# MERGING NEUROSCIENCE AND EDUCATION: IMMERSING AFFECTIVE-BEHAVIORAL-COGNITIVE INSTRUCTION WITHIN THE CONSTRUCTS OF THE ACADEMIC CURRICULUM

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## Abstract

The spotlight on violence by bright individuals questions why some gifted minds thrive in life and others fail to fulfill their potential. In performance-driven school culture, the focus has shifted away from whole child development. However, if schools are to be emotionally, intellectually, and physically safe places, we must reevaluate the overemphasis on the intellectual aspect at the expense of the other components, which inevitability leads to uneven psychological development.

Typically, aspects of the affective domain have been studied separately: cognitive theories focus on judgment, biological and psychoanalytic theories on emotions, and social learning theories on behavior. Today, a growing body of research in neuroscience, neuropsychology, psychology, psychiatry, and education reveals that all three components are interrelated, interconnected, and interdependent.

Numerous frameworks and models teaching various nonintellectual branches of child development have been debated in curriculum development (moral, social-emotional, character, values, affective, service-learning), but research is inconclusive on the effectiveness of these programs. Based on the growing body of research in neuroscience and neuropsychology showing that the processes of the brain cannot be separated, educators cannot simply encourage development in only one area; psychological development must be encouraged in all areas simultaneously. The proposed approach combines all theories concurrently: encouraging psychological/cognitive, social/behavioral, and emotional/affective development.

The first phase of this study examines several gifted education programs (creative talented arts school, urban charter schools, rural schools, and suburban schools) for moral, social, and emotional psychological development and whether a particular program encourages developmental growth. The second phase relies on neuro-education research to unify multiple models in the three theoretical fields in a curriculum research study merging the Affective-Behavioral-Cognitive curriculum with academic curricula constructs to determine whether a comprehensive curricular approach encourages growth of all psychological developmental areas simultaneously. Both phases of this mixed methods research study incorporate a quantitative component: pre-and post-test for moral-ethical development and social-emotional development and a qualitative component: three rounds of stakeholder interviews and school culture artifacts.

The proposed Affective-Behavioral-Cognitive curriculum approach combines all theories simultaneously.

The facets of:
(1) Cognitive Development (cognitive disequilibrium: moral, social, and emotional dilemma literature and discussions),
(2) Social Learning (community and conation: service-learning, community activism, mentors, apprenticeships) and
(3) Psychoanalytic (classroom environment: humanistic, constructivist, problem-based learning).

Although the present research study examines gifted individuals, the curriculum is recommended for all students, and future research will be conducted to apply the curriculum model to non-gifted classrooms.

Keywords: Neuro-education, socio-affective development, psychosocial development, moral development, socio-affective education, holistic curriculum, gifted education.