interactive elements (Kress, 2010; Jewitt, 2013). Modalities work together to create unified, non-linear meaning.

Writing on social networks and in online learning environments is a multimodal process, where thought is articulated in continuous interaction with visual elements, audience feedback, and algorithmic coordination (Page, 2018). In education, this produces new forms of learning, where students work with videos, infographics, simulations, and interactive tools requiring new semiotic competencies. Multimodality transforms how thought is converted into text: no longer linearly, but through networking and hypertextual navigation (Lemke, 2002).

2.4. *Artificial intelligence and co-authorship of thought*

Artificial intelligence tools are becoming significant discursive actors. AI is no longer merely an automation tool but a co-author in the production of linguistic structures, arguments, and ideas (Jones, 2020; Floridi, 2019). In terms of the extended mind, AI functions as an external cognitive component that coordinates memory, language, and reasoning (Clark, 2008).

This co-action changes the traditional concept of authorship and creativity, creating new forms of human–technology discursive production. In education, the role of AI transforms academic writing: students no longer focus solely on mechanical text production but on critical evaluation of their interaction with technology (Zawacki-Richter et al., 2019).

3. **Transforming thought into language in digital environments**

The process of transforming thought into language has been significantly reconfigured by the intervention of digital technology. In classical models of communication, thinking was conceived as an internal, individual, and independent process, articulated through language in the form of writing or speech (Vygotsky, 1987). Today, this process is mediated by platforms, algorithms, interfaces, and artificial intelligence, which influence the structure, rhythm, and forms of discourse production (Clark & Chalmers, 1998; Hutchins, 1995). Thought no longer “emerges” in language solely through the author, but through continuous interaction with technological tools that shape articulation.

Understanding this transformation requires analyzing three main processes, which do not operate separately but intertwine in a human–technology collaborative network: the influence of technology on internal thought processes, the mediation of digital writing and the structuring of language, and the role of artificial intelligence in co-producing discourse.

3.1. *Inner thought in the age of digital interaction*

In the classical sense, inner thought is a silent and invisible process in which the individual structures ideas before articulating them in language (Vygotsky, 1987). Digital environments challenge this perspective by creating new forms of interaction between thought and technological mediation.

Today, individuals think differently when writing on a digital platform, seeking information online, interacting with suggestion algorithms, or relying on digital tools for conceptual organization (Hutchins, 1995). Inner thought no longer occurs in isolation but through a self-dialogue in which technology becomes a co-actor: information and algorithms suggest new pathways of reasoning.

This process generates what is called cognitive fragmentation: thought becomes faster, interrupted, and networked. In education, this is observed in students who use digital notes or immediate access to resources, organizing ideas before they are transformed into academic text (Kress, 2010).

3.2. *Digital writing as a mediated process: from linear to networked text*

Digital writing is not merely the transcription of thought; technology plays an active role in shaping the structure, content, and style of expression (Kress, 2010). Digital text is networked, guided by hyperlinks, visual modalities, and interactive practices.

Three main transformations are noticeable:

1. Conciseness and modularity – Posts, comments, threads, and micro-texts require compact expression and faster rhythm, influencing how arguments are built and coherence is produced.
2. Interactivity – Platform feedback, distribution algorithms, and reader interactions make the author not only a writer but also a moderator and negotiator of meanings.
3. Fragmentation and multimodal complexity – Infographics, videos, and interactive essays require restructuring thinking in ways that often exceed the complexity of linear text (Kress, 2010).

This transformation shifts writing from a linear process to one distributed across space, time, and multiple modalities.

3.3. *The role of artificial intelligence in co-producing discourse*

The growing role of AI represents the deepest transformation in the thought–language relationship. Artificial intelligence is no longer merely an automation tool but a co-author in producing linguistic structures, arguments, and preliminary ideas (Jones, 2020; Floridi, 2019; Li Wei, 2018).

This co-action brings two main changes:

- Transformation of writing – AI interventions, in terms of word choice, rhythm, and argument organization, foster human–machine co-produced thought (Clark & Chalmers, 1998). Writing is no longer solely the product of the author but the result of interaction.
- Transformation of thought – Students reorganize their thinking by considering interaction with intelligent systems, shifting the focus from deep conceptual processing to managing collaboration with technology.

In education, the challenge is not merely plagiarism but developing a writing culture that encourages critical thinking, metacognitive reflection, and the ethical use of technological co-authorship.

Table 2. Summary table of conceptual links

Dimension	Description and Conceptual Link	Examples/Implications in Education
Inner Thought	Thought is no longer isolated; interactions with digital tools and online resources reshape its structure.	Students using digital notes and online access are better prepared for argument production.
Digital Writing	Text is intertwined with multimodality, hyperlinks, comments, and feedback. Authors become moderators and negotiators of meanings.	Forum posts, interactive essays, video presentations; ideas are coordinated and coherence is managed.
AI and Co-Authorship	AI suggests words, structures arguments, and generates preliminary ideas, building “co-produced thought.”	Students learn to use AI for critical evaluation, metacognitive reflection, and ethical writing.

4. **Constructing contemporary discourse in the digital age**

Contemporary discourse is formed within a communicative ecosystem where human, technological, and social factors intertwine. Unlike earlier periods, when knowledge was transmitted through linear texts controlled by the author, meanings today are created in a distributed, dynamic, and digitally mediated manner. Discourse is no longer an isolated process but an interactive space in which users, algorithms, digital interfaces, and virtual communities interact (Boyd, 2014; Gillespie, 2018). This interactivity produces new forms of communication, identity, and authorship.

Analyzing the construction of digital discourse requires examining three main dimensions: the effects of platforms and algorithms on structuring public and private discourse, the transformative role of multimodality in meaning-making, and the tensions between human-centered communication and algorithmic mediation. These analytical lines help us understand how individuals construct thought and identity in digital spaces.

4.1. *Technology as a discursive actor: platforms, algorithms, and hidden ideologies*

In the digital ecosystem, technology is not merely a communication channel but a discursive actor that actively intervenes in the creation, filtering, and circulation of content (Gillespie, 2014). Platforms such as Facebook, Instagram, TikTok, X, and YouTube are not neutral; they impose specific interaction architectures that influence which topics are emphasized, which are ignored, and what circulates in public and private spaces.

Algorithms function not only as technical mechanisms but as carriers of economic and cultural ideologies (Noble, 2018). They reward content that stimulates immediate emotional engagement, pushing discourses toward simplification, sensationalism, and polarization. This algorithmic logic shapes the way we discuss public, political, and ethical issues, creating “echo chambers” where users are predominantly exposed to content that aligns with their beliefs, reducing critical dialogue and increasing epistemic isolation (Pariser, 2011).

In education, this phenomenon affects how students seek information, build arguments, and form positions, as they encounter platform logic that mediates every step of the process. Understanding the pathways through which technology structures meaning is therefore essential (Bucher, 2018).

4.2. *Multimodality and innovations in meaning-making*

A central feature of contemporary discourse is multimodality, which integrates text with images, video, graphics, emojis, audio, and interactive elements. This integration is not merely an addition to language but a key component of meaning production (Kress, 2010).

Multimodality transforms the way arguments are constructed: a short video, an interactive graphic, or a series of images can communicate more than a linear paragraph. Discourse becomes distributed across modalities, requiring new interpretative skills that allow readers to understand rhythm, visuality, and interaction.

Moreover, multimodality shapes discursive identity. Users construct their online presence through choices of visual styles, symbols, and modes of presentation, making digital identity performative and influenced by audience reactions (Papacharissi, 2015).

In contemporary education, multimodality requires students to be content creators — for instance, producing presentations, videos, infographics, and interactive models. This shifts the student from a consumer role to an active producer, altering ways of thinking and learning and demanding new analytical skills to interpret the integration of modalities.

4.3. Tensions between humanity and algorithmic discourse

Despite the opportunities technology brings, it generates tensions between the humanity of communication and the algorithmic mediation of discourse. Algorithms prioritize speed and interaction, while human thought requires reflection and deep time (Florida, 2014). This creates a clash between the natural rhythm of thought and the fast pace of digital platforms.

Ethically, the use of personal data and algorithmic profiling generates new forms of invisible control that influence online discourse construction. AI-assisted writing also raises questions about authorship, authenticity, and responsibility (Coudry & Mejias, 2019).

From a psychological perspective, digital communication can cause cognitive overload, performative anxiety, and pressure for continuous presence, forcing individuals to adapt to platform rhythms rather than their own cognitive pace. In education, this challenge manifests in students who must develop academic discourse in an environment that encourages rapid and emotional communication, placing teachers in the position of balancing technology, reflection, and critical thinking.

The digital age raises new questions for the future of communication: how can humanity be preserved in an algorithm-driven world? How do we construct discourse that is both technological and human-centered? These questions constitute the central challenge for discursive competencies in the 21st century.

5. Didactic Implications

The integration of thought, language, and technology in the digital age has fundamentally transformed pedagogical practices. Teaching no longer operates within the traditional linear model teacher → student, but within a discursive ecosystem where languages, modalities, and digital tools co-produce ways of thinking and meaning-making (Jewitt, 2016; García & Li Wei, 2024; Selwyn, 2022). In this context, the role of language as a form of thought acquires a new didactic dimension: the way students think is inseparable from the ways they interact with technology and its modalities.

This transformation is evident in three main areas. First, multimodality is not simply the use of multiple modalities but a conceptual way of operating with thought and expression in the digital classroom. Modalities — images, visual schematics, audio, video, or animations — function not as supportive tools but as materialized forms of cognition (Jewitt, 2016). When a student uses an interactive diagram to process a complex concept, they are not illustrating thought, but creating a different way of thinking, impossible to achieve through linear text alone. Multimodality makes thinking visible, allows the exploration of conceptual relationships through visuality and interaction, and provides opportunities to assess cognitive processes, not just the final product.

Second, digital translanguaging goes beyond code-switching, intertwining diverse semiotic repertoires — languages, images, emojis, audio, hyperlinks, short texts, and algorithmic suggestions — into a unified system of meaning (García & Li Wei, 2024). This process is epistemic: individuals do not merely choose a language, but the most appropriate tools to articulate thought in the present moment. In Albanian academic contexts, the parallel use of Albanian, English, Italian, and visual and algorithmic repertoires produces new forms of academic and professional expression. Digital translanguaging functions as a form of free thinking, a tool of epistemic resistance, and a knowledge-building strategy, empowering student agency and enriching understanding.

Third, technology-conscious pedagogies address the challenge of automation and the preservation of human agency. With the rise of artificial intelligence, there is a risk that technology could replace students' reflection and reasoning. Technology-conscious pedagogies require teaching to focus on critical reflection on how algorithms structure information, analyzing the digital traces left by platforms, revising and regenerating personal texts, and evaluating the process, not only the automated product (Selwyn, 2022).

The summary of these three didactic pillars is presented in the table below, helping the reader clearly see their functions and contributions to contemporary pedagogy:

Table 3. Didactic pillars of the digital age and their functions in the learning process

Didactic Pillar	Theoretical Definition	Function in the Learning Process	Contribution to Contemporary Pedagogy
Multimodality as a way of thinking	Modalities (text, image, audio, video, schematics) as materialized forms of thought, not merely supportive tools (Jewitt, 2016).	Helps students build complex meanings by materializing thought in multiple forms.	Enables assessment of cognitive processes, not just final product; develops the ability to operate in visual and interactive ecosystems.
Digital translanguaging	Fluid integration of linguistic and semiotic repertoires (García & Li Wei, 2024) as an epistemic mechanism, not merely communicative.	Allows students to use multiple languages and modalities to structure thinking and argumentation.	Creates a linguistically inclusive climate; empowers academic agency and increases precision of understanding.
Technology-conscious pedagogies	Approaches that balance automation and critical thinking, reflecting on the role of algorithms in knowledge production (Selwyn, 2022).	Focus on critical reflection, analysis of digital traces, revision of personal text, and process evaluation.	Preserves student agency, combining technology with critical thinking and the development of cognitive competencies.

Together, these pillars create a learning ecosystem in which students are not merely technology users but cognitive actors who reproduce and rearticulate knowledge. Multimodality functions as the architecture of thought, digital translanguaging as an epistemic mechanism for knowledge construction, and technology-conscious pedagogies ensure the balance between automation and human agency, contributing to the development of critical and reflective thinking in digital environments.

6. Discussion

The discussion of theoretical and applied findings shows that the digital age has not only changed the ways language is used, but also the very structure of thought. Technology is not merely a communication tool but an epistemic infrastructure that mediates the formation, transformation, and circulation of ideas. This highlights the inseparable connection between language, thought, and discourse, calling for a revision of classical didactic paradigms.

Discourse construction processes have become more non-linear and fragmented, not due to chaos, but because of new opportunities for intertwining modalities and semiotic repertoires. Students think, formulate, reformulate, and reproduce ideas through a continuous flow of symbols ranging from text to images, from audio to video, and from handwritten notes to AI-generated pre-texts. This phenomenon clearly illustrates the concept of distributed cognition (Hayles, 2019), where thought no longer occurs in isolation within the individual mind but is intertwined with digital tools, social networks, and the collective co-production of meaning.

Technology is not neutral in this process. Algorithms for information selection, parameters for text generation, and the rhythms of online communication directly influence what we think, how we think, and what we present as public or academic discourse. Digital discourse is fundamentally mediated by technological design, placing educators and students in front of the challenge of understanding the “materiality of platforms” (Kress, 2020) and its impact on thought.

Analysis of the interrelation between multimodality and digital translanguaging shows that students do not merely switch languages but also forms of thinking. Switching between Albanian and English, for example, is not only a linguistic phenomenon but also a cognitive one: each code provides distinct structure, rhythm, and metaphorical frameworks. Alternating between a school document and an interactive visualization opens two different ways of articulating knowledge, creating a hybrid discursive ecosystem where boundaries between languages, modalities, and sources of meaning are blurred.

In the context of Albanian and Balkan education, these dynamics acquire a local dimension: students bring multilingual repertoires, interweave diasporic experiences, media influences, technological tools, and transnational digital cultures. This produces a transsemiotic competence, where the ability to manage diverse sources of meaning becomes the foundation of modern academic thinking.

Digital classrooms are not simply spaces where technology is used, but laboratories of contemporary thought. The teacher acts as an epistemological designer, structuring spaces where students develop the ability to balance their cognitive agency with the intelligence of digital tools. This requires conscious pedagogy, based not only on technical skills but also on the philosophy of thinking in the age of mediated media.

