

**REPORT OF THE VIRGINIA
DEPARTMENT OF EDUCATION**

**INCENTIVES FOR INTEGRATING
STUDENTS WITH DISABILITIES
INTO GENERAL EDUCATION
CLASSROOMS IN THE
COMMONWEALTH'S PUBLIC
SCHOOLS**

**TO THE GOVERNOR AND
THE GENERAL ASSEMBLY OF VIRGINIA**



HOUSE DOCUMENT NO. 8

**COMMONWEALTH OF VIRGINIA
RICHMOND
1997**



COMMONWEALTH of VIRGINIA

DEPARTMENT OF EDUCATION

P.O. BOX 2120

RICHMOND 23216-2120

July 25, 1996

The Honorable George F. Allen, Governor of Virginia
Members of the Virginia General Assembly
Richmond, Virginia

Please accept the enclosed report called for in HJR 102 (94) on integrating students with disabilities into regular education classrooms in public schools.

I apologize for the late submission of the report. Staff changes, the comprehensive requirements of the resolution, and the complexity of the issue required considerable time and occasionally led to unavoidable delays.

If I can provide anything further, please don't hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads "Richard T. La Pointe".

Richard T. La Pointe
Superintendent of Public Instruction

RTL/lch
Enclosure

cc. The Honorable Beverly H. Sgro, Secretary of Education

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
Acknowledgements	3
Executive Summary	4
Chapter I Introduction and Methodology	6
Chapter II Review of Literature	8
Chapter III Report of Focus Group Research	46
Chapter IV Report of Virginia State Special Education Advisory Committee Focus Group Session	53
Chapter V Special Education Funding	56
Chapter VI Findings and Recommendations	58
Appendix A Committee Members	65
Appendix B House Joint Resolution 102	67

ACKNOWLEDGEMENTS

Literature Review

Rachel Janney
The College of William and Mary

Report of Focus Group Meeting

Rachel Janney
The College of William and Mary

Lori Korinek
The College of William and Mary

Virginia McLaughlin
The College of William and Mary

Chriss Walther-Thomas
The College of William and Mary

Report of Meeting with State Special Education Advisory Committee

Rachel Janney
The College of William and Mary

EXECUTIVE SUMMARY

Background and Approach

This report to the Governor and members of the General Assembly, as requested by HJR 102 from the 1994 session of the General Assembly, addresses questions and concerns relative to the integration of students with disabilities into general education classrooms with their peers without disabilities. The report was developed using a variety of sources and resources. Interviews with parents, teachers, and administrators; focus groups sessions with the State Special Education Advisory Committee as well as a specially selected stakeholder group; a comprehensive literature review; a public hearing conducted by the Virginia Education Association; a review of Virginia's funding system; and a review of general education class size requirements were conducted to respond to the concerns and questions specified in the resolution.

The report is organized in sections specifically targeted to address the concerns detailed in the resolution. These are as follows:

- What are the effects on curriculum and instruction opportunities for students with and without disabilities?
- What are the effects on the allocation of instructional and support staff?
- What are the effects on general education class size?
- What are the effects on staff development requirements?
- What are potential fiscal incentives and disincentives?

Findings and Recommendations

Information in this report is based on perceptions using focus group methodology -- not on any type of "experimental" research design. The groups were not randomly selected, thus should not be thought of as representative of the entire Commonwealth.

1. Conclusions drawn from review of the literature conducted during the 1980's and early 1990's indicate that integrating students with disabilities provides benefits to students with and without disabilities only if the needs of the staff/students are taken into account and provisions are made for support. The literature also suggests that meaningful staff development and supports be implemented prior to integrating students to increase those benefits (ie: social acceptance, forming new friendships, increased achievement expectations).
2. There are no conclusions which describe "best" ways to implement special education in regular/general settings. From peoples' perspectives, integration is occurring using different methods and staffing mechanisms. Virginia focus group discussions revealed the following common themes:

- a. There is a need for flexibility for schools to address staff and student support needs. For example, state requirements for grouping students with disabilities and setting pupil-teacher ratios (Virginia's Special Education Program Standards) are viewed as a barrier to creating flexible staffing and instructional grouping practices.
 - b. Staff development is important as one of the resources/supports. It is easier for teachers to make accommodations when a wide variety of materials, equipment, and personnel are readily available.
 - c. There is a need for communication to increase the local community's understanding of appropriate integration.
 - d. Expectations and attitudes are a "two-edged sword"; they can function as a major incentive or disincentive to integration.
 - e. Thorough and careful planning is essential to long-term success of integration.
 - f. There is a need for collaboration among regular and special educators along with families to produce better understanding and support for integration.
3. Fiscal impact data are most difficult to describe because of limited available data upon which to conduct analyses. For example, schools may need a high level of resources in the initial/start-up period if they are making changes from a separate to a more integrated service delivery system, similar to making any kind of change. However, the people in this study's focus groups did not have longitudinal data over extended time periods to determine if the start-up costs decrease as a result of institutionalizing more inclusive practices.

In addition, it cannot be determined at this time if the current state funding methodology for special education provides incentives or disincentives for the development of integrated programs. One of the key variables for determining state special education fund allocations for each locality is the information provided on the federally required December 1 child count. This report lists the percent of time during the school day that special education services are provided to a student. The amount of special education being provided can be ambiguous, however, when special education and related services are provided in integrated settings. It is not clear how many localities have interpreted special education to mean the amount of time a child spends with a special education teacher. This interpretation may result in inaccurate data being provided on the December 1 child count which would generate funding for more or fewer teachers than required to meet Virginia's Special Education Program Standards. More detailed reporting requirements would be necessary to determine if the state funding method provides incentives or disincentives.

CHAPTER I

INTRODUCTION AND METHODOLOGY

Legislative History

House Joint Resolution 102 (HJR 102) requested the Department of Education to study the incentives for integrating students with disabilities into general education classrooms in the Commonwealth's public schools. Specifically, HJR 102 identified four dimensions for which the study was to consider the effects of integration. These dimensions are:

- curriculum and instruction opportunities for students with and without disabilities,
- allocation of instructional and support staff,
- general education staff size,
- staff development requirements, and
- potential fiscal incentives and disincentives.

The resolution further requested the Department to collaborate with academic researchers and specialists as well as organizations representing the interests of students with disabilities, parents, and other groups, and representatives of general and special education programs throughout the Commonwealth.

