

NEWSLETTER

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Rising Together: Building Inclusive, Reflective, Collaborative Learning Opportunities on Campus

As a cornerstone of the liberal arts curriculum, **the Visionary Project** at Science Tokyo is designed to help first-year students articulate their aspirations for university life and explore their potential.

In this issue, we are pleased to feature **a contributed article by Prof. Sanae Akaba** of Institute for Liberal Arts (ILA), who plays a central role as a lecturer in the course. In her contribution, Prof. Akaba offers valuable insights into the aims and structure of the Visionary Project, while also sharing her educational philosophy on fostering student development through intercultural exchange, shaped by her own experiences.

“Having spent many years in the U.S. as an international student, I have a deep and personal commitment to education that supports international students who come from diverse cultural and linguistic backgrounds. From the moment I joined Science Tokyo, I felt an immediate sense of “home” within the GSEP community, as the students and faculty often have cross-cultural experiences in Japan that mirror my own back in the U.S.

While abroad, I engaged in interdisciplinary and intercultural dialogue with peers from a wide range of backgrounds. These experiences were transformative—not only for intellectual development, but also for learning how to navigate complexities



Prof. Akaba (back row, third from the left) joins the class for a group photo

arising from differences in culture, language, beliefs and values. There were certainly moments of miscommunication and tension. But often times, those moments became entry points to deeper understanding, mutual respect, and collective growth. What allowed us to overcome challenges was not simply individual resilience, but our ability to work together toward shared goals.

That spirit of collaboration and cross-cultural exchange continues to shape my teaching philosophy. I believe that liberal arts education, especially within a global university context, should be rooted in peer-to-peer collaborative learning that involves dialogues across diverse backgrounds. Such engagement fosters critical thinking, deeper reflection, empathy, and creativity, empowering students to become thoughtful, engaged contributors to an increasingly interconnected world.

With this vision in mind, and supported by a university grant becoming available last year to support student-centered learning, we brought several Japanese teaching assistants (TAs) and students from an elective English courses into the Visionary Project course, making the collaborative learning between GSEP and Japanese students possible.

One of the most memorable outcomes of the Visionary Project initiative this year is the disaster prevention workshop

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Intercultural dialogue by group



Presentation in a dual-language setting

held in a dual-language setting. Organized in collaboration with faculty of ILA and the Japanese Language and Culture section, the class brought together GSEP students, Japanese students, and international students enrolled in Japanese-medium courses. A total of 25 students from the Japanese-medium classes joined the session with GSEP students.

Drawing on an informative lecture on disaster prevention, students were asked: "What would you do to protect yourself, your friends, and strangers in an emergency?" Groups worked together across languages and cultural backgrounds to develop and present their disaster response plans in both English and Japanese.

Student feedback was overwhelmingly positive. Many described how eye-opening it was to encounter perspectives different from their own, while others were surprised by the level of commonality they discovered with peers from different cultures. As an educator, it was deeply inspiring to observe students engaging so sincerely with one another—listening carefully, challenging assumptions, and working collaboratively toward meaningful outcomes.

Looking ahead, I hope to further expand these kinds of learning opportunities not only within ILA courses, but also across the university. I believe it is essential to increase the opportunities where students from diverse backgrounds can collaborate, learn from one another, and explore the complexities of global challenges. These experiences equip students with the mindset and skills needed to thrive in the world today.

There is a phrase I often return to: *"When a tide comes, all boats float."* It reminds us that when the tide rises, every boat, regardless of its size, lifts. A tide cannot rise without water, and even the vast ocean is formed drop by drop. I see our work as building that ocean, one person at a time. Together, we create the movement that lifts everyone. Through collective effort, diverse needs emerge, and meaningful support becomes possible. With this vision, I will continue to cultivate inclusive, reflective, and collaborative learning environments, both in the classroom and across campus. I warmly invite you to join us in this collective effort!"

Introducing Our New Faculty Member

We are pleased to welcome **Dr. Vinayak Gupta (Vin-sensei)**, who recently joined GSEP as a Specially Appointed Associate Professor. In the message below, Vin-sensei shares a brief self-introduction and thoughts on becoming part of the GSEP community.