Findings indicate that technology does not diminish the role of language as thought; on the contrary, it makes it more visible, materialized, and analyzable. Academic and educational discourse becomes more complex, as it is the product of dynamic interaction between the human mind and digital intelligence. This fundamental transformation demonstrates that understanding language in the digital age means understanding how thought lives within the technologies that wrap, modify, and propel it toward new forms.

Some practical recommendations for teachers and course designers are:

- To develop and adopt diversified and interactive digital learning materials, incorporating multimodality and digital literacy in every lesson.
- To use digital platforms to share materials, conduct online assessments, and create collaborative projects, motivating even less active students.

- To integrate personalized feedback and utilize digital rubrics to monitor student progress.
- To balance AI automation with critical reflection: guide students to use technology not only for the product but for the thinking process.
- To promote digital translanguaging, enriching semiotic competencies through the use of different codes and tools according to student profiles and needs.
- To standardize language usage: employ Albanian together with English where necessary, practically addressing multilingual competencies in education.

7. Conclusions

This study shows that the digital age has not merely altered communication formats but has transformed the fundamental ways of thinking and meaning-making. In this context, language no longer functions solely as a transmission tool but as a cognitive habitat, where thought lives, manifests, is constructed, and continuously renewed through interaction with technology.

First, the multimodality of digital environments gives thought a new materiality. Ideas that were once expressed only through text now take visual, auditory, and interactive forms, creating a new way of “thinking through modalities.” This development does not replace language but expands it, making the cognitive process more visible and analyzable.

Second, digital translanguaging emerges as a key mechanism in the construction of contemporary discourse. Students and teachers employ mixed repertoires in which Albanian, English, Italian, visual signs, AI algorithms, and various media formats intertwine. This reality requires education to treat translanguaging not as a deviation from norms but as an epistemic strategy that enriches thinking and knowledge production.

Third, technology—particularly artificial intelligence and its designed interfaces—appears as a co-author of thought. It helps students articulate ideas while simultaneously guiding the flow of discourse toward formats predetermined by algorithms and platforms. Therefore, modern pedagogy must develop conscious practices capable of balancing the creative potential of technology with the need for critical reflection and cognitive agency.

Fourth, digital classrooms—especially in the Albanian and Balkan context—are not merely spaces where technology and language coexist but laboratories of hybrid thinking. Students build multilingual identities, create transemiotic discourses, and develop skills to navigate knowledge in mediated environments. These processes give education a new dimension, where creativity, reflexivity, and digital competencies organically intertwine.

In conclusion, language remains the fundamental form of thought, but no longer static. It has become dynamic, interconnected, and mediated. Contemporary education is tasked not only with teaching the use of language and technology but also with fostering student awareness of the relationship between them: how technology gives thought new forms and how language gives full meaning to the digital reality.

This study presents contemporary education with a clear responsibility: to cultivate cognitive citizenship, capable of thinking within, through, and beyond the technologies that shape twenty-first-century discourse.

References

- Agha, A. (2007). *Language and social relations*. Cambridge University Press.
- Bakhtin, M. M. (1981). *The dialogic imagination: Four essays*. University of Texas Press.
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.
- Boyd, D. (2014). *It's complicated: The social lives of networked teens*. Yale University Press.
- Bucher, T. (2018). *If... then: Algorithmic power and politics*. Oxford University Press.
- Canagarajah, S. (2013). *Translingual practice: Global Englishes and cosmopolitan relations*. Routledge.
- Cazden, C. (2012). *Classroom discourse: The language of teaching and learning* (2nd ed.). Heinemann.
- Clark, A., & Chalmers, D. (1998). The extended mind. *Analysis*, 58(1), 7–19.
- Couldry, N., & Mejias, U. A. (2019). *The costs of connection: How data is colonizing human life and appropriating it for capitalism*. Stanford University Press.
- Floridi, L. (2014). *The fourth revolution: How the infosphere is reshaping human reality*. Oxford University Press.
- García, O., & Li Wei. (2014). *Translanguaging: Language, bilingualism and education*. Palgrave Macmillan.
- García, O., Johnson, S., & Seltzer, K. (2017). *The translanguaging classroom: Leveraging student bilingualism for learning*. Caslon.
- Gee, J. P. (2015). *The social mind: Language, ideology, and social practice*. Routledge.
- Gibbs, R. (2006). *Embodiment and cognitive science*. Cambridge University Press.
- Hayles, N. K. (2019). *Unthought: The power of the cognitive nonconscious*. University of Chicago Press.
- Hutchins, E. (1995). *Cognition in the wild*. MIT Press.
- Jewitt, C. (2016). *The handbook of multimodal analysis* (2nd ed.). Routledge.
- Kress, G. (2010). *Multimodality: A social semiotic approach to contemporary communication*. Routledge.
- Kress, G. (2020). *Reading images: The grammar of visual design* (latest ed.). Routledge.
- Kress, G., & van Leeuwen, T. (2021). *Reading images: The grammar of visual design* (3rd ed.). Routledge.
- Lankshear, C., & Knobel, M. (2011). *New literacies: Everyday practices and social learning*. Open University Press.

- Latour, B. (2005). *Reassembling the social: An introduction to actor-network-theory*. Oxford University Press.
- Lemke, J. (2015). *Multiplying meaning: Visual and verbal semiotics in scientific text*. Routledge.
- Li Wei. (2018). Translanguaging as a practical theory of language. *Applied Linguistics*, 39(1), 9–30.
- Noble, S. U. (2018). *Algorithms of oppression: How search engines reinforce racism*. NYU Press.
- Palfreyman, D., & al-Bataineh, A. (Eds.). (2022). *Researching translanguaging: Critical and ethnographic perspectives*. Multilingual Matters.
- Papacharissi, Z. (2015). *Affective publics: Sentiment, technology, and politics*. Oxford University Press.
- Pariser, E. (2011). *The filter bubble: What the Internet is hiding from you*. Penguin.
- Pennycook, A. (2018). *Posthumanist applied linguistics*. Routledge.
- Selwyn, N. (2022). *Should robots replace teachers? AI and the future of education*. Polity Press.
- Sfard, A. (2008). *Thinking as communicating: Human development, the growth of discourse, and mathematizing*. Cambridge University Press.
- Vygotsky, L. S. (1986). *Thought and language*. MIT Press.
- Wertsch, J. V. (1998). *Mind as action*. Oxford University Press.
- Wittgenstein, L. (1953). *Philosophical investigations*. Blackwell.

Smartphone Gyroscope-Based Analysis of Human Movement: An Open-Source Approach for iTUG Assessment

Miha Fošnarič

Chair of Biomechanics, Department of Prosthetics, Faculty of Health Sciences, University of Ljubljana, Slovenia e-mail: miha.fošnarič@zsf.uni-lj.si

Abstract

Smartphones contain high-quality gyroscopes that can capture angular velocity during human movement. Building on previous work using WebAssembly- and JupyterLite-based tools for browser-based biomechanics, this paper presents an opensource approach for instrumenting the Timed Up and Go (TUG) test using smartphone gyroscopes and the PhyPhox application. In this instrumented version (iTUG), the smartphone is attached to the lumbosacral region of the back, with the device's y-axis aligned with the longitudinal axis of the body. Rotation-rate measurements are recorded and later analyzed using open-source, browser-based Python environments. The paper outlines a measurement protocol, describes data interpretation for the phases of TUG, and discusses educational and clinical applications. Comparison is made with previous iTUG studies using accelerometry, demonstrating the viability of gyroscope-based assessment.

Keywords: biomechanics, gyroscope, iTUG, PhyPhox, smartphone sensors, WebAssembly, JupyterLite, physiotherapy.

1. Introduction

The use of smartphone sensors in biomechanics and clinical science has expanded significantly in the last decade. Modern smartphones include accelerometers, gyroscopes, magnetometers, and other sensing hardware capable of recording movement with high temporal resolution. Combined with open-source applications, these sensors enable low-cost and accessible movement analysis without specialized laboratory equipment.

In our previous paper, we introduced WebAssembly and JupyterLite as a platform for interactive biomechanics directly in a web browser, with examples based on smartphone accelerometry. This work extends that concept by focusing on gyroscope-based measurements for analyzing human movement during the Timed Up and Go (TUG) test.

The TUG test is widely used in physiotherapy, geriatrics, and rehabilitation to assess balance, functional mobility, and fall risk. Instrumented TUG (iTUG) adds sensor-based quantification. While previous smartphone-based implementations focused mostly on accelerometers (e.g., Weiss et al., 2011; Gait & Posture, <https://doi.org/10.1016/j.gaitpost.2012.02.006>) or inclination angles (Ortega-Bastidas et al., 2019), this study demonstrates how angular velocity data from gyroscopes can provide complementary insights into turning, walking stability, and transitional movements.

2. Methods

2.1 Measuring Unit Placement and Orientation

The measuring unit (smartphone) was attached on the lumbosacral region of the back, using an elastic belt or medical adhesive tape. The smartphone's y-axis was oriented along the longitudinal axis of the body, pointing upward. This ensured that rotations around the vertical axis corresponded to yaw (ω), useful for analyzing turning phases.

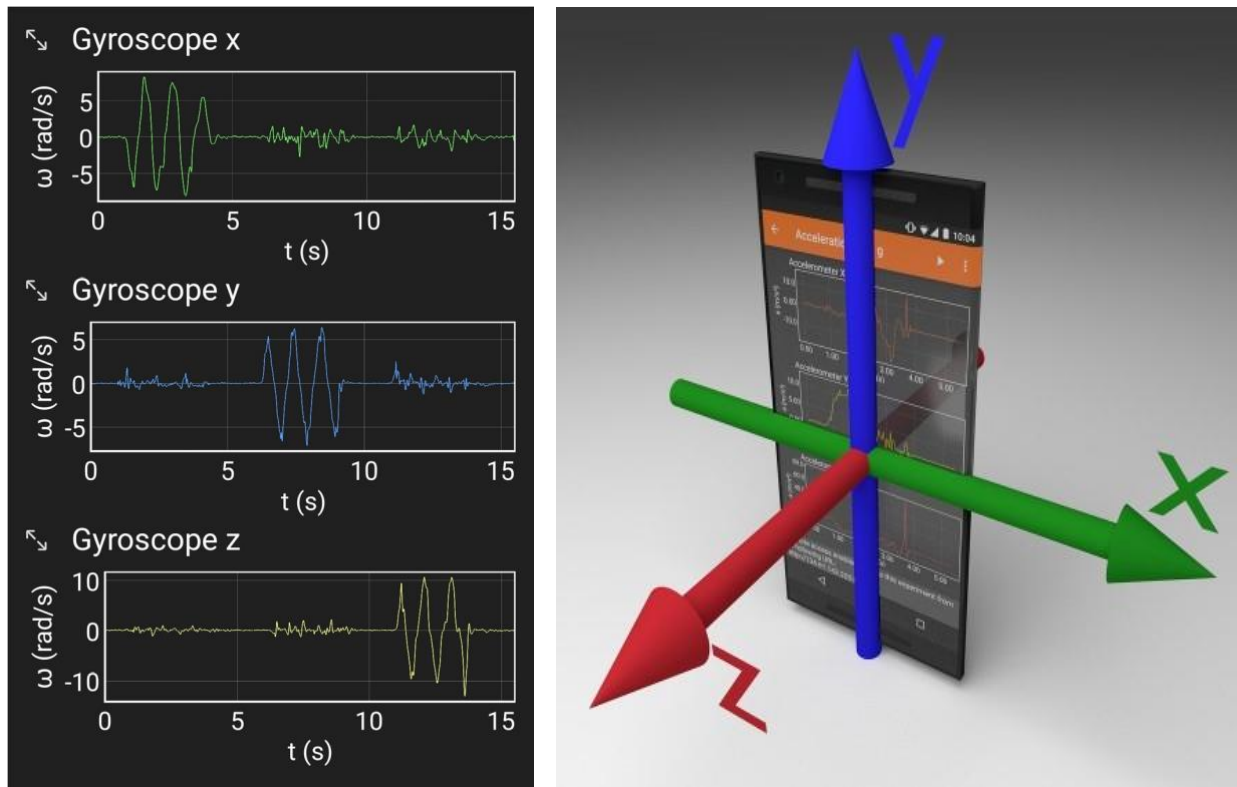


Figure 1: (a) Snapshot of PhyPhox "Rotation Rate" screen during axis-verification oscillations; (b) Definition of the phone's axes (<https://phyphox.org>).

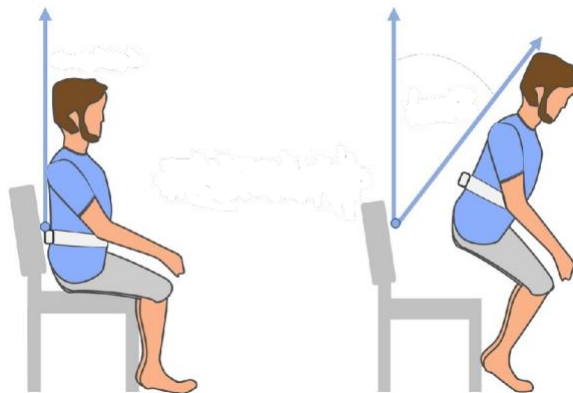


Figure 2: Position and orientation of the phone on the body (Figure to be improved).

2.2 Sensor and App Setup (PhyPhox Protocol)

Measurements were performed using PhyPhox, an open-source application developed at RWTH Aachen University.

Measurement protocol (point-by-point):

1. Open PhyPhox.
2. Select "Rotation rate" experiment.

3. Verify axes by oscillating the phone around x, y, and z (Figure 1).
4. Attach the phone to the lumbosacral region.
5. Confirm correct orientation (y-axis along body, screen facing outward).
6. Enable Remote Access
7. Open Phyphox link on another device's web browser to run and observe measurements
8. Press Start immediately before beginning the TUG test.
9. Perform the complete test without pausing.
10. Press Stop at the end of the test.
11. Export data as .csv

2.3 TUG Test Protocol and Subject Instructions

The TUG test follows a standardized sequence:

- Subject sits on a stable chair with back support.
- At the signal "Go," the subject stands up (Sit-to-Stand phase).
- Walks forward for 3 meters (Walk 1).
- Turns 180 degrees around a marked point (Mid-turn).
- Walks back to the chair (Walk 2).
- Turns again to orient toward the chair (End-turn).
- Returns to sitting position (Stand-to-Sit).