Study Approach

In conducting the study, the following strategies were used to obtain information:

- Review of the literature
- Individual and small group interviews with general education teachers at the elementary and secondary levels
- Focus group sessions with representative groups including selected members of the State Special Education Advisory Committee
- Phone interviews with parents of general education students and special education students in inclusive settings
- Phone survey with local special education directors
- Review of information from the Virginia Education Association public hearing focusing on inclusion

- Review of state funding of local special education programs

Report Organization

Chapter II of the report is a review of the literature concerning the integration of students with disabilities into general education classrooms. The review includes legal foundations, efficacy research, and instructional opportunities. Chapter III is a report of a focus group meeting of a 17-member HJR 102 advisory panel. Chapter IV discusses a focus group meeting conducted with selected members of the State Special Education Advisory Committee. Chapter V describes current special education funding. Finally, Chapter VI reports findings of the study.

Raw data that supports the reports in each chapter are available from the Department of Education.

CHAPTER II

REVIEW OF THE LITERATURE

LEGAL FOUNDATIONS FOR INTEGRATING STUDENTS WITH DISABILITIES INTO GENERAL EDUCATION CLASSES

In the United States, the movement to integrate¹ students with disabilities into their local schools and communities can be traced to the Civil Rights movement of the early 1970's. Although many children with mild and moderate disabilities were being provided with educational opportunities in separate special education schools and classes by the early to mid-1900's, several inequalities remained: (a) many children, particularly those with severe or multiple disabilities, who were viewed as "ineducable," still were not served by the public schools; (b) the special education system neither adhered to the constitution's doctrine of the least restrictive alternative² nor provided procedural and substantive due process and equal protection rights. During the early 1970's, these inequalities began to be addressed, first in the courts and later through federal legislation.

In *Pennsylvania Association for Retarded Children v. Commonwealth of Pennsylvania (PARC)* (1972), a federal district court ruled that children with mental retardation were entitled to an appropriate public education at no expense to their parents, and that it was desirable for this education to be provided in programs that were most like those provided for their peers. The landmark 1954 racial integration case, *Brown v. Board of Education of Topeka, Kansas*, which determined that separate educational programs--even if equivalent or superior--are inherently unequal, was cited.

-
1. The term "integration" generally is used to refer to placing students with disabilities in general education schools and classes where they receive special education services and supports to meet their learning goals and facilitate their social interaction with peers. The term "mainstreaming" often is used to refer to only the academic aspect of integration. For the purposes of this review, the terms "integration" and "mainstreaming" will be used synonymously. However, the related term, "full inclusion," will refer to a commitment to educate each student, to the maximum extent possible, in the school and classroom she or he would attend if not identified as having a disability (Rogers, 1993, p. 1).
 2. The Fourteenth Amendment's doctrine of the least restrictive alternative requires that government activities, such as education, not be pursued through means that stifle personal liberties.

Also in 1972, a federal district court extended the *PARC* decision to all children with disabilities in *Mills v. Board of Education of the District of Columbia*. In this case, the court ruled that children with disabilities could not be excluded from public education due to limited funds. The case also established that procedural guidelines must be followed prior to excluding children from public schools.

These key judicial decisions were followed by passage of the Vocational Rehabilitation Act of 1973 (Public Law 93-112), reauthorized in 1990 as the Americans with Disabilities Act (ADA) (Public Law 101-536). This act prohibits discrimination and segregation on the basis of disability in education, employment, housing, and access to public programs and facilities (42 U.S.C. §12131-12161). Section 504 of the Vocational Rehabilitation Act specifically applies the constitutional requirement of the least restrictive alternative to special education services, requiring public schools to make "reasonable accommodations" to enable a child to benefit from the school's educational program and prohibiting exclusion on the basis of disability. Section 504 also assures students receiving special education services of access to extracurricular activities.

Statutory and Regulatory Standards Affecting Integration

The Education of All Handicapped Children Act of 1975 (Public Law 94-142), reauthorized in 1990 as the Individuals with Disabilities Education Act (IDEA) (Public Law 101-476), mandates that *all* children, regardless of disability, be provided a free appropriate public education (FAPE) in the least restrictive environment (LRE). The regulations governing this legislation require public education agencies to ensure that placement decisions be made on an individual basis, and directs that

Special classes, separate schooling, or other removal of children with disabilities from the regular education environment occurs only when the nature or severity of the disability is such that education in regular classes with the use of supplementary aids and services cannot be achieved satisfactorily. (20 U.S.C. 1415 [5][b]).

The IDEA-Part B regulations also include the following requirements:

1. A continuum of alternative placements (instruction in regular classes, special classes, special schools, home instruction, and instruction in hospitals and institutions) is available, including provision for supplementary services such as resource and itinerant services in conjunction with regular class placement (300.551); these placements must be available to the extent necessary to implement the Individualized Education Program (IEP) for each student with disabilities (§300.552(b)).
2. Placement determinations are based on the IEP (§300.552 (a)(2)).
3. Placement is as close as possible to the child's home (§300.552(a)(3)).

4. Placement is in the school that the student would attend if not disabled, unless the IEP requires some other arrangement (§300.552(c)).
5. Consideration is given to any potential harmful effect of the placement on the child or the quality of services needed (§300.552(d)).

Judicial Interpretation of the IDEA's Placement Requirements

The judicial system has continued to be requested to arbitrate the appropriateness (FAPE) and restrictiveness (LRE) requirements of special education placements and programs. Regarding the appropriateness requirement, the Supreme Court, in *Hendrick Hudson School District v. Rowley* (1982), interpreted the IDEA to require specialized and instruction and related services "individually designed to provide education benefit" (p. 201). However, an "appropriate" educational program does not necessarily maximize the student's progress: the level of services provided to Rowley, a child with a hearing impairment, was judged appropriate because it provided a reasonable opportunity to learn, even if it was not the best possible program.

Regarding the LRE requirement (which was not addressed in Rowley--an LRE case has yet to be accepted by the Supreme Court), the U.S. appellate courts and federal district courts have consistently ruled that the act expresses a preference for mainstreaming children with disabilities to the maximum extent possible (e.g., *Board of Education of Sacramento City Unified School District v. Holland*, 1992; *Campbell v. Talladega County Board of Education*, 1981; *Daniel R. R. v. State Board of Education*, 1989; *Devries v. Fairfax County School Board*, 1989; *Greer v. Rome City School District*, 1992; *Oberti v. Clementon School Board*, 1993; *Roncker v. Walter et al.*, 1983).

