Understanding Mathematics: Teacher Knowledge, Task Design and Evaluating Students' Mathematical Reasoning

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This presentation describes a research project designed to understand the relationship between teachers' conceptual understandings of mathematics, the tasks they design for their students and their evaluation of students' responses to tasks. Using Timperley's (2008) Teacher Knowledge Building and Inquiry Cycle, Year 5 and 6 primary teachers and leaders at a range of career stages engaged in tasks to highlight the connection between what students need to know, what teachers need to know and what teachers need to learn. The implications for developing teachers' understandings of mathematics will be discussed in terms of system-level professional learning.

References

Timperley, H. (2008). Teacher professional learning and development, Educational Practices Series-18, International Bureau of Education, UNESCO.