

Computers, Concrete Manipulatives, and Candy: Keys To Beginning Number and Problem Solving Skills In A Bilingual Early Childhood Setting

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Abstract: Technology can help develop a cycle of learning that includes awareness, exploration, inquiry, and utilization for young children. (Bredenkamp & Rosegrant, 1994) Susanne Thouvenelle, in an introduction to Technology: Practical Strategies for Introducing Computers Into the Early Childhood Classroom, states that the observation of typical ways in which young children interact with computers in their classrooms illustrates how they can use the computer for problem solving as well as to construct their own understanding of the role of technology in their young lives. (Ainsa, 1995). Reflecting this philosophical background, a math activity initially utilizing "m & m's" as manipulatives, and then progressing to computer software activities, was piloted and evaluated in five early childhood classrooms.

The purpose of this study was observation of the children's response, enthusiasm, and learning as a result of the combined technology/manipulative curriculum activity. Through analysis using teacher observation of learning and frequency response. there are strong indications that the treatment yielded a positive, successful learning experience. The baseline data obtained in this study is useful to other teachers and scholars. Further study could include more controlled research methods. The project was a successful and different approach to learning. The most rewarding aspects of the program, according to the children, were candy and computers. Both seem to be high on children's scale of fun and learning.

References:

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Bredenkamp, S., & Rosegrant, T, (1994) Learning and teaching with technology. In J. Wright & D. Shade (Eds.), Young children: Active learners in a technological age. Washington, DC: National Association for the Education of Young Children.