

Inclusion: Rhetoric and Reality Surrounding the Integration of Students with Disabilities

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Contents

Introduction	
A Conflict of Visions	page 1
Special Education: History and Perspective	page 3
Mainstreaming	page 3
Regular Education Initiative (REI)	page 5
Research Evidence and the REI	page 6
Inclusion: Part-time to Full-time	page 8
Special Education Practice and Evidence	page 10
Attitudes and Beliefs	page 11
Summarizing Attitudes and Beliefs	page 13
Reality of General Education	page 15
What Happens in the General Education Class?	page 15
Social Situation in General Education	page 17
Teacher Skill and Ability	page 18
Discussion	page 20
Postmodernism and Inclusion	page 21
Ideology, Politics, and Beliefs	page 23
Conclusion	page 25
References	page 27

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Abstract

Issues surrounding the integration of students with disabilities into general education classrooms are explored. The history of the debate over inclusion is examined first by tracing the movement from mainstreaming and the least restrictive environment in 1975, to the call for a more integrated system during the 1980s under the Regular Education Initiative, and finally, to full inclusion whereby all students are completely integrated into age-appropriate general education classrooms with no separate special education. Next, research is summarized which investigates perceptions and attitudes about inclusion, the tenor of the general education classroom, and the preparation and ability of general education teachers to deal effectively with special education students. Finally, the dissonance between rhetoric and reality is explored. By ignoring research evidence, the inclusion debate has elevated discussion to the ideological level where competing conflicts of vision are more difficult to resolve. It is concluded that if the best possible education for all students with disabilities is to be achieved, then all forms of evidence must be considered.

Inclusion: Rhetoric and Reality Surrounding the Integration of Students with Disabilities

In the realm of special education, the word “inclusion” is likely to engender fervent debate. Inclusion represents a movement seeking to create schools that meet the needs of all students by establishing learning communities to educate students with and without disabilities together in age-appropriate, general education classrooms in neighborhood schools (Ferguson, 1996). Although questions about the integration of students with disabilities should no longer be controversial, passionate discussion about inclusion continues to escalate not only because its philosophy focuses on students with disabilities of any type and severity level but also because it seeks to alter the education of all students and hence general education. For some 25 years, integration has been the norm. As indicated by the U. S. Department of Education (1997), about 95% of students with disabilities are served in general education settings, and about 75% of those students are provided instruction in either general education classrooms or resource room settings. The movement toward greater integration has resulted in a significant change in the structure of special education, but questions remain about the success of special education. Empirical evidence about the efficacy of special education continues to be equivocal resulting in discussion fueled by political and ideological concerns. These differences often have resulted in contentious discussion about how and for whom the inclusion of students with disabilities should be accomplished (see O’Neil, 1994-95).

A Conflict of Visions

Inclusion appears to have created an ideological divide in special education. In analyzing social policy, Sowell (1995) discussed such a divide as a conflict of visions by reference to the “vision of the anointed” versus the “vision of the benighted.” The vision of the anointed involves the perceptions, beliefs, and assumptions of an elite intelligentsia whose revelations prevail over others in determining policy. On the other side, there is the vision of the benighted whose perceptions, beliefs, and assumptions “are depicted as being at best ‘perceptions,’ more often ‘stereotypes,’ and more bluntly ‘false consciousness’” (p. 187). In special education, those who advocate most forcefully for full inclusion appear to hold the vision of the anointed. Such a vision, however, possesses a fundamental difficulty: “Empirical evidence is neither sought beforehand nor consulted after a policy has been instituted. . . . Momentous questions are dealt with essentially as conflicts of vision” (p. 2). Consequently, the anointed do not require clear

definitions, logical arguments, or empirical verifications because their vision substitutes for all these things. Consequently, calls for more research to resolve fundamental problems are viewed solely as part of the vision of the benighted. Research evidence does not appear to be a major factor in the vision of the anointed.

What does appear to be a major factor in the vision of the anointed are assumptions about compassion and caring. Although compassion and caring are seen as the special province of those with an anointed vision, in reality, they are also integral to the vision of the benighted. The reason for the emphasis on compassion and caring among the anointed is based on the assumption that their vision possesses

a special state of grace for those who believe it. Those who accept this vision are deemed to be not merely factually correct but morally on a higher plane. Put differently, those who disagree with the prevailing vision are seen as being not merely in error, but in sin. For those who have this vision of the world, the anointed and the benighted do not argue on the same moral plane or play by the same cold rules of logic and evidence. The benighted are to be made “aware,” to have their “consciousness raised,” and the wistful hope is held out that they will “grow.” Should the benighted prove recalcitrant, however, then their “mean-spiritedness” must be fought and the “real reasons” behind their arguments and actions exposed. (Sowell, 1995, pp. 2-3)

For the anointed, both a higher moral plane and significant ego involvement preserve and insulate their vision. As Sowell (1995) suggested

Despite Hamlet’s warning against self-flattery, the vision of the anointed is not simply a vision of the world and its functioning in a causal sense, but is also a vision of themselves and of their moral role in the world. It is a vision of differential rectitude. It is not a vision of the tragedy of the human condition: Problems exist because others are not as wise or as virtuous as the anointed. (p. 5, italics in original)

When applied to the case of inclusion, the anointed believe special education possesses problems, not as a result of limits on knowledge or resources but because others lack their wisdom and virtue. Additionally, the anointed believe that special education is primarily a social construction and not a reflection of an underlying reality. Consequently, problems can be solved only by applying the articulated

visions of the anointed. Any opposition to their vision is the result of an intellectual or moral bankruptcy (or both) and not to a different reading of complex and often inconclusive research evidence. Because the vision of the anointed is independent of empirical evidence, Sowell (1995) suggested that

[This] is what makes it dangerous, not because a particular set of policies may be flawed or counterproductive, but because insulation from evidence virtually guarantees a never-ending supply of policies and practices fatally independent of reality. This self-contained and self-justifying vision has become a badge of honor and a proclamation of identity:

To affirm it is to be one of us and to oppose it is to be one of them. (p. 241)

Advocates on both sides of the inclusion issue appear to have drawn such a line between “us” and “them” over the question of inclusion. As Shanker (1994) pointed out, “Some full inclusionists talk as though they are in a battle pitting the forces of morality against the forces of immorality” (p. 7). In a later analysis, Sowell (1999) discussed the requirement to truly grasp basic ideas and concepts. Sowell, in analyzing issues of justice, argued about the need to untangle the confusions surrounding many problems by returning to square one. The purpose of this paper is to return to square one by analyzing the history of the inclusion issue and by demonstrating that a rational solution can be achieved through consideration of all forms of evidence.

Special Education: History and Perspective

Mainstreaming

Historically, special education within the public school system developed as a specialized program separate from general education and was embodied in the categorical “special class” (e.g., MacMillan & Hendrick, 1993; Safford & Safford, 1998). The special class was seen as the best means for avoiding conflicts while providing universal education (Gerber, 1996). The special class was viewed as possessing the following advantages: (a) low teacher-pupil ratios, (b) a specially trained teacher, (c) greater individualization of instruction in a homogeneous classroom, (d) an increased curricular emphasis on social and vocational goals, and (e) greater expenditure per pupil (Johnson, 1962). Although some discussion about alternative placement could be found prior to the 1960s (Shattuck, 1946), it was Dunn’s (1968) famous article questioning whether separate special classes were justifiable that brought the legitimacy of special class placement to the forefront.

