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Intentionality, Pygmalion, and Cognitive Fun Redirects Elementary School Children in Pull-Out Neural Enrichment

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Abstract

This study describes an academic enrichment and emotional wellbeing intervention for 15 'high risk' elementary school children who were pulled out of 'General Education' (Gen Ed) classrooms for 40 minutes four-times a week during the Bangalore school year. The research question sought to learn if an intervention that was brain-based might reduce the achievement gap because of a shift in just one teacher's mental model with respect to behavior. The null hypothesis stated that a teacher mental model that shifted to brain-based methodology would have no perceivable effect on (i) children's academic achievement or (ii) their social and emotional engagement. This study was grounded in teacher education literature involving mental models that illuminate classroom management techniques designed to affect student academic and social/emotional outcomes. Subjects were drawn from second grade students (mean 6.7 years; n = 15) Study was an opportunistic quasi-experimental design that is reflective of schools across India. A mixed method analysis was chosen to describe a complicated learning space that involved multiple classrooms, classroom teachers, and 15 sets of parents. Qualitative ethnographic data using grounded theory were triangulated with quantitative measures that best account for observed processes and resultant outcomes. Findings highlight significant academic, and social and emotional growth, which dramatically reduced the achievement gap for all participants. Further research is suggested to deepen an understanding of teacher mental models in the classroom. Implications of this study suggest plausible accounts for replication in large urban schools in and beyond India.

Keywords: engagement, neural enrichment, embodied cognition, mixed method