Instructions to the subject:

"Stand up from the chair, walk at your normal comfortable speed to the marker, turn around, walk back, turn, and sit down again."
 "Do not use your hands to push off unless this reflects your typical ability."

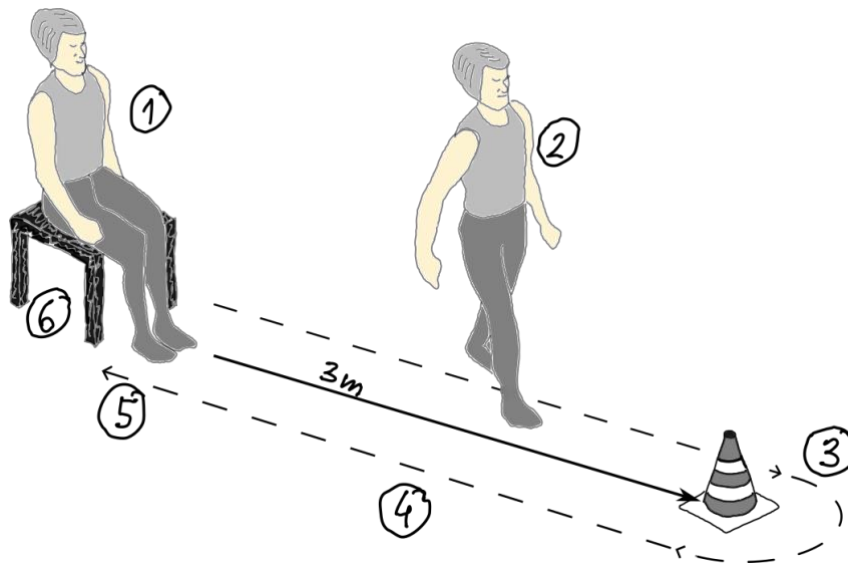


Figure 3: TUG test with the phases indicated.

3. Results

3.1 Smartphones as measuring units

Angular velocity signals (ω , ω_y , ω_z) were recorded throughout the TUG test (Figure 4).

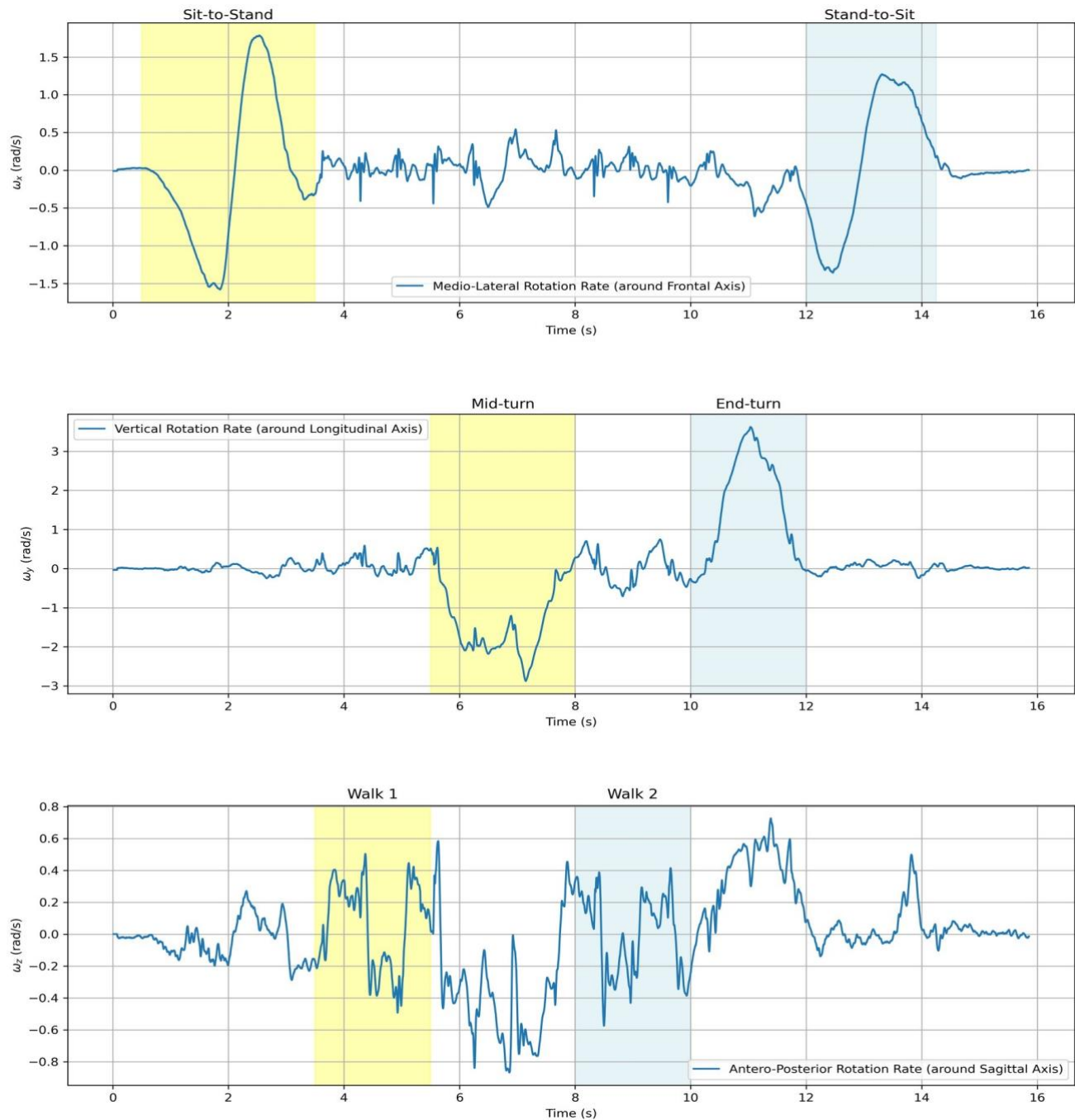


Figure 4. Time series of ω_x , ω_y , and ω_z obtained from gyroscope measurements during the TUG test. The distinct movement phases are annotated.

Distinct movement phases were identifiable in the gyroscope signals:

1. Sit-to-Stand: Moderate angular activity in x and z axes due to trunk flexion/extension.
2. Walk 1: Relatively periodic oscillatory patterns corresponding to gait cycles.
3. Mid-Turn: Pronounced changes especially in ω_y (yaw), reflecting rotation around the vertical axis.
4. End-Turn: Second rotational peak in ω_y .
5. Stand-to-Sit: Lower-frequency trunk orientation changes.
6. Walk 2: Periodic gait oscillations again.

Initial analysis showed that gyroscope-based segmentation of turning phases is highly robust, often clearer than accelerometer-based segmentation reported in previous literature.

4. Discussion

4.1 Advantages of Gyroscope-Based iTUG

Turning performance is strongly related to fall risk and functional mobility. Gyroscopes measure angular velocity directly, making them particularly suited for analyzing:

- turning speed,
- turning smoothness,
- transitions between walking and turning,
- trunk stability.

Compared with accelerometers, gyroscopes:

- provide cleaner signals for rotational events,
- require less preprocessing for identifying turns, • are less sensitive to linear impacts or sensor shifts.

This complements earlier accelerometer-based iTUG approaches (e.g., Weiss et al., 2011), which primarily focus on step regularity, acceleration peaks, and total test duration.

4.2 Educational Applications

Smartphone-based assessment enables students to:

- perform movement analysis without laboratory hardware,
- understand sensor coordinate frames, • learn signal processing methods in real time,
- perform data collection in any environment.

Combined with JupyterLite, browser-based analysis allows entire classroom sessions without installation barriers. **4.3**

Clinical Applications

Clinicians can:

- quantify TUG components beyond total time,
- track patient progress using inexpensive tools,
- use gyroscope data to estimate turning time and turning velocity,
- integrate smartphone-based assessments into telehealth.

Because PhyPhox is open-source and widely available, such measurements can be disseminated broadly.

4.4 Limitations

- Signal drift and sensor noise may affect orientation estimates.
- Smartphone attachment stability is critical.
- Gyroscope-only solutions cannot estimate linear displacement without integration.
- Different phones may have different sensor quality.

Nevertheless, for rotational analysis, gyroscopes offer a robust and low-cost solution.

5. Conclusions

This paper demonstrates how smartphone gyroscopes and an open-source application (PhyPhox) can be used to instrument the TUG test. Attaching the phone to the lumbosacral region and analyzing the recorded rotation rates enables clear segmentation of movement phases, especially turning. When combined with browser-based analysis platforms such as JupyterLite, this method offers a low-cost, accessible, and reproducible approach ideal for physiotherapy, biomechanics education, and clinical assessment.

Future work may include automated phase detection algorithms, integration with video analysis, and machine-learning-based classification of mobility impairments.

Acknowledgment

The author thanks colleagues and students at the University of Ljubljana for testing and feedback, and acknowledges the opensource communities of Jupyter, Pyodide, Phyphox, and the W3C WebAssembly Community Group.

References

- Ortega-Bastidas P, Aqueveque P, Gómez B, Saavedra F, Cano-de-la-Cuerda R. Use of a single wireless IMU for the segmentation and automatic analysis of activities performed in the 3-m timed up & go test. *Sensors*. 2019 Apr 6;19(7):1647.
- Weiss, A., Herman, T., Plotnik, M., Brozgol, M., Maidan, I., Giladi, N., & Hausdorff, J. M. (2011). Can an accelerometer enhance the utility of the Timed Up & Go test when evaluating patients with Parkinson's disease? *Gait & Posture*, 36(2), 197–201. <https://doi.org/10.1016/j.gaitpost.2012.02.006>
- Haas, A., Rossberg, A., Schuff, D., Titzer, B., Holman, M., Gohman, D., Wagner, L., Zakai, A., & Bastien, J. (2017). Bringing the Web up to speed with WebAssembly. *Proceedings of the 38th ACM SIGPLAN Conference on Programming Language Design and Implementation (PLDI)*, 185–200.
- Karvekar, S., Abdollahi, M., & Rashedi, E. (2019). A data-driven model to identify fatigue level based on the motion data from a smartphone. *BioRxiv*, 796854. <https://doi.org/10.1101/796854>
- Kluyver T, Ragan-Kelley B, Pérez F, Granger B, Bussonnier M, Frederic J, Kelley K, Hamrick J, Grout J, Corlay S, Ivanov P. (2016). Jupyter Notebooks—a publishing format for reproducible computational workflows. In *Positioning and power in academic publishing: Players, agents and agendas* (pp. 87-90). IOS press.
- Morin, A., Urban, J., & Sliz, P. (2012). A quick guide to software licensing for the scientist-programmer. *PLoS Computational Biology*, 8(7), e1002598. [doi:10.1371/journal.pcbi.1002598](https://doi.org/10.1371/journal.pcbi.1002598)
- Perens, B. (1999). The open source definition. In *Open Sources: Voices from the Open Source Revolution* (pp. 171–188). O'Reilly Media.
- Project Jupyter (2025). *JupyterLite documentation*. Available: <https://jupyterlite.readthedocs.io/>
- Pyodide project. (2025). *Python distribution for the browser and Node.js based on WebAssembly*. Available: <https://pyodide.org>
- Staacks, S., Hütz, S., Heinke, H., & Stampfer, C. (2018). Advanced tools for smartphone-based experiments: phyphox. *Physics education*, 53(4), 045009. Available: <https://phyphox.org/>
- Stallman, R. (2002). *Free Software, Free Society: Selected Essays of Richard M. Stallman*. GNU Press.
- Stampfer, C., Heinke, H., & Staacks, S. (2020). A lab in the pocket. *Nature Reviews Materials*, 5(3), 169-170.
- von Hippel, E., & von Krogh, G. (2003). Open source software and the “private-collective” innovation model: Issues for organization science. *Organization Science*, 14(2), 209–223.
- WebAssembly Community Group. (2025). *WebAssembly specification*. Available: <https://webassembly.org>
- W3C (2025). *WebAssembly Working Group*. Available: <https://www.w3.org/wasm/>

The Impact of socio-Emotional Education on students' academic performance

Msc. Parajsa Myftiu, Msc. Begzana Kazazi

Department of Education, Faculty of Education, University "Aleksandër Moisiu", Albania

Corresponding Author: myftiuparajsa@gmail.com, begzana.kazazi@gmail.com

Abstract

In the contemporary educational landscape, socio-emotional education (SEE) has emerged as a critical factor for enhancing students' academic achievement and holistic development. Beyond cognitive learning, socio-emotional competencies significantly influence motivation, engagement, and well-being. This study examines the impact of SEE on students' academic performance, identifying effective pedagogical practices. Using a mixed-methods design, data were collected through student questionnaires, teacher interviews, and a review of international literature. Preliminary findings indicate that students engaged in socio-emotional learning programs demonstrate improved academic performance, increased motivation, and greater classroom participation. The study provides practical recommendations for educators and policymakers to integrate socio-emotional learning systematically into daily teaching practices, fostering environments conducive to both personal growth and academic success.

Keywords: socio-emotional education; academic performance; student motivation; emotional regulation; classroom engagement; holistic development.

1. Introduction

Education in the twenty-first century requires a multidimensional approach that integrates cognitive, emotional, and social learning. While traditional education systems have historically emphasized academic content, such as mathematics, science, and language mastery, they have often overlooked the development of students' emotional and social competencies. As a result, students may excel in academic assessments yet struggle with motivation, engagement, stress management, and interpersonal relationships. Socio-emotional education (SEE) addresses these gaps by fostering students' emotional awareness, self-regulation, empathy, and social skills, which are essential for both personal growth and academic success.

Research increasingly demonstrates that socio-emotional competencies are not merely complementary to academic learning, but foundational for it. Bandura's (1997) social cognitive theory highlights the role of self-efficacy in learning, showing that students who believe in their capabilities are more likely to engage persistently in tasks and overcome challenges. Similarly, Goleman's (1995) framework of emotional intelligence emphasizes that self-awareness, self-management, and social awareness directly influence motivation, interpersonal effectiveness, and decision-making. The Collaborative for Academic, Social, and Emotional Learning (CASEL, 2020) further operationalizes these ideas, identifying five core competencies, self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, that provide educators with concrete strategies for classroom integration.

