



# **2008 - 2009 Research Brief**

## **Kidsbridge Museum The College of New Jersey**

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**K**idsbridge, a nonprofit organization dedicated to the celebration of human diversity, encourages the students, families and educators of the greater Mercer County region to understand and appreciate the strengths and opportunities that are inherent in the diverse, mosaic cultures of our community and our world. Kidsbridge provides programs that create measurable improvements in character education and life skills. Our character education programs generate positive learning in civility, kindness, conflict resolution, mediation and anti-bullying. Our life skill programs are designed to prepare children to be successful in a global society, while instilling the time-honored values of cooperation, peaceful interaction, teamwork and leadership.

One of the ways schools attempt to provide student-centered learning experiences is by physically moving outside the classroom. Attempting to connect school lessons with daily life and real problems, students attend field trips to enhance learning. Many schools utilize interactive museums for such learning experiences. Interactive museum exhibits are conducive to current reforms that endorse constructivism (Ansbacher, 1999). By going outside the classroom and taking advantage of the experiential, hands-on learning that museum exhibits provide, students are challenged to become critical thinkers. They are able to make meaning by constructing an understanding of the concept being taught through direct hands-on experience and the social dialogue that such exhibits offer (Classroom Compass, 1996). These exhibits allow students to talk about what they see and process what they know as they relate what they are doing in the museum to what they are learning in and out of the classroom.

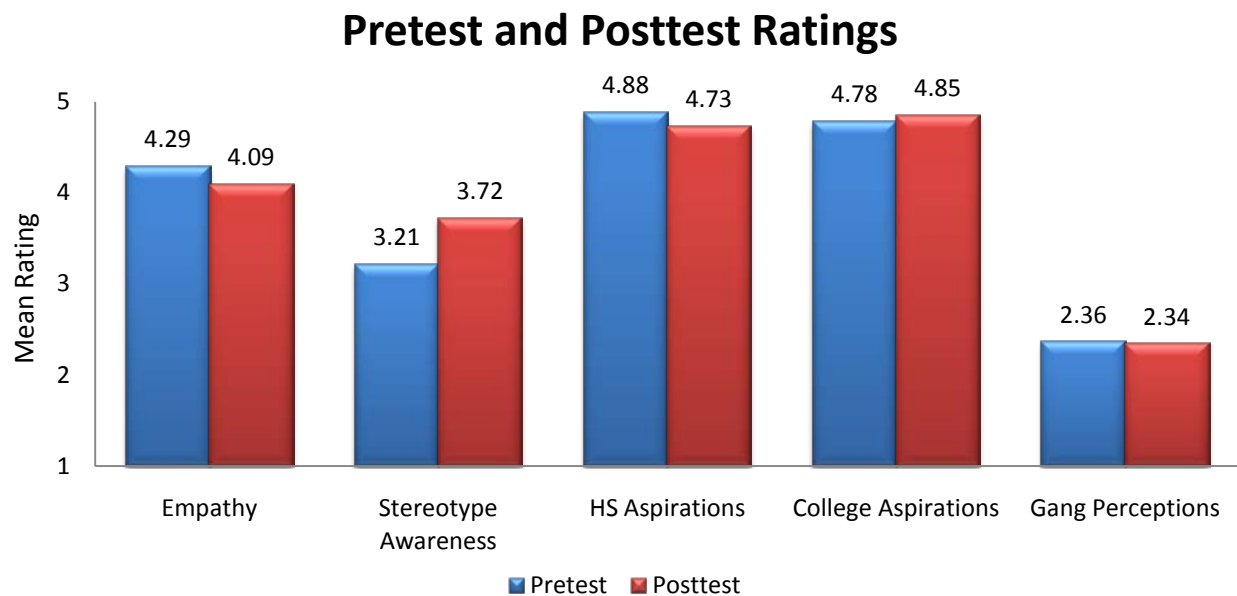
As more classrooms begin to implement current reforms on multicultural education and change their teaching practices to include opportunities for interactive learning both within the classroom and outside of it, children are learning how to combat prejudice and discrimination that has permeated our society for years. The Kidsbridge Museum can be used to equip students with the tools needed to change existing problems in their homes, schools and neighborhoods.

Data collection for the Kidsbridge cohort began in the fall of 2008 and continued until spring of 2009. This cohort includes a sample of 559 third to fifth graders from a variety of schools in Mercer County (New Jersey). This research brief summarizes key findings related to children's outcomes from Kidsbridge.

