

BOOK OF PROGRAM

EASE-ICMScE JOINT INTERNATIONAL CONFERENCES 2024







Oral Session 1	Day 2 (July 9, 2024) 13:45-15:45
Room	S - 306 PS.OF.F2
Category	Science Education, ESD
Chairperson	Ayu Nursalamah
Presentation P	rogram
1	ABS-ICMSCE-24206 Ayu Nursalamah Universitas Pendidikan Indonesia, Indonesia
	- Analyzing Teachers' Effectiveness in Integrating Education for Sustainable Development (ESD) on the Classification of Living Things topic
2	ABS-ICMSCE-24080 Ryugo Oshima Chiba University, Japan Oscar Muriithi Students' and Teachers' Perceptions of Science Lessons with ICT in Japan
3	ABS-ICMSCE-24066 Kusumar Ubonmoung Kasetsart University, Thailand Tussatrin Wannagatesiri Development and Validation of a Test for Exploring Middle School Students' Empathetic Problem-Solving Ability
4	ABS-ICMSCE-24063 Melina Doil Carl von Ossietzky Universität Oldenburg, Germany - Collegial counseling in science teacher training using the example of lesson studies
5	ABS-ICMSCE-24003 Shingo Uchinokura Kagoshima University, Japan Taito Yuge, Hiroaki Suzuki Examining pre-service teachers' perceptions of diverse learners in science teaching
6	ABS-ICMSCE-24029 Khalifatulloh Fiel'ardh Okayama University, Japan Hiroki Fujii, Hana Rozman, Gregor Torkar ESD through the Lens of Prospective Science Teachers: Comparing Perspectives from Japan and Slovenia
7	ABS-ICMSCE-24091 Pipih Nurhayati Universitas Pendidikan Indonesia, Indonesia Ari Widodo, Widi Purwianingsih, Achmad Samsudin Assessing the Effectiveness of Modified Instruments on Integrating Reflective Thinking Skills with Science Concepts
8	ABS-ICMSCE-24062 Jessica Petereit Carl-von-Ossietzky University Oldenburg, Germany - Empowering Teachers in education of sustainable development: Innovative Workshops in chemistry, biology and computer science with limited resources

ESD through the Lens of Prospective Science Teachers: Comparing Perspectives from Japan and Slovenia

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The imperative for Education for Sustainable Development (ESD) demands a deep understanding of diverse teacher perceptions to effectively achieve the Sustainable Development Goals (SDGs). Grasping these insights across various cultural contexts is crucial for crafting adaptable ESD practices suitable for global implementation. This qualitative research utilized semi-structured interviews with ten prospective science teachers (PSTs), five each from Okayama University (Japan) and the University of Ljubljana (Slovenia). It focused on three key domains of the Asia-Pacific ESD Teacher Competency Framework. Domain (1) Facilitate Learning: All interviewees highlighted the effectiveness of participatory and experiential learning methods. Interviewees from OU leaned towards immersive, science-centered activities, while interviewees at UL preferred a versatile, interdisciplinary strategy, employing a variety of learning resources. Domain (2) Continue to Learn and Connect: Consensus exists on the significance of continuous professional development and diverse experiences in mastering ESD. OU interviewees emphasized on expanding content knowledge in sustainability-related fields, particularly social sciences, while UL interviewees prioritized the development of diverse and inclusive pedagogical skills. Domain (3) Connect, Collaborate, and Engage: Agreement was noted on the importance of integrating sustainability through school-wide initiatives and community engagement. OU interviewees elaborated on tangible activities such as environmental clean-ups and tree-planting, while UL interviewees mentioned learning beyond the classroom through partnerships with local institutions and community members. The interviews underscored the critical role of cultural contexts in shaping potential ESD implementation by PSTs. The findings suggest the need for flexible, culturally tailored strategies that leverage local contexts and promote international collaboration to enhance ESD.

Keywords: Education for Sustainable Development, Science Teacher Education, Semi-structured Interview