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Eighth grade mathematics teachers' formative assessment practices in ses-different classrooms: a Taiwan study.

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Summary: In this qualitative case study, the researchers explored three 8th grade teachers' formative assessment practices as it occurred during their mathematics instruction at socioeconomic status (SES)-different schools in Taiwan. Instructionally embedded formative assessment we refer to as discourse-based assessment practice (DAP). In Taiwan, there is a large mathematics achievement gap among high SES and low SES and minority students in 8th grade. Addressing this issue at the level of classroom practice, we attempt to document teachers' DAP using a parsimonious, but practical framework for analyzing classroom discourse in 23 lessons. For the purpose of this study, three lessons for each teacher are represented. The extended sequence was the primary unit of analysis, to which we applied our framework for illuminating and differentiating the teachers' press for student understanding through questions and feedback. The analysis of the teacher's instruction at the high SES indicated that it was more formative than the others, pressing for mathematical understanding. The two teachers at the low SES schools pressed for rote understanding, though there were qualitative differences between them. The findings raise more questions and implications for research and education policy. In Taiwan where there is scant research on classroom practices, DAP as an instructional improvement may be a starting point for educational improvement for all its students.

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Keywords: aboriginal students; discourse-based assessment; equity; formative assessment; mathematics teaching; minority students; Taiwan education policy; socioeconomic status

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