In *Daniel R. R. v. State Board of Education* (1989), the Fifth Circuit Court of Appeals generated a two-part statutory test for LRE that subsequently has been applied in a number of other cases heard by the federal appellate courts (e.g., *Greer*, 1992; *Liscio v. Woodland Hills School District*, 1990; *Oberti*, 1993). *First*, before removing a child from the mainstream, the school district must determine whether education in the regular classroom, with the use of supplementary aids and services and curriculum modification, can be achieved satisfactorily. The child must be receiving educational benefit--academic and/or nonacademic--from those accommodations for the placement to be appropriate. *Second*, if placement outside the regular class is essential for the child to benefit educationally, then the child still must be included in programs with nondisabled peers to the maximum extent appropriate. To wit, in *Daniel R.R.*, the court determined that although Daniel could not be educated satisfactorily in the mainstream, social mainstreaming for lunch and recess was appropriate.

When calculating whether the child can be educated in the regular class, the courts have considered several factors: (a) the extent of the effort made to accommodate the child in the mainstream; (b) the cost of providing services in the mainstream; (c) possible negative effects on other students; and (d) the balance between the academic and social benefits of mainstreaming.

Extent of Modifications and Accommodations Required in General Education

The school district must make serious efforts to modify the general education curriculum to accommodate the child--not "mere token gestures" (Greer, 1992). In *Roncker v. Walter* (1983), the Sixth Circuit Court of Appeals established what is referred to as the "portability standard" when it stated that courts should determine whether the services that make a segregated placement superior "could be feasibly provided in a non-segregated setting" (p. 1063). Courts subsequently have ruled that a wide range of supplementary supports and services can and should be provided in mainstream settings, thereby making the mainstream an appropriate placement in the continuum of alternative placements for many students. For example, in *Greer* (1991), the Eleventh Circuit Court of Appeals ruled that the Rome City School District should have considered "the whole range" of supplementary aids and services, including resource rooms and itinerant instruction instead of providing only a regular class with some speech therapy before moving Christy Greer to a special education class.

In *Oberti v. Clementon School Board* (1993), the Third Circuit Court of Appeals upheld the district court of New Jersey's ruling that the School District had violated the IDEA by not providing, as part of the continuum of educational placements, placements within regular classes with the use of supplementary aids and services. The Clementon School District had argued that eight year old Rafael Oberti's severe intellectual and communication disabilities and disruptive behavior prevented his participating in regular classes, and maintained that the most appropriate placement was in a self-contained class for children with multiply handicaps, which was located out of district. However, the court ruled that the services and modifications which could have been provided for Rafael included resource room and itinerant special education services, behavior plans, speech and language therapy, in-service training for general education teachers, and curriculum modifications. The School District was ordered to provide an inclusive education program for Rafael.

However, not every case which has invoked the portability standard has resulted in the student's placement in a less restrictive setting and prohibited the school district from providing centralized services. For example, in *Devries v. Fairfax County School Board* (1989), the Fourth Circuit held that a student with autism could not be satisfactorily educated in his neighborhood high school because the structured, individualized instruction necessary to achieve his appropriate education was not available in the neighborhood high school. In *Barnett* (1991), another Fourth Circuit case, the School District was not required to provide all special education services--in this case, cued speech for a child with a hearing impairment--in the neighborhood school. In *Liscio v. Woodland Hills School District* (1989), the Third Circuit Court of Appeals affirmed the district court's ruling that a student with severe intellectual and behavioral disabilities should remain in a separate school. The court agreed with the school district that providing an appropriate education in the neighborhood school would require establishing a separate class for the student. Fundamental to all three of these decisions (*Barnett*, 1991; *Devries*, 1989; *Liscio*, 1989) was a high degree of deference to the judgment of the state and local education agencies in determining which services it was feasible to provide in the neighborhood school.

Cost

Although the range of supplementary aids and services that must be offered is wide, courts have allowed school districts to consider costs (e.g., *Barnett*, 1991; *Greer*, 1992); *Holland*, *Liscio*, 1990; *Roncker*, 1983; *Schuldt v. Mankato Independent School District*, 1992). This consideration has been allowed in spite of the fact that the IDEA does not mention using cost factors in determining the LRE. The argument of some school districts that the costs of providing necessary services and supports in a child's neighborhood school is prohibitive has been upheld in several cases. For example, in *Barnett*, (1991) and *Schuldt v. Mankato Independent School District* (1991), the Fourth and Eighth Circuit Courts of Appeals, respectively, determined that the School District did not necessarily have to provide all necessary services in the neighborhood school.

However, the cost of providing an integrated placement has not always been judged excessive. For example, in *Greer* (1992) and *Holland* (1992), where the districts were ordered to provide full-time integrated placements for students with moderate disabilities. The difference between these two cases and *Barnett* (1991) and *Schuldt* (1992), cited above, may be that whereas in *Greer* and *Holland* the students were already attending neighborhood schools, but receiving their services within separate classes, in *Barnett* and *Schuldt*, the students were attending separate schools.

Negative Effects on Other Students

Placement decisions may also consider possible negative effects on other students (e.g., *Liscio*, 1990; *Oberti*, 1993;; *Daniel R. R.*, 1989; *Roncker*, 1983), but the disruption must be "significant" in order to require removal of the child from the mainstream. Furthermore, the district is responsible for attempting to prevent disruption by providing appropriate supplemental aids and services (*Oberti*, 1993).

Balancing Academic and Social Benefits

Several cases have required the court to weigh the potential academic and social benefits that may be achieved in the mainstream setting as compared to the separate class or school. In general, if "adequate" educational progress may be made in either setting, then the unique social benefits that can only be achieved in the mainstream environment may make it the preferred setting. Segregated placements have been upheld in cases where the court determined that the student could not make adequate academic progress in the mainstream, but the student was ordered to be transported from the separate school to a regular school during non-academic portions of the school day (e.g., *Daniel R.R.*, 1989; *Liscio*, 1990). In other cases, the belief that the child may make superior academic progress in a special education class has been found inadequate to exclude the child from the regular class. That is, in determining whether the child's education can be achieved satisfactorily within the regular classroom, courts have held that the socialization gains, which can only be achieved in settings which include nonhandicapped peers, can make it preferable to place the child in a mainstream setting even if some degree of academic progress is sacrificed (*Gent & Mulhauser*, 1988).

