Prejudice Reduction in Schools

Teaching Tolerance in Schools: Lessons Learned Since Brown v. Board of Education About the Development and Reduction of Children’s Prejudice

Jennifer H. Pfeifer, Christia Spears Brown, & Jaana Juvonen
Department of Psychology
University of California, Los Angeles

Abstract

More than five decades after Brown v. Board of Education and four decades after the Civil Rights era, racial prejudice remains a national problem cutting across social class and culture. Although schools may seem ideal places to teach children about tolerance and harmony, there is little consensus on how to best reduce negative sentiments and behaviors toward peers of different racial or ethnic backgrounds. To understand the modest gains made by various prejudice reduction programs (each relying on different theoretical assumptions), we first review what psychologists have learned about the environmental conditions affecting prejudice, the social-cognitive constraints supporting prejudice, and the multiple manifestations of prejudice among children since this issue gained national attention via the Brown v. Board of Education decision in 1954. We then apply these lessons learned to analyze the effectiveness and promise of three approaches: multicultural curricula, cooperative learning techniques, and anti-bias/social-cognitive skills training. In conclusion, recommendations are made about age- and context-appropriate methods to reduce prejudice in schools and future topics to address in basic research.

Keywords: prejudice; schools; desegregation; policy; social cognition; multicultural curricula; cooperative learning; anti-bias programs
Prejudice Reduction in Schools

Teaching Tolerance in Schools: Lessons Learned Since Brown v. Board of Education About the Development and Reduction of Children’s Prejudice

Jennifer H. Pfeiffer, Christia Spears Brown, & Jaana Juvonen
Department of Psychology
University of California, Los Angeles

As the Supreme Court is once again considering the federal mandates for desegregation in public schools, social science evidence on the effects of desegregation is timely. Because the explicit aim of Brown v. Board of Education was to provide equal academic opportunities for racial minority (i.e., African-American) schoolchildren, most accounts and evaluations of the successes (or failures) of desegregation have indeed focused on the academic achievement of racial minority children in desegregated schools (see Schofield, 1995, for a review). Both in the court case and broader public opinion, however, more implicit goals surfaced—including the hope that desegregation would reduce children’s prejudice and discrimination (Jackson, 2001; Martin, 1988; Pettigrew & Tropp, 2000; Zirkel & Cantor, 2004).

The current analysis examines the legacy of the Supreme Court ruling with regard to reducing prejudice among racial majority (i.e., White) children—specifically, school-based prejudice reduction programs adopted in the wake of desegregation. Focusing on research conducted primarily by developmental and social psychologists (but also incorporating historical and educational perspectives), we review the ways in which some of the key assumptions about racial prejudice among children have changed since the 1950’s. Based on this brief review, we assert that three important lessons have been learned about (a) the conditions for intergroup contact that facilitate prejudice reduction, (b) the social-cognitive constraints that limit children’s thinking about racial and ethnic differences, and (c) the various manifestations of prejudice. We then apply these lessons to our review of three approaches to school-based prejudice reduction, namely, multicultural curricula, cooperative learning, and anti-bias/social-cognitive skills training. We propose that the explicit programs to reduce racial prejudice in schools are an important—albeit largely indirect—legacy of the Brown v. Board decision, and therefore a careful review of their effectiveness and promise is necessary to guide both future school-based efforts and basic research (for recent related perspectives, see also McKown, 2005; Paluck & Green, in press).

Lessons Learned about Desegregation

A: Conditions for Contact

The same year that the Brown v. Board decision was rendered, a landmark book was published by Gordon Allport (The Nature of Prejudice, 1954) that included a description of four conditions under which contact could improve intergroup relations. As part of contact theory, he proposed that to reduce prejudice groups needed to have (1) equal status, (2) common goals, (3) no competition, and (4) sanction of contact by authorities (see also Pettigrew, 1998; Pettigrew & Tropp, 2000). Somewhat later, Zajonc (1968) suggested that mere exposure to any novel stimulus—regardless of the conditions of that exposure—could increase liking. Although the mere exposure effect was not initially demonstrated in an intergroup context, there was some support for this extrapolation—for example, exposure to pictures of unfamiliar African-Americans increased White participants’ liking of those seen most frequently (Hamm, Baum, & Nikels, 1975).

Although desegregation was being widely implemented by the end of the 1960’s, it remained unclear whether this mere increase in interracial contact would be sufficient to reduce prejudice or whether the specific conditions under which desegregation took place would impact its effects on prejudice. Studies examining the initial, longitudinal, and long-term impact of desegregation did not find a consistent pattern of effects—in some cases, exposure to African-American peers resulted in White students’ more favorable attitudes toward them, while in other cases it did not (Cohen, 1975; Fishbein, 2002; Hallinan, 1982; Hallinan & Smith, 1985; McConahay, 1978; Schofield, 1978, 1989, 1995; St. John, 1975; Stephan, 1978; Wells, 1995; Wells & Crain, 1994; Wood & Sonleitner, 1996). It appeared that the exposure to other-race peers provided by desegregation was not sufficient on its own to reduce prejudice.

Instead, as Allport (1954) suggested, the conditions of contact matter. When explicitly considering the conditions under which desegregation was—and currently is—implemented in American schools, it is easy to understand why the policy has not been consistently effective in reducing racial prejudice. For example, academic tracking frequently results in de facto segregation within schools, further polarizing status differences (Khmelkov & Hallinan, 1999). Moreover, support for desegregation by schoolteachers and administrators, as well as within the broader community, varies widely. Not surprisingly, desegregation is more likely to lead to prejudice reduction in situations in which status differences are diminished and there is widespread support for desegregation (Schofield, 1995). For example, in classrooms where teachers place less emphasis on grades and standardized test scores,
White children are more likely to choose African-American peers as friends (Hallinan & Teixeira, 1987).

