

SUPPORTING TEACHERS IN BUILDING CLASSROOM DISCOURSE CENTERED ON MATHEMATICS

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Discourse is central to the current vision in the reformed curriculum (NCTM, 2000; MET, 2000). The process of creating mathematical discourse communities dealing with complex and multifaceted undertaking is a challenge for teachers (Lin, 2002a). According to the reform vision, teachers were expected to pose worthwhile mathematical tasks, help students to monitor their own understanding, and help students to question one another's ideas. Therefore, creating a collaborative team is considered to be the way of supporting teachers in encouraging their students to participate in discourse. The intention of the collaborative team was to provide teachers with a new experience of creating a discourse among them as learners.

This study was designed to help teachers building classroom learning community in which students were willing to engage in discourse. A collaborative team consisting of the researcher and four second-grade teachers was set up. The collaborative learning community and second-grade classrooms were the primary sites for the teachers learning to teach. Classroom observations and routine meetings were the major data collected in the study. The cases referred to in the study were characterized as the teaching events relevant with the issue of discourse in which teachers observed in their real classrooms.

The main conclusion of the study was that the teachers were supplied with the support of new experience and needed support of creating learning communities for students from the members of the collaborative learning community. They learned the roles of each member in the collaborative learning community in which the manner is similar to those of creating discourse in a classroom.

A result indicated that a teacher with richer research experience related to social interaction of students; she acted frequently as an abler in the collaborative learning community. The teachers supported mutually and readily in dealing with creating a discourse centering on mathematical aspect, since they confronted same problems and had similar difficulty with dealing with same grade students. Through the needed support and new experience of the collaborative learning community, the teachers evolved rapidly their pedagogy from a traditional approach toward a student-centered approach.

Reference

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