



Arts Integration Predicting Creativity and Motivation in Elementary Students

California State University, Fullerton



Introduction

- This study included two randomly selected elementary schools in Orange County, CA where arts programs were already integrated prior to program implementation.
- The program model followed a four year path. The data reflected on this poster represents year three of program implementation.
- The selected participating schools included Schools A and B. Both were Title 1 schools in their second and third years of program improvement respectively (see Figure 1).
- In the current program, the two schools' existing arts programs incorporated four new genres (i.e., visual arts, dance, theater, and music), arts education opportunities outside of the classroom, and professional development trainings for classroom teachers.

Hypothesis

H1: Students who received an arts enriched education would have increased creativity as measured by the Torrance Test of Creative Thinking (TTCT) and the Wallach and Kogan creativity test.

H2: Students who received an art enriched education would have increased motivation to attend school, engage in activities, and the curriculum.

School Profiles

Profile of School A

School	Type of School/District	Number of Teachers	English Learners	Pupil Teacher Ratio	Free & Reduced Price Meals
School A	ELEM	13	190 (54.2%)	21.3:1	281 (71.0%)

Profile of School B

School	Type of School/District	Number of Teachers	English Learners	Pupil Teacher Ratio	Free & Reduced Price Meals
School B	ELEM	16	206 (42.3%)	26:1	278 (60.4%)

Figure 1. School profiles.

Methods

- TTCT:** evaluated students' creativity by using a creativity index (CI) and compared it to the national percentiles (NP).
- Wallach & Kogan:** evaluated students' creative thinking skills for six lists in three dimensions: frequency, flexibility, and uniqueness.
- Surveys:** evaluated students' motivation and perceptions as learners over time.