The first lesson learned since Brown v. Board, therefore, is that the school context—including racial composition of the students and teachers, teachers’ attitudes, and school policies and practices that foster inequalities—impacts intergroup relations. As Slavin (1995) stated, “desegregation must be seen as an opportunity for improvement of intergroup relations, not as a solution in itself” (p. 629; see also Aboud & Levy, 2000). The presence or absence of the conditions for positive intergroup contact described by Allport (1954) may be critical determinants of desegregation’s impact on children’s prejudice.

B: Social-Cognitive Constraints
In addition to contact theory, another theoretical model frequently connected with the development of prejudice is socialization theory. During the early years of psychological research prior to and in the early years of desegregation, it was assumed that children are initially unbiased and subsequently adopt (or model) the attitudes displayed by those around them, including parents, teachers, and classmates (Allport, 1954). The importance of modeling behavior was later elaborated in related approaches such as social learning theory (Bandura, 1977). Contrary to the optimistic expectations emerging from the principles of socialization and social learning theories, the more recently formulated social-cognitive developmental theory (Aboud, 1988) contends prejudice is an inevitable, but not necessarily enduring, result of children’s cognitive constraints (see also Katz, 1976; Katz & Zalk, 1978; Piaget & Weil, 1951). Such a perspective implies that, rather than being unbiased, young children are likely to be biased due to cognitive limitations (Aboud, 2003; Bigler & Liben, 1993; Clark, Hocevar, & Dembo, 1980).

One prominent example of a cognitive constraint is young children’s lack of conservation skill. Children who do not conserve are typically distracted by visible physical dissimilarities between two objects (or people) and conclude that the entities are different from each other (the classic example being the child who assumes that there is always more water in a tall, thin beaker than a short, fat beaker; Piaget & Inhelder, 1941). On the other hand, children possessing conservation skill realize that things may appear different externally but maintain the same fundamental nature. This important skill relates to the reduction of prejudice inasmuch as it can help children realize that differences in skin color are not predictive of internal qualities or behavior (Aboud, 1988).

Young children are also likely to be constrained by poor multiple classification skills. This is typically measured by having children sort a deck of cards depicting people or objects from multiple, overlapping categories in as many different ways as possible. Children possessing this ability recognize that people or objects can be members of many groups (e.g., someone may simultaneously be a woman, an African-American, and a doctor). This cognitive skill relates to the reduction of prejudice by helping children to realize people are not solely defined by race and may share characteristics that make them similar to people of other races (Aboud, 1988).

Both conservation and multiple classification skills relate to the development and expression of racial prejudice. Children who can reason beyond external dissimilarities and realize individuals possess characteristics of many different groups have particular cognitive advantages relevant to prejudice reduction. Simply, the presence of these skills appears to increase perceptions of similarity between people from different racial or ethnic groups, and indeed, children possessing these skills tend to demonstrate less prejudice (Aboud, 1988, 2003; Bigler & Liben, 1993; Black-Gutman & Hickson, 1996; Clark et al., 1980; Doyle, Beaudet, & Aboud, 1988; c.f. Aboud & Doyle, 1995; Bigler, Jones, & Loblinier, 1997; Doyle & Aboud, 1995; Kowalski & Lo, 2001).

While conservation and multiple classification skills are basic cognitive skills applied to interpersonal domains, social-cognitive skills (or lack thereof) also contribute to the propensity of early childhood prejudice. The egocentrism of early childhood declines in response to advancing perspective-taking abilities, allowing for the development of both reconciliation and empathy (Aboud, 1988; Eisenberg, 2000; Hoffman, 1991; Piaget & Weil, 1951). Reconciliation is a social-cognitive skill defined as the ability to recognize that others may possess differing, albeit equally accurate, perspectives (Aboud, 1988; also referred to as “interpretive theory of mind,” see Carpendale & Chandler, 1996). On average, children with greater reconciliation skills demonstrate lower levels of prejudice (Aboud, 2003; Aboud & Doyle, 1995; Black-Gutman & Hickson, 1996; Doyle & Aboud, 1995; c.f. Nagata, 1985; Spencer, 1982). Empathy, in turn, is a social-cognitive skill with both cognitive and affective components, enabling a child to perceive and share the emotions of another individual (Eisenberg, 2000; Hoffman, 1991). Both dispositional and situationally-induced empathy have been linked

To be fair, social-cognitive developmental theory has its detractors. One criticism frequently posed is that, if underdeveloped social-cognitive skills are responsible for racial prejudice, a child should show similar levels of prejudice towards all social outgroups. In contrast, Powlishta and colleagues (Powlishta, Serbin, Doyle, & White, 1994) demonstrated that children had no consistent pattern of prejudice towards ethnic, gender, and body type (i.e., overweight) groups. Moreover, despite cognitive development, prejudice exists in some individuals in adulthood and varies across cultural and historical contexts, suggesting prejudice is clearly a multidetermined construct. In addition, some have questioned whether the relevant social-cognitive skills can be trained in advance of when they typically develop.

Nevertheless, the social-cognitive developmental theory of prejudice and the body of empirical research supporting it illustrates a second lesson that we have learned since Brown v. Board, namely that to understand (and hopefully, reduce) childhood prejudice, we must account for the cognitive constraints and social-cognitive skills of children. Aboud (1988) summarized the importance of this consideration in her assertion that “the prejudice seen in a child at one developmental stage is qualitatively different from the prejudice of a child at another stage because it arises out of a different understanding of the social world” (p. 27).

C. Different Manifestations of Prejudice

From the time of the Brown v. Board decision to the present day, lay conceptualizations of prejudice have focused primarily on negative intergroup attitudes. More traditional definitions of prejudice illustrate its broader reach, however. For example, Allport (1954) defined prejudice as “an antipathy based on faulty and inflexible generalization. It may be felt or expressed. It may be directed toward a group or an individual of that group” (p. 9). This definition highlights the multiple ways in which prejudice manifests itself: attitudes that are felt and behaviors that are expressed in relationships or interactions between individuals or groups (e.g., friendships, or lack thereof). These different manifestations of prejudice are not always correlated with each other (see Fazio, 1990), but are relevant to this review in that prejudice reduction programs often rely on different indices of prejudice (most commonly on cross-racial attitudes or interethnic friendships).