For example, in *Springdale School District v. Grace et al.* (1982), the court ruled that even if the education offered Sherry Grace by the Springdale School District was inferior to that she received at the Arkansas School for the Deaf, she could benefit from the education provided by the district and would also benefit from opportunities to interact with peers without disabilities. Therefore, an integrated placement was ruled most appropriate. In *Amann v. Stow School System* (1992), a part time mainstream program for a student with learning disabilities was upheld over a private special education school because the public school "did not severely compromise educational benefit" (p. 650). More recently, in *Holland* (1992), a district court ruled that although a separate special education class may have provided nine-year-old Rachel Holland with superior academic benefits, the social benefits of interacting with nondisabled peers were a more significant consideration. The Sacramento School District was ordered to enroll Rachel in a second grade class and to provide supplemental services within the general education class. Thus, school districts must ensure adequate educational progress but are not required to maximize the child's potential, and must consider the balance between academic and social benefits (Gent & Mulhauser, 1988).

Summary

In the majority of the 14 LRE cases decided at the appellate level, the local school district and state hearing decisions have been upheld. In the four cases involving disputes over whether the student would be placed in a public or a private setting, three students were ordered placed in a less restrictive, public setting (i.e., *Amann*, 1991; *Roland M.*, 1990; *Gillette*, 1991), and one was ordered placed in a more restrictive public setting (i.e., *Briggs*, 1989). In eight cases, the more restrictive setting sought by the school district was deemed appropriate, largely due to the high degree of deference shown to the educational decision-making authority of the local and state education agencies. In the three most recent cases--*Greer*, *Holland*, and *Oberti*--the appeals courts in the Third, Fifth, and Eleventh Circuits have overturned the results of the state hearing and ordered the less restrictive setting sought by the parents, that is, a supported inclusive program in the neighborhood school.

In the Fourth Circuit, the jurisdiction within which Virginia is located, the only judicial standard created at the appellate level has been that school districts may provide some centralized services where it would be unfeasible to provide specialized services in neighborhood schools. However, it has been well established that even if services are centralized, provisions for interaction with nondisabled peers must be made. In addition, although cost considerations have been deemed legitimate, if services are already decentralized and available in neighborhood schools, then providing these services to a student based in regular education is feasible, and preferable to removing the student from opportunities for social interaction with nondisabled peers.

It also is clear that the appellate courts have upheld the IDEA's standards and procedures for making individualized placement decisions based on a determination of the least restrictive environment in which the student's educational goals and objectives can be met. The mainstream class often can provide that environment if supplementary aids and services are provided within that setting.

References

- Amann v. Stow School System, 982 F.2d 644 (1st Cir. 1992).
- Barnett v. Fairfax County School Board, 927 F.2d 146 (4th Cir.), *cert. denied*, 112 S.Ct. 175, 1991.
- Briggs v. Board of Education of Connecticut, 882, F.2d 688 (2d Cir. 1989).
- Brown v. Board of Education of Topeka, Kansas, 347 US 483 (1954).
- Campbell v. Talladega County Board of Education and the Board of Education of the State of Alabama, 518 F. Supp. 47 (N.D. Ala. 1981).
- Devries v. Fairfax County School Board., 882 F.2d 876, 878 (4th Cir. 1989).
- Daniel R.R. v. State Board of Education., 874 F.2d 1036, 1044 (5th Cir. 1989).
- Gent, P. J., & Mulhauser, M. B. (1981). Public integration of students with handicaps: Where it's been, where it's going, and how it's getting there. Journal of the Association for Persons with Severe Handicaps, 13(3), 188-196.
- Gillette v. Fairland Board of Education, 932 F.2d 551 (6th Cir. 1991).
- Greer v. Rome City School District, 950 F.2d 688 (11th Cir. 1991), *op. withdrawn*, 956 F.2d 1025 (1992), *reinstated*, 967 F.2d 470 (1992).
- Hendrick Hudson School District v. Rowley, 458 U.S. 176 (1982).
- Heufner, D. S. (1994). The mainstreaming cases: Tensions and trends for school administrators. Educational Administration Quarterly, 30(1), 27-55.
- Liscio v. Woodland Hills School District, 734 F.Supp. 689 (W.D. Pa. 1989), *aff'd without opinion*, 902 F.2d 1561 (3rd Cir. 1990).
- Mills v. Board of Education of the District of Columbia, 348 F. Supp 866 (D.D.C. 1972).
- Oberti v. Clementon School Board, 995 F.2d 1204 (3rd Cir. 1993).
- Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania, 334 F. Supp. 1257 (E.D. Penn. 1971).
- Rogers, J. The inclusion revolution. Phi Delta Kappa Research Bulletin, 11, 1-6.
- Roland M. v. Concord School Committee, 910 F.2d 983 (1st Cir. 1990), *cert denied*, 111 S.Ct. 112 (1991).

Roncker v. Walter et al., 700 F.2d 1058, 1063 (6th Cir.), *cert denied*, 464 U.S. 864, 104 (1983).

Sacramento City Unified School District v. Holland, 786 F. Supp. 874, 878 (E.D. Cal. 1992).

Schuldt v. Mankato Independent School District, 937 F.2d 1357 (8th Cir. 1991), *cert. denied*, 112 S.Ct. 937 (1992).

EFFICACY RESEARCH

In this section, research comparing academic and social outcomes for special education students placed in special education and general education settings is reviewed. Research focusing on students with mild disabilities is examined first. Studies focusing on students with moderate and severe disabilities are examined next, followed by studies of the effects of integration on academic achievement and social development of classmates without disabilities. Table 1 provides an annotated list of primary sources organized by the types of programs compared and by whether the results favored special or regular education.

Efficacy of Special Education Classes for Students with Mild Disabilities

As the literature comparing the effectiveness of special education and general education placements for students with mild disabilities³ is extensive, the emphasis of this review is on academic rather than social outcomes for students with mild disabilities. In addition, rather than reviewing the primary sources, the conclusions of the major reviews and meta-analyses published since 1980 is summarized.

