

**MURC 2019**

**Presentation ID:** 143

**Presentation Format:** 10-Minute Oral Presentation

**Presentation Title:** Transfer of Cognitive to Academic Outcomes of the Arrowsmith Program

There is a growing interest in cognitive intervention programs as a means to improve the cognitive and academic abilities of children with learning difficulties. Many of these programs infuse the principles of neuroplasticity into their efforts to strengthen neural connections and fundamentally enhance the brain's capacity to learn. One of these programs, the Arrowsmith Program, has not been empirically examined to date. The purpose of this study is to identify evidence of potential transfer of cognitive improvements to academic skills in participants in the Arrowsmith Program, after approximately one year in the program. A group of 28 participants completed the Woodcock Johnson Tests of Cognitive Abilities-Third Edition (WJ-III COG) and the Tests of Achievement, Third Edition (WJ-III ACH) at two time points (baseline and after one year in the program) to assess change in their cognitive and academic ability over a period of one year. Previously presented data suggest significant growth in many cognitive and academic areas within this sample. Regarding potential evidence of transfer, bivariate correlational analyses indicate significant, positive relationships between growth in some of the cognitive and academic domains. Specifically, reading comprehension improvement was significantly correlated with growth in auditory working memory, math fluency improvement was associated with improvement in auditory processing and vigilance, and math problem solving improvement was associated with cognitive growth in inductive reasoning. These results allow us to begin to understand the long-lasting effects of interventions and programs for children with learning disabilities in their academic pursuits.

**Commented [C1]:** Just curious – is there reasoning behind this? Is Aroowsmith one of the newer programs?

**Commented [C2]:** What was the age range?

**Themes:**

Check (highlight) the most applicable theme according to the abstract.

<input type="checkbox"/> Innovation and Technology	<input type="checkbox"/> Health and Wellness	<input checked="" type="checkbox"/> Culture and Society	<input type="checkbox"/> Sustainability and Conservation
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Comments: Overall, this is a good abstract for MURC (generalist audience). The objective and methods are clear. Very interest research!