Another important issue related to how prejudice manifests itself is whether feeling or behaving in ways that favor one’s racial ingroup qualifies as prejudice, or if true prejudice requires outgroup derogation in some form (Brewer, 1999; Cameron, Alvarez, Ruble, & Fuligni, 2001). Most definitions of prejudice, such as Allport’s (1954), do not suggest that ingroup favoritism constitutes prejudice in and of itself. Yet, attitudinal measures of childhood prejudice frequently confound ingroup favoritism and outgroup derogation due to their forced-choice features. For example, in the PRAM II (Preschool Racial Attitude Measure; Williams, Best, Boswell, Mattson, & Graves, 1975), children are asked to assign positive and negative evaluative traits (such as kind, happy, and pretty as well as bad, stupid, and selfish) to either the own-race or other-race child depicted in a story. A single measure of bias is calculated by summing the number of positive ingroup and negative outgroup evaluations. Because a child must assign the negative traits (such as stupid) to at least one of the children, and in many measures cannot assign positive traits (such as kind) to both the own-race and other-race child, children’s racial prejudice has been frequently overestimated (Aboud, 2003; Cameron et al., 2001; Lemer & Schroeder, 1975).

Measures addressing other manifestations of prejudice similarly rely on ingroup favoritism. For example, examinations of prejudiced behavior have usually looked at helping one’s ingroup more than an outgroup, rather than inflicting some form of harm on the outgroup (Brown & Bigler, 2002; c.f. Patchen, Davidson, Hofmann, & Brown, 1977). Prejudice that is operationalized via relationships, in turn, relies primarily on assessments of own-race and other-race friends, rather than enemies (Aboud, Mendelson, & Purdy, 2003; Graham & Cohen, 1997; Graham & Juvonen, 2002; Kistner, Metzler, Gatlin, & Risi, 1994; for new directions related to bullying, see Aboud & Joong, in press).

After accounting for all these different manifestations and definitions of prejudice, evidence suggests it is most accurate to conclude that ingroup favoritism appears in early childhood, and on average declines with the development of skills such as conservation, multiple classification, and perspective-taking. As summarized by Allport (1954), “…the familiar is preferred. What is alien is somehow inferior, less ‘good,’ but there is not necessarily hostility against it” (p. 42). Less is known about the development of outgroup derogation (Cameron et al., 2001)—which may be a more direct assessment of true prejudice. For example, outgroup derogation may require more explicit socialization than ingroup favorit-
ism. Social desirability becomes more of a concern, however, when assessing outgroup derogation than ingroup favoritism, making measurement of outgroup derogation potentially difficult in older children who are increasingly aware of the social norms against saying negative things about others. A new direction in assessing childhood prejudice is the use of more automatic measures thought to be less susceptible to these kinds of response concerns, such as the Implicit Association Test (IAT; Baron & Banaji, 2006). Although evidence about the more implicit forms of children’s prejudice is still being acquired, these new techniques highlight how our understanding of the manifestations of prejudice is constantly evolving.

The varied ways in which children’s prejudice presents itself illustrate a third lesson learned since the Brown v. Board decision. Specifically, we have learned that prejudice can manifest itself in many different forms, and that each assessment method has a limited ability to capture the full range of relevant attitudes, behaviors, and relationships concerning ingroups and outgroups. For example, although we have comparatively little evidence of outgroup derogation during childhood, there is solid evidence of widespread ingroup favoritism. Given this, Brewer (1999) makes an important point: “Ultimately, many forms of discrimination and bias may develop not because outgroups are hated, but because positive emotions such as admiration, sympathy, and trust are reserved for the ingroup and withheld from outgroups” (p. 438). Therefore, childhood ingroup favoritism is likely to pose a threat to positive interracial relations (e.g., Tatum, 1997), although it does not by itself constitute a negative bias against outgroups. The distinction among all these manifestations of prejudice may appear to be simply an academic debate, yet the lesson has important implications for prejudice-reduction interventions. Specifically, if one wants to design, implement, or evaluate a program to reduce prejudice, it is important to be mindful of what each measure tells us about the effectiveness of the program and the broad reach of prejudice.

Three Lessons for Three Approaches

To summarize thus far, we have highlighted three important advances in our knowledge since the Brown v. Board decision. The first is that schools, even those that are multiethnic, may or may not provide optimal contexts for reducing prejudice. Second, we need to account for the cognitive liabilities of children, especially when designing interventions to reduce prejudice. Programs ought to work better if they are geared to the child’s level of social-cognitive development. Third, in assessing prejudice reduction programs, we must remember that prejudice manifests itself in a variety of ways. Specifically, it is critical to recognize that measures forcing children to derogate or show favoritism may overestimate how prejudiced they truly are, and that relying heavily on one indicator of bias to the neglect of others limits the generalizability of program outcomes.

In the following sections, we apply these three lessons to evaluate the promise and effectiveness of the three main types of school-based programs designed to reduce children’s prejudice. Each approach will be described in general, and illustrated using classic studies associated with each approach. Next, the overall effectiveness of each approach will be summarized. Although we discuss some of the general flaws in the evaluation studies, the main focus of our analyses is to apply the three lessons learned since Brown v. Board to each approach. The three approaches are presented in approximate chronological order, reflecting historical shifts in the prevalence of different approaches.

