

**Research Report**

**Improving the social skills of average and high-ability Primary 1 students in Hong Kong: Parents as trainers**

Ms LIU Sau Hing Sylvia  
EdD Student  
Faculty of Education  
Email: [sylvialiuhk@yahoo.com.hk](mailto:sylvialiuhk@yahoo.com.hk)

RMS Room 205, 2/F  
10:40 – 11:10

*Keywords: Social competence, high ability children, parent education, play, Hong Kong*

The research resulted from the perceived needs for face-to-face interactions and parent involvement in developing young children's social competence. Studies of such school-wide social programmes, with the inclusion of parents as trainers, and their applications with high-ability children in Hong Kong are rare. This study evaluated a social skills programme which has been implemented in the target primary school since 2006. In order to promote parents' ownership of the programme, parent-trainers were teamed with new parent-volunteers to conduct eight cycles of intervention. Participants were 122 Primary 1 students (age range: 5.67 - 6.75 years) in the target school and the control group comprised 136 students from a comparable school. *Raven's Progressive Matrices* was used to identify high- and average- ability. In order to assess programme impact, parents and teachers completed *the Early School Behavior Rating Scale*. Parents also completed *the Multicultural Inventory of Parenting Self-Efficacy* and *the Measure of Consistent Discipline*; results indicated that changes in children's social competence were positively correlated with parenting efficacy and parenting control. High ability students showed significant improvements in social competence, sustained over time, in home and school settings. On the other hand, students of average ability exhibited positive improvements in social competence in school, but this did not always transfer to home. The positive impact on boys was significantly higher than girls, both parent and teacher-rated scores indicated that the programme could help narrow the gender differences in social competence. Teachers' ratings indicated that greater improvement occurred for students in the programme than for those in control group. In conclusion, the study advances thinking in school and educational psychology, results demonstrate practical application of school-wide social intervention for both average- and high-ability students in an inclusive setting instead of a pull-out mode for high ability students.

**Confirmation Seminar**

**Promoting Understanding of Methodology and Epistemology of Science to Foster Scientific Reasoning**

Mr MA Guanzhong  
PhD Student  
Faculty of Education  
Email: [gzma@connect.hku.hk](mailto:gzma@connect.hku.hk)

RMS Room 206, 2/F  
15:20 – 16:30

*Keywords: scientific reasoning; conceptual change; epistemic cognition; nature of science*

Conceptual understanding is a critical objective in science education. Approaches to teaching for conceptual understanding entail reasoning about data in evaluation of knowledge claims in science. While prior research in scientific reasoning and conceptual change has demonstrated a set of factors that influence this reasoning, little is known about how prior belief and understanding of methodology interact and account for this reasoning, and what are students' epistemologies of science that justify their reasoning. Therefore the focus of the research is on students' reasoning about data in light of methodology of obtaining the data and in context of prior belief about knowledge claim under evaluation. The investigation consists of two studies. Study 1 investigates how secondary school students evaluate knowledge claims in physics in face of anomalous data. Study 2 develops an instructional intervention that targets on selected dimensions of understanding of methodology and epistemologies of science based on findings of Study 1, and evaluates its efficacy in promoting students' reasoning about data and conceptual understanding in physics. In this seminar, I will report the conceptual framework of the research, the design of the investigation, and some preliminary findings of pilot study.