

The Effect of the After-School Reading Education Program for Elementary School on Multicultural Awareness

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Abstract

The purpose of this research is to verify the effectiveness of the influence of an afterschool reading program on changing multicultural perception. The afterschool reading program at the elementary school is composed of 12sessions. The main content was reading a foreign fairy tale and then having a discussion on about it. The total number of subjects was 44 people, 21 in the experiment group and 23 people in the control group. Each group did a preliminary inspection before participating in the program, a post inspection after participating, and a later inspection 5 weeks after finishing the program. Research results showed that the reading-studying program improves the cognitive level of elementary school students' multicultural perception. Moreover, the analysis results of multicultural awareness levels concerning the cognitive factors and defined factors seemed to be more effective than behavioral factors.

Keywords: *multicultural awareness, effect of multicultural class, after-school reading education program*

1. Introduction

One of the purposes of equality in education is to promote multicultural education. It has the potential of every student by developing the intellectual, social and personal development of all students [1].

In order to adapt to having multicultural students, the school system needs to have a general understanding about diverse cultures and the changing collective awareness that they can accommodate multicultural students positively. They must recognize each other's social diversity through multicultural education, which will enable them to live as equals together in the society. The curriculum of multicultural education should be extended to critical multiculturalism which highlights intercultural mutual relationships, mutual State inertia, and mutual respect [2]. Therefore this study is aimed to determine the effectiveness of the influence of the reading program on the multicultural awareness of the elementary school students [3].

Multicultural education is helping a wide variety of ethnic, cultural, linguistic, and religious groups of students to acquire cultural community to which they can belong. The national civic union, local culture, and the knowledge required for global partnership to perform their function as global partners, attitudes, and capability [4][5][6]. Multicultural awareness is a way to recognize different cultures in a variety of groups, in the society in which we live to have understanding and respect for the difference between those cultural backgrounds. Also it can be said, that the height of multicultural awareness is the ability to understand and to respect different cultures, and to accommodate and recognize the value of each one [7] [8]. In addition to that, multicultural awareness is to be judged by not only identifying the knowledge level and action but the encompassing the cognitive area, the

affective area, and the behavioral area [9] [10]. In this study, the multicultural general awareness of students uses the concept of encompassing all area of cognition, affection, and behavior.

2. Study Methods

2.1. Subjects of Study

The subjects of the present study were 44 5th-6th grade elementary school students in Jeonbuk province, Korea. They were divided into an experiment group consisting of 23 students and a control group consisting of 21 students.

Table 1. Participants

	1 st group	2 nd group	3 rd group
Experiment group	24	23	23
Control group	24	22	21
Total	48	45	44

2.2. Treatments and Measures

2.2.1. Treatments

The experiment group received a total of 12 sessions of multicultural education for two months in 2014. The program is designed to improve the subjects' informal multicultural experiences and multicultural awareness.

2.2.2. Teacher Training

A 6-hour teacher training session was delivered for the teachers who taught the experiment and control groups. The teachers of the experiment group were instructed to implement the teaching materials based on the goals, content, and teaching methods of the multicultural education program.

2.2.3. Questionnaire for Multicultural Awareness

In order to assess the participants' multicultural awareness level, a questionnaire developed by Park Yoon-Kyung et al was adopted and modified for the current study [8]. The internal consistency measured by Cronbach α was .828.

Table 2. Factors and Items of Multicultural Awareness Test

Factors	Items	Number	Cronbach's α
cognitive factor	1-10	10	.765
affective factor	11-20	10	.703
behavioral factor	21-30	10	.814
Total		30	.828

2.3. Data Analysis

The materials collected through preliminary and post-tests were analyzed by SPSS/PC 21.0 statistic program as a material processing method for the test result analysis of this

study. The preliminary inspection was conducted to secure the homogeneity of the test group and the control group, also an independent specimen t-verification was conducted to verify the instant effect of the program.

2.4. Study Design

The effect on the program would be verified through repeated measurement on the same group. A 12 session program was input for the test group after the first preliminary inspection and the second inspection was conducted for the test group and the control group. The 3rd inspection was conducted on two groups similarly to verify the constant effect of the program after 1 month of conducting the 2nd inspection.

