

ZMATH 2010a.00069

Chen, F.-H.; Looi, C.-K.; Chen, W.

Integrating technology in the classroom: a visual conceptualization of teachers' knowledge, goals and beliefs.

J. Comput. Assist. Learn. 25, No. 5, 470-488 (2009).

Summary: In this paper, we devise a diagrammatic conceptualization to describe and represent the complex interplay of a teacher's knowledge (K), goals (G) and beliefs (B) in leveraging technology effectively in the classroom. The degree of coherency between the KGB region and the affordances of the technology serves as an indicator of the teachers' developmental progression through the initiation, implementation and maturation phases of using technology in the classroom. In our study, two teachers with differing knowledge, goals and beliefs are studied as they integrated GroupScribbles technology in their classroom lessons over a period of 1 year. Our findings reveal that the transition between the teacher's developmental states (as indicated by coherency diagrams) is nonlinear, and thus the importance of ensuring high coherency right at the initiation stage. Support for the teacher from other teachers and researchers remains an important factor in developing the teacher's competency to leverage the technology successfully. The stability of the KGB region further ensures smooth progression of the teacher's effective integration of technology in the classroom.

Classification: B50 D30

Keywords: teacher change; technology in the classroom; technology integration

doi:10.1111/j.1365-2729.2009.00323x