Until the mid to late 1960's, it was generally assumed and concluded that separate classes were more efficacious than regular classes in educating children with mild disabilities (Epps & Tindal, 1987). From the late 1960's to the early 1970's, mainstreaming was considered to be more effective (Polloway, 1984). Dunn, (1968) in his watershed review of the special education efficacy research, concluded that students with mild disabilities "made as much or more progress in the regular classes as they do in special classes" (p. 8).

The results of studies conducted from the early 1970's to the late 1980's were somewhat less consistent. Six major reviews and meta-analyses published in the 1980's (Carlberg & Kavale, 1980; Epps & Tindal, 1987; Leinhardt & Pally, 1982; Madden & Slavin, 1983; Strain & Kerr, 1981; Wang & Baker, 1985-1986) all concluded that, for special education students as a whole, "special class placement is an inferior alternative to regular class placement" (Carlberg & Kavale, 1980, p. 304). However, some differences were found when comparing effects for students with differing degrees of disability, leading some reviewers (i.e., Carlberg and Kavale, 1980; Strain & Kerr, 1981) to conclude that special classes were superior for some students classified as emotionally disturbed, behaviorally disordered, and learning disabled. Since the late 1980's, the emphasis in much of the efficacy research has been on the teaching processes and other programmatic variables that create effective educational programs, rather than on attempting to examine setting as an independent variable.

3. Mild disabilities include mild mental retardation, learning disabilities, and behavioral disorders or emotional disturbance.

Reviews and meta-analyses since 1980. Carlberg and Kavale (1980) conducted a meta-analysis of the effect size (that is, the size of the effect of an intervention) of special and general class placement in 50 studies. They found special classes were inferior by a mean effect size of -0.12 or one-tenth of one standard deviation. In terms of percentile rankings of students' achievement scores, this indicated that the average student in a special class ranked at about the 45th percentile of students in the regular class. Carlberg and Kavale found a difference between the effect size of special class intervention for students with "borderline" IQs (75-90) and mild mental retardation (IQ 50-74) as compared to students with learning disabilities or behavioral disorders: lower IQ students did slightly better in regular classes, and higher IQ students did slightly better in special classes.

Although Carlberg and Kavale (1980) included studies with methodological inadequacies in their meta-analysis, they examined the influence of several threats to the validity of the studies they analyzed, particularly the failure of some researchers to randomly assign students to treatment groups. (If pre-existing groups were used, the students may have had learning characteristics or other attributes which determined their achievement). Carlberg and Kavale found that the smaller the effect size in a study, the fewer threats to validity the study tended to have. Thus, when randomly assigned groups were used, the difference between the placements being compared was smaller. Carlberg and Kavale concluded that overall, "special class placement is an inferior alternative to regular class placement in benefitting children removed from the educational mainstream" (p. 304), but urged educators not to make "unconditional judgments about mainstreaming" (p. 305).

Because the placements being compared in efficacy studies vary from self-contained special classes to part-time resource rooms to regular classes with or without consultation, Leinhardt and Pally (1982) evaluated the results of studies that contrasted similar types of placements. They concluded that the studies comparing self-contained classes with regular classes had "mixed results." For the three studies comparing part time resource rooms with full time regular classes, a "clear advantage" in favor of the resource room programs was detected. In studies contrasting resource rooms with indirect services, they found a "slight advantage" for the indirect service model.

As positive and negative effects were found in virtually each type of setting, Leinhardt and Pally (1982) hypothesized that setting does not influence student academic achievement and social growth directly, but instead operates indirectly through teaching processes and affective variables. The programmatic features they found to be associated with successful programs, whether in special or regular classes, included: mastery learning systems, small class size, increased time spent in cognitive activities, a formal management system, and positive teacher affect (p. 572). Leinhardt and Pally noted that separate settings can make it easier to manage some of the critical features of effective instruction, but pointed out that several studies have shown that such features also can be implemented in mainstream settings. Therefore, as "setting does not eliminate or guarantee the presence of effective instructional practices" (p. 560), Leinhardt and Pally concluded that "the variables which are important for successful student outcomes can occur in most settings, and that for ethical reasons the least restrictive environment is preferred" (p. 557).

Madden and Slavin (1983) reviewed research comparing the effects of full time special education, part time special education, and full time general education on academic achievement and social-emotional variables. After discounting studies plagued by the methodological problems common to much of the efficacy research⁴, Madden and Slavin concluded that methodologically adequate studies comparing integrated and segregated placements of academically handicapped students indicate "few consistent benefits of full time special education on any important outcomes" (p. 519). Like Leinhardt and Pally (1980), Madden and Slavin (1983) maintained that achievement is enhanced by well-designed and implemented programs, whether those programs are implemented in resource rooms or in regular classes. They point to carefully designed and well-controlled studies by Calhoun and Elliott (1977) and Leinhardt (1980) as evidence that regular classes with individualized instruction can result in higher achievement for students with mild disabilities than special classes with the same programs. Madden and Slavin also noted that two of the studies often purported to provide evidence that full time special classes are superior for lower IQ students (Goldstein, Moss, & Jordan, 1965; Meyers, 1976), compared well-structured special class programs with regular classes that provided no modifications or other supports.

Wang and Baker (1985-1986) analyzed 11 studies conducted between 1975 and 1984 which had suitable data for a meta-analysis. They found somewhat higher effects overall for students in mainstream settings when compared to students in special classes. The mainstreamed students in the studies analyzed ranked 13 percentiles above comparison students in separate classes. Contrary to Carlberg and Kavale (1980) and Strain and Kerr (1981), Wang and Baker did not find any statistically significant difference in effect size as a function of students' IQ or classification. They hypothesized that one reason for this difference may have been that they analyzed only studies published after 1975, when mainstreaming effects began to improve.