## Section I: Empathy Skills of Children Who Visit Kidsbridge

Empathy is a learned process and does not happen instantaneously. Empathy is a phenomenon that children need to experience and learn over time. The younger the child is, the less of a chance that they truly understand what empathy is all about. As the child grows older and has more experiences, empathy tends to become more understood and used. This usually leads to kindness and caring attitudes, which then may result to prosocial behavior and an overall expanding of moral development.

Figure 1.



**Overall empathy ratings slightly decreased from the pre-test to posttest assessments regardless of age, gender, or educational context.** Given that the rate of empathy was very high before the museum visit, it is somewhat surprising that there was a negative change at the follow-up. Even though a slight dip resulted, empathy ratings at posttest remained very high ( $M = 4.09$ ) on a 5 point Likert scale (see Figure 1).

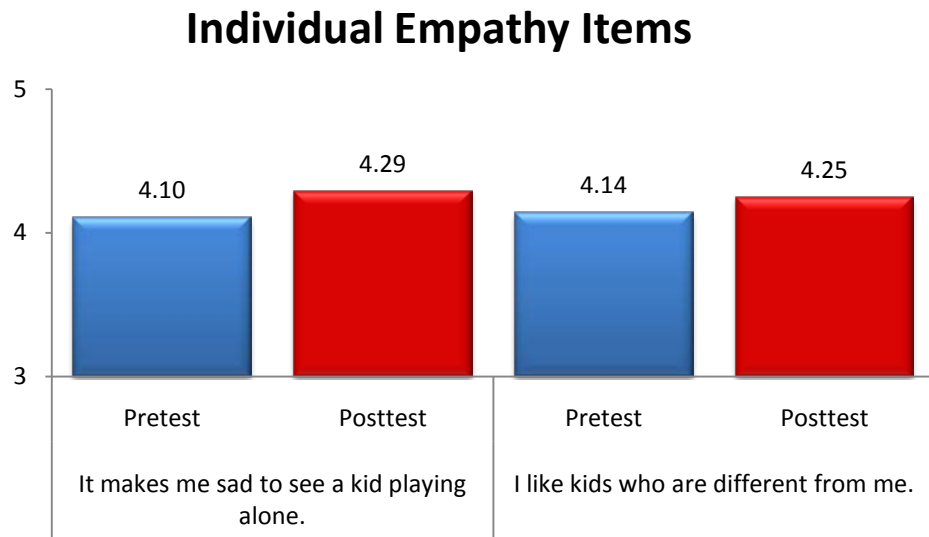
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As shown in Appendix C, an analysis of individual items from the empathy subscale revealed statistically significant differences. As shown in Figure 2, empathy increased among all children on two questions.

In addition, empathy ratings positively increased from pre- to posttest assessments on the item “it makes me sad to see a kid playing alone” especially among males, fourth and fifth graders, and public school students (See Appendices D, E, and F for more information).

Furthermore, “I like kids who are different from me” revealed significant gains in empathy for females and private school students.

Figure 2.



## Section II: Stereotype Knowledge and Awareness among of Kidsbridge Visitors

**Children have a limited understanding of stereotypes before the museum tour.** The majority of children who visit the museum report that they have no knowledge of what a stereotype is (89%); however, after a tour of the museum, the understanding of stereotypes increases to a total 51% of children (as shown in Figure 3).

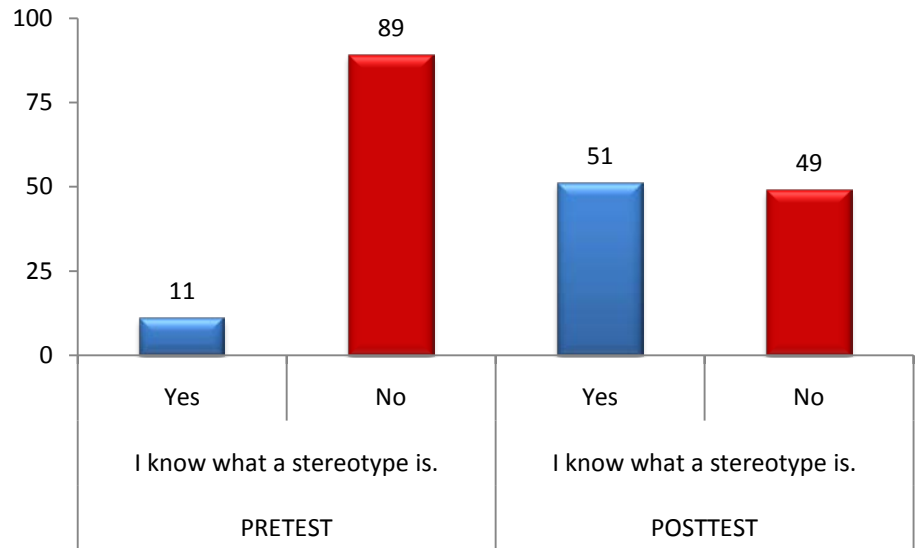


Figure 3.