Figures

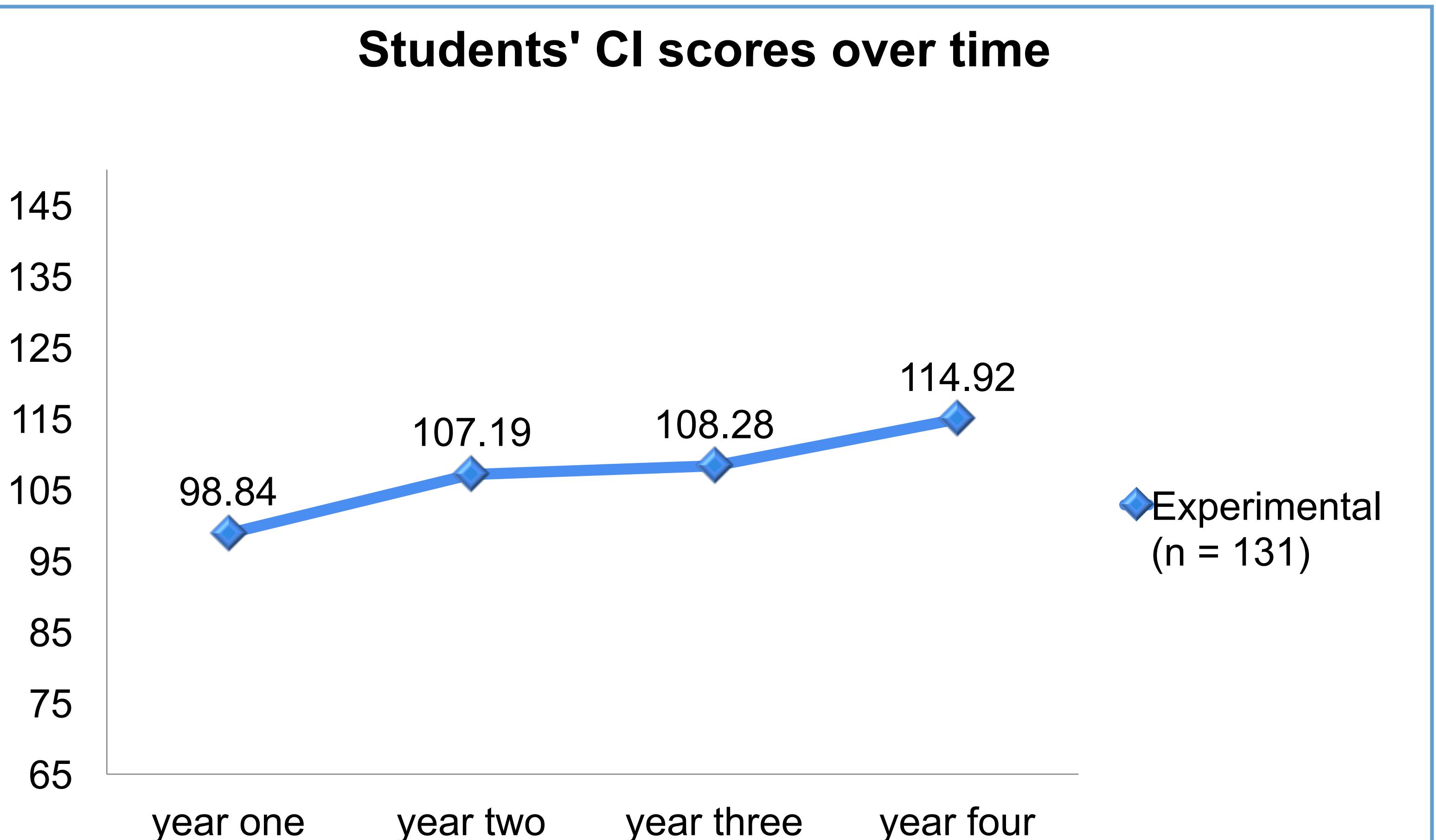


Figure 2. Students' CI scores over time.

Flexibility Comparison for Experimental Group

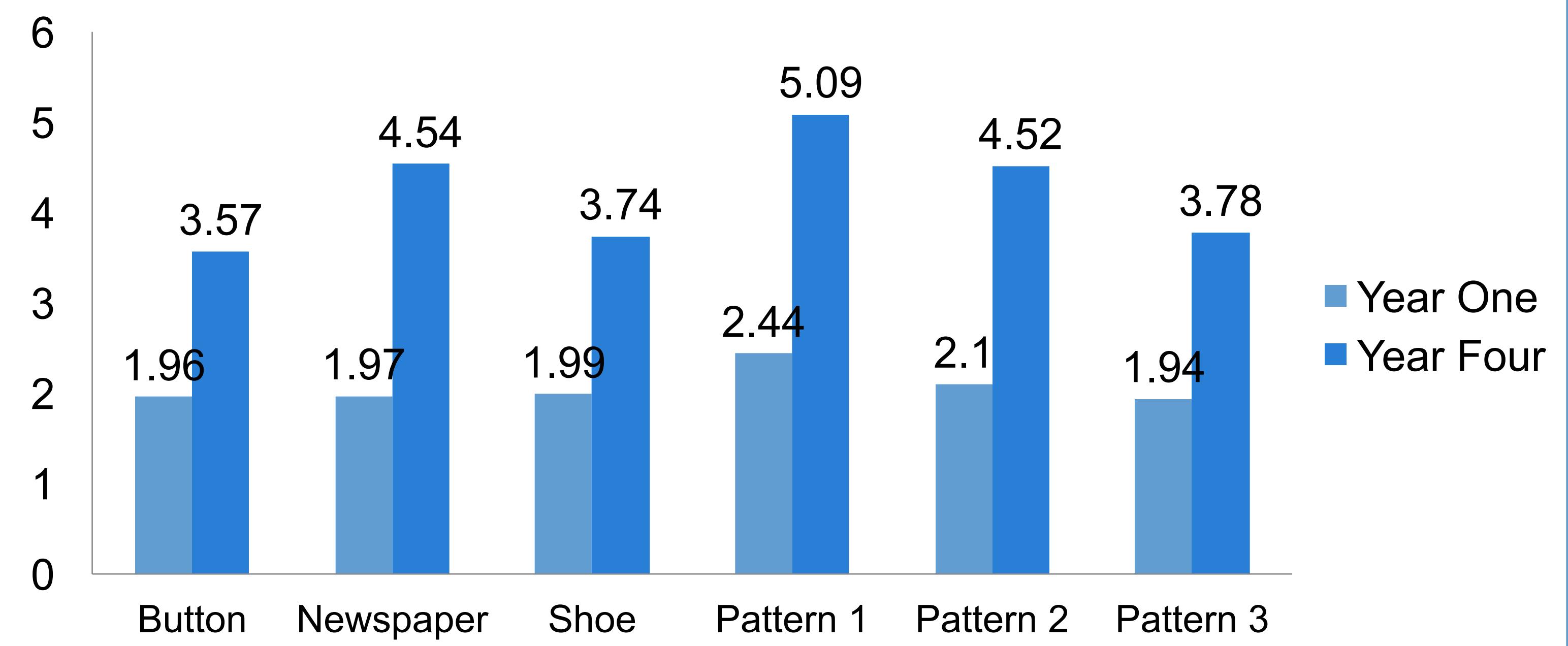


Figure 3. Students' Wallach & Kogan flexibility scores over time.