Epps and Tindal (1987) reviewed and provided an extensive methodological critique of the efficacy research conducted with students with mild disabilities. Epps and Tindal concluded that poor methodology and a lack of adequate definition of the treatments provided in the settings being compared made it difficult to draw conclusions regarding the influence of setting on educational outcomes. Epps and Tindal asserted that a safer conclusion is that "treating setting as an independent variable has provided little insight into what constitutes effective education...[as] a certain placement option does not guarantee the presence of effective instructional practices" (p. 227). Therefore, Epps and Tindal also reviewed research comparing the programming that occurs in special and regular education

-
4. Common methodological problems include: (a) lack of random assignment to groups; (b) comparisons of students across states, although classifications may vary; (c) comparisons of two programs that may not have had the same goals and/or use of measuring devices that may not have measured the two program's goals equally well; (d) failure to specify what curricula and teaching procedures were used (Epps & Tindal, 1987).

settings. Their analysis led Epps and Tindal (1987) to conclude that although it typically is presumed that the amount and type of instruction students receive in special education settings varies according to their learning needs and performance characteristics, few substantive differences in the content of special classes and regular classes occur in practice. That is, there was little evidence that differential programming had been provided for students with disabilities placed in special education settings in order to receive such programming. Noting that "all the teacher variables that appear highly related to student achievement appear to be applicable across educational environments" (p. 233), Epps and Tindal (1987) recommended a withdrawal from research treating setting as an independent variable and a shift to research which can assist educators to develop effective, replicable programs.

Efficacy studies conducted since 1980. Many of the efficacy studies conducted since 1980 have focused on comparisons of part- or full-time special class programs with regular classes to which consultative services or other supports and modifications have been added. In general, this research has indicated either no significant differences in performance between students with mild disabilities placed in general or special education classes (Affleck, Madge, Adams, & Lowenbraun, 1988), or significantly superior gains made by students in integrated settings (e.g., Knight, Meyers, Paolucci-Whitcomb, Hasazi, & Nevin, 1981; Wang & Birch, 1984; Wang, Peverly, & Randolph, 1984). For example, Affleck, Madge, Adams, and Lowenbraun (1988) examined an Integrated Classroom Model, which utilized teachers dually certified in special and general education and incorporated a very structured, mastery learning approach to instruction. They found no significant differences between integrated classroom students and resource room students on reading, math, and language achievement tests.

Studies of the differentiation of instruction in special education settings. In order to determine whether students do in fact receive differentiated services based upon their assessed needs, several researchers have examined the amounts and types of instruction offered to students across various levels of service delivery. Thurlow, Yesseldyke, Graden, Greener, & Macklenberg (1982) observed 26 students with learning disabilities in five levels of service from consultation to full time special class. They found few significant differences in the classroom practices associated with levels of service. The major differences were that the students in full- or half-time special education placements received significantly more one-to-one instruction and less entire group instruction than students in general classes; however, students in special education placements also received significantly less time allocated for instruction than students placed in general education.

Haynes and Jenkins (1986) compared the reading instruction of 133 students with mild disabilities in regular classes or resource rooms. Results indicated that the students in regular classes spent more time reading, more time in indirect reading instruction, and more time on task than those who received their reading instruction in resource rooms. Students in resource rooms received more one-to-one and small group instruction, but they also spent more time doing "seatwork." In addition, Haynes and Jenkins (1986) found that the correlation between student need (as measured by the discrepancy between achievement and grade level) and program offerings was nearly zero. That is, the amount of time students spent in the resource room and the amount of time spent in reading instruction did not vary

by how poor their reading was, but was "more a function of teacher and school context factors" (p. 232).

Other studies also have shown that participation in special education classes does not ensure access to more instruction in reading (Allington & McGill-Franzen, 1989; Yesseldyke, Thurlow, Mecklenburg, & Graden, 1984; Zigmond, Vellacorsa, & Leinhardt, 1980) or increased individualization of reading instruction (Morsink, Soar, Soar, & Thomas, 1986; Thurlow, Ysseldyke, Graden, & Algozzine, 1984). Several researchers have expressed concern about the lack of congruence sometimes found between the reading activities conducted in the regular class and those conducted in the resource class due to the use of different materials, different levels of difficulty, and different theories of reading development (Allington & McGill-Franzen, 1989; Haynes & Jenkins, 1986).

Follow-up studies of students with mild disabilities. Another approach to assessing the efficacy of special education for students with mild disabilities has been to examine follow-up data for students exiting from special education programs. Drop out rates for students with learning disabilities and behavioral disorders of over 35% have been reported (deBettencourt, Zigmond, & Thornton, 1989; Edgar, 1987; Hasazi, Gordon, & Roe, 1985; Thornton & Zigmond, 1988). Several follow-up studies of young adults with learning disabilities who have received special education services indicate that they lack of many of the academic, vocational, and social skills required for adult life (Edgar, 1987; Fourqurean & LaCourt, 1991; Haring, Lovett, & Smith, 1990; Sitlington & Frank, 1990; Wagner, D'Amico, Marder, Newman, & Blackorby, 1992; Zigmond & Thornton, 1985). Reported employment rates for students with mild disabilities range from approximately 50% to 70% (Edgar, 1987; Haring et al., 1990; Hasazi, Johnson, Hasazi, Gordon, & Hull, 1989, Wagner et al, 1991), with as few as 18% of those employed earning more than the minimum wage (Edgar, 1987). These data have not been collected so as to enable comparisons among graduates of various levels of service, but may suggest the inadequacy of the special education system as a whole in meeting the long term needs of students with mild disabilities.

Efficacy of Special Education Classes for Students with Moderate and Severe Disabilities

For students with moderate and severe disabilities⁵, efficacy research has examined dependent variables other than academic achievement as such, because these students' educational progress is not measured as achievement in the general education curriculum. Instead, comparisons have been based on variables such as achievement of individualized education program (IEP) objectives, the development of social skills and adaptive behaviors, the number and quality of social interactions with nondisabled peers, and degree of parental satisfaction.

Research comparing the efficacy of integrated and self-contained settings for students with moderate and severe disabilities has found few significant differences in the achievement of appropriate IEP goals or developmental skills (Cole & Meyer, 1991; Logan & Rankin, 1994; Saint-Laurent, Fournier, & Lessard, 1993), but significant gains in adaptive behavior for students served in integrated settings (McDonnell, McDonnell, Hardman, & McCure, 1991).

