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## Fostering Digital Competence and Learner Autonomy through AI-Supported Self-Directed Learning

**Project Number:** 6000855

**Principal Investigator:** Prof. Wing Chung HO

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### **Abstract:**

The rapid development of various technologies and breakthrough innovations demand education to provide prompt responses. However, the fast pace of technological advancement and student variation in their digital competence pose challenges for teachers to keep up with the ever-changing landscape. This project initiative promotes AI-supported self-directed learning to grant students autonomy in their digital competency development. The objective of this project is two-fold: 1) to enhance students' digital competence through AI-supported self-directed learning. 2) to empower students in self-directed learning through effective integration and utilization of digital technology.

While maintaining the original Constructive Alignment (Intended learning outcomes [ILOs], teaching and learning activities [TLAs], and assessment tasks [ATs]) in the SS Foundation course, SS1024 Social Issues and Problems, supplementary TLAs and formative assessments that do not contribute to the overall grading will be added to transform some of the teacher-centred tasks to self-directed learning tasks. Several AI and other digital applications, e.g., ChatGPT, Consensus, ResearchRabbit, Padlet, Flip, etc., will be introduced in the supplementary TLAs. The project outcome will be measured through a digital competency survey (DigCompSAT), student feedback, Teaching and Learning Questionnaire (TLQ) results, and students' work. Statistic analysis (descriptive statistic, T-test, ANOVA) and content analysis will be adopted to analyse the quantitative and qualitative data. On the other hand, a Course Website, a short promotional video, an AI-supported Self-Directed Learning Guidebook and a potential publication will be generated in this project to share good practices.