MacMillan's (1971) analysis of the Dunn (1968) article noted that it lacked scholarly rigor. Rather than citing empirical support for less restrictive placement, Dunn argued in favor of this position based on the lack of support for the efficacy of a separate special class. Nevertheless, the Dunn article was the impetus for several pieces calling for the abandonment of the special class (e.g., Christopolos & Renz, 1969; Deno, 1970; Lilly, 1970), even though summaries of empirical evidence offered equivocal conclusions about its efficacy (Goldstein, 1967; Guskin & Spicker, 1968; Kirk, 1964).

Within the social context of the time, the Dunn article initiated an attitude in special education that eschewed empirical evidence in favor of ideology as the basis for change (MacMillan, Semmel, & Gerber, 1994). This attitude was manifested in a shift in focus from evaluating "best practice" to emphasizing the need for students in special education having access to general education. Advocacy thus shifted from the "child" to the "program," but questions remained about the best way to optimally serve students with disabilities in any setting (MacMillan & Semmel, 1977). The Dunn article must also be placed in the context of the strong antisegregation sentiments of the 1960s. The segregated (i.e., separate) nature of special education itself was targeted for change rather than the particular practices used to teach students with disabilities (Semmel, Gerber, & MacMillan, 1994).

The debate about integration culminated in the passage in 1975 of the Education for All Handicapped Children Act (now the Individuals with Disabilities Education Act [IDEA], 1990, 1992, 1997). This Act mandated that all students with disabilities be provided with an appropriate education designed to meet their unique needs in the least restrictive environment (LRE) (Heller, Holtzman, & Messick, 1982; Weintraub, Abeson, Ballard, & LaVor, 1976; Zettel & Ballard, 1986). Furthermore, the Act required that students with disabilities be educated to the maximum extent appropriate in a classroom context with peers without disabilities (i.e., mainstreamed). Mainstreaming, however, was difficult to define operationally (Kaufman, Agard, & Semmel, 1986). The legal definition focused more on what mainstreaming was theoretically rather than stipulating that students should only be removed and placed in separate classes or schools when the nature or severity of their disability was such that they could not receive an appropriate education in a general education classroom with supplementary aids and services (Bateman & Chard, 1995; Osborne & DiMattia, 1994). To ensure compliance with the Act, school districts were required to provide a complete continuum of alternative placement options as described by Reynolds

(1962) and exemplified in Deno's (1970) "Cascade model." The continuum meant that the LRE was not a particular setting (i.e., general education classroom). Furthermore, although the LRE for some students with disabilities might be the general education classroom, it was neither required nor desirable in all cases (Abeson, Burgdorf, Casey, Kunz, & McNeil, 1975). This conclusion has been supported in a number of court cases in which the LRE concept was clarified by developing evidential tests for determining how compliance might be achieved (Thomas & Rapport, 1998; Yell, 1995). In no case did the tests imply that the general education classroom was anything more than an option in a LRE framework (Zirkel, 1996).

Regular Education Initiative

The LRE mandate brought structural change to special education by making the resource "pull out" model the primary placement option. In this option, the special education teacher provided academic instruction for specified time periods to a special education student whose primary placement was the general education classroom (Hammill & Wiederholt, 1972). By spending at least half the school day in the general education setting, the student was considered to be in the "mainstream." Nevertheless, answers to questions about the efficacy of special education remained equivocal (Madden & Slavin, 1983; Wang & Baker, 1985-86; Wiederholt & Chamberlain, 1989).

Mainstreaming was primarily concerned with access, but questions about how students with disabilities should effectively be taught still remained unanswered (Gottlieb, 1981; Kauffman, 1995). Despite increased calls for school reform during the 1980s, the needs of special education were often not considered--especially how advocating for higher standards and enhanced excellence might impact students with high-incidence disabilities (Pugach & Sapon-Shevin, 1987; Shepard, 1987; Yell, 1992). In an effort to contribute to school reform, special education attempted to introduce more powerful instructional methodologies and professional practice (Biklen, 1985; Lipsky & Gartner, 1989; Wang, Reynolds, & Walberg, 1986). These efforts, along with a continued call for more inclusive instructional placements, were termed the Regular Education Initiative (REI) (Reynolds, Wang, & Walberg, 1987). Essentially, the goal was to merge general and special education to create a more unified system of education (Gartner & Lipsky, 1987; Will, 1986). The REI was based on the following assumptions: (a) students are more alike than different, so truly special instruction is not required, (b) good teachers can teach all students, (c) all students can be provided with a quality education without being classified according to traditional special

education categories, (d) general education classrooms can manage all students without any segregation, and (e) physically separate education is inherently discriminatory and inequitable.

The REI did not receive uniformly positive responses (Davis, 1989; Heller & Schilit, 1987; Lieberman, 1985). For example, Kauffman, Gerber, and Semmel (1988) argued against the REI by indicating that: (a) students were not over-identified for special education; (b) student failure should not be attributed solely to perceived shortcomings of teachers; (c) more competent teachers did not necessarily possess more positive attitudes toward students with disabilities; (d) variability in student performance increases rather than decreases when effective instruction was provided to all students; and (e) teachers are faced with the dilemma of maximizing mean performance versus minimizing group variance. Reynolds (1988) countered with the suggestion that perceived problems resulted primarily from traditional special education: "Present practices have themselves become problematic--causing disjointedness, proceduralism, and inefficiencies in school operations" (p. 355). The rhetoric continued and can be summarized in the question posed by Jenkins, Pious, and Jewell (1990): "How ready for the REI is this country's educational system?" (p. 489).

Research Evidence and the REI

In marshaling empirical evidence for the REI, supporters used the earlier "efficacy studies," the body of research that compared students with disabilities in special classes versus general education placements. Dunn (1968) used this same research evidence, but the validity of the findings have long been open to serious question. For example, most efficacy studies did not use random selection and assignment of students and thus failed to meet standards associated with true experimental designs. In fact, the few studies that did use randomization provided some support for the efficacy of the special class (Goldstein, Moss, & Jordan, 1965). Thus, it was imprudent to cite the efficacy studies as having provided evidence that special classes were not effective (Gartner & Lipsky, 1989; Lilly, 1988; Wang & Walberg, 1988).

Carlberg and Kavale (1980) conducted a meta-analysis that synthesized the findings from 50 of the best efficacy studies. The mean effect size was $-.12$, indicating that the relative standing of the average special class student was reduced by about 5 percentile ranks after an average 2-year stay in a special class. Thus, a small negative effect was associated with special class placement. Larger effect sizes, however, were found for student classification. For students with mild mental retardation (MMR), a mean effect size

of -.14 was found. However, an effect size of +.29 was found for students with learning (LD) or emotional and behavioral (E/BD) disabilities. Special class placement was thus found to be disadvantageous for students with below average IQ, causing them to lose 7 percentile ranks. In contrast, it was found to be advantageous for students with learning or behavior problems, who improved by an average 11 percentile ranks and were better off than 61% of their counterparts placed in a general education classroom. These findings raise questions about whether all students with disabilities benefitted from integration. Given the magnitude of associated effects, it was evident that placement per se had only a modest influence on outcomes. The specific classroom where students with disabilities learned was not a critical factor suggesting that an examination of what goes on, instructionally and socially, in those placements was needed (Leinhardt & Pally, 1982).