Multicultural Curricula

Adopting a multicultural curriculum is one of the oldest and most frequently used approaches to try to improve children’s interracial attitudes, behavior, and friendships. These approaches may either (a) expose children to diverse groups in addition to traditional curricula (additive programs), (b) depict outgroup members in a counter-stereotypical manner (counter-stereotypical programs), or (c) enact major transformations of curriculum goals and structure (transformative programs; see Bigler, 1999). For example, schools may adopt curriculum units or courses covering African and African-American history or supplement traditional materials with books that include stories about or pictures of African-American children (Banks, 1995). Multicultural curricula approaches are based primarily on socialization theory. Hence, it is presumed that multicultural curricula will instill positive beliefs in place of children’s incorrect or incomplete beliefs about other groups (Aboud & Levy, 2000).

A classic illustration of this approach is a pair of studies that randomly assigned classrooms of White second-graders from a segregated school (n=68) to use either a traditional reader or a reader that was identical in content except that the pictures were multiethnic (Litcher & Johnson, 1969). Four different measures of children’s interracial attitudes were used to assess prejudice, including the Clark doll test. After four months of exposure to the multiethnic reader, White children responded significantly more favorably on average towards African-Americans on all four tests than children using the traditional reader. However, follow-up studies failed to replicate these findings when the multiethnic readers were used for only one month (Litcher, Johnson, & Ryan, 1973). This style of prejudice reduction program is not a relic of the past, but continues to be used today (e.g., Cameron & Rutland, 2006; Wham, Barnhart, & Cook, 1996).

Despite the positive effects in the four-month study, reviews of multicultural curricula are often discouraging
The effectiveness of several representative multicultural curricula programs is summarized in Table 1. The less than optimal effects of the studies summarized in Table 1 are consistent with a recent meta-analysis that concluded that multicultural curricula were less effective than other approaches in reducing prejudice (Levy, Troise, Moyer, Aboud, & Bigler, 2003). These studies on multicultural curricula, however, tend to have basic design flaws (such as inadequate control groups and small samples sizes), and thus it is difficult to have much confidence in the results.

The three lessons learned since Brown v. Board help explain the inconsistent effects of multicultural curriculum programs. In general, the school context of interracial relations is generally ignored in this approach. The focus is on the materials brought to the classroom, rather than the social and organizational conditions present that are also likely to impact prejudice reduction. For example, many multicultural programs are used in schools that are very homogeneous. As shown in Table 1, six out of the seven evaluation studies involved 95-100 percent White samples. Thus to some degree, the unsuccessful effects of multicultural curricula can be understood in light of contact theory: activities included in multicultural curricula, such as reading books or watching movies about other groups, do not meet the requirements of high quality contact between equal status individuals. In fact, Allport (1954) discussed just how resistant individuals could be to knowledge that contradicts their stereotypes. Hence, it is possible that the effects of multicultural programs are positive only when students have opportunities to “apply their knowledge” of different others to their daily interactions with different-ethnicity classmates. It will be inherently more difficult for multicultural curricula to reduce prejudice if schools lack ethnic diversity. Here again it is apparent that although desegregation is not a solution, it is an important starting point for those communities where integration is possible. If only minimal racial diversity can be attained because of population homogeneity, it is all the more important that Allport’s (1954) optimal conditions of contact be met—namely, that what little contact is possible occurs between equal status peers with common goals, and that the community and adults in authority support racial tolerance.

In addition to overlooking the presence or absence of the ideal contextual conditions for prejudice reduction, cognitive constraints during development can also help explain the less than ideal effects of multicultural curricula

<table>
<thead>
<tr>
<th>Study</th>
<th>Attitudes</th>
<th>Behavior</th>
<th>Friendship</th>
<th>Grade</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Litcher &amp; Johnson (1969)</td>
<td>Positive</td>
<td>N/A</td>
<td>N/A</td>
<td>2nd grade</td>
<td>Multiethnic reader that replaced pictures of White children with Black children used for 4 months (n=68; 100% White)</td>
</tr>
<tr>
<td>Litcher, Johnson, &amp; Ryan (1973)</td>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
<td>2nd grade</td>
<td>Multiethnic reader that replaced pictures of White children with Black children used for 1 month (n=128; 100% White)</td>
</tr>
<tr>
<td>Singh &amp; Yancey (1974)</td>
<td>Positive</td>
<td>N/A</td>
<td>N/A</td>
<td>1st grade</td>
<td>Read biographies of famous African-Americans and other counterstereotypical fiction stories about racial outgroups, viewed movies, and participated in group discussions for 30 consecutive school days (n=41; 100% White)</td>
</tr>
<tr>
<td>Best, Smith, Graves, &amp; Williams (1975)</td>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
<td>Kinder</td>
<td>Counterstereotypical curricula addressing both race and color used for 8 weeks, two 45-minute sessions per week (n=60; 100% White)</td>
</tr>
<tr>
<td>Lessing &amp; Clarke (1976)</td>
<td>None</td>
<td>N/A</td>
<td>N/A</td>
<td>6th-8th grade</td>
<td>Read stories about racial outgroups, wrote book reports, and gave oral presentations (n=169; 95% White, 5% Black)</td>
</tr>
<tr>
<td>Katz &amp; Zalk (1978)</td>
<td>None</td>
<td>None</td>
<td>Mixed-Positive</td>
<td>2nd and 5th grade</td>
<td>Listened to a story with accompanying slides about a racial outgroup once for 15 mins (n=32; two integrated schools with varying % of White, Black, &amp; Hispanic)</td>
</tr>
<tr>
<td>Slone, Tarrasch, &amp; Hallis (2000)</td>
<td>Positive</td>
<td>N/A</td>
<td>N/A</td>
<td>5th grade</td>
<td>Read stories or watched films about complexities of social contact between Arab and Jewish Israeli children (15 mins) followed by group discussion (30 mins) for 6 sessions (n=209; 100% White)</td>
</tr>
</tbody>
</table>
programs. Research demonstrates that counter-stereotypical and transformative approaches are likely to be distorted or forgotten by children with underdeveloped multiple classification skills (Bigler & Liben, 1993). In one study, teachers read 12 stories to students, each depicting a different pair of one own- and one other-race child. For example, in a stereotypical story, a lazy African-American child rests at her desk while an industrious White child works. In a counter-stereotypical story, a mean White child throws rocks at a nice African-American child. White children with poor multiple classification skills remembered 30 percent fewer counter-stereotypical traits than children with good multiple classification skills, although both groups of children remembered stereotypical traits equally well (Bigler & Liben, 1993). These results suggest that cognitive constraints should be a major concern for multicultural curricula. However, multiple classification skills are not well-developed until approximately age seven, and many curriculum interventions are conducted with five- to seven-year-old children who are still trying to master this developmental task.

