Connecting Teachers in a Web-Based Professional Development Community in Crisis Time: A Knowledge Building Approach

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Abstract : The pandemic crisis disrupted normal classroom practices so that the constraints of the traditional practice became apparent. This turns out to be new opportunities for technology-based learning and teaching. However, how the technology supports the preschool teachers go through this sudden crisis and how preschool teachers conceived of the use of technology, appropriate and design technological artifacts as a mediator of knowledge construction in order to suit young children's literacy level are rarely explored. This study addresses these issues by looking at the influence of a web-supported teacher community on changes/shifts in preschool teachers' epistemological beliefs and practices. This teachers' professional development community was formulated before the pandemic time and developed virtually throughout the home-based learning caused by Covid-19. It served as a virtual and asynchronous community for those teachers to collaboratively plan for and conduct online lessons using the knowledge-building approach for the purpose of sustaining children's learning curiosity and opening up new learning opportunities during the lock-down period. The knowledge-building approach helps to increase teachers' collective responsibility to collaboratively work on shared educational goals in the teacher community and awareness of noticing new ideas or innovations in their classroom. Based on the data collected across five months during and after the lock-down period and the activity theory, results show a dynamic interplay between the evolution of the community culture, the growth of teacher community and teachers' identity transformation and professional development. Technology is useful in this regard not only because it transforms the geographical distance and new gathering guidelines after the outbreak of pandemic into new ways of communal communication and collaboration. More importantly, while teachers selected, monitored and adapted the technology, it acts as a catalyst for changes in teachers' old teaching practices and epistemological dispositions. Keywords : activity theory, changes in epistemology and practice, knowledge building, web-based teachers' professional

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