In practical terms, socio-emotional education can take many forms. Reflective journaling encourages students to identify and articulate their emotions, recognize strengths and weaknesses, and develop strategies for improvement. Cooperative learning activities, such as group projects in literature or science, allow students to practice communication, negotiation, and problem-solving skills, reinforcing social awareness and relationship competencies. Role-playing exercises, debates, and peer-feedback sessions provide opportunities for responsible decision-making and ethical reasoning, allowing students to apply socio-emotional skills in meaningful, real-world contexts. Research indicates that such activities enhance not only emotional intelligence but also cognitive engagement and academic performance (Zins et al., 2004; Hattie, 2009).

The importance of socio-emotional education is particularly pronounced in the Balkan context. Secondary schools in this region often place a strong emphasis on academic achievement and standardized testing, creating environments where students may experience significant performance pressure. This focus on grades and exam results, while promoting mastery of content, can inadvertently undermine motivation, engagement, and well-being. Integrating SEE provides students with strategies to manage stress, maintain focus, and navigate social interactions effectively. For example, students participating in structured role-playing exercises reported increased confidence in presenting ideas and collaborating with peers, while those engaged in reflective journaling demonstrated improved emotional regulation during high-stakes assessments.

Furthermore, SEE supports the development of **inclusive learning environments**. Students with varying levels of prior achievement, socio-economic backgrounds, or personal challenges benefit from targeted socio-emotional interventions. Teachers who model emotional regulation, provide constructive feedback, and facilitate cooperative problem-solving create classrooms where all students can participate actively, feel valued, and develop both academic and social competencies.

By integrating SEE systematically into the curriculum, educators foster **holistic student development**, preparing learners not only for academic success but also for personal growth, social responsibility, and lifelong learning. This study, therefore, investigates how socio-emotional education can be implemented in secondary schools, particularly within the Balkan context and examines its impact on students' motivation, engagement, and overall performance. By exploring practical strategies and contextual applications, the study aims to provide insights that can guide educators and policymakers in creating supportive and effective learning environments that balance academic rigor with socio-emotional development.

2. Literature Review

2.1 Theoretical Foundations

Socio-emotional learning (SEL) is grounded in several educational theories. Daniel Goleman's emotional intelligence framework emphasizes self-awareness, self-management, social awareness, relationship skills, and responsible decision-making as key for personal and academic success (Goleman, 1995).

Bandura's social cognitive theory highlights **self-efficacy** as a mechanism linking socio-emotional competencies to academic performance. Students with high self-efficacy demonstrate greater motivation, persistence, and achievement (Bandura, 1997).

Vygotsky's sociocultural theory emphasizes the role of social interaction in cognitive development, while Dewey's experiential learning theory stresses reflective practice and emotional engagement in meaningful learning (Vygotsky, 1978; Dewey, 1938).

The CASEL framework operationalizes SEL into five competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making (CASEL, 2020). OECD and UNESCO advocate for integrating SEL into curricula to prepare students for contemporary challenges (OECD, 2015, 2018; UNESCO, 2016, 2021).

2.2 Socio-Emotional Skills and Academic Performance

Empirical research consistently demonstrates a strong positive correlation between socio-emotional skills and academic achievement. Socio-emotional learning (SEL) equips students with the ability to understand and manage their emotions, establish and maintain positive relationships, make responsible decisions, and demonstrate persistence and resilience in academic tasks (Bandura, 1997; Goleman, 1995; CASEL, 2020). These competencies not only enhance personal well-being but also contribute directly to classroom engagement, motivation, and measurable learning outcomes.

Emotional Regulation

Emotional regulation is a foundational SEL competency that allows students to control impulses, manage stress, and respond adaptively to challenges. In practice, a 10th-grade science class in a Balkan secondary school incorporated mindfulness exercises and structured reflective journaling. Students documented moments of frustration during experiments, recognized triggers for anxiety, and applied strategies such as deep breathing and goal-setting to overcome obstacles. Teachers reported that students who consistently practiced emotional regulation were more focused during lab activities, persisted through challenging tasks, and demonstrated higher quality work. This aligns with research indicating that students who manage their emotions effectively are better able to concentrate, process information, and engage actively with content (Zins et al., 2004).

Self-Efficacy and Goal-Directed Behavior

Self-efficacy, the belief in one's capacity to succeed is central to academic achievement. According to Bandura (1997), students with strong self-efficacy set realistic yet challenging goals, monitor their progress, and persist in the face of difficulties. In a mathematics classroom in a Balkan context, students were encouraged to maintain progress charts for weekly problem sets and reflect on strategies for improvement. Students with higher self-efficacy demonstrated greater persistence, attempted more complex problems, and achieved higher accuracy. Conversely, students with lower self-efficacy often abandoned tasks prematurely, highlighting the critical role of fostering confidence and self-belief through SEL programs.

SEL interventions, such as goal-setting workshops, peer mentoring, and reflective feedback, can strengthen self-efficacy across diverse academic domains. For example, literature classes that integrate personal goal reflection allow students to track their interpretative and analytical skills, reinforcing both self-awareness and motivation.

Social Awareness and Collaboration

Social awareness enables students to recognize and empathize with the emotions, perspectives, and needs of others. In collaborative projects, students who practice social awareness listen attentively, value differing opinions, and contribute constructively to group tasks. In a history class analyzing regional conflicts, students assumed roles representing various historical actors, discussing ethical and cultural perspectives. Students with higher social awareness facilitated balanced discussions, resolved disagreements amicably, and enriched the overall quality of group presentations.

These skills not only improve academic performance but also foster a positive classroom climate. Students learn to navigate complex interpersonal dynamics, mediate conflicts, and support peer learning, competencies essential for holistic education and lifelong social success. In the Balkan educational context, where classrooms often have large student-to-teacher ratios, social awareness plays a critical role in maintaining effective collaboration and preventing social exclusion.

Relationship Skills

Relationship skills include communication, teamwork, conflict resolution, and leadership. In practical classroom settings, students develop these skills through structured activities such as peer feedback sessions, cooperative problem-solving tasks, and project-based learning. For example, during a literature discussion, students worked in small groups to analyze a poem. They practiced articulating their interpretations, negotiating differing viewpoints, and offering constructive criticism. Teachers observed that students with well-developed relationship skills facilitated inclusive participation, minimized conflict, and elevated the quality of collective outputs.

Relationship skills also have broader implications for academic engagement. Students who feel socially connected and supported are more likely to participate actively, seek help when needed, and persist in challenging tasks. In Balkan schools, promoting relationship skills is particularly important for integrating students from diverse socio-economic or cultural backgrounds, ensuring equitable participation and fostering a collaborative learning environment.

Responsible Decision-Making

Responsible decision-making involves evaluating options, considering ethical implications, and selecting actions that benefit both the individual and the group. In a classroom debate on environmental policies, students applied responsible decision-making by reflecting on evidence, considering multiple perspectives, and reaching balanced conclusions. This competency integrates self-awareness, self-management, social awareness, and relationship skills, illustrating how SEL creates a cohesive framework for cognitive and emotional functioning.

Structured SEL programs have shown that fostering responsible decision-making enhances problem-solving, reduces impulsive behavior, and encourages ethical reasoning. In Balkan classrooms, where students often face high academic pressure, cultivating this competency supports measured responses to challenges, improved time management, and collaborative decision-making in group projects.

Impact on Motivation and Academic Outcomes

The combined effect of these socio-emotional competencies is a measurable improvement in motivation, engagement, and academic performance. Meta-analyses indicate that structured SEL programs lead to better classroom behavior, more positive attitudes toward learning, and higher achievement scores (Zins et al., 2004; Hattie, 2009).

In a Balkan secondary school implementing a six-week SEL program, students engaged in role-playing, reflective journaling, and cooperative projects scored on average 15–20% higher in group assignments and demonstrated enhanced participation compared to peers not enrolled in the program. Teachers reported that students were more willing to take intellectual risks, collaborate effectively, and persist through challenging tasks. These findings confirm that socio-emotional skills **complement rather than detract from academic instruction**, supporting both cognitive and personal development.

2.3 Implementation Challenges and Best Practices (Expanded Version)

Implementing socio-emotional learning (SEL) in secondary schools presents both challenges and opportunities. While the benefits of SEL for student motivation, engagement, and academic achievement are well documented, practical integration into daily classroom practice requires thoughtful planning, resources, and teacher support.

Implementation Challenges

Several challenges can hinder the effective adoption of SEL programs:

1. **Limited Teacher Training:** Many teachers have limited exposure to SEL theory and practical strategies. Without adequate training, they may struggle to facilitate activities such as reflective journaling, role-playing, or cooperative group projects effectively. For example, in a Balkan secondary school, some teachers reported difficulty in guiding students during peer-feedback sessions due to unfamiliarity with structured feedback techniques, which initially led to superficial participation rather than meaningful engagement.
2. **High Curriculum Demands:** Teachers often face pressure to cover extensive academic content, leaving limited time for SEL activities. In subjects such as mathematics or sciences, where curricula are dense and assessment-driven, allocating time for socio-emotional exercises can be challenging. Without careful planning, SEL activities may be perceived as optional or supplementary, reducing their impact.
3. **Inconsistent Institutional Support:** Successful SEL implementation requires support from school leadership and educational authorities. Lack of policy guidance, insufficient resources, and absence of professional development opportunities can hinder teachers' ability to integrate SEL systematically. In some Balkan schools, inconsistent administrative support led to sporadic SEL practices, limiting their effectiveness and sustainability.
4. **Cultural and Contextual Barriers:** SEL strategies must be adapted to fit local cultural norms, classroom dynamics, and student needs. Teachers need to balance traditional academic expectations with socio-emotional activities, ensuring that SEL integration respects existing values and practices while promoting holistic student development.

Best Practices for Effective SEL Implementation

Despite these challenges, research and practical experience indicate several best practices for embedding SEL successfully into classroom instruction:

1. **Embedding SEL in Daily Instruction:** Rather than treating SEL as a separate subject, teachers can incorporate socio-emotional activities into regular lessons. For example, in literature classes, discussing characters' emotions and motivations

allows students to practice empathy and self-awareness while analyzing texts. Similarly, science labs can include collaborative problem-solving exercises that foster teamwork and responsible decision-making.

2. **Cooperative Learning and Peer Interaction:** Structured group activities, such as projects or role-playing, promote social awareness, relationship skills, and collaborative problem-solving. In a Balkan history classroom, students worked in teams to simulate historical debates, applying ethical reasoning and negotiation skills. These activities enhanced engagement, reduced conflicts, and encouraged students to value diverse perspectives.
3. **Reflective Dialogue:** Encouraging students to reflect on their emotional experiences, learning processes, and social interactions reinforces self-awareness and self-management. Practices such as reflective journaling, guided discussions, and post-activity debriefings help students internalize lessons and apply them in future tasks.
4. **Formative Feedback and Positive Reinforcement:** Teachers play a crucial role in monitoring students' socio-emotional growth. Providing timely feedback, recognizing improvements, and modeling appropriate emotional responses enhances learning outcomes. For instance, teachers in Balkan classrooms who praised effective teamwork or constructive conflict resolution observed higher student motivation and increased willingness to participate.
5. **Teacher Modeling of Emotional Regulation:** Educators serve as role models for socio-emotional behavior. Demonstrating calm responses to classroom challenges, respectful communication, and problem-solving strategies teaches students how to handle their emotions and interact constructively with peers. Teachers who consistently model these behaviors contribute to a supportive classroom climate that encourages engagement and trust.

Impact in Balkan Classrooms

In the Balkan context, integrating socio-emotional learning (SEL) has shown significant benefits in improving **classroom climate, equity, and student motivation**. Students participating in SEL activities reported feeling more **included, respected, and capable of handling academic pressures**, which reflects the development of self-awareness, self-management, and social competencies.

Teachers emphasized that **consistent facilitation, structured guidance, and modeling of emotional regulation** were critical to successful implementation. For example, in Albanian secondary schools, students involved in cooperative projects in literature or history classes demonstrated **enhanced collaboration, reduced interpersonal conflict, and greater confidence in presenting ideas**. Similarly, role-playing exercises and guided discussions enabled students to practice responsible decision-making and empathy, reinforcing skills that directly contribute to classroom engagement and academic performance.

The adoption of SEL in Balkan classrooms also supports **inclusive education**, ensuring that students from diverse **socio-economic backgrounds** or varying academic levels can actively participate and benefit from structured learning activities. In practice, this meant that students who were previously less confident in group activities were able to contribute meaningfully, express their perspectives, and feel valued, leading to **improved peer relationships and equitable participation**.

Moreover, integrating SEL into everyday teaching allows academic learning to be **complemented by emotional and social growth**, creating a **holistic educational approach**. This aligns with international best practices outlined by CASEL, OECD, and UNESCO, which emphasize the importance of developing emotional intelligence, social skills, and responsible decision-making alongside traditional cognitive learning. In the Balkan context, these strategies respect **local educational traditions** while addressing contemporary challenges, such as high performance pressure, classroom overcrowding, and diverse student needs.

For example, a six-week SEL program implemented in three secondary schools in Albania included **reflective journaling, peer feedback, cooperative projects, and teacher-guided discussions**. Observations and student questionnaires indicated **noticeable improvements in engagement, motivation, and conflict resolution**, demonstrating that SEL not only supports academic outcomes but also contributes to a positive classroom culture.

In conclusion, the **Balkan experience** illustrates that systematic SEL integration fosters classrooms that are **emotionally safe, socially inclusive, and academically stimulating**. By promoting self-awareness, empathy, collaboration, and ethical decision-making, SEL equips students with essential skills for both academic success and personal growth, preparing them to navigate complex social and educational environments.

3. Context of the Study / Educational Context

The study focuses on secondary schools in the Balkan region, where traditional education systems place a strong emphasis on academic achievement and standardized testing. While this focus ensures mastery of core subjects such as mathematics, languages, and sciences, it often overlooks the socio-emotional development of students. Adolescents in these settings frequently face high academic pressures, which can lead to stress, anxiety, decreased motivation, and, in some cases, disengagement from learning activities (OECD, 2018; UNESCO, 2021). These challenges are particularly evident during transitions between school levels, exam periods, and high-stakes assessments.

Integrating socio-emotional learning (SEL) into classrooms addresses these challenges by supporting students' resilience, self-regulation, empathy, and interpersonal skills. Teachers in the region have begun incorporating SEL practices within their standard curricula through structured activities, cooperative learning projects, peer discussions, and reflective exercises. For example, a case study in a 10th-grade classroom demonstrated that students who participated in weekly reflective journaling exercises developed higher self-awareness, improved emotional regulation, and greater confidence in collaborative tasks. Similarly, cooperative problem-solving activities across subjects such as history and biology have enhanced students' social awareness, teamwork skills, and responsible decision-making.