Studies of social variables have documented increased social interactions and/or social competence for preschoolers (Buysse & Bailey, 1993; Cole & Meyer, 1991), kindergarten-aged students (Falvey, 1980, cited in Halvorsen & Sailor, 1990), and secondary students (Gaylord-Ross & Pitts-Conway, 1984) with severe disabilities in integrated settings. Several researchers have found that students with severe disabilities who were effectively supported in regular classes received adequate opportunities for social interaction with their nondisabled peers and were often quite popular with their classmates (Burke & Bang, 1993; Evans, Salisbury, Palombaro, Berryman, & Hollowood, 1992; Hanline, 1993). Other investigations have confirmed the importance of interactions with peers to the development of social and communication skills in young children with severe disabilities (Bricker, 1978; Strain & Odom, 1986; Strain, Odom, & McConnell, 1984).

Although research has demonstrated improved outcomes for students with severe disabilities integrated both part-time and full-time into general education classes, the results of some studies have created concerns about the effects of part-time integration on children's social relationships (e.g., Ferguson, 1993; Schnorr, 1992). For example, Schnorr (1992), in an ethnographic study of a first grade classroom, found that a part time mainstreamed student was not perceived to be a member of the class, but was viewed as "an outsider, someone who is 'not in our class,' a visitor who 'comes and goes'" (p. 235).

5. Moderate and severe disabilities include autism, dual sensory impairments,, multiple handicaps, and mental retardation in the moderate, severe, or profound range.

Effects of Integration on Academic Achievement and Social Development of Peers Without Disabilities

Yet another approach to the efficacy question has been to compare the achievement of general education students in classrooms with and without mainstreamed students with disabilities. Wang and Birch (1984) and Wang, Peverly, and Randolph (1984) detected positive achievement and attitudinal outcomes for general education students in classrooms using the Adaptive Learning Environments Model, where students with mild to moderate disabilities had been mainstreamed full time. Jenkins et al. (1994) found significant effects on reading and language scores for general education students in classrooms using Cooperative Integrated Reading and Composition, a program that used heterogeneous groups and provided in-class tutoring and supplementary instruction for students with special needs. In their evaluation of an Integrated Classroom Model, Affleck, Madge, Adams, and Lowenbraun (1988), also found no significant differences in achievement between general education students in integrated and non-integrated classrooms.

Vandercook, York, Sharpe, Knight, Salisbury, LeRoy, and Kozleski (1992) summarized four studies which investigated the impact of full inclusion of students with disabilities on the academic performance of peers without disabilities. In all four studies, preliminary analyses indicated no significant differences between standardized achievement test scores in math and reading between experimental and comparison groups. Logan and Rankin (1994) also found no adverse affects on grades or test scores of general education students in 27 elementary classrooms where students with severe disabilities had been integrated full time.

A number of researchers have found that nondisabled peers often to develop meaningful relationships with their classmates with disabilities, and experience personal growth which they and their teachers and parents find to be positive (Burke & Bang, 1993; Evans et al., 1992; Giangreco et al., 1993; Peck, Donaldson, & Pezzoli, 1990; York et al., 1992).

References

- Affleck, J. W., Madge, S., Adams, A., & Lowenbraun, S. (1988). Integrated classroom versus resource model: Academic viability and effectiveness. Exceptional Children, 54(4), 339-348.
- Allington, R. L., & McGill-Franzen, A. (1989). School response to reading failure: Instruction for Chapter One and special education students in grades two, four, and eight. Elementary School Journal. 89(5), 529-542.
- Allington, R. L., & McGill-Franzen, A. (1989). Different programs, indifferent instruction. In D. K. Lipsky & A. Gartner, (Eds.), Beyond separate education: Quality education for all (pp. 75-97). Baltimore: Paul H. Brookes.
- Bersoff, D. N., Kabler, M., Fiscus, E., & Ankney, R. (1972). Effectiveness of special class placement for children labeled neurologically handicapped. Journal of School Psychology, 10(2), 157-163.
- Bradfield, R. H., Brown, J., Kaplan, P., Rickert, E., & Stannard, R. (1973). The special child in the regular classroom. Exceptional Children, 1973, 39, 384-390.
- Bricker, D. (1978). A rationale for the integration of handicapped and nonhandicapped preschool children. In M. J. Guralnick (Ed.), Early intervention and the integration of handicapped and nonhandicapped children (pp. 3-26). Baltimore: University Park Press.
- Budoff, M., & Gottlieb, J. (1976). Special class EMR children mainstreamed: A study of aptitude (learning potential) x treatment interaction. American Journal of Mental Deficiency, 81, 1-11.
- Buffmire, J. A. (1977). Special education delivery alternatives: Changes over time in teacher ratings, self-image, perceived classroom climate and academic achievement among handicapped and non-handicapped children (Rev. ed.). Salt Lake City, Utah: Southwest Regional Resources Center. (ERIC Document Reproduction Service No. ED 140 565)
- Burke, D. A., & Bang, M. (1993). The impact of inclusive education placements in Michigan. Lansing, MI: Disability Research Systems, Inc.
- Buyse, V., & Bailey, D. B., Jr. (1993). Behavioral and developmental outcomes in young children with disabilities in integrated and segregated settings: A review of comparative studies. Journal of Special Education, 26, 434-461.
- Calhoun, G., & Elliott, R. (1977). Self concept and academic achievement of educable retarded and emotionally disturbed pupils. Exceptional Children, 44, 379-380.
- Cantrell, R. P., & Cantrell, M. L. (1976). Preventive mainstreaming: Impact of a supportive services program on pupils. Exceptional Children, 42, 381-386.