Empirical evaluations of models for educating students with disabilities in a general education setting have also been used to support the REI. A prime example is the Adaptive Learning Environments Model (ALEM) that was designed to deliver effective instruction to students with disabilities without removing them from the general education classroom (Wang, Gennari, & Waxman, 1985). Evaluations of the ALEM model (Wang & Birch, 1984a, b; Wang, Peverly, & Randolph, 1984; Wang & Walberg, 1983) have been analyzed critically and found deficient and inconsistent with respect to design, analysis, and interpretation (Bryan & Bryan, 1988; D. Fuchs & L. S. Fuchs, 1988; Hallahan, Keller, McKinney, Lloyd, & Bryan, 1988). The equivocal research evidence suggested that the ALEM model could not be endorsed as a prototypical model for integrating general and special education.

Given its limited empirical support, the REI was buttressed primarily with ideological arguments. Rhetoric cast opponents of the REI as segregationists (Wang & Walberg, 1988), and the current system of special education as slavery (S. Stainback & W. Stainback, 1987) and apartheid (Lipsky & Gartner, 1987). Conversely, proponents of the REI were viewed as naive liberals (Kauffman, 1989). The essential issue was framed as a debate about the future of special education between “abolitionists and conservationists” (D. Fuchs & L. S. Fuchs, 1991). The REI proponents appeared divided over the question of who should be integrated, however. On one side, some REI proponents suggested that the REI was aimed primarily at students with high-incidence disabilities like MMR, LD, and E/BD, and that alternative separate settings should remain an option for students with severe and profound disabilities (Pugach & Lilly, 1984;

Reynolds & Wang, 1983). For these students, there should be more progressive inclusion that was “describable in terms of a gradual shift, within a cascade model, from distal to proximal administrative arrangements and from segregated to integrated arrangements” (Reynolds, 1991, p. 14). On the other side, there was the suggestion that all students with disabilities be integrated regardless of disability type or severity level (Gartner & Lipsky, 1987; S. Stainback & W. Stainback, 1984b). If all students were not integrated, then two separate systems of education would be maintained that represented merely “blending of the margins” (Gartner & Lipsky, 1989, p. 271) and “[would] not address the need to include in regular classrooms and regular education those students labeled severely and profoundly handicapped” (S. Stainback & W. Stainback, 1989, p. 43).

Inclusion: Part-time to Full-time

Special education was thus experiencing great tensions (Meredith & Underwood, 1995). Some called for radical change that would alter the fundamental nature of special education, while others called for a more cautious approach to change based on empirical analyses and historical considerations (Dorn, D. Fuchs, & L. S. Fuchs, 1996). Kauffman (1993) suggested that change in special education should be predicated on three assumptions: (1) the necessity of keeping place in perspective, because setting per se has limited impact on outcomes for students with disabilities; (2) choosing ideas over image; for example, equating special education with segregation and apartheid were gross oversimplifications that distorted debate because image can become the measure of truth; and (3) avoiding fanaticism, a passion that has become dangerous because it often leads to moral certainty with predetermined answers. Finally, Kauffman called for the strengthening of special education’s empirical base through experimentation with new programs, strategies, and policies.

D. Fuchs and L. S. Fuchs (1994) traced the origins of the inclusive schools movement and contrasted it with the REI movement. A major distinction between the movements was focused on the distinction between “high vs low” incidence special education populations. Many advocates for the low-incidence group (i.e., those students with severe intellectual deficits) continued to view the REI as policy directed primarily at students with high-incidence disabilities (i.e., students with MMR, LD, or E/BD), but nonetheless retained the goal of moving all students into the mainstream. Consequently, the strategies used to demonstrate the merits of the REI were not convincing (Pugach & Sapon-Shevin, 1987). In reality, the

REI was primarily a special education initiative for high-incidence disabilities that had modest success in changing special, but not general, education.

The inclusive schools movement, however, possessed the larger goal of reducing special education services as defined in the continuum of placements (Gartner & Lipsky, 1989). Later, Lipsky and Gartner (1991) suggested that, “The concept of Least Restrictive Environment--a continuum of placements, and a cascade of services--were progressive when developed but do not today promote the full inclusion of all persons with disabilities in all aspects of societal life” (p. 52, italics in original). The “inclusive school” was thus viewed as a setting essentially devoid of special education because the emphasis was on all students being included in age-appropriate general education: “No students, including those with disabilities, are relegated to the fringes of the school by placement in segregated wings, trailers, or special classes” (S. Stainback & W. Stainback, 1992, p. 34). Although it was possible to identify different models for inclusion, they all aimed at providing a restructured and unified system of special and general education (Skrtic, 1991). In the course of advocacy for inclusion, many proponents of the REI became disillusioned because of their limited influence on general education. But soon, a group associated with The Association of Persons with Severe Handicaps (TASH) “took the field by storm; they rushed into a vacuum created by others’ inaction, no doubt intimidating by their vigor alone many who disagreed with their radical message” (D. Fuchs & L. S. Fuchs, 1994, p. 299). TASH had a significant effect on policy because of the rhetoric calling for the elimination of special education in the form of a continuum of placements (W. Stainback & S. Stainback, 1991) and a curricular focus emphasizing socialization in order to foster social competence over academic achievement (Snell, 1991).

The proponents of full inclusion predicated their position on the assumption that special education was the basic cause of many of the problems experienced by general education (Skrtic, Sailor, & Gee, 1996). Consequently, there was no need for a LRE defined by a continuum of placements because the LRE was, in fact, the general education classroom (Lipsky & Gartner, 1997; Taylor, 1988). This view of the LRE as solely a single place ignored important interactions between student needs and instructional processes (Korinek, McLaughlin, & Walther-Thomas, 1995; Morsink & Lenk, 1992). With all students in the same classroom (and no special education), TASH hoped that general education would be forced to deal with students previously avoided and thus transform itself into a more responsive and resourceful system.