The integration of SEL aligns with international frameworks, including CASEL's five core competencies, self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, which have been shown to improve academic engagement and achievement (CASEL, 2020). In the Balkan context, educators often embed SEL principles directly into subject lessons rather than teaching them as a separate course. For instance, language teachers may facilitate peer discussions about ethical dilemmas or literary characters' emotions to foster empathy and perspective-taking, while science teachers might include cooperative lab experiments that encourage teamwork and problem-solving.

Beyond classroom activities, school culture and teacher-student relationships play a crucial role in socio-emotional development. Schools that emphasize supportive interactions, constructive feedback, and positive reinforcement create emotionally safe environments that allow students to take intellectual risks and engage more deeply in learning. Teacher modeling of emotional regulation, conflict resolution, and effective communication further reinforces SEL outcomes. Research indicates that students in classrooms with strong emotional support exhibit higher levels of motivation, persistence, and academic performance (Bandura, 1997; Zins et al., 2004).

Moreover, socio-emotional education in the Balkan context contributes to the development of skills necessary for lifelong learning and social integration. As students navigate complex social environments within and outside school, SEL equips them with strategies to manage stress, resolve conflicts, and collaborate effectively. By combining academic rigor with socio-emotional support, Balkan schools aim to prepare students not only for exams but also for personal growth, responsible citizenship, and success in higher education and the labor market.

In summary, the educational context in the Balkans presents both challenges and opportunities for socio-emotional education. While traditional curricula emphasize academic achievement, integrating SEL provides a balanced approach that enhances students' motivation, engagement, and overall well-being. Structured SEL activities, supportive classroom climates, and teacher modeling ensure that students develop essential emotional and social competencies alongside academic skills, fostering holistic development that aligns with international best practices while remaining sensitive to local cultural and educational traditions.

4. Research Methodology (Revised for Albanian Context)

4.1 Research Design

This study employed a **mixed-methods research design**, combining quantitative and qualitative approaches to provide a comprehensive understanding of the impact of socio-emotional learning (SEL) on students' academic performance and classroom engagement. This design was chosen to capture measurable outcomes, such as changes in motivation and academic performance, alongside in-depth insights into students' experiences and teachers' perspectives in Albanian secondary schools.

4.2 Participants

The study involved **50 secondary school students** (grades 9–11) and **12 teachers** from **three selected secondary schools in Albania**, chosen based on voluntary participation and prior involvement in SEL activities.

- **Students:** The student sample included participants from diverse academic backgrounds and varying socio-economic contexts within Albania, ensuring a representative view of the impact of SEL. Informed consent was obtained from all students and their guardians.
- **Teachers:** The teacher sample included educators from literature, mathematics, and social sciences. All had prior experience with SEL strategies or willingness to integrate socio-emotional activities into their classrooms. Teachers provided insights into effective practices and challenges specific to the Albanian educational context.

By focusing on a smaller number of schools, the study allowed for more **in-depth observation and qualitative insights**, while still collecting sufficient data to analyze trends in SEL implementation and its effects on student outcomes.

4.3 Data Collection Methods

1. **Student Questionnaires:** Students completed structured questionnaires assessing engagement in SEL activities, classroom participation, motivation, and perceived academic performance. Likert-scale and open-ended questions were included to capture both quantitative and qualitative perspectives.
2. **Teacher Interviews:** Semi-structured interviews explored teachers' classroom strategies, challenges in implementing SEL, student behavior, and perceptions of effectiveness. Interviews provided detailed contextual information about SEL integration in Albanian classrooms.
3. **Classroom Observations:** Selected lessons in the three schools were observed to examine student interactions, participation, and application of socio-emotional skills in real-time. Observations helped triangulate findings from questionnaires and interviews.

All instruments were pilot-tested to ensure clarity, relevance, and suitability for the Albanian context.

4.4 Data Analysis

- **Quantitative Data:** Student questionnaire responses were analyzed using descriptive statistics (means, standard deviations) and inferential analyses (correlation analysis) to examine relationships between SEL engagement and academic outcomes.
- **Qualitative Data:** Teacher interviews and observation notes were analyzed thematically to identify patterns, challenges, and best practices. Key themes included classroom engagement, implementation barriers, and effective instructional strategies.

- **Integration of Findings:** Quantitative and qualitative data were triangulated to provide a robust understanding of how SEL influences motivation, engagement, and academic performance in the Albanian secondary school context.

4.5 Ethical Considerations

All procedures adhered to ethical standards. Participation was voluntary, and informed consent was obtained from students and guardians. Confidentiality and anonymity were ensured, and participants could withdraw at any time without penalty.

5. Findings

- **Student outcomes:** Participants engaged in SEL programs reported higher motivation, improved focus, and greater confidence.
- **Teacher observations:** Enhanced peer collaboration, positive classroom climate, and increased student participation.
- **Practical observation:** Activities like role-playing, reflective journals, and cooperative projects positively impacted engagement and learning outcomes.

6. Tables and Figure

Table 1. Student Questionnaire Results

SEL Competency	Number of Questions	Mean Score (1–5)	% Reporting Improvement
Self-awareness	5	4.2	78%
Self-management	6	4.0	75%
Social awareness	4	4.3	82%
Relationship skills	5	4.1	80%
Responsible decision-making	3	4.0	77%

Interpretation of Table 1 – Student Questionnaire Results

Table 1 summarizes the responses of students regarding their engagement and improvement in five key socio-emotional learning (SEL) competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making.

Self-Awareness

Students scored an average of **4.2 out of 5** on self-awareness, with **78%** reporting improvement. This indicates that most students have become more conscious of their emotions, strengths, and areas for growth. For example, reflective journaling activities in classrooms allowed students to identify moments of stress or anxiety during group projects and recognize strategies to manage these feelings. Higher self-awareness supports better emotional regulation and academic confidence.

Self-Management

Self-management received a mean score of **4.0**, with **75%** of students noting improvement. This suggests that students are learning to regulate their emotions and behaviors effectively, especially in challenging tasks. For instance, during science experiments or problem-solving exercises, students practiced persistence, time management, and coping strategies to overcome frustration. This competency directly supports academic engagement and task completion.

Social Awareness

Social awareness had the highest mean score (**4.3**) and the highest percentage of reported improvement (**82%**). Students are increasingly able to understand others' perspectives and demonstrate empathy. Activities such as group projects, debates, and discussions in literature and history classes helped students consider peers' viewpoints, leading to more cooperative and respectful interactions. This reflects the importance of collaborative learning in enhancing SEL.

Relationship Skills

Relationship skills scored **4.1**, with **80%** reporting improvement. This demonstrates growth in teamwork, communication, and conflict resolution. Students participating in cooperative projects learned to negotiate differing opinions, provide constructive feedback, and collaborate effectively, resulting in improved group dynamics and classroom engagement.

Responsible Decision-Making

Responsible decision-making scored **4.0**, with **77%** of students noting improvement. This shows that students are developing the ability to make thoughtful and ethical choices. Classroom exercises such as role-plays, problem-solving scenarios, and debates encouraged students to apply self-awareness, self-management, and social skills when evaluating options and making decisions.

Overall Interpretation

The table clearly indicates that **all five SEL competencies show high levels of student engagement and improvement**, with mean scores ranging from 4.0 to 4.3 and improvement percentages between 75% and 82%. These results suggest that structured SEL activities are effective in enhancing students' socio-emotional skills, which are closely linked to motivation, classroom engagement, and academic performance.

abstract concepts, but actionable abilities that, when practiced consistently, lead to tangible improvements in both personal growth and academic outcomes.

7. Discussion

The findings of this study provide strong support for prior research indicating that socio-emotional learning (SEL) positively influences student motivation, engagement, and academic outcomes. Consistent with Bandura's self-efficacy theory (1997), the development of socio-emotional competencies enhances students' belief in their ability to succeed, thereby promoting persistence, resilience, and goal-directed behavior. When students feel capable of managing their emotions and navigating social interactions, they approach academic tasks with greater confidence and commitment, which directly contributes to improved learning outcomes.

The results also highlight the practical applicability of CASEL's framework. By integrating the five core competencies: self-awareness, self-management, social awareness, relationship skills, and responsible decision-making, teachers are equipped with concrete strategies to foster both emotional and cognitive growth. For example, structured activities such as reflective journaling, peer feedback sessions, and role-playing exercises not only enhance emotional intelligence but also improve collaboration, critical thinking, and problem-solving skills in academic contexts. These practices demonstrate that SEL can be embedded seamlessly into existing curricula without compromising academic rigor.

Furthermore, the study underscores the importance of systemic support as advocated by international organizations such as OECD and UNESCO. Policies and frameworks that recognize socio-emotional development as an integral component of education provide guidance for schools, teacher training programs, and curriculum designers. For instance, the OECD's Education 2030 framework emphasizes competencies that prepare students for complex and uncertain futures, highlighting the need for emotional regulation, adaptability, and interpersonal skills alongside traditional academic knowledge. Similarly, UNESCO's Reimagining Our Futures Together report (2021) promotes education that nurtures the whole child, including social and emotional development, which aligns closely with the practices observed in Balkan secondary schools.

In the context of the Balkans, the study revealed that while traditional education systems heavily emphasize academic achievement and standardized testing, students who engaged in SEL activities exhibited enhanced classroom participation, increased motivation, and improved problem-solving abilities. For example, during group projects in history and literature classes, students who applied social awareness and relationship skills were able to mediate conflicts, integrate diverse perspectives, and complete assignments more effectively. Teachers reported that students who consistently practiced self-management strategies, such as stress regulation during exams or time management in projects, demonstrated higher academic resilience and persistence. These findings suggest that SEL not only supports emotional well-being but also mitigates the adverse effects of academic pressure prevalent in the region.

The discussion also highlights the interplay between individual competencies and collective classroom dynamics. Students' self-awareness and self-management contribute to a more positive classroom climate, while social awareness and relationship skills enhance peer interactions and cooperative learning. Responsible decision-making ensures that students make ethical and thoughtful choices, reinforcing a culture of respect and accountability. Together, these competencies create a **feedback loop** in which improved socio-emotional skills foster engagement and motivation, which in turn enhance academic performance.

Moreover, the study provides evidence that SEL can address disparities in student achievement. Students who initially showed low motivation or limited engagement benefited significantly from targeted socio-emotional interventions. This suggests that SEL has the potential to support inclusive education, enabling all students to access opportunities for academic and personal growth regardless of prior achievement levels or socio-economic background.

In conclusion, the findings reinforce the growing consensus in educational research: socio-emotional learning is not ancillary but central to student success. The integration of SEL strategies, guided by CASEL's competencies and supported by OECD and UNESCO frameworks, equips educators with practical tools to create emotionally supportive, engaging, and academically rigorous learning environments. By fostering students' emotional intelligence alongside cognitive skills, schools can promote holistic development, resilience, and lifelong learning, ultimately preparing students to thrive in both academic and real-world settings.

8. Conclusion

The findings of this study provide compelling evidence that socio-emotional education (SEE) significantly enhances academic performance, motivation, and classroom engagement. By developing emotional awareness, self-regulation, social awareness, relationship skills, and responsible decision-making, students acquire critical competencies that allow them to navigate academic tasks and personal challenges more effectively.

Integrating SEL into daily classroom instruction fosters a **supportive, inclusive, and motivating learning environment**. In Albanian secondary schools, students who participated in structured SEL activities including reflective journaling, cooperative projects, role-playing exercises, and guided peer feedback demonstrated notable improvements in persistence, task completion, collaboration, and overall engagement. Teachers observed that students were more confident in presenting ideas, better at managing conflicts, and more willing to participate in class discussions. These results underscore the importance of embedding SEL within the standard curriculum rather than treating it as an optional add-on.

From a theoretical perspective, these outcomes align with Bandura's (1997) self-efficacy theory, which emphasizes that students who believe in their capabilities are more likely to persist and achieve academically. Goleman's (1995) framework of emotional intelligence

further explains how competencies such as self-awareness and emotional regulation enhance students' ability to manage stress, maintain focus, and interact positively with peers. The CASEL framework provides actionable strategies for integrating these competencies into classroom practice, while OECD and UNESCO emphasize the systemic value of socio-emotional development as a core component of modern education, preparing students for complex and uncertain futures.

The study also highlights **context-specific implications** for Albanian secondary schools. Traditional academic systems often prioritize content mastery and high-stakes assessments, which can create stress and reduce student engagement. SEL offers a complementary approach, equipping students with skills to manage these pressures effectively. For example, cooperative group projects in literature and social studies classes allowed students to practice relationship skills and social awareness, leading to more inclusive classroom dynamics and improved group performance. Reflective exercises and guided teacher modeling of emotional regulation contributed to students' self-management abilities, enhancing resilience and academic persistence.

In addition, SEL contributes to **equity and inclusivity** in the classroom. Students from diverse academic, socio-economic, or cultural backgrounds benefited from structured SEL interventions, demonstrating that these programs can help bridge achievement gaps and promote positive participation for all learners. By fostering empathy, collaboration, and ethical decision-making, SEL prepares students not only for academic success but also for responsible citizenship and meaningful social engagement.

Practical implications for teachers and schools include:

- Embedding SEL strategies into daily lessons rather than treating them as separate modules.
- Utilizing cooperative learning, role-playing, and reflective dialogue to reinforce competencies.
- Providing formative feedback and consistently modeling emotional regulation.
- Aligning SEL activities with academic content to enhance both cognitive and socio-emotional outcomes.

In conclusion, socio-emotional education is not ancillary but **central to holistic student development**. By systematically integrating SEL into Albanian secondary school classrooms, educators can create learning environments that nurture motivation, engagement, resilience, and interpersonal skills. Students gain the ability to navigate challenges effectively, collaborate with peers, and achieve academically, while also developing the social and emotional competencies essential for lifelong learning.

Ultimately, the study emphasizes that SEL equips students with **practical, actionable skills** that foster academic achievement, personal growth, and social responsibility. By combining theory, evidence, and practical implementation strategies, this research reinforces the transformative potential of socio-emotional education and provides guidance for educators and policymakers seeking to enhance educational outcomes in Albania and beyond.