Table 3. Study Design

Group	Pretest	Treatment	Immediate Posttest	Delayed Posttest
Experiment group	○1	●	○3	○5
Control group	○2	X	○4	○6

○1, ○2 pre-test, ○3, ○4 pro-test, , ○5, ○6 pro-test ● Program X No program

2.5. Data Analysis

The materials collected through preliminary, posttest was analyzed by SPSS/PC 21.0 statistic program as a material processing method for the test result analysis of this study. The preliminary inspection was conducted to secure the homogeneity of test group and control group, and independent specimen t-verification was conducted to verify the instant effect of the program.

3. Results

3.1. Cultural Awareness between Experimental and Control Groups

In order to verify the effect of reading education for elementary school students on their multicultural awareness, Table 4 shows the grand mean and standard deviation for multicultural awareness during every testing period with the experimental group and the control group. Compared to the mean difference between the experimental group and the control group in a pretest period, there was a significant difference ($p < .01$) in the results of posttest ($M=1.66$ for experimental group, $M=2.04$ for control group) and the results of delayed posttest ($M=1.67$ for experimental group, $M=2.12$ for control group). The experimental group showed, to some degree, an increased level of multicultural awareness in the delayed posttest after the posttest, but the treatment effects of the program were also shown to be long-lasting.

Table 4. The Average Difference between Multicultural Awareness Verification

		Test G	Control G	df	t
Pretest	M	2.08	2.10	47	-.138
	SD	.57	.50		
Immediate Posttest	M	1.66	2.04	47	-2.836**
	SD	.41	.49		
Delayed Posttest	M	1.68	2.12	47	-3.529**
	SD	.36	.49		

** $p < .01$

3.2. Effective Verification of Continued Cultural Awareness

In order to verify the lasting effect of reading education for elementary school students on multicultural awareness, the significance of the changes in the level of multicultural awareness at different testing periods with the two groups was analyzed by repeated measures of ANOVA. Table 5 shows that the significance probability of Wilk's λ , for the groups with which repeated measures of ANOVA were carried out for the 2nd time and 3rd time, was under $p < .001$. This indicates significant differences in treatment effect. The object verification in contrast in the 1st treatment group shows that there were significant changes in scores ($p < .05$) between the 1st results and the 2nd results that were carried out before and after the implementation of the program. And these changes were still significant ($p < .05$) between the 1st and 3rd test. However, in the control group, there was no change between the 1st test and 2nd test as well as between the 1st and 3rd test. These results confirm that reading education for elementary school students has an enduring effect on the improvement of multicultural awareness.

Table 5. Repeated Measures Analysis of Variance Test Results for the Period by the Change Multicultural Awareness

Group	times	Object verification in contrast			Wilk's λ
		SS	F	p	F
Test G	1 st -2 st	3.181	6.384	.019	17.751***
	1 st -3 st	2.468	4.917	.037	
Control G	1 st -2 st	.263	.851	.366	2.108
	1 st -3 st	7.379E-2	.236	.632	

*** $p < .001$

Table 6 shows the results of the analysis of the effects between the experimental group and the control group and the fact that there was a significant difference ($p < .001$) between the groups. That is to say, the reading education program had a significant effect on the improvement of multicultural awareness in elementary school students.

Table 6. Effectiveness between Experimental and Control Groups Variance Analysis Table

Source	Type III Sum of Square	df	SS	F	p
Intercept	251.096	1	251.096	5832.640	.000
Test-Control group	.706	1	.706	16.399	.000
error	3.186	43	3.186		

*** $p < .001$

3.3. Multicultural Awareness Factor by Test Results

In order to verify the effect of the program on each factor of multicultural awareness in elementary school students, the mean and the standard deviation for each sector is indicated in Table 7 for different testing periods. Analysis of the sub-factors of multicultural awareness in elementary school students shows that there was a significant difference during the posttest.

