Project Title :   Developing and Evaluating a Learning Analytics
                           Platform to Support University Teachers for
                           Pedagogical Decision-making in Fostering Reflective
                           Engagement of Students

Leading Institution :   The Education University of Hong Kong

Participating Institution(s) :   Hong Kong Baptist University, Lingnan University,
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This project aims to develop a learning analytics platform to enhance the capacity of teachers in promoting students' reflective engagement in higher education sector. The advocacy of students' reflective learning and the trend of digital classrooms using various learning management systems (LMSs) and social network platforms (SNPs) place new demands on teachers for transforming pedagogical practices. Paralleled to it is a gigantic amount of accessible learning data that are produced and captured in the LMSs and SNPs across formal and informal learning spaces. These student-generated data footprints document what is actually happening in the learning process.

Learning analytics refers to the collection, organization, analysis and reporting of a wide range of data produced by students on LMSs and SNPs in the learning context in order to generate information and identify potential issues for prediction and pedagogical decision-making. The goal of conducting learning analytics is to provide opportunities for teachers to facilitate and guide students in the learning process with

the ultimate goal of optimizing their learning outcomes.

This project, adopting the design-based approach, will conduct a three-year research on adaptive teaching practices in digital classrooms by co-designing and co-developing a learning analytics platform with teachers. The research foci are:

(1) To develop a learning analytics platform conducive to data-oriented decision-making;
(2) To evaluate the impact of a learning analytics platform on facilitating reflective engagement of students in the learning process;
(3) To evaluate the impact of a learning analytics platform on teachers' pedagogical decision making.

This project will invite teachers to help co-design, co-develop, use and evaluate the learning analytics platform in teacher professional development program. Evaluations from both teachers and students on the use of this learning analytics platform will be conducted. The significance of this project for enhancing the quality of learning and teaching in Higher Education Institutes lies in three aspects. Firstly, teachers will benefit from using the learning analytics platform to gain a better understanding of students' learning process, and identify learning issues to predict learning patterns and make corresponding pedagogical decision-making, hence optimizing the learning environment. Secondly, by focusing on students' learning needs and learning trails, the adoption of the learning analytics platform will help teachers to move away from summative assessment to formative assessment; students will be able to respond to the results of analytics, thus evidence-based improvement can be achieved. Thirdly, the learning analytics platform can be scaled up to different subjects and universities to transform teaching and learning in higher education.