The essence of the message offered by TASH thus differed markedly from other advocacy and professional groups in special education (see Kauffman & Hallahan, 1995, pp. 307-348). For example, how could TASH speak for all students when supporting a diminished academic emphasis that represented the primary educational focus for almost all students with high-incidence disabilities? By rejecting alternative views and believing that theirs was the only pure and honorable position, the TASH full inclusion position really reflected “an exclusionary, not inclusionary, mindset” that radicalized reform in special education (D. Fuchs & L. S. Fuchs, 1994, p. 304). In contrasting the REI and full inclusion, Fuchs and Fuchs suggested that, “Full inclusionists’ romanticism, insularity, and a willingness to speak for all is markedly different from REI supporters’ pragmatism, big-tent philosophy and reluctance to speak for all” (p. 304). The radical proposal offered by full inclusion proponents was questioned by REI supporters who focused their attention on repairing the “disjointedness” experienced by students and programs of the “second system” at the “school margins” (Reynolds, 1989, 1992; Wang, Reynolds, & Walberg, 1988). Additionally, special education renewed interest in demonstrating its real benefits (D. Fuchs & L. S. Fuchs, 1995a, 1995b; Kavale & Forness, 1999; Wang, Rubenstein, & Reynolds, 1985). Special education appeared, however, to reach a status quo. Although general agreement about the benefits of inclusive environments for students with disabilities could be found (Putnam, Spiegel, & Bruininks, 1995), the issue remained unclear because of the many different approaches to inclusion that differed markedly from setting to setting. As Martin (1995) suggested, “a federal or state government, even a local school system, cannot responsibly adopt ‘inclusion’ without defining its proposed program” (p. 193).

Special Education Practice and Evidence

The emphasis on special education as a place (i.e., a setting where students with disabilities are educated) deflected attention away from the fact that special education was a more comprehensive process whose actual dynamics were major contributors to its success or failure (Kavale & Glass, 1984). A significant part of the special education process was represented in the beliefs and actions of general education. An integrated system means that special education cannot act independently as a separate system, but must formulate policy in response to the attitudes, perceptions, and behaviors of general education (Gallagher, 1994).

Attitudes and Beliefs

It has long been recognized (Sarason, 1982) that a major factor in the success or failure of a policy like mainstreaming are the attitudes possessed by the general education teacher (Hannah & Pliner, 1983; Horne, 1985; Linton & Juul, 1980). Early on, general education teachers expressed some negative attitudes, especially feelings of inadequacy, about dealing with students with disabilities, although they remained generally positive about the concept of integration (Harasymiw & Horne, 1976; Ringlaben & Price, 1981; Stephens & Braun, 1980). Although positive attitudes about students with disabilities could also be found (Alexander & Strain, 1978; Nader, 1984; Yucker, 1988), these positive attitudes were often accompanied by concerns about the integration of students with severe disabilities, particularly those with significant intellectual deficits (Diebold & Von Eschenbach, 1991; Hirshoren & Burton, 1979; Shotel, Iano, & McGettigan, 1972). Teachers were also found to be more willing to integrate students whose disabilities did not require additional responsibilities on their part (Center & Ward, 1987; Gans, 1987; Houck & Rogers, 1994). Otherwise, they revealed a resistance to greater integration (Margolis & McGettigan, 1988). Although attempts to foster more positive attitudes about integration have been attempted (Naor & Milgram, 1980), any positive attitudinal changes achieved were found to be short-lived (Donaldson, 1980; Stainback, Stainback, Strathe, & Dedrick, 1983).

The attitudes of peers toward students with disabilities have also been investigated. Although not uniformly positive, findings generally revealed a tendency toward more tolerance with increased contact (Esposito & Reed, 1986; Towfighy-Hooshyar & Zingle, 1984; Voeltz, 1980). Generally, though, general education peers paid no particular attention to students with disabilities (Lovitt, Plavins, & Cushing, 1999). Any positive reactions to inclusion among students without disabilities (Hendrickson, Shokoohi-Yekta, Hamre-Nietupski, & Gable, 1996) was often accompanied by feelings of discomfort, especially about students with moderate and severe disabilities who possessed significant communication difficulties and lacked positive social skills (Helmstetter, Peck, & Giangreco, 1994; Peck, Donaldson, & Pezzoli, 1990). Although it has been suggested that students with severe disabilities were, in fact, accepted by nondisabled peers (Evans, Salisbury, Palombaro, Berryman, & Hollowood, 1992; Hall, 1994; Janney, Snell, Beers, & Raynes, 1995), Cook and Semmel (1999) found that this was not the case, particularly when atypical

behavior occurred. In the case of students with mild disabilities, Cook and Semmel also found that they “do not typically appear to engender peer acceptance” (p. 57).

For parents, generally positive attitudes about inclusion appeared to be the norm, although anxiety about the actual mechanics was also seen (Bennett, DeLuca, & Bruns, 1997; Gibb et al., 1997; Green & Shinn, 1994). This anxiety was clearly seen among parents who supported inclusion but had reservations about it for their child (Lovitt & Cushing, 1999). As a result, diverse opinion among parents was found (Borthwick-Duffy, Palmer & Lane, 1996). For example, Carr (1993) doubted whether inclusion would be appropriate for her child with LD because of the loss of special education services: “What has changed in education since the time my son was in elementary school that would ensure successful inclusion? The answer is, unfortunately, nothing really” (p. 59). Taylor (1994) disagreed and, in response, suggested that “regular education is not only where the responsibility lies, but also where those with learning disabilities deserve to be educated” (p. 579). In discussing her sons with special needs, Brucker (1994) stressed the need for change: “We have been generally unsuccessful in our current mode of service delivery, although we have had some individual successes. The operation may have been a success, but the patient died! Inclusion’s time has come!” (p. 582). Grove and Fisher (1999) discussed this as a tension between the culture of educational reform (i.e., opportunities offered by inclusive education) and the culture of the school site (i.e., day-to-day demands of schooling). The attitude of the general public has also been investigated and found to be positive about integration but less positive if the students in question were likely to encounter difficulty in the general education classroom (Berryman, 1989; Gottlieb & Corman, 1975).

Administrators, because of their leadership positions, were viewed as playing a significant role in the success or failure of mainstreaming (Alexander & Strain, 1978; Lazar, Stodden, & Sullivan, 1976; Payne & Murray, 1974). Principals, however, often demonstrated a lack of knowledge about students with disabilities (Cline, 1981), and perceived little chance of their success in general education, particularly students with the label “mentally retarded” (Bain & Dolbel, 1991; Davis, 1980). Additionally, principals indicated that pull-out programs were the most effective placements, that full-time general class placements offered more social rather than academic benefits, and that support services were not likely to be provided in general education classrooms (Barnett & Monde-Amaya, 1998; Center, Ward, Parmenter, & Nash, 1985;

Wade & Garguilo, 1989-90). When the attitudes of teachers and administrators about mainstreaming were compared, the most positive attitudes about integrating students with disabilities into general education were held by administrators, the individuals most removed from the reality of the classroom (Davis & Maheady, 1991; Glicking & Theobald, 1975; Junkala & Mooney, 1986). Garver-Pinhas and Schmelkin (1989) suggested that “principals appear to respond in a more socially appropriate manner than may actually be the case in reality” (p. 42). Additionally, Cook, Semmel, and Gerber (1999) found critical differences between principals’ and teachers’ opinions about inclusion including differing perceptions concerning the possibilities for enhanced academic achievement, what really works best, and the level of resources being committed for inclusive arrangements. The optimistic views of principals were in sharp contrast to the more pessimistic views of teachers, and were assumed to be “at least in part, based on negative experiences regarding the outcomes of inclusion or the conviction that inclusion will not produce appropriate outcomes” (p. 25).