Finally, the manifestations of prejudice focused on by multicultural curricula evaluation studies drastically affects what we can say about their effectiveness. These studies tend to utilize attitudinal measures, to the exclusion of interracial behaviors and relationships (in part because they were designed to affect attitudes, but also because the school contexts were often homogeneous, precluding the possibility of direct interactions between groups). The heavy reliance on forced-choice attitude measures may have made it more difficult to demonstrate positive effects. Moreover, as shown in Table 1, six of the seven program evaluation studies were conducted with White samples, hence little is known about the effects of multicultural curricula on children’s interracial behaviors and peer relationships in contexts that do allow for intergroup contact.

However, not all multicultural curricula fail to improve children’s interracial attitudes. One new direction in multicultural curricula derives from social identity development theory, which suggests that prejudice is most likely to manifest itself if the structural conditions of intergroup contact support it (such as ingroup norms sanctioning the expression of prejudice; Nesdale, 1999, 2004). For example, Cameron and Rutland (2006) used “extended contact” through multicultural curricula (depicting ingroup members who were friends with physically-disabled children) to increase positivity towards the disabled. The goals of these types of programs are to illustrate positive intergroup affect, model positive intergroup behavior, and develop ingroup norms countering prejudice. The evidence of their effectiveness appears promising.

Some have also suggested that successful programs may require relatively high dosages of exposure to curricula to ensure retention and encourage identification with the ingroup and outgroup characters (Slone, Tarrasch, & Hallis, 2000). Greater identification might enhance socialization of positive interracial attitudes, behaviors, and relationships. This is consistent with an often-overlooked aspect of socialization theory, that children’s attitudes might be more likely to match those of their parents if the child highly identifies with the parents (Allport, 1954; see also Sinclair, Dunn, & Lowery, 2004). Regardless of the effectiveness of multicultural curricula in reducing prejudice, there may be educational value in a multicultural education. At a minimum, it provides a more realistic, well-rounded context for learning necessary in our multicultural society.

**Cooperative Learning Techniques**

The next approach, cooperative learning techniques, was developed in laboratories and then exported to the field following the rise of multicultural curricula (Slavin, 1995). Sherif and Sherif’s (1953) finding, that two fighting groups from a boys’ summer camp could be brought together by common goals that required the skills and participation of both groups, exemplifies this perspective. The cooperative learning approach acknowledges the possibility of conflict and pre-existing status differences between groups. To mitigate these difficulties, cooperative learning programs were explicitly designed to meet the theoretical requirements of contact theory, making them in many ways the most successful (Banks, 1995; Slavin, 1995).

In cooperative learning programs, children are placed in small classroom groups with a diverse representation of gender, race, and ability levels. These groups are evaluated or receive rewards and recognition based on the degree to which they increase the academic performance of each group member. Each group member is responsible for a unique aspect of a project and, at times, the heterogeneous groups might also compete with one another. Programs that exclude these aspects in which groups compete and members contribute uniquely to their groups (while still placing children in heterogeneous groups) fall short of the intended design.

This approach is illustrated by a classic study that randomly assigned classrooms of White and African-American seventh- and eighth-graders (n=294) to either a traditional
classroom or a cooperative learning classroom (Slavin, 1979). The particular technique used in the cooperative learning classrooms was known as Student-Teams-Achievement Divisions (STAD). Teams composed of four or five students each worked jointly to learn material from a unit on grammar, punctuation, and English usage, and group performance was recognized and rewarded. In contrast, students in the traditional classrooms studied the unit alone and individual performance was recognized and rewarded. Pre- and post-intervention friendship nominations (an unlimited number of classmates could be nominated) were used to assess prejudice. After ten weeks of the program, students in the cooperative learning program nominated a greater number and proportion of cross-race friends compared to students in the traditional classrooms. A nine-month longitudinal follow-up with roughly one-third the original sample showed that the number and proportion of cross-race friends were still significantly greater for students assigned to the cooperative learning programs compared to traditional classrooms.

The effectiveness of several representative cooperative learning studies is summarized in Table 2. Both this summary and recent reviews agree that cooperative learning programs appear to be more consistently positive in their effects than multicultural curricula programs or desegregation alone (Banks, 1995; Slavin, 1995). In addition, because these evaluation studies tend to be better designed than many of the studies that examine multicultural curriculum programs (e.g., more longitudinal designs, random assignment, and large samples), we can be more confident in the findings.

Similar to multicultural curricula, the three lessons learned since Brown v. Board are also relevant to cooperative learning techniques. A major strength of cooperative learning programs is that they do consider the conditions that are optimal for prejudice reduction—in particular, interdependence (Allport, 1954). Typically, cooperative learning methods are such that team goals cannot be met without the substantial contribution of each group member’s unique skills. As a result, this contact should be of higher quality and between individuals of more equal status than in desegregation alone or multicultural curricula. Slavin (1995) also points out that in this style of intervention, teacher support for interracial contact is unequivocal.

