



APPENDIX B

An Inventory of Arts-Related Academic and Social Outcomes Found in Critical Links—Organized by Cognitive Capacities and Motivations

This chart on the following page is based on a chart from James Catterall’s essay, “The Arts and the Transfer of Learning,” in the research compendium, *Critical Links: Learning in the Arts and Student Academic and Social Development*. Catterall’s original chart provides a preliminary inventory of the academic and social outcomes that are shown to be, by the studies collected in *Critical Links*, related to learning in the arts.

This chart separates out the outcomes Catterall lists for each art form (drama, multi-arts, music, dance, and visual arts) into two areas: 1) outcomes related to cognitive capacities and 2) outcomes related to student motivation. The specific studies and the essays in *Critical Links* should be referenced for more detailed information, particularly on the strength of the relationship of a particular arts learning experience to an outcome/s (the strength of these relationships varies by study). »

» DRAMA

» MULTI-ARTS

» Cognitive Capacities (Academic and Social Skills)

- Understanding social relationships
- Ability to understand complex issues and emotions
- Concentrated thought
- Story comprehension (oral and written)
- Character identification
- Character motivation
- Increased peer interaction
- Writing proficiency and prolixity
- Conflict resolution skills
- Skill with subsequently read, unrelated texts
- Problem-solving dispositions/ strategies)

SPECIAL POPULATIONS

- **Lower SES Students:** story understanding, story recall, conflict resolution

- Empathy for others
- Creativity/Creative thinking
- Reading, verbal and mathematics skills
- Collaboration skills
- Leadership
- Higher-order thinking skills

IMPACTS ON SCHOOL

- Instructional practice in the school
- Professional culture of school
- School climate
- Community engagement and identity
- Reduced dropout rates

» Motivations (Attitudes and Dispositions)

- Engagement
- General self-concept

SPECIAL POPULATIONS

- **Special education students:** ignoring distractions, courteous behavior, acceptable use of free time
- **At-risk students:** self-confidence, self-image, seeking additional resources to support writing

- Self-confidence
- Risk taking
- Paying attention
- Self-initiating
- Persevering
- Task persistence
- Ownership of learning
- Achievement motivation
- Cognitive engagement
- Educational aspirations
- Engagement/attendance

» MUSIC

- Spatial temporal reasoning
- Math achievement/proficiency
- Reading achievement
- Cognitive development
- Spatial reasoning
- Quality of writing
- Prolivity of writing
- SAT verbal scores
- Skills for second language learners

- Self-efficacy
- Self-concept

» DANCE

- Creative thinking—fluency
- Originality, elaboration and flexibility
- Expressive skills
- Reading skills
- Nonverbal reasoning
- Creativity in poetry
- Social tolerance

SPECIAL POPULATIONS

- **Two boys with learning disabilities:** writing and drawing

- Self-confidence
- Persistence
- Appreciation of individual/group social development

» VISUAL ARTS

- Content and organization of writing
- Sophisticated reading skills/interpretation of text
- Reasoning about scientific images
- Reading readiness