Collaborating with Student Teaching Assistants in Experiential Learning

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Experiential Learning

- Experiential learning offers students the opportunity to apply their knowledge and skills in real-world settings.
- Through hands-on experiences, students develop critical thinking, problem-solving, and collaboration skills.
- Discover the benefits of experiential learning and how it can enhance student success.

Challenges of Experiential Learning

- One of the challenges of implementing experiential learning is the need for sufficient manpower in teaching.
- Providing personalized guidance and supervision to students in real-world settings requires dedicated resources and faculty support.
- Addressing this challenge is crucial to ensure the quality and effectiveness of experiential learning programs.

Student Teaching Assistants (STAs)

- Student teaching assistants play a vital role in experiential learning by leveraging their technical expertise, mentorship, and support.
- Their involvement significantly enhances student learning outcomes, creating immersive and meaningful educational experiences.

Benefits of Having STAs in Experiential Learning

1 Enhanced Student Engagement

STAs help create interactive and engaging learning environments, fostering deeper student involvement in experiential learning activities.

2 Increased Faculty Productivity

By supporting faculty experiential learning tasks, SRAs enable instructors to focus more on lecture materials and lab instructions.

3 Opportunities for Professional Growth

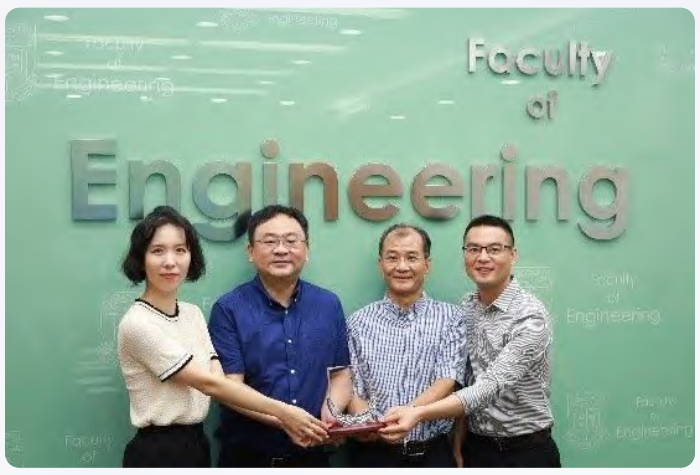
Working as as STA provides them with valuable teaching experience, enhancing their academic and career prospects.

Examples of Learning Activities with STAs in IMSE

- ENGG1320 Engineers in the Modern World
- CCHU9056 Virtual Worlds, Real Bodies
- Summer Institute
- and some more courses…

ENGG1320 Engineers in the Modern World

- Engineering Year 1 Core Course (divided into 4 classes, each of around 150 students)
- Course Coordinator: Ray Zhong
- Course Teachers from IMSE: SH Choi, Yao Cheng, HH Cheung, YH Kuo
- Faculty Outstanding Teaching Award (Team Award – Teaching Innovations in Engineering)
- The course aims to enable students to learn about engineering in the modern world, with an emphasis on engineering innovation, businesses, systems, and entrepreneurship, and how to bring new ideas to market in both engineering startups and corporate settings.
- Contact hours: Lectures + lab sessions
- Students are required to work on a group project, where each team work together to inspire engineering business and product ideas, perform market analysis or simple business plans, and/or develop product prototypes.
- Projects from IMSE: (1) Product design and development (2) 3D printing for product design and development (3) Laser cutting, robotics, and wireless control



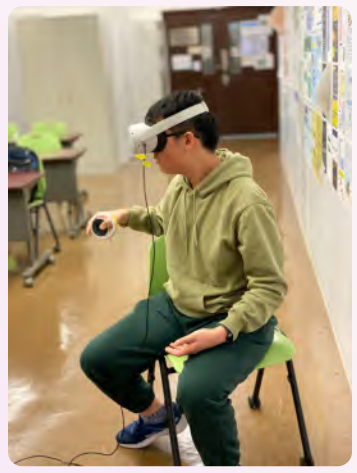
CCHU9056 Virtual Worlds, Real Bodies

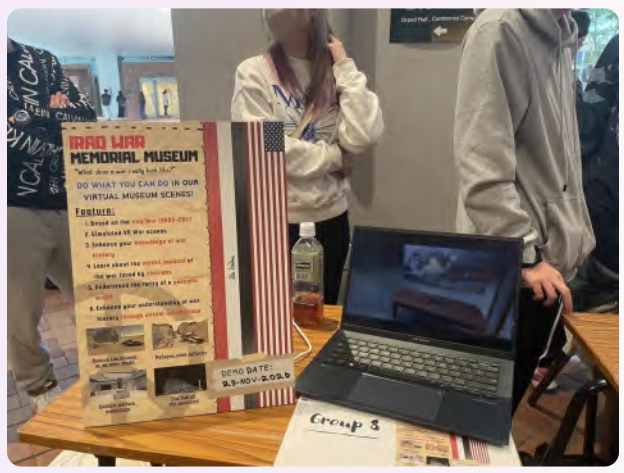
- University Core Course (120 students) under Arts and Humanities
- Course Coordinator: YH Kuo
- Course Teachers from IMSE: Leith Chan, Nicole Lee, YH Kuo
- By engaging students on an explorative journey of the emergence and development of VR in our modern societies, and giving them hands-on practice in creating their own virtual worlds, this course encourages students to reflect, evaluate and contemplate from multiple perspectives on how modern computer and digital technologies “inhabit” our bodies, and the world.
- Group project: theme “Human-centered virtual innovation” – encourage students to design an application which demonstrates the importance of designing virtual experiences with a focus on human needs and aspiration

STAs in Lab Sessions and Project Support

- STAs were recruited via previous courses related to VR, current research projects, and pre-course interviews & trainings.
- They all had the required technical knowledge (e.g., VR tools, programming skills, content development).
- They demonstrated VR projects and introduced basics of VR technologies.
- They provided technical support of the project development and suggestions on project content.

Fun in CCHU 9056

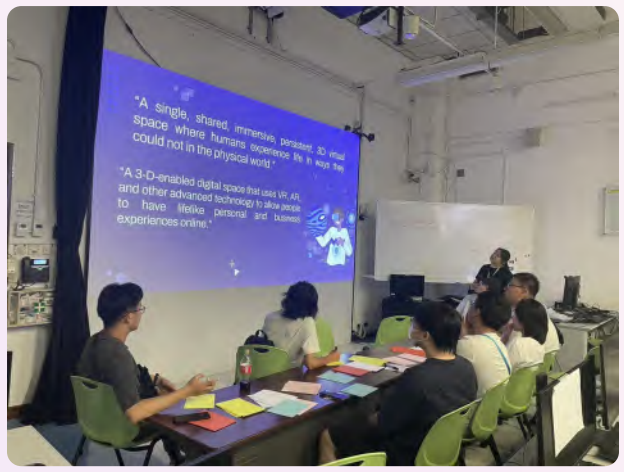




Summer Institute

- AI + Metaverse Value Creator (Undergraduate Featured Programme) 10 July – 20 July 2023
- Future Innovator in STEM (High School Featured Programme) 31 July – 4 Aug 2023
- Course Coordinator: Kal Ng
- Contact hours: Lectures + lab sessions
- STAs (from different disciplines, including Engineering, Arts, Social Science, …) were provided 10+ hours training on VR.
- Some of the STAs were invited to work on some R&D projects to get themselves familiar with the technologies.

Fun in Summer Institute



Thank you!

Questions?