Academic Background

My academic journey has been driven by a deep commitment to addressing environmental challenges through engineering and innovation. It began at the Manipal Academy of Higher Education, often called the "Harvard of India", where I earned my bachelor's degree in civil engineering. Surrounded by distinguished alumni such as Rajiv Suri of Nokia and Satya Nadella of Microsoft, I was inspired to set ambitious goals for myself. For my final year project, I transferred to the Malaviya National Institute of Technology in Jaipur, focusing on microbiological contamination in drinking water and advanced disinfection technologies for sewage management. This experience was pivotal in shaping my dedication to environmental sustainability.

Motivated by these early achievements, I pursued a master's in environmental engineering at the National University of Singapore. After graduation, I co-founded a startup with an innovative vision: a toilet system designed to convert human waste into valuable manure. While this entrepreneurial venture was both challenging and rewarding, I realized my true passion lay in academic research and the pursuit of new knowledge.

This led me to Japan for doctoral studies in Transdisciplinary Science and Engineering at Tokyo Tech, where I explored the psychological and social factors influencing sustainability decisions. I also had



the privilege of an academic exchange at Imperial College London, contributing to pioneering work on sustainable textiles. Each step has reinforced my dedication to innovation and sustainability, and I am eager to continue making meaningful contributions in this vital field.

Personal Interests and Hobbies

Outside of research, I enjoy activities that foster connection and inspiration. As an ENFJ, I thrive on meaningful interactions and have cherished living and working in India, Singapore, the UK, and Japan. I stay active through hiking and workouts—preferably with friends, as shared experiences energize me. I also enjoy reading and engaging in thoughtful conversations about life's big questions. These moments of connection and curiosity are what keep me balanced and motivated.

Message to Students

I encourage each of you to embrace your academic and personal journeys with curiosity, openness, and resilience. The field of transdisciplinary science and engineering is evolving rapidly, and we face urgent challenges, such as climate change and resource scarcity, that require creative, collaborative solutions. I believe every student here has the potential to make a significant impact. I urge you to step beyond your comfort zones, seek out diverse perspectives, and engage openly with your peers. Remember, every question leads to greater understanding, so never hesitate to ask for guidance or share your ideas. Your unique backgrounds and experiences are powerful assets that enrich our community.

If you would like to discuss research or sustainability, I would be delighted to connect. I value building friendships and exchanging insights, and I am always ready to listen and learn from you. I am genuinely excited to meet and collaborate with all of you; together, we can make a meaningful difference toward a more sustainable and equitable future!



Joint hackathon brings distant campuses closer

From March 5 to 7, 2025, Science Tokyo and Kyushu Institute of Technology (Kyutech) co-hosted a three-day hackathon at Taki Plaza on the Ookayama Campus. Bringing together students from both universities, the event fostered innovation, collaboration and meaningful exchange.

With the theme "Cross-Border and Exchange," the hackathon challenged participants to develop products that promote connection between the two geographically distant universities. A total of 43 students formed 12 teams—some mixed, others from a single institute—based on shared interests. Among them was a team **Echolink**, composed of four then-second-year GSEP students: **Eubin Baek**, **Kumkab Keeratisiwakul**, **Dang Hoang Binh** and **Shambhava Sood**.

After an initial icebreaker, teams jumped straight into their projects. They worked intensively toward mid-event presentations on the second day and continued refining their ideas until the final presentations on the third day. Discussions were focused and energetic, with teams maintaining impressive momentum throughout.

A panel of judges—including professional engineers from leading tech companies—evaluated the final presentations based on critical thinking, problem-solving, technical skills, presentation quality, and originality.

Echolink earned second prize for their creative pixel-art role-playing game, which reimagines the campuses of Science Tokyo and Kyutech. Players navigate intricately designed maps, discovering trivia and hidden gems related to each university. Conversations with the quirky non-player characters (NPCs) that bring the world to life are full of personality and humorous dialogue that are sure to make players smile. The game provides a fun and immersive way to experience the two universities as if visiting in person. Congratulations, **Echolink**!



Team Echolink with prizes