References

- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- CASEL. (2020). *What is social and emotional learning (SEL)?* Collaborative for Academic, Social, and Emotional Learning.
- Dewey, J. (1938). *Experience and education*. New York, NY: Macmillan.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. New York, NY: Bantam Books.
- Hattie, J. (2009). *Visible learning*. London: Routledge.
- OECD. (2015). *Skills for social progress*. Paris: OECD Publishing.
- OECD. (2018). *The future of education and skills: Education 2030*. Paris: OECD Publishing.
- UNESCO. (2016). *Education 2030: Incheon declaration*. Paris: UNESCO.
- UNESCO. (2021). *Reimagining our futures together*. Paris: UNESCO.
- Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.
- Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.). (2004). *Building academic success on social and emotional learning*. New York, NY: Teachers College Press.

Tourism development models and sustainability: a comparative analysis of Theth and Cortina d'Ampezzo

Gentian Memaj¹, Mirjam Dibra², Emirjeta Bejleri³

Department of Tourism, Faculty of Economy, University of Shkodra "Luigj Gurakuqi", Albania,

¹ *Department of Tourism, Faculty of Economy, University of Shkodra "Luigj Gurakuqi", Albania*

² *Department of Tourism, Faculty of Economy, University of Shkodra "Luigj Gurakuqi", Albania*

³ *Department of Business Administration, Faculty of Economy, University of Shkodra "Luigj Gurakuqi", Albania*

**Corresponding Author: e-mail: gentian.memaj@unishk.edu.al*

Abstract

Mountain tourism in Albania has experienced significant growth in recent years. Mountain destinations like Theth, Valbona, and Kelmendi, year by year, are becoming more popular among international visitors. While the economic benefits of this growth are clear, there are also growing concerns about the sustainability of such rapid development.

Given these concerns, important questions arise: how should mountain tourism in Albania be developed to ensure its long-term sustainability? Which is the right tourism development model to follow? This paper explores two different pathways of destination development. The first model is community-based tourism in Theth and the other, corporate-driven model in Cortina D'Ampezzo, Italy— both offering valuable insights into how mountain tourism can evolve.

Theth's model, offers a more participatory approach. In Theth, with the community playing a pivotal role in managing tourism activities and also a very well balance of distribution of generated income. However, this model also presents challenges in terms of capacity building, access to funding, and balancing the needs of tourists with the community's long-term goals.

On the other hand, Cortina D'Ampezzo tends to develop a more corporate-driven model, where large businesses dominate tourism activities. According this model, the community tends to play a secondary role in tourism.

The aim of this paper is not to establish which model is superior, but to critically evaluate each model through the lens of sustainability.

In conclusion, the rapid growth of mountain tourism in Albania offers both great potential and significant concerns. By examining different development models and their suitability with sustainable practices, this study aims to contribute to a more complex understanding and greater awareness of how mountain tourism can be developed in order that preserve the peculiarity and the beauty of these destinations meanwhile meeting the needs of both visitors and local populations.

Keywords: community-based tourism, corporate development model, authenticity, Theth, Cortina D'Ampezzo

Introduction

Tourism has established itself as one of the largest and most dynamic industries globally, contributing approximately 9.1% to the world's GDP and supporting one in ten jobs worldwide in 2023 (UNWTO, 2024). This growth is particularly significant in peripheral and remote areas, where tourism functions as a catalyst for socio-economic development, economic diversification, and place branding. At the same time, the rapid expansion of mass tourism frequently poses serious threats to fragile environments, including the depletion of natural resources, pollution, and the degradation of cultural heritage. This paradox is especially evident in mountain regions, which cover approximately 20% of the Earth's land surface and represent some of the most vulnerable ecosystems to anthropogenic pressure and climate change (Klimkiewicz, 2001).

In response to these challenges, the concept of sustainable tourism development has gained increasing prominence. The United Nations World Tourism Organization (UNWTO) defines sustainable tourism as tourism that fully accounts for its current and future economic, social, and environmental impacts while addressing the needs of visitors, the industry, the environment, and host communities (UNWTO, 2011). Achieving sustainability in tourism requires an integrated management approach that balances the so-called "triangle of life": economic viability, environmental conservation, and socio-cultural authenticity and inclusion. In recent years, the alignment of tourism development with the United Nations Sustainable Development Goals (SDGs), particularly Goal 8 (Decent Work and Economic Growth) and Goal 15 (Life on Land), has become a priority for scholars and policymakers aiming to ensure long-term destination resilience (Rasoolimanesh et al., 2020).

A central issue in the sustainability debate concerns the choice between different tourism development models. Community-Based Tourism (CBT) has emerged as a participatory, bottom-up approach that empowers local residents to manage their own resources, promotes equitable benefit distribution, and supports the preservation of traditional livelihoods (Aref et al., 2010; Naranjo Llupart, 2022). Conversely, many mature destinations evolve toward corporate-driven models characterized by high levels of external investment, global market integration, and professionalized management structures. While such models often ensure high standards of

infrastructure and environmental protection, they may also generate negative social outcomes, including demographic decline, economic leakage, and the marginalization of local communities in decision-making processes (Galvani, 1993; Lorenzi & Lorenzi, 2022).

This paper provides a narrative comparative analysis of two contrasting mountain destinations that embody these divergent development paradigms: Theth National Park in Albania and Cortina d'Ampezzo in Italy. Theth represents an emerging mountain destination where tourism has developed primarily since 2005 as a strategic response to poverty, depopulation, and rural marginalization. Its development trajectory is largely organic and community-based, relying on family-owned guesthouses (*bujtina*) and a high degree of local ownership. In contrast, Cortina d'Ampezzo is a mature Alpine resort with international recognition dating back to the 1956 Winter Olympic Games. In Cortina, environmental stewardship is deeply rooted in the medieval *Regole d'Ampezzo* system of collective land ownership, which has effectively constrained urban sprawl but has also contributed to rising real estate prices and social exclusion.

By examining these two destinations through the lens of sustainable tourism development and Stakeholder Theory (Freeman, 1984), this paper aims to identify critical success factors, structural weaknesses, and governance implications relevant for mountain destinations at different stages of the tourism life cycle. The findings are particularly relevant for emerging destinations in the Western Balkans and other peripheral mountain regions seeking to reconcile economic development with environmental protection and social cohesion.

1. Literature Review

2.1 *Conceptualizing Sustainable Tourism:*

There is no single, universally accepted definition of sustainable tourism. According to the United Nations World Tourism Organization (UNWTO, 2011) and the United Nations Environment Programme (UNEP, 2011), sustainable tourism is defined as tourism that takes full account of its current and future economic, social, and environmental impacts, while addressing the needs of visitors, the tourism industry, the environment, and host communities. Early contributions to the field conceptualized sustainable tourism as a normative approach aimed at mitigating the tensions and conflicts arising from the complex interactions between tourists, host communities, the tourism industry, and natural environments (Bramwell & Lane, 1993; Lu & Nepal, 2009).

Several scholars emphasize that sustainability in tourism is not limited to environmental protection but also encompasses social well-being and economic viability. From this perspective, sustainable tourism involves the quality of life of local communities (Hunter & Green, 1995; Byrd et al., 2009), tourist satisfaction and experience quality (Cohen et al., 2014; Miller et al., 2010), and the long-term conservation of natural and cultural resources (Buckley, 2012; Han & Haejin, 2015). Sharpley (2004) further argues that sustainable tourism should not be viewed as a niche form of tourism; rather, all forms of tourism must be sustainable in order to remain viable in the long term.

2.2 *Sustainable Tourism in Mountain Destinations*

Mountain regions represent a particularly sensitive context for sustainable tourism development. Covering approximately 20% of the Earth's land surface, these areas play a crucial role in biodiversity conservation, water provision, and cultural heritage preservation, while simultaneously offering significant opportunities for tourism-based economic development (Kostić et al., 2018). However, uncontrolled tourism growth in mountain destinations often leads to environmental degradation, landscape fragmentation, and a decline in destination attractiveness (Galvani, 1993; Klimkiewicz, 2001).

Research on sustainable tourism has increasingly focused on specific destination types, including national parks (Reihanian et al., 2015), rural areas (Muresan et al., 2016), coastal zones (Blancas et al., 2010), and protected cultural landscapes (Landorf, 2009). Within this body of literature, mountain destinations are frequently highlighted as contexts where the trade-offs between conservation and development are particularly acute. As a result, effective governance mechanisms and locally adapted development models are considered essential for balancing economic benefits with environmental and social sustainability (Bošković et al., 2019).

2.3 *Community-Based Tourism and Corporate-Driven Models*

Community-Based Tourism (CBT) has been widely promoted as a development model capable of enhancing sustainability in rural and peripheral destinations. CBT emphasizes local ownership, participatory decision-making, and the empowerment of resident communities, thereby reducing economic leakage and strengthening social capital (Roberts & Tribe, 2008; Terzić et al., 2014). Empirical studies suggest that CBT can contribute to poverty reduction, cultural preservation, and greater community support for tourism development, particularly in protected and rural areas (Aref et al., 2010; Restrepo Rico & Peterek, 2024).

In contrast, mature tourism destinations often evolve toward corporate-driven development models dominated by external investors and integrated into global tourism markets. While such models may deliver high-quality infrastructure, international visibility, and stable visitor flows, they frequently generate substantial economic leakage and weaken local control over development processes (Weaver, 2006; ETC, 2021). In mountain resorts, this transition is often associated with real estate speculation, the proliferation of second homes, and demographic decline, leading to what several authors describe as processes of "social erosion" or community displacement (Lorenzi & Lorenzi, 2022).

2.4 *Indicators and Governance for Sustainable Tourism*

Monitoring the impacts of tourism development is a core component of sustainable destination management. Indicators are commonly used to measure economic, social, and environmental changes associated with tourism activity (Céron & Dubois, 2003; Schianetz & Kavanagh, 2008). Traditional tourism indicators have focused primarily on economic performance, such as visitor numbers, overnight stays, length of stay, and tourist expenditure (Hunter & Green, 1995). While these indicators remain important, they provide an incomplete picture of sustainability outcomes.

More recent approaches advocate the use of integrated indicator systems that combine quantitative and qualitative measures to capture complex sustainability dynamics (Miller & Twining-Ward, 2006; Torres-Delgado & López Palomeque, 2014). The UNWTO (2004) recommends the combined use of economic, environmental, and social indicators, recognizing that many sustainability attributes—such as community well-being or governance quality—cannot be fully quantified. Effective governance, supported by accessible and reliable indicators, is therefore considered a prerequisite for adaptive management and long-term resilience in mountain tourism destinations (Navarro Jurado et al., 2012; Gebreegziabher Asmelash & Kumar, 2019).

2. Theoretical Framework

2.1. The Sustainability Triangle in Mountain Tourism

Sustainable tourism development in mountain destinations is commonly conceptualized through the framework of the sustainability triangle, which integrates three interdependent dimensions: economic viability, environmental conservation, and socio-cultural authenticity (WCED, 1987; Buckley, 2012). In mountain regions, this balance is particularly difficult to achieve due to ecological fragility, spatial constraints, seasonal demand patterns, and demographic vulnerability. Any imbalance among these dimensions may undermine long-term destination resilience, leading either to environmental degradation, economic stagnation, or social disintegration.

Economic sustainability refers to the ability of tourism to generate stable and equitable income, employment, and local value creation over time. Environmental sustainability concerns the preservation of ecosystems, landscapes, biodiversity, and natural resources that constitute the core attraction of mountain destinations. Socio-cultural sustainability involves maintaining community cohesion, cultural identity, demographic vitality, and residents' quality of life. The sustainability triangle emphasizes that none of these dimensions can be pursued in isolation; rather, they must be addressed through integrated planning and governance mechanisms adapted to local contexts (Torres-Delgado & López Palomeque, 2014).

3.2. Stakeholder Theory and Destination Governance

Stakeholder Theory provides a useful analytical lens for understanding sustainability challenges in tourism destinations. Originally developed by Freeman (1984), the theory posits that organizational success depends on the ability to balance the interests of multiple stakeholders, rather than prioritizing a single dominant group. In tourism contexts, stakeholders include local residents, tourism entrepreneurs, destination management organizations, public authorities, investors, visitors, and environmental groups (Pérez & Rodríguez del Bosque, 2014).

In mountain destinations, stakeholder relationships are often characterized by asymmetries of power, access to resources, and decision-making authority. Emerging destinations frequently rely on informal governance structures and community initiatives, while mature destinations tend to exhibit institutionalized governance dominated by corporate actors and external investors. Applying Stakeholder Theory allows for the identification of inclusion and exclusion dynamics, economic leakage patterns, and governance gaps that directly affect sustainability outcomes (Rasoolimanesh et al., 2020). Within this framework, local communities are considered strategic partners whose active participation is essential for long-term resilience, rather than passive recipients of tourism impacts.

3. Case Study I: Tourism Development in Theth National Park (Albania)

3.1. Geographical Setting and Natural Resources

Theth is located in the upper Shala Valley, in the heart of the Albanian Alps in northern Albania. The village lies within the boundaries of Theth National Park, established in 1966 and covering an area of approximately 2,630 hectares. The landscape is characterized by steep limestone peaks reaching altitudes of up to 2,570 meters, extensive beech and pine forests, and distinctive glacial landforms. The hydrological system is particularly rich, with more than 80 permanent springs, the Shala River, and prominent natural attractions such as the Grunas Waterfall.

The relative isolation of the valley until the early 2000s contributed to the preservation of high environmental quality. However, this same isolation also reinforced economic marginalization, limited infrastructure development, and demographic decline, creating the conditions under which tourism emerged as a survival strategy rather than a growth-oriented economic sector.

3.2. Historical Evolution of Tourism

Theth has a long history of human settlement, with archaeological evidence indicating prehistoric and medieval fortified structures, particularly in the Grunas area. The village was first mentioned in historical records in 1485 under the name "Fusha," when it consisted of only seven households. Basic modernization occurred slowly: a primary school was built in 1921, and the first automobile road reached the valley in 1936.

The initial forms of tourism appeared in the mid-20th century. In 1956, small hotel facilities were established, followed by the opening of a formal holiday house in 1968, marking the early stages of organized mountain tourism. However, during the communist period, tourism remained highly regulated and limited in scale. After the political transition of 1991, Theth experienced severe depopulation as residents migrated to urban centers such as Shkodra in search of economic opportunities.

