

Bioeconomy through Outdoor Education in Kindergarten: A Rights-Based Academic Pathway for Sustainable Futures

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Abstract:

This presentation explores how the integration of bioeconomy principles into Outdoor Education at the kindergarten level can serve as a dynamic academic and pedagogical framework for promoting the rights of the child. Framed within Article 29 of the UN Convention on the Rights of the Child, which emphasizes education for the development of the child's personality, talents, and mental and physical abilities to their fullest potential, our work proposes a vision where environmental literacy, sustainability, and children's participation intersect meaningfully in early childhood education.

Drawing from interdisciplinary academic collaborations and field-based educational practices in Greece, we present a model piloted within university-affiliated training programs that positions Outdoor Education as a vehicle for introducing concepts of the bio-economy, sustainability, and environmental responsibility to young children. Central to this model is the recognition of the child as an active agent of change, a rights-holder capable of contributing to the dialogue around local and global ecological challenges.

Our research combines qualitative field observations, educator reflections, and child-led project outcomes to analyze how Academia can train future educators not only to deliver content, but to cultivate a pedagogy of rights, participation, and sustainability from the earliest years. The presentation further explores how such approaches expand academia's role in mainstreaming child rights across curricula, fostering intergenerational responsibility, and aligning with Sustainable Development Goals (SDGs), particularly SDG 4 (Quality Education), SDG 12 (Responsible Consumption and Production), and SDG 13 (Climate Action).

By situating child rights within the practical application of bioeconomy concepts through Outdoor Education, we argue for a reimagined academic agenda, one that prepares educators to uphold and advocate for children's rights while contributing to a sustainable, inclusive future.

Presentation language: English

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Short CVs:

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Dr Aristeia Kyriakou is a Postdoctoral Researcher at the Aristotle University of Thessaloniki and Education Consultant with UNICEF. She holds a PhD in Outdoor Education from the University of Aberdeen (as an Onassis Foundation scholar). She is the co-founder of the European Outdoor Education Hub, a non profit established to make outdoor education accessible to every school in Europe. Her work focuses on outdoor learning, sustainability, and curriculum design, leading international projects that promote innovation and climate resilience in education through participatory, nature-based methods.

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Professor Anastasia Dimitriou is a faculty member at the Aristotle University of Thessaloniki, specializing in Sciences and Environmental Education at the School of Early Childhood Education. Her research interests include environmental education, science teaching and learning in early childhood and primary education, and environmental justice. She has coordinated national teacher training programs and contributed to numerous academic initiatives advancing participatory and transformative education practices in early learning environments.