

Collaborations of Three Educational Parties in Leading IT Development in Mathematics Education

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Abstract

Most IT researches in mathematics education are confined to classroom settings [5], ignoring the surrounding conditions for their practicality. In this paper, an innovative collaboration of three educational parties: teaching frontiers, curriculum developers and academic theorists, e.g.[1], are all involved.

The 3 authors endeavor to: (i) address pedagogical, teacher-training, policy-making problems *when the parties are functioning separately without mutual adaptation* at present and share value-dilemmas encountered by the three educational parties in Hong Kong; (ii) adopt and examine an integrated school (hybridizing 'top-down' and 'down-up') approach in perpetuating *regionalised IT school culture* in order to consolidate forthcoming school-based mathematics curricula in Hong Kong and even other Asian countries in the next century; (iii) discuss some activities on using various components of IT in teaching and learning mathematics in day-time lessons and after-school activities by the new approach.