Summarizing Attitudes and Beliefs

Attitudes about integration have historically been multidimensional and reflective of a variety of underlying factors. Larrivee and Cook (1979) attempted to identify these factors and found that they included: (a) academic concerns (i.e., the possible negative effects of integration on general academic progress); (b) socio-emotional concerns (i.e., the negative aspects of segregating students with disabilities); (c) administrative concerns (i.e., the resources and support required to sustain special education); and (d) teacher concerns (i.e., issues about the experience and training necessary to work with students with disabilities). These concerns appear to be maintained even after 20 years of inclusion experience (Cornoldi, Terreni, Scruggs, & Mastropieri, 1998).

The research evidence about attitudes surrounding integration has remained equivocal because of the very disparate opinions held. Within the context of the REI and full inclusion, some studies have shown general education teachers to hold negative views about integration (Coates, 1989; Gersten, Walker, & Darch, 1988; Semmel, Abernathy, Butera, & Lesar, 1991), while others have revealed more positive attitudes (Villa, Thousand, Meyers, & Nevin, 1996; York, Vandercook, MacDonald, Heise-Neff, & Caughey, 1992). For example, Semmel et al. (1991) found that general education teachers did not oppose pull-out models of special education, while Villa et al. (1996) found that teachers favored educating all

students with disabilities in the general education classroom. These differences may support research which has found that more experience with inclusion is associated with more positive attitudes (Minke, Bear, Deemer, & Griffin, 1996). However, experience with inclusion may also create sampling differences that bias findings in one direction and make any generalizations suspect.

Soodak, Podell, and Lehman (1998) examined the relationship among teacher, student, and school factors in predicting teachers' response to inclusion. Two responses were found: (a) a hostility/receptivity response reflecting teachers' willingness to include students with disabilities in their classrooms and their expectations about the success of such an arrangement, and (b) an anxiety/calmness dimension reflecting teachers' emotional tension when actually faced with serving students with disabilities. Both responses were found to be related to individual teacher attributes and school conditions. Teachers who possessed low self-efficacy (i.e., beliefs about the impact of their teaching), who had limited teaching experience, or who demonstrated limited use of differentiated teaching practices were generally less receptive to inclusion. Another major influence on the two dimensions was type of disability: Teachers held more positive attitudes toward the inclusion of students with physical disabilities rather than those with academic or behavior disorders (Mandell & Strain, 1978). The greatest hostility and anxiety was found toward inclusion of students with MR. This pattern was duplicated for students with LD as teachers gained more experience in special education (Wilczenski, 1993).

In an effort to clarify the complexity surrounding attitudes about integration, Scruggs and Mastropieri (1996) conducted a quantitative research synthesis of 28 investigations that surveyed the perceptions of almost 10,000 general education teachers regarding the inclusion of students with disabilities. Although two-thirds of general education teachers supported the concept of integration, only a small majority expressed a willingness to include students with disabilities in their own classrooms. While there was support for the concept of integration, fewer than one-third of general education teachers expressed the belief that the general education classroom was either the optimal placement or would produce greater benefits than other placements. The two factors which seemed to influence these perceptions were severity level of student disability and the amount of additional teacher responsibility required. Among about one-third of the sample, these two factors were also associated with the belief that including students with disabilities would have a negative impact on the general education classroom.

Finally, only about one-quarter of the teachers believed that they had sufficient classroom time for inclusion efforts, that they were currently prepared to teach students with disabilities, or that they would receive sufficient training for inclusion efforts. These findings were interpreted as support for the assumption that teachers viewed students with disabilities in the context of the reality of the general education classroom rather than as support for the prevailing attitudes about integration. General education teachers thus demonstrated a certain reluctance about inclusion that must be addressed if such a policy change is to be successful (Welch, 1989).

Reality of General Education

What Happens in the General Education Class?

Besides attitudes toward integration, there are also contextual realities associated with the general education classroom that might affect the success or failure of integration (Shanker, 1995). Baker and Zigmond (1990) asked the question, “Are regular education classes equipped to accommodate students with learning disabilities?” Their analysis indicated that the general education classroom was a place where undifferentiated, large-group instruction dominated, and teachers were more concerned with maintaining routine rather than meeting individual differences: “Teachers cared about children and were conscientious about their jobs--but their mind-set was conformity, not accommodation. In these regular education classes, any student who could not conform would likely be unsuccessful” (p. 319). By definition, students in special education did not conform and therefore were referred to special education. If placed in general education, they again might not conform and consequently would experience increased probability of failure.

McIntosh, Vaughn, Schumm, Haager, and Lee (1993) found a similar scenario for students with disabilities in the general education classroom. Although treated much like other students, albeit with lower rates of interaction with teachers and peers, their instruction was not differentiated, and few adaptations were provided. Even effective teachers were found to make few adaptations because of the belief that many adaptations were either not feasible (Schumm & Vaughn, 1991; Whinnery, Fuchs, & Fuchs, 1991; Ysseldyke, Thurlow, Wotruba, & Nania, 1990) or because students themselves did not view many adaptations favorably (Vaughn, Schumm, & Kouzekanani, 1993; Vaughn, Schumm, Niharos, & Daugherty, 1993). In fact, many students with disabilities preferred special education pull-out programs

(i.e., resource room) over programs delivered exclusively in the general education setting (Guterman, 1995; Jenkins & Heinen, 1989; Klingner, Vaughn, Schumm, Cohen, & Forgan, 1998). Even though many students with disabilities experienced feelings of anger, embarrassment, and frustration in a special education setting and generally viewed it as undesirable (Albinger, 1995; Lovitt et al., 1999; Reid & Button, 1995), Padeliadu and Zigmond (1996) found that most students with disabilities also felt a separate special education setting to be a supportive, enjoyable, and quiet environment where they could receive the extra academic assistance required for success. In a synthesis of eight studies examining the perceptions of students about their educational placements, Vaughn and Klingner (1998) concluded that, “Whether at the elementary or secondary level, many students with LD prefer to receive specialized instruction outside of the general education classroom for part of the school day” (p. 85).

In a later analysis of full-time mainstreaming with Project MELD (Mainstream Experiences for Learning Disabled), Zigmond and Baker (1994) investigated whether “the regular education class can provide an environment in which students with LDs have more opportunities to learn, to make greater educational progress in academic skills, and to avoid the stigma associated with being less capable in academic achievement” (p. 108). After examining outcomes, they concluded that special education students “did not get a special education” (p. 116). Lieberman (1996) attributed the situation to the increased demands on the general education teacher while Roberts and Mather (1995) suggested that “regular educators are not trained to provide diversified instructional methods or to cope with the needs of diverse learners” (p. 50). In fact, general education teachers were most comfortable when using generic and nonspecific teaching strategies not likely to meet the individual needs of students with disabilities (Ellet, 1993; Johnson & Pugach, 1990).

