EDITOR’S INTRODUCTION

The current issue of Research and Practice in Technology Enhanced Learning is delighted to present a Special Issue on the theme “Assessment of Collaborative Problem Solving” with three selected articles, on top of our regular publication of original articles.

The Special Issue on the theme “Assessment of Collaborative Problem Solving”, with Chee-Kit Looi and Wenli Chen as Guest Editors, aims to disseminate innovative research and empirical practice on the promising ways to assess collaborative problem solving competencies (CPS) for enhancing the quality of teaching and learning. The Editorial by the Guest Editors delineates the theme as well as introduce the individual articles. I wish to express my sincere gratitude to the Guest Editors for their great effort and professional contribution to the realization of the Special Issue.

In addition to the three Special Issue Articles, this issue presents three Original Articles looking into the variation between examples and supported problem solving in benefiting learning, the approach of CSCL for problem solving in mathematics lessons, and the use of digital portfolios for assessment in Visual Arts curriculum.

In the paper Examples and Tutored Problems: Is Alternating Examples and Problems the Best Instructional Strategy?, Shareghi Najar and Mitrovic present a study that compares the effects and ways of three conditions—examples only (EO), alternating examples and tutored problems (AEP), and tutored problems only (PO)—on supporting novices and advanced students who use a constraint-based tutor to learn knowledge of database queries in SQL. Based on the experimental results, the authors confirm their hypothesis that AEP condition is superior to both PO and EO conditions. They also discuss the different assistance levels that the three conditions bring to the novices and advanced students respectively.

In the paper Group Scribbles to Support “Fraction” Collaborative Learning in a Primary School, Lin et al. investigate how the approach of computer-supported collaborative learning (CSCL) influences students’ performance and attitude in learning fraction concepts. The authors conduct a quasi-experimental study on the use of Group Scribbles (GS 2.0) software for collaborative problem solving in mathematics lessons among students in an elementary school. Based on the positive research results, the authors discuss the potential of the GS-based CSCL learning design to support students on enhancing performance, stimulating interest and improving experience in fraction learning.

In the paper Using Digital Portfolios for High-Stakes Assessment in Visual Arts, Newhouse explores the digital representation of student practical work together with the
online collection and scoring of student artwork as an alternative approach to summative assessment in Visual Arts curriculum. With an action research in which the selected secondary schools develop, pilot and implement school-based practices for the digital assessment approach, the author investigates the implementation feasibility and the usage perception of this digital assessment approach. The author then discusses the obstacles to artwork accuracy management and artwork scoring reliability. The scalability issue in future implementation is also highlighted.

We keep soliciting an eclectic collection of quality paper submissions from researchers and practitioners around the world to share insights into the theoretical and methodological dimensions of research and practice in technology enhanced learning.

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Editor-in-Chief