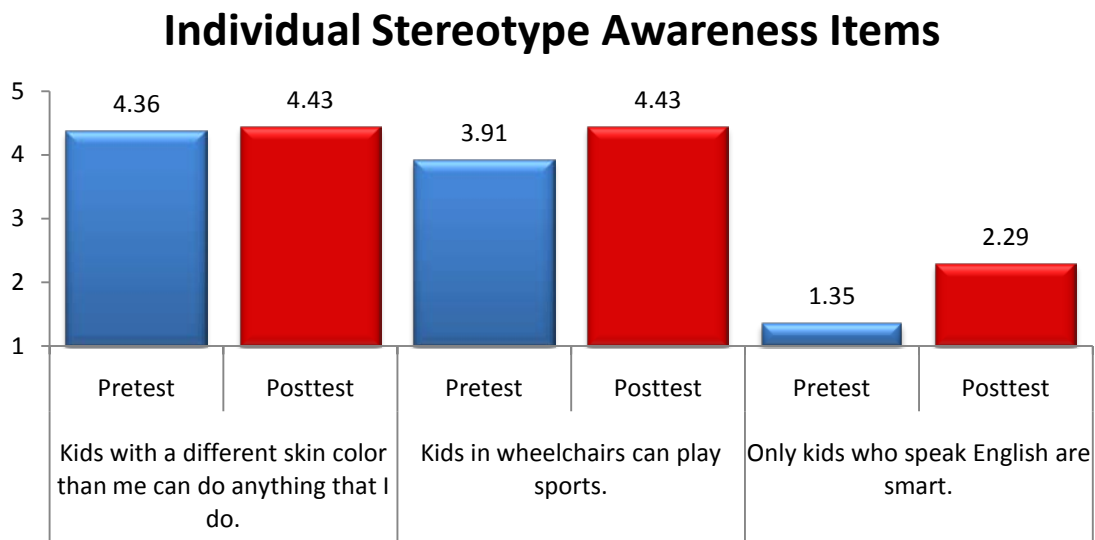
Table 1.

Variable	Response	Pretest (%)	Posttest (%)
<i>Grade</i>			
3	Yes	14	46
	No	86	54
4	Yes	10	52
	No	90	48
5	Yes	12	55
	No	88	45
<i>Gender</i>			
Males	Yes	12	50
	No	88	50
Females	Yes	11	53
	No	89	47
<i>School Context</i>			
Public	Yes	12	46
	No	88	54
Private	Yes	10	70
	No	90	30

**Stereotype knowledge significantly improved between the pre- and posttest administrations based on grade level, gender, and school context.** A positive developmental grade trend is noted in children (that is, more knowledge is reported at time of posttest for grade 5), as well as increased stereotype knowledge for girls, and private school students (see Table 1).

In addition, stereotype awareness significantly changed between the pre- and posttest administrations. Specifically, understanding of stereotypes significantly increased among grade, gender, and school type across time of assessment (refer to Figure 1). An analysis of individual stereotype questions revealed some interesting findings. For instance, stereotype awareness ratings significantly increased on the item “kids in wheelchairs can play sports” across grade, gender, and school type. In addition, after the museum visit children were more likely to endorse the belief that “only kids who speak English are smart” regardless of grade, gender or school type (see Figure 4).

