

2025/11/30 30 November, 2025

11月10～13日に広島大学で国際開発学会第36回全国大会をホストしました。  
We hosted the 36<sup>th</sup> annual conference of the Japan Society for International Development (JASID) at Hiroshima University on 29-30 November, 2025.



ラウンドテーブルを開催しました。

We conducted a roundtable session.

**Title: An International Comparative Study on Educational Innovation Using ICT: Potential, Risk, Disparity, and Inclusion**

**Date: Saturday, 29 November 2025**

**Time: 14:55-16:55**

**Venue: Small conference Room in the IDEC building on the 1<sup>st</sup> floor**

The integration of Information and Communication Technology (ICT) into education has become increasingly indispensable worldwide. ICT has the potential to enhance learning by making lessons more engaging, efficient, and accessible, while also enabling new forms of collaboration across time and space. However, these benefits are accompanied by challenges, including unequal access to devices and networks,

overreliance on online resources, declining writing and critical thinking skills, and concerns about online safety. In the context of teacher shortages, demographic shifts, and widening educational disparities, the need to critically assess both the opportunities and risks of ICT in education is more urgent than ever.

**By bringing together cases from Japan, Thailand, and Malawi to examine the multiple dimensions of ICT use in education, the roundtable aims to highlight not only the benefits but also the challenges of ICT, examining how different countries utilize ICT to address educational disparities and promote inclusive education.** By comparing the potential and risks of ICT in education, it aims to provide new perspectives for building inclusive, sustainable, and resilient education systems. Expected outcomes include a deeper understanding of how ICT can bridge or widen educational gaps, as well as practical implications for policymakers, educators, and researchers engaged in shaping the future of education.

### **Members**

Organizer: Kyoko Taniguchi (Hiroshima University)

Moderator: Takayoshi Maki (Hiroshima University)

Presenter: Takayoshi Maki (Hiroshima University)

Nongluck Manowaluilou (Kasetsart University, Visiting Hiroshima University)

Foster Gondwe (University of Malawi, Visiting Hiroshima University)

Kyoko Taniguchi (Hiroshima University)

Discussant: Kenzi Watanabe (Fukuyama City University)

Jun Kawaguchi (Keio University)



## **Abstract**

**Takayoshi Maki (Hiroshima University)**

### **Technology-Enhanced Multigrade Systems in Japan**

This talk explores innovative approaches to technology-enabled multi-grade education in Japan. Due to declining birth rates, school sizes are shrinking, and multi-grade classrooms will become more common. By connecting these multigrade classrooms online, we can create virtual single-grade classrooms where pupils of the same grade can study together. This approach highlights both the potential and challenges of using technology in education, especially amid teacher shortages and demographic shifts.

**Nongluck Manowaluilou (Kasetsart University, Visiting Hiroshima University)**

### **Bridging the Digital Divide with Ethical AI and TPACK: Thailand's Quest for Equity in the Transition to Education 5.0**

My presentation will explore how vocational teacher education can be reimaged through the lens of the 3Es: empowerment, equality, and ethical practice. Drawing on my observations of pre-service teachers, I will highlight the challenges they face in applying university training to real classrooms, where rapid technological change—particularly AI—widens inequity gaps. To address this, teacher education must move beyond technical training to empower future educators with ICT competence, while fostering equality through inclusive practices and bridging the digital divide. At the same time, integrating soft power and Education for Sustainable Development (ESD) ensures ethical responsibility and prepares vocational teachers to shape resilient and sustainable futures.

**Foster Gondwe (University of Malawi, Visiting Hiroshima University)**

### **When technology substitutes space: The pedagogical costs of ICT in teacher education**

In this presentation, I reflect on the use of ICT in Malawian teacher education to support in-service teachers pursuing a University Certificate of Education at the University of Malawi. Drawing on Neil Selwyn, Paulo Freire, and Henry Giroux, I explore how ICT, introduced mainly because of limited classroom space and timetabling challenges rather than to enhance the learning experience, can limit the pedagogy of teacher education. Selwyn's critique of the political and ideological dimensions of technology highlights issues of control and access, Freire's ideas on critical pedagogy emphasize the importance of teacher agency and dialogue, and Giroux's work stresses how efficiency-driven approaches can undermine educational quality. I then use examples from my practice to show how ICT can be applied thoughtfully to support collaboration, reflection, and

teacher autonomy, and close with questions to stimulate discussion and reflection.

**Kyoko Taniguchi (Hiroshima University)**

**Home Learning for Primary Students Using Mobile Application in Malawi**

This study aims to enhance home learning opportunities for primary school students in Malawi through the use of a mobile learning application. Low levels of basic literacy and numeracy remain critical challenges in Malawi. In rural areas, primary students have limited opportunities for home study or for practicing similar exercises in class due to a lack of learning materials. To address this issue, the author developed a mobile application designed to support basic reading and mathematics skills. The application includes 728 mathematics questions and 192 English questions, ranging from basic to applied levels. Using snowball sampling, 14 students from Grades 5 to 8 participated between November 2021 and December 2024. Both home-based and school-based learning were implemented. The results indicated that the application effectively provided students with practical study time. The study also identified several advantages and disadvantages of learning basic skills through mobile applications, which will be discussed in the conference presentation.