<table>
<thead>
<tr>
<th>Study</th>
<th>Attitudes</th>
<th>Behavior</th>
<th>Friendship</th>
<th>Grade</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weigel, Wiser, &amp; Cook (1975)</td>
<td>Mixed-positive</td>
<td>Positive</td>
<td>Mixed-positive</td>
<td>Junior and senior high</td>
<td>Weigel methods, no control group (n=324; 75% White, 15% Black, 10% Hispanic)</td>
</tr>
<tr>
<td>Slavin (1979)</td>
<td>N/A</td>
<td>N/A</td>
<td>Positive</td>
<td>7th, 8th grade</td>
<td>Student-Teams-Achievement Divisions (STAD), 10 weeks, 9 month follow-up (positive effects remained) (n=424; White and Black)</td>
</tr>
<tr>
<td>Ziegler (1981)</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
<td>5th, 6th grade</td>
<td>Jigsaw II, 8 weeks (3 class periods per week), 4-6 team members, 2.5 month follow-up (positive effects remained) (n=146; primarily White, including a variety of European ethnicities, as well as students from Asia and West Indies)</td>
</tr>
<tr>
<td>Johnson &amp; Johnson (1981)</td>
<td>N/A</td>
<td>Positive</td>
<td>N/A</td>
<td>4th grade</td>
<td>Johnson methods, 45 minute sessions daily for 16 days (n=51; 80% White, 20% Black)</td>
</tr>
<tr>
<td>Oishi, Slavin, &amp; Madden (1983, cited in Slavin, 1995)</td>
<td>Positive</td>
<td>Positive</td>
<td>Positive</td>
<td>2nd grade</td>
<td>Team-Assisted Individualization (TAI), number of subjects and ethnic context N/A</td>
</tr>
<tr>
<td>Sharan (1984)</td>
<td>Positive</td>
<td>Positive</td>
<td>None</td>
<td>6th-8th grade</td>
<td>Group Investigation and STAD (n=725; 66% White, 33% Middle Eastern)</td>
</tr>
</tbody>
</table>

Note: these programs are all similar in that they involve evaluating or rewarding students based on heterogeneous group work. However, they differ in that Johnson methods do not contain individualistic or competitive elements, while other programs possess these elements in some form. Also, Jigsaw II is structured such that each student gains expertise about a unique component of the project and then instructs his or her teammates about that component, while other programs do not focus on first developing each student’s expertise.
At first blush one might conclude that cooperative learning programs ignore developmental factors including the cognitive constraints and social-cognitive skills of children. However, cooperative learning techniques seem to be effective across a wide range of ages (including grades 2-12; see Table 2), and meta-analyses of contact theory have found that age does not significantly moderate the effect of contact. In fact, it is equally strong across childhood (grades 1-12), adolescence, and young adulthood; Pettigrew & Tropp, 2000, 2006). Further, Ziegler (1981) found that his cooperative learning program increased an important social-cognitive skill in prejudice reduction: perspective-taking. Hence, one factor underlying the effectiveness of the cooperative-learning approach may be that it addresses this cognitive antecedent of positive intergroup relations.

In contrast to studies that evaluate multicultural curricula (which often by necessity assess interracial attitudes), studies that evaluate cooperative learning techniques primarily use interracial friendship choices, or ratings of how much children like their peers, as outcome variables—after all, this is the aspect of prejudice that is targeted by the intervention. Because of this narrow focus on one manifestation of prejudice, we are left with the same limitation described in our review of multicultural curricula—that we only partially know how these programs affect prejudice. We cannot claim that their effectiveness generalizes to White children’s more positive attitudes towards African-Americans or to positive behaviors toward other outgroup individuals (Banks, 1995). One of the few studies investigating this specifically found that friendships did not generalize to reductions in these alternate manifestations of prejudice or to increases in friendships with outgroup members who were not part of children’s cooperative learning team (Weigel, Wiser, & Cook, 1975). Proponents like Slavin (1995), however, argue that interracial friendships can be considered the most stringent test of attitude and behavior change, given the norms against cross-racial friendships and group differences accentuated by neighborhood segregation, socioeconomic status, school achievement, and activity preferences. He also reports that the cross-racial friendships formed as a result of cooperative learning interventions are primarily close friendships. An additional positive factor about friendship measures, especially the varieties used to evaluate this approach, is that they usually do not force children to choose between ingroup and outgroup members as friends.

A final note about cooperative learning approaches is that these programs are some of the most difficult to implement in the classroom. Program fidelity is easy to achieve in the laboratory, but less so in the field (Slavin, 1995). Part of the difficulty in implementing cooperative learning programs may be due to the emphasis on individual achievement in the American education system, especially in the current era of academic accountability. However, critics should take note that most cooperative learning studies also measure academic achievement and usually find that students in cooperative learning teams outperform those in traditional classes (e.g., Sharan, 1984; Slavin, 1995; Ziegler, 1981). Specifically, they report the greatest gains for those children who were furthest behind, with no losses for children who already excelled in traditional learning classes.

**Anti-Bias/Social-Cognitive Skills Training**

The final approach discussed here includes both social-cognitive skills training and anti-bias curricula programs, which represent the current direction taken by many schools and non-profit organizations to address issues of intergroup relations. Social-cognitive skills training arose out of the belief that young children’s prejudice directly results from the absence of particular cognitive or social-cognitive skills and typically attempts to teach children more advanced perspective-taking skills and empathy. This approach is frequently used in conjunction with anti-bias curricula (and it is often difficult to distinguish between the two). Anti-bias curriculum programs are descendants of multicultural curriculum programs and focus explicitly on the topics of prejudice and discrimination, rather than information about minority groups. Prejudice and discrimination are defined and discussed, often in groups led by peers rather than teachers (Paluck & Green, in press).