In a more comprehensive evaluation of special education students in inclusive settings, Baker and Zigmond (1995) found similar circumstances, and concluded: “We saw very little ‘specially designed instruction’ delivered uniquely to a student with learning disabilities. We saw almost no specific, directed, individualized, intensive, remedial instruction for students who were clearly deficient academically and struggling with the schoolwork they were being given” (p. 178). Thus, a basic tenet of special education, individualization, was not being achieved (Deno, Foegen, Robinson, & Espin, 1996). Further confirmation was found in analyses of Individualized Education Programs (IEP). Generally, findings suggested that the

less restrictive the setting, the less individualized the IEP (Espin, Deno, & Albayrak-Kaymak, 1998; Smith, 1990). For example, Espin et al. (1998) found special education resource teachers using information to individually tailor programs while general education teachers in inclusive programs focused primarily on information useful for teaching large groups of students. They concluded that “the ‘specialness’ of special education, with its emphasis on individualized programming, seems to decrease in inclusive settings” (p. 173).

After analyzing three large-scale projects designed to restructure schools to better accommodate students with disabilities in general education classrooms, Zigmond et al. (1995) concluded that “general education settings produce achievement outcomes for students with LD that are neither desirable nor acceptable” (p. 538). In a review assessing the academic outcomes associated with eight different models for educating students with mild disabilities in general education classrooms, Manset and Semmel (1997) concluded that “the evidence clearly indicates that a model of wholesale inclusive programming that is superior to more traditional special education service delivery models does not exist at present” (p. 178). Although findings assessing academic outcomes associated with inclusion were mixed, they generally were not encouraging given the significant investment of resources necessary to provide these enhanced educational opportunities (Marston, 1996; SRI International, 1993; Waldron & McLeskey, 1998). A similar scenario was found in studies investigating the academic performance of students with disabilities who had been reintegrated into general education classrooms (Carlson & Parshall, 1996; Fuchs, Fuchs, & Fernstrom, 1993; Shinn, Powell-Smith, Good, & Baker, 1997).

Social Situation in General Education

In addition to academic effects, social outcomes associated with general education placement have also been investigated. Although some positive social outcomes have been found, primarily in the form of increased tolerance and more social support from students without disabilities (Banerji & Dailey, 1995; Fryxell & Kennedy, 1995; Kennedy, Shukla, & Fryxell, 1997), there appears to be continuing negative findings concerning low self-confidence, poor self-perceptions, and inadequate social skills among students with disabilities (Tapasak & Walther-Thomas, 1999). Mixed findings also surrounded teacher-child interactions in inclusive settings. Although students with disabilities have been shown to engage in more positive interactions with teachers (Evans et al., 1992; Thompson, Vitale, & Jewett, 1984), studies have

also shown that fewer of these positive interactions occur in general education classrooms (Alves & Gottlieb, 1986; Richey & McKinney, 1978). In a study of teacher-child interactions in inclusive classrooms over the course of a school year, Jordan, Lindsay, and Stanovich (1997) found that more interaction occurred at the beginning of the school year. In contrast, Chow and Kasari (1999) found that the number of teacher and student interactions did not differ over the course of the school year. The problem, however, is that students with disabilities may require continuing higher levels of interaction (Wigle & Wilcox, 1996). “By receiving the same amount of interactions at the end of the year, the needs of children with disabilities and at-risk children may not have been sufficiently met” (Chow & Kasari, 1999, p. 231).

In a large-scale study, Vaughn, Elbaum, and Schumm (1996) assessed the effects of inclusive placements on social functioning and found that students with disabilities were less accepted by peers, and the degree to which they were accepted and liked declined over time. In sum, students with disabilities were less often accepted and more often rejected (Roberts & Zubrick, 1992; Sale & Carey, 1995).

With respect to the self-perceptions among students with disabilities, Bear, Clever, and Proctor (1991) found low levels of global self-worth, academic competence, and behavioral conduct. One problem, noted by MacMillan, Gresham, and Forness (1996) was that for students without disabilities, simple contact with students with disabilities in itself did not result in more favorable attitudes and improved acceptance. Rather, the nature and quality of interactions significantly influenced the way attitudes toward students with disabilities developed. Any objectionable behavior on the part of students with disabilities quickly resulted in less favorable perceptions among their peers in general education. Additionally, if there was a strong academic focus in the classroom, then perceptions about students with disabilities “not keeping up” resulted in less teacher tolerance and less peer acceptance (Cook, Gerber, & Semmel, 1997).

Teacher Skill and Ability

At a fundamental skill level, general education teachers were not well prepared for the inclusion of students with disabilities (Kearny & Durand, 1992; Myles & Simpson, 1989; Rojewski & Pollard, 1993), and consequently expressed a variety of concerns over the implementation of inclusive activities (Fox & Ysseldyke, 1997; Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993). For example, although Downing, Eichinger, and Williams (1997) found generally positive views about inclusion, teacher’s

residual negative attitudes became a significant barrier to the optimal implementation of inclusion. General education teachers expressed concern that the time and effort required to meet the needs of students with disabilities might limit their ability to provide an optimal education for students without disabilities.

Special education teachers were most concerned about their perceived loss of control over the classroom and their modified job functions. Another barrier to implementation was the perception that needed resources and support exceeded their availability (Werts, Wolery, Snyder, Caldwell, & Salisbury, 1996).

As a result of these perceived barriers and expressed concerns, the requisite individual planning for students with disabilities might not have occurred in general education contexts (Schumm & Vaughn, 1992; Schumm, et al., 1995; Vaughn & Schumm, 1994). Similar results were found among rural as well as urban general education teachers (Boyer & Bandy, 1997; de Bettencourt, 1999). Although instructional adaptations for students with disabilities were viewed as desirable (Bender, Vail, & Scott, 1995; Blanton, Blanton, & Cross, 1994; Schumm, Vaughn, Gordon, & Rothlein, 1994), they may not be used unless perceived as easy to implement as well as requiring little extra time, little change in routine, or little additional assistance (Bacon & Schulz, 1991; Fuchs, Fuchs, Hamlett, Phillips, & Karns, 1995; Munson, 1986-87). The experiences of general and special education teachers working collaboratively in inclusive settings showed some success but also revealed concerns over differences in perceived roles, teaching styles, and philosophical orientation (Salend et al., 1997). Walther-Thomas (1997) noted pragmatic problems in collaborative arrangements related to scheduling planning time, coordinating teacher and student schedules, and obtaining administrative support. The failure of collaborative teaching teams was found to result primarily from an inability to communicate, a failure to resolve teaching-style differences, and an inability to adequately integrate special education students and teachers into the classroom (Phillips, Sapona, & Lubic, 1995).

Schumm and Vaughn (1995) summarized findings from a 5-year research project designed to determine whether or not general education was prepared for inclusive education (see also Vaughn, Schumm, Jallad, Slusher, & Saumell, 1996). Using both quantitative and qualitative research methods, 18 individual research studies were conducted to gain insight into the probable success a student with a high-incidence mild disability might experience in the general education classroom. The findings affirmed many earlier conclusions suggesting that general education teachers believed they did not possess the necessary

preparation to teach students with disabilities, they lacked opportunities to collaborate with special education teachers, and they made infrequent and unsystematic use of adaptations even though students with disabilities preferred teachers who did make such instructional adaptations. In answering the question about whether the educational stage was set for inclusion, Schumm and Vaughn provided a generally negative response. The importance of having the stage properly set was demonstrated by Mamlin (1999) in an analysis of an inclusion effort that failed. The failure was attributed to a continuing culture of segregation in the school and a leadership style that demanded too much control. In conclusion, Mamlin suggested that “not all schools are ready to make decisions on restructuring for inclusion” (p. 47).