3.3. Tourism Growth and Socio-Economic Trends

The transformation of Theth into an emerging tourism destination began around 2005, largely as a result of international development cooperation projects. A key intervention was initiated by the German Agency for Technical Cooperation (GTZ, later GIZ), which promoted tourism as a tool for poverty alleviation and rural revitalization (Bischof, 2014).

Demographic data illustrate both decline and partial recovery. In 1937, Theth comprised approximately 125 households with around 900 inhabitants. By 2000, the population had fallen to roughly 650 residents across 74 households, and by 2007 only 18 families remained permanently in the village during winter months. Tourism growth has since contributed to seasonal repopulation and limited return migration.

Tourist arrivals increased from approximately 5,000 visitors in 2008 to an estimated 10,000–12,000 visitors annually by 2013. Accommodation capacity expanded accordingly, with the number of family-owned guesthouses (*bujtina*) increasing from around 10 in 2008 to approximately 30 by 2013. More recently, the transnational Peaks of the Balkans (PoB) trail has become a major driver of visitation. Current estimates indicate that the trail attracts over 43,000 hikers annually, with the Valbona–Theth section being the most frequently used segment (Reuter et al., 2025).

3.4. *Development Model and Sustainability Challenges*

Tourism development in Theth follows a predominantly community-based model. Accommodation and catering services are largely provided by family-run guesthouses operating within traditional stone houses (*kulla*), ensuring high levels of local ownership and income retention. The emphasis on authenticity, cultural exchange, and traditional hospitality has strengthened the destination's identity and community cohesion.

Despite these strengths, significant sustainability challenges persist. Infrastructure development has not kept pace with visitor growth, particularly regarding solid waste management and wastewater treatment. The absence of centralized systems has resulted in localized pollution of the Shala River, as septic tanks frequently leak into groundwater. Governance capacity remains limited, with weak enforcement of national park regulations and insufficient coordination among stakeholders. Additionally, a socio-economic divide has emerged between households located in the village center that benefit directly from tourism and more remote families that remain economically marginalized. A substantial share of tourism revenue is also captured by external tour operators based in Tirana or Shkodra, reducing local control over decision-making processes.

4. Case Study II: Tourism Development in Cortina d'Ampezzo (Italy)

4.1. *Geographical Context*

Cortina d'Ampezzo is located in the eastern Alps of northern Italy and covers a municipal area of approximately 254.51 km². The settlement extends roughly 14 km in length and 5–6 km in width, with the town center situated at an altitude of 1,224 meters above sea level. The surrounding relief is characterized by dramatic elevation gradients, with peaks such as Tofana di Mezzo reaching 3,242 meters.

The landscape consists primarily of rocky Dolomite formations interspersed with extensive forests dominated by pine, larch, and fir species between 1,100 and 2,000 meters. Cortina experiences a relatively mild Alpine climate, with an average snow cover period of approximately 147 days per year, conditions that have historically supported winter sports tourism.

4.2. *Historical Development of Tourism*

Cortina is widely recognized as one of the earliest and most prestigious mountain tourism destinations in Italy. Tourism development began in the mid-19th century, when the first ascents of its steep rock faces attracted mountaineers from Germany, England, and the United States. The arrival of skiing at the end of the 19th century, and its recognition as an Olympic discipline in the 1930s, marked a decisive shift toward winter sports tourism.

The 1956 Winter Olympic Games represented a turning point, transforming Cortina into a global tourism brand and a destination for international elites. Tourist overnight stays peaked in the early 1970s at approximately 1.5 million nights per year and have since stabilized at around 1.2 million nights annually, reflecting the destination's mature stage in the tourism life cycle (Galvani, 1993).

4.3. *Community Structure and the Regole d'Ampezzo*

A distinctive feature of Cortina's development is the *Regole d'Ampezzo*, a medieval institution of collective property ownership that continues to shape land-use governance. The *Regole* manage approximately 63% of the municipal territory, primarily forests and pastures, as inalienable and indivisible assets restricted to descendants of the original native families. This system has played a central role in preserving the landscape and preventing uncontrolled urban sprawl.

However, despite strong environmental stewardship, the community has experienced pronounced demographic decline. The resident population peaked at 8,631 inhabitants in 1973 and declined to 5,668 by 2021, with an average annual loss of approximately 60 residents. Nearly one-third of the population is now over the age of 65, while the number of young residents has halved over the past five decades (Lorenzi & Lorenzi, 2022).

4.4. *Economic Structure and Sustainability Implications*

The contemporary economic model of Cortina d'Ampezzo is predominantly corporate-driven. Approximately 68% of housing units are second homes owned by non-residents, a figure that has increased dramatically since the mid-20th century. Recent estimates suggest that around 70% of real estate no longer belongs to the local population, contributing to rising housing costs and youth outmigration.

In the hospitality sector, only about one-third of hotel rooms are managed by local residents, while the majority of accommodation capacity is controlled by external companies with greater financial resources. Although tourism generates high gross revenues and international prestige, a substantial share of profits leaks out of the local economy. The winter sports sector exemplifies this pattern: despite operating 27 ski lifts and 72 ski runs, only around one-third of ski instructors are permanent residents. Strict urban planning regulations introduced in 1975 and the establishment of the Ampezzo Dolomites Natural Park in 1990 have successfully protected the environment, but at the cost of reduced housing availability and intensified social exclusion.

5. Comparative Discussion

The comparative analysis of Theth National Park and Cortina d'Ampezzo highlights how mountain destinations at different stages of the tourism life cycle experience distinct sustainability trade-offs. Rather than representing a dichotomy between success and failure, the two cases illustrate complementary strengths and weaknesses across the economic, socio-cultural, and environmental dimensions of the sustainability triangle.

From an economic perspective, Theth exemplifies an emerging, community-based tourism model characterized by high levels of local ownership and relatively low economic leakage. Family-run guesthouses (*bujtina*) ensure that tourism revenues largely remain within the local economy, supporting household incomes and contributing to rural survival. However, the economic base remains fragile due to strong seasonality, limited diversification, and weak integration into formal tourism value chains. A significant portion of visitor flows is mediated by external tour operators, which reduces local bargaining power and constrains long-term economic upgrading.

In contrast, Cortina d'Ampezzo operates within a mature, corporate-driven economic model integrated into global tourism markets. The destination generates high gross revenues and benefits from international visibility, yet suffers from pronounced economic leakage. The dominance of external investors in real estate and hospitality has transformed Cortina into a predominantly seasonal residential destination, where tourism value creation increasingly bypasses the resident community. These dynamics confirm existing findings on the relationship between tourism maturity, capital concentration, and declining local economic control (Weaver, 2006; ETC, 2021).

Socio-cultural sustainability reveals an inverse pattern between the two destinations. In Theth, tourism has functioned as a catalyst for social cohesion and partial remigration. Improved accessibility, employment opportunities, and renewed interest in cultural heritage have encouraged some former residents to return, particularly during the tourism season. Nevertheless, emerging social inequalities are evident between centrally located households directly involved in tourism and peripheral families that remain economically marginalized. Without inclusive governance mechanisms, these internal disparities risk undermining long-term community support for tourism development.

Cortina d'Ampezzo, by contrast, faces an advanced stage of social erosion. Demographic decline, population aging, and youth outmigration are closely linked to rising housing costs and the scarcity of affordable residences for local inhabitants. Despite the strong preservation of cultural symbols and traditions, the lived social fabric of the community is weakening. The progressive loss of resident population challenges the long-term viability of local culture and raises questions about who ultimately benefits from sustainability-oriented land-use policies.

Environmental sustainability constitutes the area where Cortina demonstrates its strongest performance. The *Regole d'Ampezzo* system of collective land ownership has ensured long-term protection of forests, pastures, and landscapes, effectively limiting urban sprawl and preserving ecosystem integrity. However, these environmental achievements have been accompanied by unintended social consequences, particularly the inflation of property values and exclusionary housing dynamics.

In Theth, environmental quality remains relatively high due to historical isolation and low-intensity development. Yet this condition is increasingly under threat as tourism growth outpaces infrastructure provision. Inadequate waste and wastewater management pose immediate risks to water quality and ecosystem health, particularly in the Shala River basin. These findings underline the importance of early intervention and proactive environmental governance in emerging mountain destinations.

6. Conclusions and Policy Implications

The narrative comparison between Theth National Park and Cortina d'Ampezzo demonstrates that sustainable tourism development in mountain regions is a dynamic and non-linear process rather than a fixed outcome. The two destinations, positioned at opposite ends of the tourism life cycle, illustrate that no single development model can simultaneously optimize all dimensions of sustainability.

Theth's community-based tourism model shows considerable potential in terms of local economic retention, social cohesion, and cultural authenticity. However, the absence of formal governance structures and environmental infrastructure places the destination at a critical threshold. Without targeted institutional support, investments in green infrastructure, and the introduction of monitoring systems aligned with sustainable tourism indicators, Theth risks degrading the natural assets upon which its tourism economy depends.

Cortina d'Ampezzo, on the other hand, offers a compelling example of long-term environmental stewardship through the *Regole d'Ampezzo*. The effective protection of landscapes and ecosystems demonstrates the value of collective property regimes and strict land-use planning. Nonetheless, the social costs of this model—manifested in demographic decline, housing exclusion, and reduced local economic control—signal a pressing need for social regeneration policies. Measures aimed at affordable housing, resident retention, and greater local participation in tourism governance are essential to restore socio-cultural balance.

For policymakers and destination managers, the key implication is that sustainable tourism in mountain regions requires adaptive governance frameworks capable of evolving alongside the destination's development stage. Emerging destinations should prioritize early planning, inclusive stakeholder participation, and preventive environmental management, while mature destinations must address issues of social equity and community resilience. Across both contexts, the active involvement of local residents as strategic partners—rather than passive beneficiaries or victims of tourism—is fundamental to achieving long-term sustainability.

References

- Aref, F., Redzuan, M., Gill, S. S., & Aref, A. (2010). *Assessing the level of community capacity building in tourism development in local communities. Journal of Sustainable Development*, 3(1), 134–144.
- Bischof, L. (2014). *Tourism development in Thethi, northern Albania: A future scenario analysis from a community's perspective* (Master's thesis). University of Vienna.
- Blancas, F. J., González, M., Lozano-Oyola, M., & Pérez, F. (2010). *The assessment of sustainable tourism: Application to Spanish coastal destinations. Ecological Indicators*, 10(2), 484–492.
- Bošković, N., Vujičić, M., & Ristić, L. (2019). *Sustainable tourism development indicators for mountain destinations. Current Issues in Tourism*, 22(18), 2307–2326.
- Bramwell, B., & Lane, B. (1993). *Sustainable tourism: An evolving global approach. Journal of Sustainable Tourism*, 1(1), 1–5.
- Buckley, R. (2012). *Sustainable tourism: Research and reality. Annals of Tourism Research*, 39(2), 528–546.
- Butler, R. W. (1980). The concept of a tourism area life cycle of evolution: Implications for management of resources. *Canadian Geographer*, 24(1), 5–12.
- Céron, J. P., & Dubois, G. (2003). *Tourism and sustainable development indicators. Current Issues in Tourism*, 6(2), 157–175.
- ETC – European Travel Commission. (2021). *Encouraging sustainable tourism practices*. Brussels.
- Freeman, R. E. (1984). *Strategic management: A stakeholder approach*. Boston: Pitman.
- Galvani, A. (1993). *Mountain tourism in Cortina d'Ampezzo: Sustainability and saturation. Tourism Recreation Research*, 18(1), 27–32.
- Gebreegziabher Asmelash, A., & Kumar, S. (2019). *Assessing progress of tourism sustainability. Journal of Sustainable Tourism*, 27(12), 1810–1830.
- Hall, C. M., & Lew, A. A. (2009). *Understanding and managing tourism impacts: An integrated approach*. London: Routledge.
- Han, H., & Haejin, H. (2015). *Consumers' pro-environmental behavior in tourism. Journal of Sustainable Tourism*, 23(7), 1006–1025.
- Hunter, C., & Green, H. (1995). *Tourism and the environment: A sustainable relationship?* London: Routledge.
- Klimkiewicz, M. (2001). *Sustainable tourism development in mountain regions. Final Report*.
- Kostić, M., Lakićević, M., & Milićević, S. (2018). *Sustainable tourism development of mountain destinations. Economics of Agriculture*, 65(2), 843–857.
- Lorenzi, R., & Lorenzi, S. (2022). *Storia di una comunità al tramonto: Cortina 2020–2040*. Cortina d'Ampezzo: Print House.
- Miller, G., & Twining-Ward, L. (2006). *Monitoring for a sustainable tourism transition*. Wallingford: CABI.
- Navarro Jurado, E., et al. (2012). *Carrying capacity assessment. Tourism Management*, 33(2), 321–334.
- Rasoolimanesh, S. M., Ramakrishna, S., Hall, C. M., Esfandiar, K., & Seyfi, S. (2020). *Sustainable tourism and the SDGs. Journal of Sustainable Tourism*, 28(11), 1794–1817.
- Reuter, S., Kemmerling, T., Schmalenbach, T., & Brözel, C. (2025). *Economic impacts of trail destinations. Journal of Outdoor Recreation and Tourism*, 52, 100928.
- Sharpley, R. (2004). *Tourism and sustainable development. Journal of Sustainable Tourism*, 12(1), 1–19.
- Torres-Delgado, A., & López Palomeque, F. (2014). *Measuring sustainable tourism. Tourism Geographies*, 16(1), 31–55.
- UNWTO. (2004). *Indicators of sustainable development for tourism destinations*. Madrid.
- UNWTO. (2011). *Tourism and sustainability*. Madrid.
- Weaver, D. (2006). *Sustainable tourism: Theory and practice*. Oxford: Elsevier.
- WCED. (1987). *Our common future*. Oxford: Oxford University Press.

Digital Trends and Threats in Language and Translation Studies

PhD. Cand. Anna Maria Vasili

*English Department, Faculty of Foreign Languages, University of Tirana, Albania
e-mail: anna.maria@unitir.edu.al*

Abstract

The rapid expansion of digital technologies has fundamentally reshaped the landscape of language and translation studies, offering new opportunities, while simultaneously introducing complex challenges. This paper examines current digital trends, particularly the rise of AI-assisted translation tools, machine learning-based language processing, and integrated translation platforms, and evaluates their influence on professional and academic practices. While these developments have facilitated unprecedented access to multilingual communication, increased efficiency, and enhanced terminological consistency, they have also generated significant concerns regarding translator agency, data ethics, and the gradual erosion of human interpretive competence.

