



Preventing Reading Loss with a Culturally Relevant Curriculum

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Introduction

North Florida Freedom Schools (NFFS) is part of the Children's Defense Fund's (CDF) Freedom Schools (FS) Program. FS strives to reach low-income students, who are racial or ethnic minorities, during free 6-week summer camps intended to empower students to make a difference in their world through a social action project, while also encouraging a love of reading and preventing summer reading loss (Roehrig, Clemons, & Norris, in press). CDF subsequently developed the culturally relevant Integrated Reading Curriculum (IRC), which is facilitated by college-age community members in a summer camp setting. The IRC follows a consistent schedule which includes time for group reading, small group activities, individual activities, and social action projects. Currently, there are nearly 200 FS summer camps across the United States annually.

Purpose Statement

The purpose of this study is to conduct preliminary longitudinal analysis of the reading achievement of children in NFFS during the Summer of 2017. The results of this study will shed light onto the possible changes in children's reading achievement while participating in NFFS.

Method

The reading frustration level of the participating children ($n = 58$) was measured with the Basic Reading Inventory (BRI; Johns, 2012) during the first and last weeks of the free, 6-week program. The BRI assesses three distinct but related types of reading achievement: word recognition in a word list, word recognition in context (passage), and passage comprehension. The average alternate-form reliability of the BRI up to the eighth grade is $r = .85$, ranging from .47 to .95 (Johns, 2012). Preliminary analyses presented in this poster includes pre-test and post-test mean and standard deviation for three types of reading achievement and Repeated Measures One-Way Analysis of Variance (RM-ANOVA), which was conducted to determine if there was a significant difference in the means of the three types of reading achievement from pre-test to post-test.

Results

Demographics of the sample can be seen in Table 1. Students' identified reading grade levels from the BRI are presented in Table 2. The descriptive statistics suggest a slight increase over time in students' ability to recognize words in context and comprehend passages, especially for Grades 6-8. The results of the RM-ANOVA (Table 3) provide corroboratory evidence and suggest significant increases between pre-test and post-test means for word recognition in context and passage comprehension in Grades 3-5. Furthermore, significant differences between pre-test and post-test mean were found in all measures of reading achievement in Grades 6-8. The significant differences and effect sizes seen (Table 3) suggest that meaningful improvement in reading achievement was seen in this 6-week period for students in Grades 3-5 and 6-8.

Sample Demographics & Descriptive Statistics

Table 1
Sample Demographics

Group 1 ($n = 17$)	Group 2 ($n = 31$)	Group 3 ($n = 10$)
Grades 1-2	Grades 3-5	Grades 6-8
9 females, 8 males	15 females, 16 males	7 females, 3 males
14 AA, 3 LH	25 AA, 2 LH	10 AA
16 FRL	19 FRL	4 FRL

Note. AA: African-American, LH: Latino/Hispanic, FRL: Free and Reduced Lunch

Table 2
Students' Reading Grade Levels

	Pre-Test		Post-Test		Gain/Loss
	Mean	St. Dev	Mean	St. Dev	
Group 1 (Grades 1-2)					
Word Recognition in Isolation	2.25	1.36	2.33	1.78	0.08
Word Recognition in Context	3.33	1.72	3.42	2.15	0.09
Passage Comprehension	3.00	1.54	3.25	1.96	0.25
Group 2 (Grades 3-5)					
Word Recognition in Isolation	5.32	1.52	5.55	1.50	0.23
Word Recognition in Context	6.96	1.84	7.91	2.31	0.95
Passage Comprehension	6.27	1.88	7.36	2.44	1.09
Group 3 (Grades 6-8)					
Word Recognition in Isolation	6.43	2.15	7.00	2.38	0.57
Word Recognition in Context	7.86	2.19	9.71	1.89	1.85
Passage Comprehension	7.43	2.37	9.71	1.89	2.28

Within-Subject Results

Table 3

RM-ANOVA Results				
	F	Sig.	Observed Power	Effect Size
Group 1 (Grades 1-2)				
Word Recognition in Isolation	0.10	0.754	0.060	0.009
Word Recognition in Context	0.07	0.795	0.057	0.006
Passage Comprehension	1.00	0.339	0.150	0.083
Group 2 (Grades 3-5)				
Word Recognition in Isolation	1.09	0.308	0.169	0.049
Word Recognition in Context	7.39	0.013*	0.737	0.260
Passage Comprehension	13.09	.006**	0.836	0.312
Group 3 (Grades 6-8)				
Word Recognition in Isolation	8.00	.030*	0.657	0.572
Word Recognition in Context	8.59	.026*	0.687	0.589
Passage Comprehension	8.63	.026*	0.689	0.590
All Groups (Grades 1-8)				
Word Recognition in Isolation	3.68	.016*	0.686	0.127
Word Recognition in Context	15.56	.001**	0.943	0.234
Passage Comprehension	23.01	.000**	0.985	0.293

Note. ** p -value < .01, * p -value < .05

Conclusion

This study is a step towards providing empirical evidence of the effectiveness of this program. The results of the analysis provided suggest that the IRC and culturally relevant experiences provided as part of participation in the FS program offer an enriching experience that may prevent loss of learning during the summer months. Some evidence even suggests that children's reading achievement improved while participating in NFFS.

Future research will be conducted to expand upon this preliminary analysis with the use of data from the other sites of NFFS. This includes assessing the significance of the differences in reading levels seen from pre-tests and post-tests with a larger sample of students. Furthermore, future studies will attempt to control for possible covariates such as site, student demographics/characteristics (e.g., grade level, school type, etc.), and testing conditions (e.g., the alternate form of BRI that was used).

References

- Johns, J. L. (2012). *Basic reading inventory*. Dubuque, Iowa: Kendall Hunt Publishing Company.
- Roehrig, A. D., Clemons, K. M., & Norris, K. (in press). *The fierce urgency of now: CDF Freedom Schools and culturally relevant pedagogy*. In E. Ortlieb, & E.H. Cheek Jr. (Eds.), *Addressing diversity in literacy instruction*. Bingley, UK: Emerald Group Publishing.