Discussion

Special education is in a state of flux. Integration has been a prominent theme for some 25 years, but its final form remains unclear (Danielson & Bellamy, 1989; Katsiyannis, Conderman, & Franks, 1995; Verstegen, 1996). The lack of agreement is demonstrated in the differing position statements offered by organizations promoting full inclusion (Association for Persons with Severe Handicaps, 1992; Council of Chief State School Officers, 1992; National Association of State Boards of Education, 1992) and those advocating inclusion as one of many possible placement options (Council for Exceptional Children, 1993; Learning Disabilities Association, 1993; National Joint Committee on Learning Disabilities, 1993). Although the trend has been for greater integration for a greater number of students with disabilities, whether or not this means all students all the time has been subject to passionate debate (see Roberts & Mather, 1995, and response by McLesky & Pugach, 1995). A more cautious policy is thus warranted. Inclusion appears to be not something that simply happens but rather something that requires careful thought and preparation. The focus must not simply be on access to general education but rather the assurance that when inclusion is deemed appropriate, it is implemented with proper attitudes, accommodations, and adaptations in place (Deno, 1994; King-Sears, 1997; Scott, Vitale, & Masten, 1998).

The research evidence investigating inclusion clearly suggests caution (MacMillan et al., 1996; Salend & Gerrick Duhaney, 1999). There is much that is still not known. What is known about the beliefs and operations of general education is not uniformly supportive and suggests the need for careful and reasoned implementation (Downing et al., 1997; Idol, 1997). Analysis of the evidence also suggests that the effectiveness of practices associated with inclusion are mixed at best (Fisher, Schumaker, & Deshler,

1995; Hunt & Goetz, 1997; Sobsey & Dreimanis, 1993). Generalizations about inclusion thus remain tentative, and it appears unwise to advocate for inclusion without insuring that it is carried out effectively. Too much time has been spent talking about inclusion and not enough time evaluating it in relation to alternative service delivery arrangements and practices (King-Sears & Cummings, 1996). Consequently, outcomes for special education are not predictable, and students with disabilities may be at risk for potentially adverse consequences with the indiscriminate implementation of a full inclusion policy.

Postmodernism and Inclusion

The realities of the general and special education nexus suggest that general education is neither ready nor willing to endorse a radical policy like full inclusion. A segment of special education, however, appears to ignore this reality. The influence of postmodern thought among this segment is significant. Postmodernism rejects the modern view of science as a system that focuses on problem solving by constructing, evaluating, and testing different conjectures about optimal solutions (Gross & Levitt, 1994). The postmodern model questions the superiority of the modern over the pre-modern, eschews rigid disciplinary boundaries, and challenges the possibility of creating global, all-encompassing world views (Bauman, 1987; Griffin, 1988; Turner, 1990).

The postmodern perspective has been challenged, however (Koertge, 1998; Sokal & Bricmont, 1998). The differences between modern and postmodern were described by Rosenau (1992)

Those of a modern conviction seek to isolate elements, specify relationships, and formulate a synthesis; post-modernists do the opposite. They offer indeterminary rather than determinism, diversity rather than unity, difference rather than synthesis, complexity rather than simplification. They look to the unique rather than to the general, to intertextual relations rather than causality, and to the unrepeatable rather than the re-occurring, the habitual, or the routine. With a post-modern perspective, social science becomes a more subjective and humble enterprise as truth gives way to tentativeness. (p. 8)

Within the postmodern perspective, the most questionable assumption is the rejection of all science because it is believed to be untrustworthy. Consequently, alternative ways of understanding special education possess equal merit, especially understanding based on an individual's own experience because it

is assumed the only one really knowable (Danforth, 1997; Sailor & Skrtic, 1996; Skrtic et al., 1996). Instead of discussing the possibilities surrounding inclusion in a real-world context buttressed by empirical research, some special educators have chosen to construct arguments within a postmodern framework. This approach becomes even more unreal and extreme when it is also based on the view that special education is a fundamentally evil enterprise (Danforth & Rhodes, 1997; Lipsky & Gartner, 1996). For example, Brantlinger (1997) suggested that the current special education system is harming students because it is driven by a privileged ideology that has made it impossible to achieve equity. Consequently, the situation can only be ameliorated by placing all students in the general education setting. In reality, such a postmodern solution is neither practical nor reliable. Although postmodernism views radical transformation as the sole remedy, a more incremental approach to positive change based on a substantive real-world empirical research foundation offers the possibility for more rational and credible solutions (Carnine, 1997; Kauffman, 1993; Zigmond, 1997).

The role and validity of research, however, has become a contentious issue, particularly with respect to preferred research methodology. The division is seen in the quantitative-qualitative research debate (Simpson & Eaves, 1985; Stainback & Stainback, 1984a). Opposing sides in the inclusion debate tend to sort themselves into quantitative or qualitative camps. Much of the support for inclusion has been based on qualitative research findings (Kozleski & Jackson, 1993; Salisbury, Palombaro, & Hollowood, 1993). Such findings are often presented in the form of discourse that emulates styles associated with literary criticism or cultural studies: “Post-modern delivery is more literary in character while modern discourse aims to be exact, precise, pragmatic, and rigorous in style” (Rosenau, 1992, p. 7). Although postmodernists may prefer “audacious and provocative forms of delivery” (p. 7), it must be emphasized that such characteristics offer no insight into the worth of the arguments presented. Contas (1998) also questioned the motivation behind postmodern form of delivery: “Is this disciplinary shift part of a rhetorical strategy being used to give the impression of erudition?” (p. 29). Contas goes on to suggest that definitive conclusions are often lacking because of “the spurious belief that ordered thinking and rational inquiry stifle the human spirit and oppress the political rights of the people we study” (p. 28). The consequences are seen in what has been termed the “cult of ambiguity and indeterminacy” (Eagleton, 1996).

The proper role of research may also be at issue. For example, in discussing the famous Brown vs. Board of Education (1954) Supreme Court decision, Gerard (1983) argued that the supporting Social Science Statement was based on well-meaning rhetoric rather than solid research evidence: “All that it said, in effect, was that because the minority child was now in a classroom with whites, he or she would no longer have the status of an outcast or a pariah. This knowledge would somehow impart to the child the self-image necessary to do well in school and later enter the mainstream of American society” (p. 869). Substitute child with disabilities for minority child and parallels to the present inclusion debate are evident.