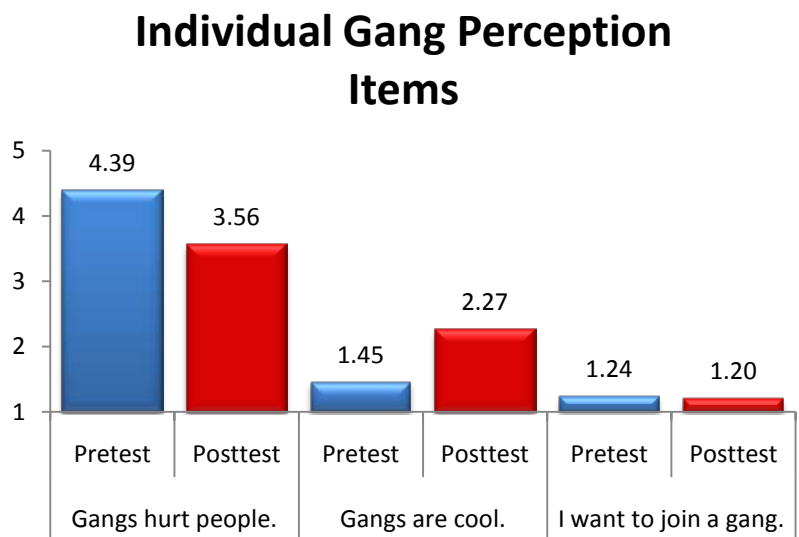
Figure 4.



## Section III: Children's Perceptions of Gangs

In general, children viewed gangs negatively. As shown at the beginning of this report in Figure 1, the negative perception of gangs remained relatively inconsistent between the pretest and posttest. An analysis of the individual gang items showed at posttest children were more apt to see gangs as less negative after the museum visit (see Figure 5 for details).

Figure 5.



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## Section IV: Future Educational Aspirations

**Overall ratings for finishing high school and attending college were very high (see Figure 1).** The pre- and posttest measures asked children to rate two questions regarding future aspirations. First, they rated the importance of finishing high school. Second, they indicated their beliefs about attending college someday. An examination by grade indicated significant differences occurred between third and fourth graders ratings of future aspirations to high school and college. From pre to post assessment, children's ratings for the item "I believe that I can finish high school" dropped from  $M = 4.88$  to  $M = 4.73$ ; however, the ratings to "go to college someday" were overwhelmingly positive especially among females and public school students (see Appendices E and F).

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## Section V: Recommendations

**Overall, participants' responses to the mini-museum were positive as indicated by pre- and post-test analyses.** Their positive reception of the program was witnessed as they interacted with the museum itself, as well as through discussions conducted before and after assessments. Additionally, students who attended improvisations were actively involved in the show and responded positively to questioning. Finally, participants seemed to enjoy being on a college campus where they could get a preview of college life. With that in mind, we offer the following recommendations to enhance the experience of museum visitors and facilitators and to improve future program assessments.

- A uniform facilitation of each of the museum's stations would provide students with a more effective interactive experience, enhancing learning. This would aid in achieving the overall goals of the *Kidsbridge* program.
- The primary aim of the museum is to examine empathy in children. There were a couple of inconsistencies in children's responses over time (such as less empathy, endorsement of gangs). These discrepancies may be result of a problematic measurement tool or other confounds, rather than actual cognitive and behavioral change. In order to examine changes in thinking and behavior, it is important to conduct additional follow-ups (e.g., 3 months, 6 months, 1 year) within and outside of the museum.
- Future assessments should include a more updated and standardized assessment tool. It is vital to find standardized measures that examine sex differences and age trends in self-reported empathic responsiveness, considering empathic concern, empathic distress and a more general empathic responsiveness dimension.
- While we are not familiar with each docents' requirements for training, a more structured approach would benefit visitors. It would also assist TCNJ students by giving them the opportunity to practice interactive lessons and facilitate it, preparing them for their future careers in child development. It is essential to create and utilize a docent-training program.

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- Children were very confused about gangs. The responses related to the items related gangs were very inconsistent from pre- to post-test. Given that this issue is not discussed at any of the museum stations, it is recommended that these items be excluded from future museum assessments.
  - Another form of assessment that might be interesting to explore would be to compare more racially and socioeconomically diverse visitors by including more school districts and environmental contexts (i.e., public/charter, private). This might help us gain more insight into how discrimination and prejudice is indeed perpetuated and perceived by children of different backgrounds, since most of the visitors to the museum were inner-city, Black and Latino children. Such insight would help to provide appropriate programs within schools to address racial issues and tensions.

The Kidsbridge Museum of Tolerance is a powerful tool that can help to decrease the perpetuation of prejudice and discrimination in today's society. Our research shows that the exhibit positively affects youth social development by changing their attitudes, and has the potential to improve their future behaviors when dealing with bullying, exclusion, name-calling, stereotyping, etc. Overall, the partnership between Kidsbridge and TCNJ is crucial, and provides mutual benefits to both groups.