The study highlights three critical threats: the over-reliance on automated systems, the risk of dehumanized linguistic output, and the reduced visibility of the translator's intellectual contribution. Drawing on theoretical and applied perspectives, the paper argues that digital innovation must be approached through informed critical engagement rather than passive adoption. The findings emphasize the need for pedagogical adaptation, technological literacy, and ethical frameworks that preserve the epistemic and cultural role of human translation in an increasingly automated linguistic environment.

Keywords: digital translation, artificial intelligence, machine translation, translator agency, language studies.

Introduction

Digitalization has emerged as one of the most transformative forces in contemporary language and translation studies. Over the past two decades, advances in computational linguistics, artificial intelligence (AI), and machine learning have radically altered how languages are processed, translated, and disseminated. Translation practices that were once exclusively human-centered are now increasingly mediated, or even dominated, by digital tools such as neural machine translation (NMT), computer-assisted translation (CAT) tools, and cloud-based multilingual platforms.

These technological developments have redefined the boundaries between human and machine translation, raising fundamental questions about expertise, authorship, and quality. On the one hand, digital tools have democratized access to translation, enabling faster and cheaper multilingual communication across global contexts. On the other hand, they have introduced structural challenges related to professional displacement, ethical responsibility, and the reduction of language to purely algorithmic output.

Within academic discourse, scholars have increasingly emphasized that translation is not merely a technical transfer of meaning but a complex interpretive and cultural act. As digital technologies continue to advance, the tension between efficiency-driven automation and human-centered linguistic competence becomes increasingly pronounced. This paper situates itself within this debate by critically examining both the dominant digital trends and the emerging threats shaping contemporary language and translation studies.

Aim of the Study

The primary aim of this study is to critically analyze the impact of digital technologies on language and translation studies, with particular emphasis on AI-driven translation systems. The paper seeks to assess how digital innovation influences professional translation practices, academic training, and the conceptualization of translation as a human intellectual activity.

Specifically, the study aims to:

- Identify key digital trends currently shaping language and translation studies.
- Examine the major threats associated with increased reliance on automated translation systems.
- Evaluate the implications of these developments for ethical responsibility, and linguistic quality.
- Propose a balanced framework for integrating digital technologies while preserving human-centered translation values.

Research Questions

To achieve these aims, the study addresses the following research questions:

1. What are the dominant digital trends influencing contemporary language and translation studies?
2. How do AI-assisted and machine-based translation tools affect professional and academic translation practices?
3. What ethical, cognitive, and cultural threats arise from the over-reliance on automated translation systems?
4. How can translation studies reconcile technological innovation with the preservation of human interpretive competence?

Discussion

Digital Transformation and Theoretical Reconfigurations in Translation Studies

The accelerated digitalization of translation has not merely introduced new tools but has fundamentally reconfigured theoretical assumptions within language and translation studies. Classical models of translation, grounded in equivalence, fidelity, and source–target dichotomies, are increasingly challenged by algorithmic processes that operate on probabilistic and data-driven principles. Neural machine translation systems function through pattern recognition across massive multilingual corpora, thereby shifting the locus of meaning from intentional human agency to statistical inference.

This shift has prompted scholars to reconsider long-standing epistemological questions concerning authorship, intentionality, and interpretive responsibility. Translation, traditionally understood as a situated act performed by a culturally embedded subject, is increasingly reframed as an automated process optimized for speed and scalability. While such reframing aligns with market-driven demands, it risks reducing translation to an instrumental service detached from its socio-cultural and ethical dimensions.

From a theoretical perspective, the dominance of AI-driven translation tools reinforces a techno-positivist narrative that equates linguistic competence with computational efficiency. Critical translation studies, however, caution against this reductionism, emphasizing that meaning production is inherently contextual, embodied, and value laden. Digital technologies thus expose a growing tension between humanistic and technocratic paradigms within the discipline.

Translator Agency and the Politics of Automation

One of the most consequential implications of digital translation technologies concerns the erosion of translator agency. In professional environments increasingly structured around machine translation and post-editing workflows, translators are often repositioned as secondary actors whose primary role is to correct or validate machine-generated output. This restructuring has significant cognitive and ethical consequences.

Post-editing practices demand high levels of concentration while simultaneously constraining creative decision-making. Empirical studies indicate that prolonged engagement with machine-generated text can lead to cognitive fatigue and reduced critical distance, potentially diminishing the translator’s ability to question underlying assumptions embedded in the source text or algorithmic output. Moreover, the economic valuation of translation labor is frequently recalibrated downward, as productivity metrics privilege speed over interpretive quality.

At a structural level, automation reinforces asymmetrical power relations between technology developers, platform providers, and linguistic professionals. Translators rarely participate in the design or governance of translation technologies, yet they bear responsibility for the outputs produced. This disconnect raises critical questions about accountability, professional autonomy, and the long-term sustainability of translation as a knowledge-based profession.

Linguistic Quality, Dehumanization, and Cultural Loss

Although contemporary neural machine translation systems have achieved notable improvements in surface-level fluency, their outputs often mask deeper deficiencies related to pragmatic meaning, stylistic nuance, and cultural specificity. The apparent naturalness of machine-generated translations can obscure subtle distortions, leading to what some scholars describe as a form of “invisible error.”

Dehumanization in translation manifests not only in textual outcomes but also in the conceptualization of language itself. When language is treated as a dataset rather than a lived social practice, translation risks becoming detached from human experience. This is particularly problematic in domains such as literary translation, legal discourse, and healthcare communication, where ethical sensitivity and contextual judgment are indispensable.

Furthermore, the homogenizing tendencies of AI-driven systems may contribute to linguistic and cultural loss. Dominant languages and standardized registers are disproportionately represented in training data, marginalizing lesser-resourced languages and non-normative forms of expression. Over time, this imbalance may reinforce global linguistic hierarchies and undermine efforts to preserve linguistic diversity.

Ethical Frameworks and Data Governance

Ethical concerns occupy a central position in contemporary debates on digital translation. Machine translation systems are trained on vast quantities of textual data, often harvested without explicit consent from authors or translators. This practice raises unresolved issues related to intellectual property, authorship rights, and data sovereignty.

Algorithmic bias constitutes another pressing ethical challenge. Training datasets frequently reflect existing social and cultural prejudices, which may be reproduced or amplified in translated output. Gender bias, racial stereotyping, and ideological distortion have all been documented in machine translation systems, underscoring the need for rigorous ethical oversight.

Addressing these challenges requires the development of comprehensive ethical frameworks that extend beyond technical optimization. Such frameworks must incorporate principles of transparency, accountability, and inclusivity, ensuring that translation technologies serve communicative justice rather than merely commercial efficiency.

Implications for Doctoral Research and Pedagogy

At the doctoral level, language and translation studies must respond to digital transformation through methodological and curricular innovation. Traditional qualitative approaches remain essential but must be complemented by critical engagement with computational

methods. Doctoral researchers are increasingly expected to navigate interdisciplinary terrains that encompass linguistics, computer science, ethics, and cultural studies.

Pedagogically, this necessitates a shift from tool-centric training toward critical technological literacy. Doctoral programs should equip researchers with the capacity to interrogate algorithmic systems, evaluate their epistemological assumptions, and articulate theoretically grounded critiques. Such training is vital for preserving the analytical depth and intellectual rigor of the discipline.

Importantly, doctoral scholarship plays a crucial role in resisting the uncritical normalization of automation. By foregrounding human agency, cultural context, and ethical responsibility, advanced research can contribute to more balanced and reflective models of technological integration.

Conclusion

Digital technologies have undeniably transformed language and translation studies, introducing powerful tools that enhance efficiency, accessibility, and analytical capacity. However, these advancements also present profound challenges that threaten the human-centered foundations of translation practice and theory.

This paper has argued that the uncritical adoption of automated translation systems risks eroding translator agency, ethical accountability, and interpretive depth. Addressing these threats requires a balanced approach that integrates technological innovation with robust ethical frameworks and pedagogical reform.

Ultimately, the future of language and translation studies depends on sustaining the epistemic and cultural value of human translation in an increasingly automated environment. By fostering critical engagement with digital tools, the discipline can adapt to technological change while preserving its core intellectual and humanistic principles.

References

- Bowker, L., & Buitrago-Ciro, J. (2019). *Machine translation and global research: Towards improved machine translation literacy in the scholarly community*. Emerald Publishing.
- Chesterman, A. (2016). Memes of translation: The spread of ideas in translation theory. *Benjamins Translation Library*, 123, 1–19.
- Cronin, M. (2013). *Translation in the digital age*. Routledge.
- Cronin, M. (2017). *Eco-translation: Translation and ecology in the age of the Anthropocene*. Routledge.
- Kenny, D. (2020). *Machine translation: Foundations, methods, and applications*. Routledge.
- Kenny, D., & Winters, M. (2020). Machine translation, ethics, and the translator's agency. *The Translator*, 26(1), 1–19.
- Moorkens, J. (2017). Under pressure: Translation in times of austerity. *Perspectives: Studies in Translation Theory and Practice*, 25(3), 464–477.
- Moorkens, J., Castilho, S., Gaspari, F., & Doherty, S. (Eds.). (2018). *Translation quality assessment: From principles to practice*. Springer.
- O'Hagan, M. (2016). Massively open translation: Unpacking the relationship between technology and translation in the 21st century. *International Journal of Communication*, 10, 929–946.
- Pym, A. (2014). *Exploring translation theories* (2nd ed.). Routledge.
- Risku, H. (2010). A cognitive scientific view on technical communication and translation. *Target*, 22(1), 94–111.
- Sager, J. C. (1994). *Language engineering and translation: Consequences of automation*. John Benjamins.
- Venuti, L. (2017). *The translator's invisibility: A history of translation* (3rd ed.). Routledge.
- Vieira, L. N., O'Hagan, M., & O'Sullivan, C. (2021). Understanding the societal impacts of machine translation: A critical review. *Translation Studies*, 14(2), 207–225.

From energy transition to EU Integration: Kosovo's strategic path forward

Dorajet Imeri

*Department of Political Science, Faculty of Philosophy, University of Prishtina, Republic of Kosovo
e-mail: dorajet.imeri@uni-pr.edu*

Abstract

Kosovo's progress toward the European Union (EU) depends strongly on how it reforms its energy sector. This paper explains that energy transition is not only about the environment or technology, but also about politics, the economy, and society. Kosovo still relies mainly on coal for electricity, which causes pollution, health problems, and energy insecurity. Based on national strategies and regional studies, this paper shows how renewable energy, especially solar and wind power, can help Kosovo become more energy independent and closer to EU standards. The paper argues that clean energy should be treated as a national priority that supports economic growth, social stability, and European integration.

Keywords: energy transition, European integration, renewable energy, energy security, Kosovo.

1. Introduction

Energy policy is one of the most important issues in today's European Union. The EU Green Deal requires countries to reduce pollution and increase the use of renewable energy. For Kosovo, this means that reforming the energy sector is necessary for progress toward EU membership.

Although Kosovo became independent in 2008, its energy system is still based mostly on coal. This old system causes serious air pollution, technical problems, and high health costs. Recent energy crises in Europe have shown that countries depending on coal and energy imports are more exposed to price increases and supply risks.

This paper explains why energy transition is essential for Kosovo's European future. It focuses on how renewable energy can improve energy security, support economic development, and help Kosovo meet EU requirements.

Around 95% of Kosovo's electricity comes from lignite coal. The main power plants are old and inefficient. They often stop working and produce large amounts of pollution, which damages the environment and public health.

Electricity prices have been kept low for social reasons. While this helps households in the short term, it reduces investment in renewable energy and energy efficiency. Another problem is the weak electricity market, which limits competition and private investment.

Energy poverty is widespread. Many households struggle to pay energy bills or use wood for heating, which increases air pollution. These social issues make energy reform politically sensitive.

Kosovo has adopted key policy documents, such as the Energy Strategy 2022–2031 and the draft National Energy and Climate Plan (NECP) 2025–2030. These documents set clear goals, but implementation is still slow.

Kosovo faces similar energy challenges as other Western Balkan countries. Most of the region depends on coal, has old infrastructure, and lacks sufficient investment. Compared to the EU, renewable energy use and energy efficiency are still low.

Through the Energy Community Treaty, the EU requires Kosovo and other Western Balkan countries to follow EU energy and climate rules. This includes reducing emissions, opening energy markets, and supporting renewable energy. Countries that do not make progress may face delays in EU integration.

For Kosovo, progress in energy reform is also important for international credibility. It shows that Kosovo is a serious and reliable partner for the EU.

Solar energy is one of Kosovo's biggest opportunities. The country has many sunny days, and solar technology has become much cheaper. Solar power can be installed quickly on homes, businesses, and large sites.

Wind energy also has strong potential, especially in open and high areas. Several wind farms already operate successfully in Kosovo. Hydropower exists but is limited due to environmental concerns.

Despite this potential, renewable energy development is slow. The main reasons are complex administrative procedures, limited grid capacity, unclear land rules, and limited financial support. Large investors benefit more than small businesses and citizens.

Kosovo needs a more decentralized energy system that supports local projects and citizen participation.

Prosumers are households or businesses that produce their own electricity, usually from solar panels. Kosovo allows net-metering, which helps prosumers reduce their electricity bills. However, many administrative and technical barriers remain.

Energy communities allow groups of citizens, municipalities, or small businesses to jointly produce and share renewable energy. This model can lower energy costs, reduce energy poverty, and increase public support for energy transition.

Kosovo has included energy communities in its laws, but they are not yet fully active. Clear rules, financial support, and pilot projects are needed.

Moving away from coal will affect workers and communities that depend on mining and power plants. If these social effects are ignored, people may resist energy reforms.

A just transition means supporting workers through retraining, social protection, and new jobs. Energy efficiency programs can also help reduce energy poverty and improve living conditions.

Including social justice in energy policy is important for long-term success. Energy transition is a key part of Kosovo's path toward the EU. Renewable energy improves energy security, reduces pollution, and helps Kosovo follow EU rules.

At the same time, energy reform strengthens institutions, encourages citizen participation, and improves Kosovo's international image. This shows that Kosovo is committed to European values.

Conclusion

Kosovo's energy transition should be seen as a national project, not only as a technical reform. Renewable energy, prosumers, and energy communities offer real solutions for a cleaner and safer energy system.

By linking energy transition with economic development, social protection, and EU integration, Kosovo can turn current challenges into long-term opportunities. Strong political commitment and clear policies are essential for success.