

## **Bilingual Research Color Study 2011**

Researchers conducted a matched-samples cross-program evaluation over 12 weeks to quantify the effectiveness of Allegro's movement education techniques for teaching basic pre-literacy skills to preschool students at risk with unidentified disabilities. Three separate Bilingual Preschool classes were held throughout the Spring Semester, where students of similar abilities were matched for proper comparison using composite scores from the PF Scale,  $r(47) = -.025$ ,  $p = .882$ .

### **Group Composition**

**Group 1:** All preschool students at risk with unidentified disabilities were taught color names paired with color-specific movement education instruction.

**Group 2:** All preschool students at risk with unidentified disabilities were taught color names without movement instruction.

**Group 3:** All preschool students at risk with unidentified disabilities were taught color names following movement activities unrelated to colors.

Based upon previous evidence of Allegro's movement education techniques, children in Group 1 should excel and outperform students in all other groups. Students enrolled in Group 3 are predicted to perform moderately well with educational gains due to recent although unrelated movement instruction. The increased blood flow and oxygen to the brain in addition to other physiological changes in the body should facilitate learning in this third group. Finally, our control group, Group 2, is expected to perform the lowest of all three with only modest improvements in the color-naming task.

### **Results**

Evidence presented below as gather by Student/Volunteer Coordinator Jessica Rossini validates our predictions. **Group 1, taught through Allegro's paired movement education instruction (36%) performed much better than the movement-only (31%) and control (23%) groups, providing empirical evidence for the importance of Allegro's techniques!**

## Results

Color	Group #	Number of Students in Class	Number of Students with Correct Response	Percentage Correct	Total Percent Increase
Red	1	14	8	57%	
		14	12	86%	29%
	2	17	6	35%	
		17	9	53%	18%
	3	16	9	56%	
		16	12	75%	19%
Orange	1	14	7	50%	
		14	12	86%	36%
	2	17	6	35%	
		17	10	59%	24%
	3	15	7	47%	
		15	12	80%	33%
Yellow	1	14	8	57%	
		14	13	93%	36%
	2	17	8	47%	
		17	13	76%	29%
	3	17	9	53%	
		15	13	87%	34%
Green	1	14	8	57%	
		14	13	93%	36%
	2	17	8	47%	
		17	12	71%	24%
	3	15	10	67%	
		15	14	93%	26%
Blue	1	14	8	57%	
		14	13	93%	36%
	2	17	9	53%	
		17	11	65%	12%
	3	15	9	60%	
		15	14	93%	33%
Purple	1	14	7	50%	
		14	13	93%	43%
	2	17	6	35%	
		17	11	65%	30%
	3	15	6	40%	
		15	12	80%	40%