Developing Students' Evaluative Judgment and Feedback Literacy through Self-assessment: An Experimental Study

Life-long learning is a central aim of education in the 21st century (Curriculum Development Council, 2014, 2017; Education Commission, 2000) and requires evaluating one's performance and learning needs (Joughin et al., 2019). Specifically, students should learn to judge the quality of their work and others' work against suitable quality standards (*evaluative judgement*, Tai et al., 2018) by acquiring and using feedback from different sources (*feedback literacy*, Carless & *Boud, 2018). However, this research literature has four major gaps. First, theorists have discussed evaluative judgement and feedback literacy, but show little empirical evidence of: (a) successful instructional strategies for them; or (b) their impact on academic performance. Second, studies have examined evaluative judgement and feedback literacy among university students but not younger students. Third, many successful educational interventions require too many teacher resources for long-term sustainability (*Yan et al., accepted). Fourth, researchers designed self-assessment interventions mainly based on pedagogical principles without psychological processes, such as motivation to self-assess.

To address this need, we propose and test a simple, low-cost, self-assessment intervention to enhance the evaluative judgement, feedback literacy, and academic performance of students. The intervention will be conducted through a self-assessment worksheet integrated into routine school teaching and learning. Students receiving the intervention are prompted and guided to engage in self-assessment to enhance their evaluative judgement, feedback literacy, and academic performance. To further increase its impact, we apply a wise intervention (Walton & Wilson, 2018) to improve students' motivation to engage in self-assessment and to carry it out more often and more effectively. Based on the results of a pilot study (*Yan et al., accepted), this study will apply a mixed-methods, sequential explanatory design, focused on the first phase quasiexperimental study, which the second phase qualitative study helps explain. Two experiments (one for primary and one for secondary) will be conducted in a core subject (i.e. Chinese, English, or Mathematics). In each experiment, we will collect: (a) pre-test, post-test, and delayed post-test data; and (b) time-series data via once-a-week worksheets focused on self-assessment, evaluative judgement, feedback literacy, and academic performance. According to a power analysis, 168 students will participate in this study, 84 from two primary schools and 84 from two secondary schools. Structural equation growth models will determine the relations among the variables. Students' responses to open-ended questions in the self-assessment worksheet and interviews of selected students will help explain the experiment results.

The findings of this study will consolidate the theoretical understanding and provide empirical evidence for the dynamic relationship among self-assessment, evaluative judgement, feedback literacy, and academic performance. The results will also inform interventions to enhance the awareness of teachers and students on using self-assessment to foster life-long learning, and provide sustainable, low-cost, effective instructional strategies for developing the evaluative judgement and feedback literacy of students.