

CONSIDERATIONS OF VETERAN MATHEMATICS TEACHERS AS THEY PLAN THEIR LESSONS

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Teachers' preparation for classes has come under increasing scrutiny in light of recent TIMSS data showing Japanese instructors teaching in ways closer to NCTM's vision than U.S. teachers. Most current research focuses upon the impact of coursework on student teachers' lesson plans rather than how veteran teachers prepare. Through survey research with 83 veteran teachers, findings reveal what teachers think about as they prepare their lessons. Particularly, I examine if teachers consider their students' prior conceptions and development of mathematical understanding as they plan.

STUDY

Eighty-three middle and secondary school math teachers responded to a Lesson Planning Survey which included questions focused upon what mathematics teachers consider when they plan their lesson: What do you do during your lesson planning time? What does your lesson plan typically include? What is part of your planning process is not written? Do you collaborate with others in developing lesson plans? What do you think about when you plan a lesson? Do you plan differently for different mathematics classes? Do you incorporate your understanding of students' thinking about mathematics into your lesson planning? Other data gathered from the survey included demographic information and questions to determine teachers' level of effort on lesson planning. Data was analyzed qualitatively with coding based on three themes: content (What information do I need to convey?), process (How will I convey it?), and student context (How might students' thinking before and during the lesson impact my instruction?).

This study found that most teachers don't keep student context and thinking foremost in their minds as they create their written or mental lesson plans. Instead, the majority of teachers focused their lesson planning on curriculum driven mathematics, spending the majority of their time examining the text and the district course plan to determine curricular goals. Besides teachers' reflections about their students' general "ability", the data indicated that there was a gap between what teachers considered and what they planned to do in the classroom regarding students' thinking.

References

19 references are included in the paper.