Ideology, Politics, and Beliefs

With an emphasis on ideology without reference to accompanying research evidence in making policy decisions, an objective rendering of the real-world situation may not be achieved (Kauffman, 1999). Ideology can cause arguments to be perceived in a selective manner (Cohen, 1993). A prime example is found in the contentious nature-nurture debate surrounding the role of heredity and environment in producing intelligence. In an early review, Pastore (1949) suggested that those taking the nature (heredity) side tended to be politically right of center, while those taking the nurture (environment) side tended to be left of center. Later, Harwood (1976, 1977) found a similar political dichotomy among those who either supported or objected to the position proposed by Jensen (1969). Jensen suggested that the 15 IQ point advantage for whites over blacks could be explained by a heritability estimate of about 80% for IQ with only about 20% of IQ differences being the result of environment. Harwood also suggested that different modes of thought entered the choice of position about Jensen. Consequently, conceptual frameworks were formed by both political beliefs and styles of thinking.

Although these differences surrounding the nature-nurture debate have been recognized, there has not been significant progress in achieving closure about the question. The reason is that not much new data have been brought to bear on the question (Cartwright & Burtis, 1968). Consequently, the different sides tend to form conclusions using the same finite body of information where differences are primarily the result of ideology, not scientific interpretation. Under such circumstances, the nature-nurture debate has become testy. The nature side has been accused of distortion, misrepresentation, and faulty logic (Deutsch, 1969; Hirsch, 1975; Lewontin, 1970), but the same charges have also been leveled against those on the

nurture side (Eysenck, 1971; Herrnstein, 1973; Loehlin, Lindzey, & Spuhler, 1975). Ideology has been a significant factor in the positions taken.

Ideology, by itself, however, does not promote scientific advancement. Kuhn's (1970) well-known account of scientific development emphasized the importance of paradigms in defining concepts and methodology. While Kuhn featured the paradigm, Lakatos (1978) stressed the "research program" and its description as either "progressive" or "degenerative." When there is a lack of validating empirical research evidence, theories experience experimental failure and must be modified to accommodate the earlier theory's successes as well as the anomalies that brought the earlier theory into question. When this process is achieved successfully, the research program is termed progressive. If not progressive, the research program is termed degenerative. With no empirical successes, anomalies are met with ad hoc explanations that become increasingly inadequate. A new research program may then be necessary. The earlier cited nature vs nurture debate about IQ represents a case where the rival viewpoints can be viewed as competing research programs: Are the rival programs progressing or degenerating? Using Lakatos' critical methodology, Urbach (1974a, 1974b) concluded that the hereditarian (i.e., nature) position was stronger: "environmentalists have revised their theories in an ad hoc fashion. This patching-up process has left the environmentalist programme as little more than a collection of untestable theories which provide a 'passee partout' which explains everything because it explains nothing" (p. 253). Urbach also pointed out that such an analysis does not mean the nurture (i.e., environmental) position was wrong: "The fact that the environmentalist programme has been degenerating does not mean that no progressive programme will ever be based on its hard core" (p. 253).

Research is thus necessary to strengthen a paradigm (i.e., the common set of assumptions) in a progressive manner. Special education initially possessed a research program emphasizing the special class. The earlier-cited "efficacy studies" created an anomaly that was remedied by the continuum of placements embodied in the "Cascade model." By 1980, the special education research program was manifested in the LRE concept, but anomalies were still present (e.g., students in special education not making the progress expected). Research dealing with resource models, collaborative models, adaptive education, peer tutoring, individualized education strategies, and innovative teaching strategies demonstrated the response of the progressive special education research program.

In contrast, advocates for full inclusion have failed to provide such a progressive research program. In fact, a quantitative inclusion research program is difficult to identify. In examining the same anomalies, the full inclusion research program simply “upped the ante” by calling for all students with disabilities to be fully integrated (Biklen, 1985; Lipsky & Gartner, 1997; S. Stainback, W. Stainback, & Forest, 1989; Villa, Thousand, W. Stainback, & S. Stainback, 1992). The supportive arguments were primarily based on ideology with anecdotal case studies and testimonials but not quantitative research evidence. Thus, a solution that simply calls for full inclusion without accompanying empirical support is neither logical nor rational, and results in a degenerative research program with too many ad hoc explanations. More empirical research on inclusion is thus necessary as suggested by MacMillan et al. (1996): “We need more research on inclusion, not less. . . . Simplification will only mislead us into adopting untried treatments with the possibility of disserving children” (p. 156).

Ideology may be useful in discussions attempting to establish goals and objectives, but actual practice is best derived from scientific inquiry. Special education had a previous example where ideology played a primary role in determining policy. The issue was deinstitutionalization where Landesman and Butterfield (1987) pointed out that: “As goals, normalization and deinstitutionalization are not terribly controversial; as means to achieving these goals many of the current practices related to deinstitutionalization and normalization are” (p. 809). They suggested that more data relevant to the care and treatment of individuals with MR was required. In the absence of such information, there was no basis for judging the merits of deinstitutionalization policy. Shadish (1984), in discussing deinstitutionalization policy, pointed out the tendency to view negative consequences (e.g., increase in homelessness) as merely unfortunate happenstance not connected to the ideology that initiated the policy. More positive outcomes were then sought not by using new research evidence to guide practice, but rather by using the same ideological foundation reshaped with more noble intentions and ending again with the same pragmatic difficulties. The parallels with the inclusion debate are again evident, and efforts should be directed at avoiding a similar scenario.

Conclusion

In closing, questions about the integration of students with disabilities are not new. There has been, over the past 25 years, a steady press toward greater integration of students with disabilities. The law

demands placement in the least restrictive environment. However, difficulties have resulted from cases where the general education classroom has been interpreted as the optimal placement for all students regardless of type and level of disability. Although there is ideological and political support for inclusion, the empirical evidence is less convincing. The reality of general education suggests that the requisite attitudes, accommodations, and adaptations for students with disabilities are not yet in place.

Consequently, a more tempered approach is necessary which formulates and implements policy on the basis of research and evaluation findings as well as ideological and political considerations. In this way, real solutions may be forthcoming that reflect neither Sowell's (1995) visions of the anointed nor benighted but rather a "vision of the rational." It is possible to draw parallels to the inclusion debate from previous contentious issues in special education, and it would be prudent to learn from these past experiences. With a rational solution, special education may be in a better position to pursue its real mission: providing the best possible education for all students with disabilities.

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Issues surrounding the integration of students with disabilities into general education classrooms are explored in this article. The history of this debate is examined first by tracing the movement from mainstreaming and the least restrictive environment in 1975, to the call for a more integrated system during the 1980s under the Regular Education Initiative, and to full inclusion of all students in age-appropriate general education classrooms, with no separate special education.Â @inproceedings{Kavale2000HistoryRA, title={History, Rhetoric, and Reality: Analysis of the Inclusion Debate}, author={Kenneth A. Kavale and Steven R. Forness}, year={2000} }. Kenneth A. Kavale, Steven R. Forness. Segregation, Integration and Inclusion Inclusive Education (IE) is often defined as a journey or movement away from the kind of segregation where children with particular difficulties have been put together with other children whose needs are similar. Frederickson and Cline (2002 p63) contend that the creation of special facilities segregating children with Special Educational Needs (SEN)¹ from other children of their own age can be stigmatizing; it also restricts access to important educational opportunities.Â of an enduring physical, sensory, mental health or learning disability or any other condition, which results in a person learning differently from a person without that condition.â€Â Inclusion of Students with Special Educational Needs: Post primary Guidelines.