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Advancing elementary students' literacies through principled-based knowledge building pedagogy

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Statement of the research

The current study was conducted in a Chinese context using knowledge building pedagogy. An elementary teacher designed a lesson by discussing with knowledge building researchers to advance students' online reading and writing. This study introduces a context-dependent case to illustrate how Taiwanese elementary students improved their reading and writing literacies in a knowledge building environment cross two semesters.

Preliminary Results

In the first semester, the teacher designed to encourage students to contribute ideas related to living experiences (i.e., real ideas, authentic problems) in a KB environment called Knowledge Forum. Students' notes were coded according to low-to-high levels of reading comprehension. Results indicate that students' reading were increasingly advanced in high-level reading comprehension (i.e., interpreting and integrating ideas and information, and examining and evaluating contextual elements) in the later phase of the semester.

In the second design iteration, based on the findings from the previous semester, the teacher's design was to specifically use scaffolding supports to advance students' writing skills (i.e., improvable ideas). We analyzed built-on notes, scaffolds used in notes, keywords, and problems students identified in notes. Results showed that students' writing was much elaborated from mainly asking questions and sharing ideas to providing explanatorily more coherent and integrated ideas.

Discussion and Next Steps

To date, we found that knowledge building characterizes online reading and writing activities not only as a means to enhancing text comprehension and composition but also as a means to advancing collaborative, idea-centered knowledge work. This research brought out an issue on teacher's design using knowledge building pedagogy and Knowledge Forum technology together support the development of students' literacies in reading and writing will be further analyzed and discussed.