A detailed examination of the effect of the program on multicultural awareness in elementary school students shows significant differences in cognitive factors ($M=2.46$ for the 1st test, $M=2.11$ for the 2nd test, and $M=2.17$ for the 3rd). In affective factors, there was a steady increase in effects ($M=1.86$ for the 1st test, $M=1.41$ for the 2nd test: $p < .001$, and $M=1.40$ for the 3rd test: $p > .01$). In behavioral factors too, there was a steady increase in effects ($M=2.39$ for the 1st test, $M=2.03$ for the 2nd test, and $M=2.08$ for the 3rd test: $p < .05$)

Table 7. Elementary Multicultural Awareness Factor by an Average Difference Verification

		Test G	Control G	df	t	
Cognitive factor	1 st inspection	M	2.46	2.64	45	-1.336
		SD	.38	.51		
	2 st inspection	M	2.11	2.57	45	-3.318**
		SD	.42	.51		
	3 st inspection	M	2.18	2.57	45	-2.996**
		SD	.40	.50		
Affective factor	1 st inspection	M	2.07	2.06	45	.747
		SD	.46	.46		
	2 st inspection	M	1.36	2.00	45	-6.157***
		SD				

		SD	.32	.39		
	3 st inspection	M	1.40	1.98	45	-4.653***
		SD	.29	.53		
	1 st inspection	M	2.39	2.55	45	-1.084
		SD	.37	.61		
Behavioral factor	2 st inspection	M	2.04	2.37	45	-2.268*
		SD	.50	.51		
	3 st inspection	M	2.08	2.43	45	-2.323*
		SD	.52	.50		

* $p < .05$, ** $p < 0.1$, *** $p < .001$

3.4. Multicultural Awareness Factor by Test Results

Table 8 shows the results of effectiveness verification of multicultural awareness in elementary school students between the experimental group and the control group. There are significant differences between the groups in cognitive factors ($p < .01$), affective factors ($p < .05$), and behavioral factors ($p < .05$). As mentioned above, the effective verification of the factors of multicultural awareness in elementary school students shows that the reading education program has a significant effect on the improvement of multicultural awareness in elementary school students.

Table 8. Elementary Cultural Factors Recognized by Effective Verification Variance Analysis Table

Source		Type III Sum of square	df	SS	F	p
Cognitive factor	Intercept	458.532	1	458.532	529.337	.000
	Test-Control	8.311	1	8.311	9.595	.003
	error	38.981	45	.866		
Affective factor	Intercept	535.767	1	535.767	979.165	.000
	Test-Control	2.773	1	2.773	5.068	.029
	error	24.623	45	.547		
Behavioral factor	Intercept	754.073	1	754.073	1454.195	.000
	Test-Control	2.745	1	2.745	5.294	.026
	error	23.335	45	.519		

* $p < .05$, ** $p < 0.1$, *** $p < .001$

3.5. The Effect on the Multicultural Awareness

Table 9 shows the results of effectiveness verification of multicultural awareness in elementary school students between the experimental group and the control group. There are significant differences between the groups in cognitive factors ($p < .01$), affective factors ($p < .05$), and behavioral factors ($p < .05$). As mentioned above, the effective verification of the factors of multicultural awareness in elementary school students shows that the reading education program has a significant effect on the improvement of multicultural awareness in elementary school students.

The verification of the lasting effect of reading education for elementary school students on the sub-factors of multicultural awareness is indicated in Table 5, which is the result of repeated measures of ANOVA of the significance of changes in the level of awareness for each factor at different times of tests between the two groups. The results of

analysis indicate significant differences in treatment effect, showing significance probability of Wilk's λ under $p < .001$ for both the group of 2nd treatment and the group of 3rd treatment in the sub-factors of multicultural awareness.

Object verification in contrast for the 1st treatment group in multicultural awareness shows significant changes in scores ($p < .001$) between the results of the 1st test and the results of the 2nd test that were carried out before and after the implementation of the program. These changes are also significant between the 1st test and the 2nd test. In the case of affective factors, there were significant differences between the 1st test and the 2nd test ($p < .05$), but there was continuous improvement in the level of multicultural awareness in the 2nd test and 3rd test. The overall changes in the multicultural awareness of elementary school students were $p < .001$ between the 2st test and the 2nd test, as well as between the 2nd and the 3rd test, which in conclusion indicates a continuous change in awareness.

