

## Editorial

Welcome to the special issue of the *Asia-Pacific Journal of Gifted and Talented Education*. The scope of this issue is the relationship of creativity and intelligence to academic achievement. This issue includes three original research articles.

Jo and Maker investigated the effect of the DISCOVER (Discovering Intellectual Strengths and Capabilities while Observing Varied Ethnic Responses) Curriculum Model on students' mathematical knowledge and mathematical creativity. In this article, the results of a research project on the effectiveness of the DISCOVER Curriculum Model as implemented by three types of teachers (high, middle and low implementers) were presented. Research participants included both students and teachers. They used DISCOVER Math Assessment to measure students' mathematical knowledge and mathematical creativity. Research results showed strong evidence on the effectiveness of the DISCOVER Curriculum Model on mathematical knowledge and mathematical creativity for the 2<sup>nd</sup> and 3<sup>rd</sup> grade students. That is, students of high implementer teachers of the DISCOVER Curriculum Model had higher creativity and knowledge scores than those of low implementers. Research on the DISCOVER Curriculum Model has grown much since its initial years. This research study also shows the importance of the role of teachers in effectively implementing new models in education practices.

Bahar and Maker investigated the relationship between students' creativity and achievement in mathematical domain, using the DISCOVER Math Assessment to measure creativity and the Iowa Tests of Basic Skills math section and the Comprehensive Tests of Basic Skills math section to measure achievement. Creativity scores, both fluency and total creativity, were correlated highly with achievement scores. Findings may be interpreted as mathematical creativity and mathematical achievement can be partial predictors of each other. Their research findings also provide strong evidence, though not mentioned in the article, on the criterion validity of the DISCOVER Math Assessment for grades 1 through 4, as scores on the DISCOVER Math Assessment were correlated significantly with scores on the Iowa Tests of Basic Skills math section and the Comprehensive Tests of Basic Skills math section.

In the third article, Muammar presents the role of intelligence and self-control on academic performance of academically gifted and non-gifted students in an eastern province institute in Saudi Arabia. Muammar hypothesizes that joint application of intelligence and self-control explains academic performance more than either of them. In the study, intelligence was measured by the Cognitive Ability Test (CAT) and self-control was assessed by observing the level of students' commitment to their assignments and homework. Academic achievement was measured using their GPAs in the first semester of their college years. The simultaneous linear multiple regression analysis showed that intelligence and self-control accounted for 42% of the variance in all students' GPA and 59% of the variance in the gifted group's GPA. Based on the research findings, Muammar suggests authorities of gifted education consider factors such as self-control in addition to intelligence for identification of gifted students.

In conclusion, the three articles in this issue have a focus either on intelligence or on creativity with academic achievement. They also pose new research problems, such as the relationship between levels of domain-specific knowledge and creativity and effect of the inclusion of personality factors in the identification of gifted students.

Ugur Sak, Ph.D.

Guest Editor,

Associate Professor and Director of Gifted Education Division

Anadolu University, Eskisehir, Turkey