ABSTRACT OF THE DISSERTATION

ENHANCING PRIMARY STUDENT SUCCESS THROUGH MULTIPLE

INTELLIGENCE-BASED PORTFOLIO ASSESSMENT

By

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Having students effectively learn the fundamentals of mathematics has been a long-standing challenge for educators. Many children drop the subject as soon as they can or check out psychologically or cognitively from the information as early as primary school. But is the difficulty with the learning of mathematics or the assessment of that learning? That is what this research seeks to investigate.

Using the Multiple Intelligence Theory as a framework, a new set of assessment tools were developed to allow students a greater range of responses in their evaluation. A Multiple Intelligence profile, a Multiple Intelligence-based Mathematics workshop, a student-led portfolio assessment procedure, and an individual interview were completed with 102 third grade children. These instruments proved to be valid, and the correlation results were statistically significant at the .05 level of confidence. Chi square was used to compare this outcome to school type, and it was found that choice schools were not significantly different than typical schools in their results.

Whether mathematics achievement was greater with this approach than through standard methodology was not conclusive, but the results did lead to a proposal for further research. Entitled the multiple assessment process, this scheme includes integrating Multiple Intelligence Theory and portfolio assessment into any curriculum for a stronger learning outcome. It is suggested by the current research that children who have English as a second language or those with behavioral or cognitive support needs could benefit from this methodology.