One classic study that clearly illustrates this approach assigned fifth-graders (n=80) from an integrated school (50%...
White, 30% African-American, and 20% Asian-American) to either a traditional curriculum or an intervention called “More Than Meets the Eye” (Bowers & Swanson, 1988, as cited in Aboud & Fenwick, 1999). The program introduced a fictitious class of “Hoozhoo Kids” from different racial and ethnic backgrounds by having children working individually, discussing in groups, and solving problems in pairs. Children learned to cross-categorize (an ability based on multiple classification skills) and remember the unique, internal qualities of each Hoozhoo Kid (an ability based on conservation skills). The activities also helped children identify differences between themselves and their friends, and similarities between themselves and other classmates.

To assess the program’s effectiveness, children’s racial attitudes (both before and after the program) were measured, along with their perceptions of similarities and differences between pairs of same-race individuals. On average, prejudiced attitudes decreased for those children in the intervention classroom who were initially high in prejudice, and remained stable for those children who were initially low in prejudice. There were no changes in the perceived similarity between same-race individuals for children in the intervention class, but both high- and low-prejudice children in the intervention class used more internal (as opposed to external) descriptors of other individuals after completing the “More than Meets the Eye” program. This program exhibits qualities of both social-cognitive skills training—including perspective-taking, multiple classification, and conservation abilities—as well as anti-bias curricula, as group discussions commonly addressed racial categories, stereotypes, and discrimination (Aboud & Fenwick, 1999).

Several examples of the social-cognitive skills training and anti-bias curricula approach are described in Table 3. Similar to multicultural curricula, studies of both social-cognitive skills training and anti-bias curricula are rarely longitudinal and often have inadequate control groups. Despite these limitations in the studies examining their effectiveness, most research suggests that social-cognitive skills training and anti-bias curricula show consistently positive outcomes. In comparison to other approaches, those programs

<table>
<thead>
<tr>
<th>Study</th>
<th>Attitudes</th>
<th>Behavior</th>
<th>Friendship</th>
<th>Grade</th>
<th>Program Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weiner &amp; Wright (1973)</td>
<td>Positive</td>
<td>N/A</td>
<td>N/A</td>
<td>3rd grade</td>
<td>Children randomly assigned to a variation on Jane Elliot’s Blue-Eyes/Brown-Eyes simulation (n=62; only 1 Black child)</td>
</tr>
<tr>
<td>Breckheimer &amp; Nelson (1976)</td>
<td>Mixed-Positive</td>
<td>Mixed-Positive</td>
<td>Positive</td>
<td>Senior high school</td>
<td>Discussion of the causes of racial prejudice and ways to promote interracial cooperation or role-playing of these same topics (n=25; ethnic context N/A)</td>
</tr>
<tr>
<td>Katz &amp; Zalk (1978)</td>
<td>Positive</td>
<td>Mixed-Positive</td>
<td>None</td>
<td>2nd and 5th grade</td>
<td>Training to differentiate individuals within a racial outgroup (n=48; two integrated schools with varying % of White, Black, &amp; Hispanic)</td>
</tr>
<tr>
<td>Gimmestad &amp; deChiara (1982)</td>
<td>Positive</td>
<td>N/A</td>
<td>N/A</td>
<td>4th-6th grade</td>
<td>Read and re-enacted dramatic plays about 4 racial outgroups, emphasizing perspective-taking and empathy (n=559; majority Hispanic)</td>
</tr>
<tr>
<td>Whetstone &amp; Pezdek (1992)</td>
<td>None</td>
<td>Positive</td>
<td>Positive</td>
<td>3rd, 7th, and 11th grade</td>
<td>“A World of Difference” program: training to respond to instances of prejudice and discrimination (n=545; included segregated, stable integrated, and transitional integrated schools)</td>
</tr>
<tr>
<td>Bigler &amp; Liben (1992)</td>
<td>Positive</td>
<td>N/A</td>
<td>N/A</td>
<td>K-5th grade</td>
<td>Training to improve multiple-classification skills for gender groups only, not racial groups (n=75; 100% White)</td>
</tr>
<tr>
<td>Aboud &amp; Fenwick (1999)</td>
<td>Positive</td>
<td>Mixed-Positive</td>
<td>N/A</td>
<td>5th grade</td>
<td>“More Than Meets the Eye” program: training to learn internal attributes about racial outgroup members (n=126; 50% White, 30% Black, &amp; 20% Asian)</td>
</tr>
</tbody>
</table>
that incorporate anti-bias curricula or social-cognitive skills training (including empathy) appear to be more effective (Levy et al., 2003).

As with the previous two approaches, we can use the three lessons learned since Brown v. Board to interpret the success of social-cognitive skills training and anti-bias curricula. While social-cognitive skills training and anti-bias curricula do not necessarily address whether the school context provides the optimal conditions for prejudice reduction (as shown in Table 3, two of the seven program evaluation studies were conducted in homogeneous White settings), some have taken care to note how school context has impacted the effects of social-cognitive skills training and anti-bias curricula. For example, Whetstone and Pezdek (1990) found increased acceptance of interracial social relationships as a result of the “A World of Difference” anti-bias curriculum, but only in heterogeneous schools whose ethnic composition was stable over the past five years. These approaches also recognize that successful interventions must address children’s cognitive abilities. Social-cognitive skills training, by definition, focuses on children’s cognitive limitations and attempts to advance their abilities. Although social-cognitive developmental theory suggests that children would benefit the most from cognitive skills training prior to eight years of age, this approach has been popular with a wide range of ages, just like cooperative learning techniques. Because anti-bias curricula programs are implemented primarily in older children—children who already possess the requisite cognitive skills—they may inadvertently be taking advantage of children’s cognitive abilities. This may explain, in part, why anti-bias curricula are generally more successful than multicultural curricula. Alternatively, anti-bias curricula could improve children’s perspective-taking and empathy (although they are rarely assessed), and the increases in their social-cognitive skills could subsequently be leading to reductions in prejudice.

