# The Mediating Role of Creative Dispositions in the Relationship Between AI Use Attitudes and Creative Problem-Solving

**Xingzi Yu**
Ph.D. Student, Department of Education, National Chengchi University, Taiwan, Wenshan District Taipei City, Taiwan

**Yu-chu Yeh**
Distinguished Professor, Research fellow Institute of Teacher Education, National Chengchi University, Wenshan District Taipei City, Taiwan
Research Center for Mind, Brain & Learning, National Chengchi University, Wenshan District Taipei City, Taiwan

**Princy Pappachan**
Assistant Professor, Department of Foreign Languages, National Chiayi University, Taiwan
Department of Education, National Chengchi University, Taiwan, Wenshan District Taipei City, Taiwan

**Chia-Hsiang Ma**
Ph.D. Student, Department of Psychology, National Chengchi University, Taiwan, Wenshan District Taipei City, Taiwan

## Abstract:

Students' attitudes toward the use of generative artificial intelligence (GAI) have become a critical factor in shaping their learning outcomes. While prior research has begun to examine the academic impacts of GAI, relatively little attention has been given to how students' attitudes toward GAI influence their creative problem-solving abilities. Given the well-established link between creative dispositions and creative problem-solving, this study investigates whether creative dispositions mediate the relationship between attitudes toward GAI and creative problem-solving performance following a structured training course. To explore this, a GAI-integrated intervention course was employed. The results revealed that creative dispositions partially mediate the relationship between students' attitudes toward GAI and their creative problem-solving ability. These findings highlight the potential of GAI-integrated pedagogical strategies to support and enrich the development of students' creativity in higher education. By emphasizing the interplay between technology use, learner attitudes, and psychological traits, this study contributes to a deeper understanding of how educational interventions can leverage GAI to cultivate essential 21st-century skills. Implications for instructional design, curriculum development, and future research directions are discussed.