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# APPENDIX A

## Data collection instruments

The pretest included 21 items (18 fixed-answer and three open-ended). The posttest included 24 items (19 fixed and 5 open-ended). Brief descriptions of the pretest and posttest data collection instruments reported in this Research Brief are listed below.

- **The Empathy Index** includes a shortened 11-item version of The Bryant Empathy Scale for Children and Adolescents. Mean scores were obtained using a Likert five-response format. Higher mean scores reflect greater empathy.
- **Stereotype Knowledge** was measured by a partially open-ended question “I know what a stereotype is.” The second part of the item asked respondent to provide an example of a stereotype.
- **Perceptions of Gangs** asked children to rate their feelings about gangs and whether they would consider being a part of one.
- **Future Aspirations** included 2 closed-ended questions using a 5-point Likert scale regarding finishing high school and attending college.
- **Conflict Resolution Skills** were assessed through two open-ended items that asked the child to reflect on their actions for direct and indirect provocations.

**Perceptions of the Museum** included two questions regarding children’s like and dislikes about the Kidsbridge Museum.

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## APPENDIX B

### Demographic Information

#### Grade

Grade	Number	Percent
3rd	154	27.5
4th	277	49.6
5th	128	22.9
<i>Total</i>	<i>559</i>	<i>100.0</i>

#### Gender

Gender	Number	Percent
Male	207	37
Female	352	63
<i>Total</i>	<i>559</i>	<i>100.0</i>

#### Educational Context

Gender	Number	Percent
Public	432	78
Private	122	22
<i>Total</i>	<i>559</i>	<i>100.0</i>

#### Race/Ethnicity

Race/Ethnicity	Number	Percent
American Indian or Alaska Native	11	2
Asian	11	2
Black or African American	174	31.1
Latino or Hispanic	95	17
Native Hawaiian or Other Pacific Islander	39	7
White	120	21.5
Other	72	12.9
Missing	37	6.6
<i>Total</i>	<i>559</i>	<i>100.0</i>

## APPENDIX C

Mean Ratings Table for All Children (N= 559)

Pair	Question	Subscale	Time of Assessment	Mean	Standard Deviation
Pair 1*	It makes me sad to see a kid playing alone.	Empathy	Pretest	4.10	1.23
			Posttest	4.29	1.17
Pair 2*	I like kids who are different from me.	Empathy	Pretest	4.14	1.18
			Posttest	4.25	1.15
Pair 3*	I feel bad when I see kids getting hurt.	Empathy	Pretest	4.61	.94
			Posttest	3.72	1.74
Pair 4	Kids with a different skin color than me can do anything that I do.	Stereotype Awareness	Pretest	4.36	1.22
			Posttest	4.43	1.16
Pair 5*	Kids in wheelchairs can play sports.	Stereotype Awareness	Pretest	3.91	1.37
			Posttest	4.43	1.01
Pair 6*	Only kids who speak English are smart.	Stereotype Awareness	Pretest	1.35	.99
			Posttest	2.29	1.80
Pair 7*	It is important for me to finish high school.	Educational Aspirations	Pretest	4.88	.52
			Posttest	4.74	.79
Pair 8*	I want to go to college someday.	Educational Aspirations	Pretest	4.79	.74
			Posttest	4.85	.59
Pair 9*	Gangs hurt people.	Gangs	Pretest	4.39	1.10
			Posttest	3.56	1.74
Pair 10*	Gangs are cool.	Gangs	Pretest	1.45	1.07
			Posttest	2.27	1.72
Pair 11	I want to join a gang.	Gangs	Pretest	1.24	.76
			Posttest	1.20	.69

\*P < .05

## APPENDIX D

Mean Ratings Table by Grade of Participant = 3 ( $n = 153$ ), 4 ( $n = 272$ ), 5 ( $n = 128$ )