Students' Motivation Over Time

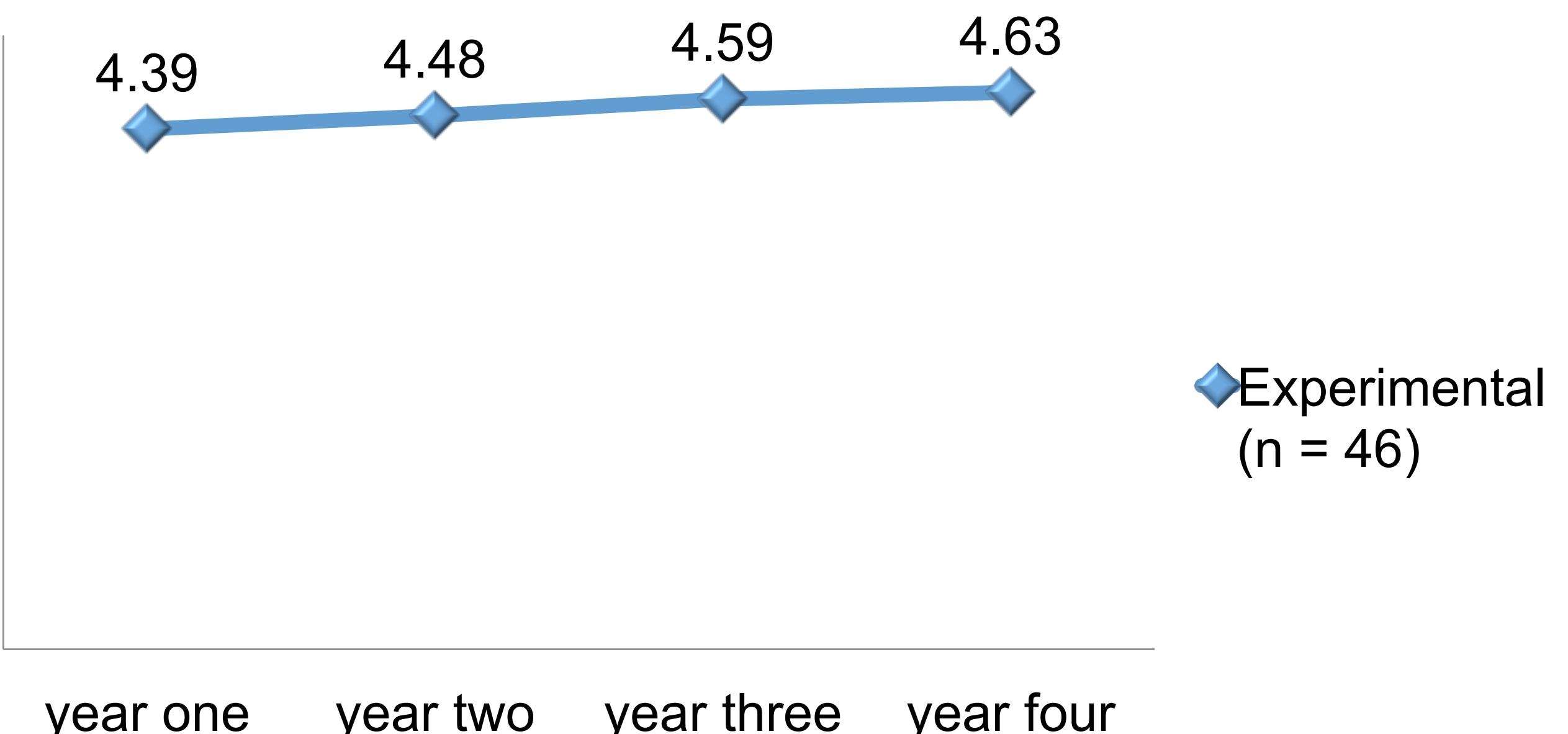


Figure 4. Students' motivation over time.

Results

- Figure 2
 - A repeated measures ANOVA was run to reveal changes in students' CI scores over time.
 - $F(3, 773) = 91.22, p < .001$.
- Figure 3
 - Means are presented in the figure. Paired samples t-tests were conducted to assess significance. All items are significant at $p < .001$.
- Figure 4
 - A repeated measures ANOVA was run to reveal changes in students' motivation over time.
 - $F(3, 451) = 1.23, ns$.

Conclusion

- Students participating in an arts enriched education had increased creative thinking over the four year evaluation.
- Students had significant increases in flexibility scores within the Wallach & Kogan over time.
 - Similarly, students' frequency of responses and number of unique responses also increased over the evaluation period.
- There were no significant changes in motivation over time.
 - However, this may be due to the fact that year one data was clustered positively around the upper limit of the scale, which did not allow for further positive growth.
 - Motivation scores remained consistently positive over time.
- Data suggests that arts enriched education may be beneficial for students with regard to their levels of creativity and critical thinking.