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Generating a Peer Mentoring Culture Through Mathematics Camps

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Generating a Peer Mentoring Culture through Mathematics Camps

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One of the hallmarks of a preservice teachers' transition into the profession is their aptitude and desire for sharing ideas and overcoming difficulties faced by the community of teachers. Teacher educators strive to design programs that address the many facets necessary to foster preservice teachers through the transition from student to professional educator. In many cases preservice teachers move according to a prescribed program of study in which they learn from professors, engage in tutoring and/or field experiences with students, and apply their knowledge in an internship with an experienced mentor teacher. During the program of study there is typically cooperation with peers for group work on designing lessons, units, pedagogical strategies and portfolio development (Davis & Honan, 1998; Freidus, 1998), but there is not a significant and prolonged collaboration among preservice teachers in solving the immediate problems presented by issues such as disengaged students, struggling students, or students with behavior problems. What would it mean for a program to increase expectations and transition from peer collaboration to peer mentoring by enacting teaching in mathematics camps?

In this poster I will describe an *exploratory evaluation* study (Patton, 1987) of a mathematics teacher program at a university in Southeast Asia. The program in the study incorporated mathematics camps with public school children from grades K-12 each semester. Preservice teachers in the program were expected to design, implement, assess, discuss, and redesign mathematics camp curriculum and processes. The mathematics camps were enacted for many different grade levels and schools in the local community. The preservice teachers applied their learning from mentors and their experiences from each camp to become more effective at engaging students in enjoyable learning of mathematics. First year preservice teachers are mentored by the second and third year preservice teachers. In the first year they learn about the camp structure and participate as students in a large camp experience. Second year preservice teachers are mentored by the third year preservice teachers in the design, implementation, assessment, discussion, and redesign process. The second year students work alongside the third year to enact the camps in several schools each academic semester. Third year students are in authority at the camps and must ensure their success. They may consult their fourth and fifth year elders and their professors on issues that arise, but during the camp, they must make the decision they feel is best and then reflect on that decision with others later.

The resulting descriptions from the study suggest the program has a rich and endearing peer mentoring culture that has been established through the teaching of mathematics camps with local school students. These descriptions reveal that through the peer mentoring and the teaching during the mathematics camps preservice teachers have a strong bond to others within the profession and the mathematics unit. Preservice teachers also appear to operate with increasing pride and efficacy in their teaching of mathematics. Lastly, there is evidence of significant development of the preservice teachers social, organization, and leadership skills as they progress through the program.

References

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