Table 9. Multicultural Awareness Factor by Repeated Measures ANOVA Test in Accordance with the Time

factors	Group	times	Object verification in contrast				Wilk's λ
			SS	MS	F	p	
Cognitive factor	Test G	1 st -2 st	3.694	3.694	28.228	.000	6.020**
		1 st -3 st	2.875	2.875	22.448	.000	
	Control G	1 st -2 st	.371	.371	.926	.342	.569
		1 st -3 st	.267	.267	.933	.340	
Affective factor	Test G	1 st -2 st	5.473	5.473	25.181	.000	3.692*
		1 st -3 st	2.916	2.916	7.205	.011	
	Control G	1 st -2 st	2.383	2.383	1.987	.167	1.121
		1 st -3 st	1.810	1.810	1.465	.234	
Behavioral factor	Test G	1 st -2 st	2.092	2.092	6.358	.014	3.651*
		1 st -3 st	1.061	1.061	4.549	.038	
	Control G	1 st -2 st	.668	.668	2.089	.157	1.018
		1 st -3 st	.299	.299	.723	.401	

* $p < .05$, ** $p < 0.1$, *** $p < .001$

4. Conclusion and Discussion

This study verified the immediate effect that the reading program for elementary school students influenced multicultural awareness and had a lasting effect on them. In the case of the experimental study, the understanding of multicultural awareness in the elementary school improved in the second and third test after implementing the program. In the third test, even though the experimented group showed that the effect of the program had reduced over time, their multicultural awareness level has improved more than before implementing the program. This ensured that the immediate effect of the reading program in elementary school education is most significant, and the influence persisted, even after two months.

This program recognized the effectiveness of multicultural awareness in elementary school through reading education. The study verified reliability by separating Multicultural awareness factors in elementary school by three areas and 30 questions consisting of each area 10 questions each. The result demonstrated that the elementary school reading program was significant as a whole, and that little difference existed

between the sub areas. According to the findings of the urgent and continuing effectiveness, it shows significant differences between the experimental groups and the control groups on the whole. The conclusion of this study is as follows; the reading program for elementary school education is beneficial for improving the recognition of multiculturalism.

References

- [1] "Korea's Social Studies Society: Theory and practice of multicultural education", Kyonggi, Edam, (2011).
- [2] C. Choi, "Understanding of Multicultural Education", Seoul, Yangseowon, (2010).
- [3] J. Seo, "A study on the effects of multicultural education in the Secondary Teacher's college", Information: An International Interdisciplinary Journal, vol. 17, no. 10, (2014), pp. 5203-5210.
- [4] J. A. Banks, "Teaching strategies for ethnic studies", Boston: Pearson Education Allyn & Bacon, (2008).
- [5] J. Lee, "High School Students' Perception and Attitude toward Multicultural Education", Master dissertation, National Sunchon University, (2009).
- [6] Y. Kim, "Introduction to Multicultural Educational: understanding and integration", Seoul, Edam, (2009).
- [7] K. Ha, "Analysis of Elementary Students' Attitude toward Cultural Diversity and Factors Influencing Attitude", Master dissertation, Ewha Womans University, (2010).
- [8] Y. K. Park, K. H. Sung and Y. D. Cho, "Elementary and secondary school teachers' attitude towards cultural diversity and students from multicultural families", Theory and Research in Citizenship Education, vol. 40, no. 3, (2008), pp. 1-28.
- [9] J. Seo, "The effect of multicultural education program on middle school students' informal multicultural experience and multicultural awareness", The Journal of Educational Research, vol. 10, no. 3, (2010), pp. 257--283.
- [10] S. Kim, H. J. Choi and J. Seo, "Satisfaction of Workers who work at Community Child Center of Rural Area in Korea", Information: An International Interdisciplinary Journal, vol. 18, no. 5B, (2015), pp. 1967-1974.

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