

## The Climate Crisis in Foreign Language/Environmental Literacy Education: A Binational Virtual Exchange

Hedwig Fraunhofer<sup>1</sup>, Laurenz Volkmann<sup>2</sup>

<sup>1</sup>Department of World Languages and Cultures, Georgia College & State University, USA

<sup>2</sup>Department of English and American Studies, Friedrich-Schiller-University Jena, Germany.

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### **Abstract**

*This contribution provides a best-practice example or case study of a transatlantic online course focused on the integrative acquisition of environmental literacy, intercultural skills, and foreign language proficiency. Through binational and transdisciplinary group and class interactions, students from universities in Germany and the United States learned to identify and negotiate culturally and discipline-mediated perspectives on the more-than-human world. Discussing novels, films, media and cultural artifacts that centrally engage ecological themes, students learned to think of the relationship between nature and culture as deeply imbricated. If human culture is acknowledged as part of nature, and culture as a concept extends beyond the human sphere, intercultural competence as a skill or outcome acquires a new, added meaning. Intercultural competence then includes both the ability to negotiate differences between divergent human cultural viewpoints and practices (Byram 1997), as well as the ability to establish an egalitarian relationship with the nonhuman world that goes beyond anthropocentric extractivism.*

**Keywords:** *Online education; virtual exchange; transdisciplinarity; intercultural learning; environmental literacy; natureculture.*

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## **1. Introduction**

In an age increasingly marked by devastating wildfires, rising sea levels, warming ocean waters and violent storms, the climate crisis has become one of the most central and urgent “global issues” under discussion in the humanities, and specifically in pedagogy and teacher training. In Germany, for example, the Shell youth study of 2019 explored what young Germans view as the most impactful issues of the moment, determining that “[e]nvironmental protection and climate change, in particular, have gained considerably in importance as issues of relevance to the future” (Shell, 2019, p. 13). As is becoming increasingly clear, climate change is creating a planetary emergency that in the coming decades will require combined transnational efforts by individuals and societies.

Jointly offered online by our two universities, in the United States and Germany, the course “Climate Crisis” was co-taught by faculty from Georgia College and State University (Dr. Hedwig Fraunhofer) and the Friedrich-Schiller Universität Jena (Prof. Dr. Laurenz Volkmann), using synchronous online meetings (via Zoom) as well as asynchronous elements in combination with a Moodle-based platform hosted by Jena University. The transdisciplinary course, which was open to students from all disciplines, attracted 28 students from both universities – while German students enrolled as majors in English (plus another subject), all studying to become teachers in the future, US-American students had diverse academic majors in the humanities, health sciences, and the natural sciences. The course took seriously the widely agreed upon assumption that the sciences must provide the factual, data-based knowledge basis for any possible intervention in the climate crisis. And yet, the humanities can and must facilitate and enrich the discussion, interpretation, and dissemination of these data and their possible consequences for human action. While climate change is indeed a hyperobject in the philosopher Timothy Morton’s sense (Morton, 2013) – too large an entity for humans to envision – cultural artifacts, film and literature enable us to go beyond the limits of our imagination, helping us visualize and conceptualize imminent threats to our planet’s ecology, including mass extinction.

## **2. An integrative approach**

Arguing from an interdisciplinary perspective, Skutnabb-Kangas et al. (2003, p. 9) explain: “The links between language, culture and the environment suggest that biological, cultural and linguistic diversity should be studied together, as distinct but closely and necessarily related manifestations of the diversity of life on Earth.” Establishing this close link between, or imbrication of, cultural and ecological diversity was the main task of our course.

Such an integrative approach needed to be thoroughly informed by ecocritical theories and concepts. Ecocriticism is defined as a meta-discipline, striving to bring to light the cultural and societal bases for anthropocentric concepts and practices (Marland, 2013). As a field of

research within the humanities, ecocriticism focuses on the relationship of humans to their more-than-human environments from a cultural, literary, and historical perspective. Ecocriticism is primarily interested in literary and cultural representations and concepts of the more-than-human (what we used to call the “nonhuman” in a more problematic, binary terminology), and in the way in which such representations contribute to conceptualizations of “nature.” Recent developments in ecocriticism have focused on shifting the perspective “beyond anthropocentrism” (Lindgren & Öhman, 2018), questioning anthropocentrism as a world view that considers human interests to have priority over those of nonhuman entities. These insights have exposed how human concerns thus end up overriding ecological matters, and how nature is often seen as a mere resource at humans’ free disposal. Unfortunately, the results of this extractivist view of the nonhuman are becoming only too clear.