Finally, while studies that evaluate the effectiveness of these programs commonly focus on attitudinal measures of prejudice, behaviors and friendships are also frequently assessed, and forced-choice measures are rarely used. This balanced array of measures to assess prejudice provides a more complete picture of the effectiveness of these programs. Although the manifestations of prejudice assessed by these programs are diverse, there is not much diversity in which cognitive constraints and social-cognitive skills are examined and taught. For example, most social-cognitive skills training focuses solely on perspective-taking skills and empathy. Perhaps other skills (e.g., conservation and multiple classifica-

Consistent with our training, we approached the issue of prejudice reduction in this paper primarily from the perspective of developmental and social psychologists (with an eye towards including educational and historical points of view as well). We hope this paper spurs future interdisciplinary work. After all, facilitating interethnic relations involves understanding of the roles of school racial composition, community attitudes, historical background of particular social groups, etc.—topics that we could not include in this paper for the sake of brevity. Clearly, policymakers, psychologists, educators, sociologists, and anthropologists have many lessons to learn from one another (for example, we also direct readers to Banks, 2006; Baker, 1998; McKown, 2005; Paluck & Green, in press; Schofield & Hausmann, 2004; Stephan, 1999; Wells, 1995; Wells & Crain, 1994).

Furthermore, we hope our review of the three different approaches taken by schools to reduce children’s prejudice demonstrates that, from a psychological vantage point, there are pertinent reasons why some programs are more effective than others. These reasons derive from the three lessons psychologists have learned about children’s prejudice since the Brown v. Board of Education decision in 1954: a) there are optimal conditions under which contact can reduce prejudice, b) young children possess social-cognitive constraints that increase the likelihood of being prejudiced, and c) prejudice has multiple affective, behavioral, and interpersonal components that manifest themselves in ways which can favor ingroups, derogate outgroups, or both.

Evaluations of the multicultural curricula have been conducted in predominately White schools where there are no opportunities to interact with peers of other races or ethnicities (thus, we know less about their effectiveness in diverse contexts). Nor do multicultural curricula consider children’s social-cognitive constraints. In contrast, cooperative learning techniques meet all the requirements of optimum contact to make interracial interactions maximally positive (as outlined by contact theory). However, because most cooperative learning program evaluations rely heavily on friendship choices, it is unclear whether they are effective in reducing children’s prejudicial attitudes and behaviors beyond children’s closest contacts. Anti-bias curricula and social-cognitive skills training may help children make better use of multicultural curricula, or directly reduce prejudice, by increasing empathy.
and perspective-taking skills. Yet, like multicultural curricula, these approaches (or at least their evaluations) often overlook the role of social context and the conditions that maximize prejudice reduction.

**Recommendations for Educational Practice**

The information in this review has many applications for educational practice. These program-specific recommendations are contingent on children's developmental level and the social context provided by school diversity (or lack thereof). However, we also need to recognize that the initial impetus to do anything about prejudice in schools may be lacking, from the classroom to the national level. For example, the Supreme Court recently heard two cases about whether elementary schools could consider racial diversity when accepting students. Many parents and community leaders argued that the integration of schools is not an important consideration in the post-Civil Rights era, reflecting the lay belief that children are not prejudiced. This is a cultural barrier which undermines school, district, and national policies that attempt to address this "invisible problem." We hope in this paper to have demonstrated that children are indeed prejudiced for a variety of reasons, and we need to be motivated to work towards change at all possible levels. For example, it might be appropriate to incorporate prejudice reduction programs into the character education component of the No Child Left Behind policy. The more specific recommendations below integrate the findings of our entire review.

1. Multicultural curricula. It is especially important to carefully weigh the potential outcomes of using multicultural curricula with children younger than age eight. Their cognitive limitations may prevent them from learning counter-stereotypical information. Moreover, cognitive transformations of counter-stereotypical to stereotypical information may inadvertently serve to reinforce their stereotypes. Because children older than eight years of age are likely to have attained foundational cognitive abilities like multiple classification or conservation skills, multicultural curricula may be more successful in this age group. Newer multicultural curriculum programs that make use of increased affective components, modeling of positive intergroup behavior, and development of ingroup norms countering prejudice through "extended contact" materials might be ideal ones to search out. However, our review suggests that this approach may still be less effective than the other two approaches.

2. Cooperative learning techniques. In multiethnic schools, teachers wanting to improve interracial peer relationships can consider changing their classroom organization to be compatible with cooperative learning approaches. This strategy appears to not only benefit interracial relationships but also academic outcomes, because each group member is responsible for a unique aspect of the project, and groups as a whole are evaluated or rewarded based on the performance of each member. If the specific conditions for cooperative learning techniques cannot be met in particular classrooms (for example, if the school is lacking racial diversity), then anti-bias or social-cognitive programs are likely a better choice. On the other hand, if ethnically mixed cooperative learning groups can be constituted, they are likely to increase interracial friendships across a wide range of ages because cooperative learning techniques were founded on contact theory, which applies across childhood, adolescence, and young adulthood.

3. Anti-bias curricula/social-cognitive skills training. In homogenous schools, activities that incorporate social-cognitive skills training or anti-bias curricula are strongly advised if multicultural curricula are to be used. These may include role-playing activities that promote perspective-taking and empathy, or discussions of prejudice and discrimination. The social-cognitive skills used should be tailored as precisely as possible to the child's developmental level (for example, multiple classification and empathy both have simple as well as sophisticated forms with known developmental trajectories). More generally, programs of this type are strongly recommended because of their effectiveness across different school contexts and age groups and for different manifestations of prejudice. When in doubt, programs of this type are, therefore, likely to be an educator's safest choice. The challenge is finding concrete and personal ways to talk about prejudice and discrimination with young children. Even children as young as five, however, understand concepts related to unfairness (Laupia & Turiel, 1986) and thus can comprehend how people can be treated unfairly because of the way they look (the most basic operational definition of race).