How to Assess Effective Teaching in a Problem Solving Mathematics Curriculum.

In order to attempt to assess teaching effectiveness in a problem solving math curriculum, the inevitable question of what defines teaching effectiveness must be considered. Existing studies identified the following as important aspects to assessing teaching effectiveness: Classroom performance; Curriculum planning; and Material development; While these components are foundational to teaching in general, we propose four additional abilities which must be developed in order to effectively teach in a problem solving curriculum. We discuss each of these abilities in some detail, and we provide some examples of what have been or could be effective methods which demonstrate them. Our four abilities include: Creating an atmosphere that promotes learning and doesn’t stifle student growth; Helping students learn how to learn by recognizing different learning styles and adapting teaching styles as required; Ensuring students know what resources are available to aid in their learning; Demonstrating the ability to change and improve based on feedback from multiple sources. (Received September 19, 2007)