According to ecocritical perspectives, a critique of anthropocentrism has to be combined with calls for sustainable development, defined as a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 41). The UNESCO has defined a number of learning objectives in line with seventeen sustainable development goals (UNESCO, 2017). The overarching goal is to develop sustainability competencies that are, in all areas, useful and necessary. The learning objectives are subdivided into goals in different domains: cognitive, socio-emotional, and behavioral. First, *cognitive objectives* for each goal aim at the acquisition of knowledge that lets individuals understand the complexity of the respective goal and how it can be achieved. Second, the *socio-emotional* domain presents learning goals for the development of learners’ collaboration, communication, and self-reflection skills, as well as values, attitudes, and motivations regarding any element of sustainable development. Third, the *behavioral learning* objectives are geared towards the acquisition of action competences. The UNESCO provides a detailed overview of these learning objectives, accompanied by a number of topics and exemplary activities and methods (cf. UNESCO, 2017, pp. 12-45). Since the learning objectives are designed to be suitable and relevant for learners of all ages and from all parts of the world, it is the responsibility of educators to adapt the chosen objectives to meet national and local needs (such as different national/regional or institutional requirements regarding modules, assignments, examinations, and degrees).

### **3. Environmental literacy and intercultural learning beyond the human**

Recent definitions in the field of pedagogy have shifted the focus from “ecological pedagogy” or “learning for sustainable development” to aspects of “environmental literacy” (Küchler, 2016, p. 156). Environmental literacy can easily be integrated and combined with critical skills, and specifically with critical media literacy. To define the latter, we propose the informed analysis and discussion of mass media’s and popular texts’ relationships to cultural, social, political, ideological and economic concepts, structures, and practices,

including conceptualizations of race, class, and gender. What needs to be added to this list (while acknowledging important questions of intersectionality or enmeshment), however, is the conceptualization of species (a biological term) and of the more-than-human in general (biotics as well as abiotics). In this context, it is essential for students to become aware that critical thinking describes the ability to call into question societal and cultural norms, opinions, and practices. Students learn to reflect on how their own values, actions, and perceptions have been influenced by their media environments, and how this cultural preconditioning has shaped and formed their positions on matters of ecology and sustainability (see also UNESCO, 2017, p. 10), as well as their understanding of themselves, as humans, in relation to “nature.”

Drawing a parallel with the more-than-human realm, Eppelsheimer et al. point to the concept of the ecotone, the transition zone between two biological communities or habitats, as a paradigm for foreign language learning in general and for the relationship between second language pedagogy and the environmental humanities in particular: “Th[e] notion of the ecotone [...] offers a paradigm for the fruitful collaboration between foreign languages and the environmental humanities. [...] In other words, foreign-language learners reflect on the world and themselves through the lens of another language and culture, striving to understand differences in meaning, mentality, and worldviews as expressed in their own and the foreign language(s). We are all learners in this regard.” (Eppelsheimer et al., 2014, pp. 5, 8). In our binational project, we aimed at not only the honing of foreign language skills, but also at the development of intercultural competences. Byram prominently defines intercultural competence as comprising “attitudes of curiosity and openness, skills of interpreting and relating, knowledge of social groups and their products and practices and skills of discovery and interaction” (Byram, 1997, p. 49). When approaching an issue such as the environment, diverse learners bring with them different cultural schemata that shape their notions of the world around them and also influence their attitudes and behaviors towards natural/cultural phenomena. Binational courses, or courses with students from different cultural backgrounds in general, provide ideal learning scenarios for both instructors and students to become aware of their own cultural preconditioning – understanding others’ culturally conditioned perspectives and negotiating divergent views, linguistic codes and cultural narratives. Here the aim can also be to understand culturally varied concepts of “nature,” “life,” “human” or diverse, more-than-human entities or phenomena.

We, as instructors, thus aimed at integrating multiple learning goals, particularly in the fields of intercultural and ecological learning – a strategy in line with most environmental literacy models (Deetjen & Ludwig, 2021). Students were encouraged to observe and discuss different cultural practices and perspectives related to the natural environment, while also learning to see nature and culture as ultimately co-extensive and co-productive. Through examinations of culture-specific media presentations, narratives, metaphors, and imagery,

pedagogical approaches to the environment and specifically the climate crisis can foster an understanding of both differences and commonalities between students' own culture and other global human cultures, as well as a greater understanding of cultures beyond the human.

