



Teaching and Learning Experience Sharing (TALES) Workshop

UGC-FSTL

Project Showcase

Bilingual Text-mining for Pedagogical Decision-making in Subject Disciplines

- A project supported by the UGC-Funding Scheme for Teaching & Learning Innovations



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12:45 – 2:15 p.m. (light lunch from 12:30 – 12:45 p.m.)



ACC 209 2/F, Jockey Club Academic Community Centre, Baptist University Road Campus

Solution Struct Abstract

A bilingual text-mining system is developed for the collection, analysis and reporting of student-generated text recorded in online discussion forums. Using a framework consisting of bilingual keywords of a topic in a subject discipline designed by teachers, the text-mining system identifies and counts the matching keywords covered by the text automatically. The text-mining results presented by hierarchical visualization enable teachers to examine students' learning status including their strengths and inadequacies in understanding of key concepts of the topic. The hierarchical visualization also incorporates a number of statistical quantities, including coverage, elaboration, proportion and bivariate correlation (i.e. Pearson's *r*), for supporting a better interpretation of text-mining results. With a well-defined framework of bilingual keywords, the text-mining system enhances teachers to predict learning patterns and improve learning environments so that pedagogical decision-making can be achieved for optimising students' learning outcomes.

This collaborative project is led by EdUHK, with HKBU and CUHK as partners. The system described here can be made available for use by interested colleagues.

Biography

Prof. Kong Siu Cheung is Professor of Department of Mathematics and Information Technology, and Director of Centre for Learning, Teaching and Technology at The Education University of Hong Kong. His research interests cover pedagogy in different areas, including but not limited to digital classroom, information literacy education, professional development of teacher for learner-centered learning, etc. Prof. Kong has produced 100 academic publications and completed/ conducted 71 research projects. He is the Editor-in-Chief of the international journals, *Research and Practice in Technology Enhanced Learning (RPTEL)* and *Journal of Computers in Education (JCE)*.

Enquiries and Registration

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