

DEFINING STUDENTS' INSTRUCTIONAL NEEDS IN NUMERATION USING DYNAMIC ASSESSMENT

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Many applications of 'dynamic assessment' have been developed and all approaches subscribe to the idea that "if you wish to understand how a child learns, it is best to engage the child in the learning process" (Lidz, 1997, p.281). Within a school psychology practice, teaching can be incorporated into a clinical assessment procedure so that the effect of teaching can be examined (Fleischner, 1994) as well as the learning of the student.

The study involved the development and implementation of a school mathematics dynamic assessment procedure for use by school psychologists. The information derived from conventional as well as from dynamic assessment were compared in terms of their ability to inform instruction. Conventional assessments produced lists of skills to be taught. Alternatively, the dynamic assessment approach defined concepts, intensity and type of instruction needed, and focused on specific aspects of student functioning. The ability of dynamic assessment to provide rich information about student learning was confirmed in this study.

The research aimed to be illuminatory, rather than totally generalisable (Gerber, Williams & Biilmann, 1995). It shed light on how dynamic assessment can contribute to school mathematical learning. Curriculum-based dynamic assessment provides a framework for a clearly focused lens on school mathematical learning by school psychologists. It can provide explanations as well as descriptions of achievement. The dynamic assessment procedure produced extensive information about student learning that was not available from conventional procedures, and which better supported the definition of instructional needs of individual students.

References

- Fleischner, J. (1994). Diagnosis and assessment of Mathematics learning disabilities. In G. Lyon (Ed.), *Frames of reference for the assessment of learning disabilities: New views of measurement issues* (pp. 441-458). Baltimore, MD: Paul H. Brookes.
- Gerber, R., Williams, M. & Biilmann, O. (1995). Conceptualising qualitative research in curriculum studies: an international study. *Curriculum Studies*, 3 (3), 283-297.
- Lidz, C. S. (1997). Dynamic Assessment approaches. In D. P. Flanagan, J. L. Genshaft & P. L. Harrison (Eds.), *Contemporary intellectual assessment: Theories, tests and issues* (pp. 281-295). New York: Guilford.