#### **4. A transnational agenda**

Discussing various genres such as commercials engaging in “greenwashing,” young adult fiction with an ecocritical agenda, novels thematizing the lack of human attention to ecological threats, a graphic novel, eco-documentaries, feature films and multimodal explanation books, the students in the course learned to see nature and culture as intimately entangled. In their instructions, the instructors urged student presenters to avoid what guest speaker Kuchler (2016) critiqued as “disaster pedagogy” or “doom-gulp-gloom” pedagogy. Feedback from students was gleaned through both universities' course assessment systems, featuring quantitative online evaluation; through interviews with course participants conducted by University Communications at one university; as well as through informal student comments. Several students were also asked to provide qualitative data in interviews conducted by members of a third-party project sponsored by the German Academic Exchange Service (DAAD) (see <https://www.zlb.uni-jena.de/internationales/lehramt-international-ideas>; for a more detailed report see Volkmann, 2021, Braselmann et al., forthcoming). Regarding the aspect of ecological education or ecological literacy (Kuchler, 2016), the students expressed a strong sense of having gained important insights and competences. It became clear that the course had refrained from both an alarmist, moralistic approach and an anthropocentric belief in “technological fixes.” Students explained that the course had encouraged them to venture beyond anthropocentric frameworks (Hartley, 2015). They also understood that intercultural encounters, such as the one experienced in the course's online context, are and need to be shaped by more than just a “tool-box” of interculturally relevant knowledge and skills, but always involves a complex “negotiation of meaning” between culturally different agents (see Byram, 1997). The climate emergency is a key global issue that calls for action-oriented transdisciplinary and transnational cooperation. In their projects – from in-class interactions and binational group presentations to co-authored written or audiovisual projects – students in our course demonstrated their ability to cooperate in multicultural teams.

In the summer term of 2022 the two course instructors will be conducting a second iteration of this course, entitled “*The Climate Crisis through Philosophy, Film and Fiction: The Sequel.*” Providing new content, this course takes up where the course taught in Summer 2021 left off. Most importantly, however, the new course will put even greater emphasis on binational student cooperation and discussion and also include a new experiential emphasis on interaction with the natural world.

## References

- Braselmann, S., Ewers, E., & Kramer, P. (forthcoming). Kompetenzvermittlung durch digitale Auslandserfahrungen im Studium. Eine Erhebung zu Potentialen für eine interkulturelle und reflexive Lehramtsausbildung.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Clevedon: Multilingual Matters.
- Deetjen, C., & Ludwig, C. (2021). Introduction – developing students’ critical environmental literacies in the ELT classroom. *anglistik & englischunterricht*, 94, 9–24.
- Eppelheimer, N., Küchler, U., & Melin, C. (2014). Claiming the language ecotone: Translinguality, resilience, and the environmental humanities. *Resilience: A Journal of the Environmental Humanities*, 1 (3), 54–68.
- Hartley, D. (2015). Against the anthropocene. *Salvage*, 1(1), 107–118.
- Küchler, U. (2016) Signs, images, and narratives – climate change across languages and cultures. In S. Siperstein, S. Hall, & LeMenager, S. (Eds.). *Teaching climate change in the humanities* (pp. 153–160), London: Routledge.
- Lindgren, N., & Öhman, J. (2018). A posthuman approach to human-animal relationships: Advocating critical pluralism. *Environmental Education Research*. doi: 10.1080/13504622.2018.1450848
- Morton, T. (2013). *Hyperobjects: Philosophy and ecology after the end of the world*. Minneapolis: University of Minnesota Press.
- Marland, P. (2013). Ecocriticism. *Literature Compass*, 10 (11), 846–868.
- Shell Youth Study (2019). Summary Shell Youth Study, pp. 13–34. Retrieved from: [https://www.shell.de/about-us/shell-youth-study/\\_jcr\\_content/par/toptasks.stream/1570708594823/cc089c96f35209143fdcdcbead8365dc26f9a238/shell-youth-study-2019-summary-en.pdf](https://www.shell.de/about-us/shell-youth-study/_jcr_content/par/toptasks.stream/1570708594823/cc089c96f35209143fdcdcbead8365dc26f9a238/shell-youth-study-2019-summary-en.pdf).
- Skutnabb-Kangas, T., Maffi, L., & Harmon, D. (2003). *Sharing a world of difference: The earth’s linguistic, cultural, and biological diversity*. Paris: UNESCO Publishing.
- UNESCO. (2017). *Education for sustainable development goals: Learning objectives*. Paris: UNESCO.
- Volkman, L. (2021). Internationalisierung der Lehramtsausbildung: Neue Optionen durch digitale Formate. *Zeitschrift für Hochschulentwicklung*, 16 (2), 93–105.
- World Commission on Environment and Development (WCED). (1987). *Report of the world commission on environment and development: Our common future*. Oxford: Oxford University Press.