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LANGUAGE EDUCATION – BRIDGING THE HUMANITIES AND LIFE SCIENCES

A. DRAGOESCU-PETRICĂ, A. IBRIC, M. LUNGU, A. MARGHITAN
ULST 'King Mihai I' from Timisoara

Abstract: The paper seeks to provide answers and arguments in support of the following questions which may function as working hypotheses: What are the major contributions of the humanities (language education, in our case) in modulating cultural dynamics in mixed intercultural classes and within society at large? How can we as language educators enable students in the life sciences to better integrate seemingly disunited aspects of their learning across their fields of study? How can we help learners achieve optimal socio-linguistic interaction within sustainable learning communities, according to the fullest human potential? *This paper explores the contributions of language education to modulating cultural dynamics in intercultural contexts, enhancing interdisciplinary learning in the life sciences, and fostering sustainable, communicative communities that align with the human potential for cooperation and empathy. Drawing on eco-linguistics and biosemiotics, the study situates language as a medium through which humans can re-establish relational coherence with both culture and nature.*

• Introduction

- The humanities, including language education, occupies a crucial role in bridging disciplinary divides, fostering intercultural understanding, and cultivating sustainable modes of thinking. In contemporary academia, the divide between the sciences and the humanities often perpetuates a fragmented worldview that we aim to address.
- Through fostering intercultural dialogue, relational awareness, and sustainable linguistic practices, we nurture the fullest human potential: to live responsibly within the semiotic web of life.
- These combined perspectives would lead toward developing an integrated vision of humanity and nature, where we acknowledge our interdependence with other life forms.
- Thus, reintegrating the humanities with the natural sciences is essential for addressing the ecological and social crises of the Anthropocene. Language education, informed by eco-linguistics and biosemiotics, can function as a bridge discipline that teaches relational thinking and ecological literacy alongside communicative competence.
- The paper argues that language learning should not be limited to developing linguistic proficiency, but should also encourage learners to participate critically and responsibly in intercultural and civic contexts. Seen as a dynamic framework for addressing current global challenges, the language learning environment becomes an optimal ground for cultivating educational practices that nurture ethical reflection and critical cultural awareness.

• Material and method

- The study adopts a qualitative research methodology, guided by a range of research approaches aligned with communicative language teaching principles, ecolinguistics, and biosemiotics, ensuring a multidisciplinary perspective on language education.
- By combining observational insights with theoretically informed frameworks, the methodology facilitates a nuanced exploration of how language functions within ESP curricula for Life Sciences, highlighting both pedagogical practices and the semiotic dimensions of scientific language communication.

• Results and discussions

- When language instruction is integrated with ecological and biological content, it provides a rich context for interdisciplinary reflection, particularly when approached through the lenses of Ecolinguistics, Critical Discourse Analysis, and the intercultural communicative competence (ICC) framework.
- Embedding eco-linguistic and eco-semiotic perspectives within life sciences curricula encourages learners to perceive science as a culturally and socially situated practice. This approach foregrounds the ethical, communicative, and interpretive dimensions of scientific knowledge, highlighting how linguistic practices mediate sustainable communication.
- By bridging language, culture, and scientific discourse, such pedagogical strategies cultivate critical thinking, intercultural awareness, and a more nuanced comprehension of the complex interplay between human cognition and ecological knowledge.
- Biosemiotics, when informed by the humanities, may thus evolve into a truly ecological epistemology: one that perceives life as a continuum of sign processes, interpretation, and ethical responsibility (KULL, 2018; MARAN, 2018). Favareau et al. (2017) make a case for the re-engagement of the humanities and the life sciences through a shared semiotic paradigm. Their essay anticipates the broader intellectual movement toward eco-semiotic and transdisciplinary frameworks, where meaning is recognized as both a biological and cultural phenomenon.

• Conclusions

- The paper has exemplified the hypothesis we formulated that the humanities, in our case language education for specific purposes, hold transformative potential. By engaging eco-linguistic and biosemiotic frameworks, educators can help students in both the humanities and life sciences recognize the deep continuity between communicative, cultural, and ecological systems.
- Thus, fostering students' capacity for integrative thinking across cultural, linguistic, and biological dimensions prepares them to participate in sustainable communities that reflect the interconnectedness of life. The humanities, far from being ancillary to the sciences, are central to cultivating this holistic worldview.

• References

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