Pair	Question	Subscale	Time of Assessment	Grade 3	Grade 4	Grade 5
Pair 1	It makes me sad to see a kid playing alone.	Empathy	Pretest	4.16	4.11	4.02
			Posttest	4.29	4.27	4.34
Pair 2	I like kids who are different from me.	Empathy	Pretest	4.07	4.14	4.23
			Posttest	4.23	4.24	4.28
Pair 3	I feel bad when I see kids getting hurt.	Empathy	Pretest	4.67	4.63	4.50
			Posttest	3.43	3.92	3.64
Pair 4	Kids with a different skin color than me can do anything that I do.	Stereotype Awareness	Pretest	4.34	4.39	4.33
			Posttest	4.42	4.42	4.46
Pair 5	Kids in wheelchairs can play sports.	Stereotype Awareness	Pretest	3.78	3.88	4.13
			Posttest	4.50	4.41	4.39
Pair 6	Only kids who speak English are smart.	Stereotype Awareness	Pretest	1.44	1.30	1.35
			Posttest	2.67	2.07	2.30
Pair 7	It is important for me to finish high school.	Educational Aspirations	Pretest	4.91	4.85	4.91
			Posttest	4.55	4.77	4.89
Pair 8	I want to go to college someday.	Educational Aspirations	Pretest	4.71	4.80	4.83
			Posttest	4.84	4.84	4.90
Pair 9	Gangs hurt people.	Gangs	Pretest	4.13	4.48	4.50
			Posttest	3.20	3.74	3.61
Pair 10	Gangs are cool.	Gangs	Pretest	1.73	1.30	1.45
			Posttest	2.77	2.00	2.24
Pair 11	I want to join a gang.	Gangs	Pretest	1.42	1.16	1.21
			Posttest	1.33	1.11	1.26

## APPENDIX E

Mean Ratings Table by Gender of Participant = males ( $n = 206$ ), females ( $n = 347$ )

Pair	Question	Subscale	Time of Assessment	Males	Females
Pair 1	It makes me sad to see a kid playing alone.	Empathy	Pretest	3.83	4.27
			Posttest	4.15	4.37
Pair 2	I like kids who are different from me.	Empathy	Pretest	4.02	4.21
			Posttest	4.06	4.36
Pair 3	I feel bad when I see kids getting hurt.	Empathy	Pretest	4.46	4.70
			Posttest	3.37	3.93
Pair 4	Kids with a different skin color than me can do anything that I do.	Stereotype Awareness	Pretest	4.19	4.47
			Posttest	4.28	4.52
Pair 5	Kids in wheelchairs can play sports.	Stereotype Awareness	Pretest	3.77	3.99
			Posttest	4.40	4.45
Pair 6	Only kids who speak English are smart.	Stereotype Awareness	Pretest	1.51	1.26
			Posttest	2.68	2.06
Pair 7	It is important for me to finish high school.	Educational Aspirations	Pretest	4.91	4.86
			Posttest	4.74	4.73
Pair 8	I want to go to college someday.	Educational Aspirations	Pretest	4.79	4.78
			Posttest	4.86	4.85
Pair 9	Gangs hurt people.	Gangs	Pretest	4.36	4.40
			Posttest	3.43	3.65
Pair 10	Gangs are cool.	Gangs	Pretest	1.63	1.35
			Posttest	2.53	2.11
Pair 11	I want to join a gang.	Gangs	Pretest	1.30	1.21
			Posttest	1.24	1.18

## APPENDIX F

Mean Ratings Table by Educational Context = public ( $n = 431$ ), private ( $n = 122$ )

Pair	Question	Subscale	Time of Assessment	Public	Private
Pair 1	It makes me sad to see a kid playing alone.	Empathy	Pretest	4.02	4.41
			Posttest	4.23	4.51
Pair 2	I like kids who are different from me.	Empathy	Pretest	4.11	4.25
			Posttest	4.20	4.43
Pair 3	I feel bad when I see kids getting hurt.	Empathy	Pretest	4.59	4.70
			Posttest	3.64	4.02
Pair 4	Kids with a different skin color than me can do anything that I do.	Stereotype Awareness	Pretest	4.27	4.71
			Posttest	4.36	4.69
Pair 5	Kids in wheelchairs can play sports.	Stereotype Awareness	Pretest	3.87	4.08
			Posttest	4.39	4.56
Pair 6	Only kids who speak English are smart.	Stereotype Awareness	Pretest	1.39	1.20
			Posttest	2.40	1.88
Pair 7	It is important for me to finish high school.	Educational Aspirations	Pretest	4.89	4.86
			Posttest	4.73	4.76
Pair 8	I want to go to college someday.	Educational Aspirations	Pretest	4.77	4.83
			Posttest	4.85	4.88
Pair 9	Gangs hurt people.	Gangs	Pretest	4.37	4.45
			Posttest	3.50	3.79
Pair 10	Gangs are cool.	Gangs	Pretest	1.47	1.38
			Posttest	2.33	2.04
Pair 11	I want to join a gang.	Gangs	Pretest	1.26	1.19
			Posttest	1.22	1.14