- Carlberg, C., & Kavale, K. (1980). The efficacy of special versus regular class placement for exceptional children: A meta-analysis. Journal of Special Education, 13, 295-309.
- Cohen, S. S., & Zigmond, N. (1986). The social integration of learning disabled students from self-contained and mainstream elementary school settings. Journal of Learning Disabilities, 19(10), 614-618.
- Cole, D. A., & Meyer, L. H. (1991). Social integration and severe disabilities: A longitudinal analysis of child outcomes. Journal of special education, 25(3), 340-351.
- Cole, K. N., Mills, P. E., Dale, P. S., & Jenkins, J. R. (1991). Effects of preschool integration for children with disabilities. Exceptional Children, 58(1), 36-45.
- deBettencourt, L. U., Zigmond, N., & Thornton, H. (1989). Follow-up of postsecondary-age rural learning disabled graduates and dropouts. Exceptional Children, 56, 40-49.
- Deno, S., Maryama, G., Espin, C., & Cohen, C. (1990). Educating students with mild disabilities in general education classrooms: Minnesota alternatives. Exceptional Children, 57(2), 150-161.
- Dunn, L. M. (1968). Special education for the mildly retarded: Is much of it justified? Exceptional Children, 35, 5-22.
- Edgar, E. (1987). Secondary programs in special education: Are many of them justifiable? Exceptional Children, 53, 555-561.
- Epps, S., & Tindal, G. (1987). The effectiveness of differential programming in serving students with mild handicaps: Placement options and instructional programming. In M. C. Wang, M. C. Reynolds, & H. J. Walberg, Handbook of special education: Vol. 1. Learner characteristics and adaptive education (pp. 213-248). NY: Pergamon Press.
- Evans, I., Salisbury, C. L., Palombaro, M. M., Berryman, J., & Hollowood, T. M. (1992). Peer interactions and social acceptance of elementary-age children with severe disabilities in an inclusive school. Journal of the Association for Persons with Severe Handicaps, 17, 205-212.
- Ferguson, D. L. (1993). Regular Class Participation System (RCPS): A final report. Eugene, OR: Specialized Training Program, University of Oregon.
- Fourqurean, J. M., & LaCourt, T. (1991). A follow-up of former special education students: A model for program evaluation. Remedial and Special Education, 12(1), 16-23.
- Glavin, J. P., Quary, H. C., Annesley, F. R., & Werry, J. S. (1971). An experimental resource room for behavior problem children. Exceptional Children, 38, 131-137.

- Gaylord-Ross, R., & Pitts-Conway, V. (1984). Social behavior development in integrated secondary autistic programs. In N. Certo, N. Haring, & R. York (Eds.), Public school integration of the severely handicapped: Rational issues and progressive alternatives. Baltimore: Paul H. Brookes.
- Giangreco, M., Dennis, R., Cloninger, C., Edelman, S., & Schattman, R. (1993). "I've counted Jon": Transformational experiences of teachers educating students with disabilities. Exceptional Children, 59(4), 359-372.
- Goldstein, H., Moss, J., & Jordan, L. (1965). The efficacy of special class training on the development of mentally retarded children (U.S. Office of Education Cooperative Project No. 619). Urbana, IL: University of Illinois Press. (ERIC Document Reproduction Service No. ED002907)
- Guerin, G. R., & Sszatlocky, K. (1974). Integration programs for the mildly retarded. Exceptional Children, 41, 173-179.
- Halvorsen, A., & Sailor, W. (1990). Integration of students with severe and profound disabilities: A review of research. In R. Gaylord-Ross (Ed.), Issues and research in special education (vol. 1). New York: Teachers College Press.
- Hanline, M. F. (1993). Inclusion of preschoolers with profound disabilities: An analysis of children's interactions. Journal of the Association for Persons with Severe Handicaps, 18(1), 28-35.
- Haring, K. A., Lovett, D. L., Smith, D. D. (1990). A follow-up study of recent special education graduates of learning disabilities programs. Journal of Learning Disabilities, 23(2), 108-113.
- Hasazi, S. B., Gordon, L., & Roe, C. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979-1983. Exceptional Children, 51(6), 455-469.
- Hasazi, S. B., Johnson, R. E., Hasazi, J. E., Gordon, L. R., & Hull, M. (1989). Employment of youth with and without handicaps following high school: Outcomes and correlates. Journal of Special Education, 23, 243-255.
- Haynes, M. C., & Jenkins, J. R. (1986). Reading instruction in special education resource rooms. American Educational Research Journal, 23(2), 161-190.
- Jenkins, J. R., Jewell, M., Leicester, N., O'Conner, R. E., Jenkins, L. M., & Troutner, N. M. (1994). Accommodations for individual differences without classroom ability groups: An experiment in school restructuring. Exceptional Children, 60(4), 344-358.
- Jenkins, J. R., & Mayall, W. F. (1976). Development and evaluation of a resource teacher program. Exceptional Children, 43, 21-29.

- Kluwin, T. N. (1993). Cumulative effects of mainstreaming on the achievement of deaf adolescents. Exceptional Children, 60(1), 73-81.
- Knight, M. F., Meyers, . W., Paolucci-Whitcomb, P., Hasazi, S. E., & Nevin, A. (1981). A four-year evaluation of consulting teacher service. Journal of Behavioral Disorders, 6(2), 92-100.
- Leinhardt, G. (1980). Transition rooms: Promoting maturation or reducing education? Journal of Educational Psychology, 72(1), 55-61.
- Leinhardt, G., & Pally, (1982). Restrictive educational settings: Exile of haven? Review of Educational Research, 52(4), 557-578.
- Logan, K. R., Rankin, D. H. (1994). Tentative project results: Project STEPS. (OSERS Grant No. HO86D2002). Gwinett County Public Schools, Lawrenceville, GA.
- Macy, D. J., & Carter, J. L. (1978). Comparison of mainstream and self-contained special education program. Journal of Special Education, 12(3), 303-313.
- Madden, N., & Slavin, R. (1983). Mainstreaming students with mild handicaps: Academic and social outcomes. Review of Educational Research, 53, 519-569.
- Marston, D. (1987-88). The effectiveness of special education: A time series analysis of reading performance in regular and special education settings. Journal of Special Education, 21, 13-26.
- Mayhall, W. F., Jenkins, J. R., Chestnut, N. J., Rose, M. A., Schroeder, K. L., & Jordan, B. (1975). Supervision and site of instruction as factors in tutorial programs. Exceptional Children, 45(2), 151-154.
- McDonnell, A., McDonnell, J., Hardman, M., & McCune, G. (1991). Educating students with severe disabilities in their neighborhood school: The Utah elementary integration model. Remedial and Special Education, 12, 34-45.
- McGuire, J. M., et al. (1987). Connecticut's statewide follow-up study of former special education program graduates. (ERIC Document Reproduction Service No. ED 212148)
- Meece, J., & Wang, M. (1982, March). A comparative study of social attitudes and behaviors of mildly handicapped children in two mainstreaming programs. Paper presented at the annual meeting of the American Educational Research Association, New York. (ERIC Document Reproduction Service No. ED 221 005).
- Meyers, J. K. (1976). The efficacy of the special day school for EMR pupils. Mental Retardation, 14(4), 3-11.
- Miller, T. L., & Sabatino, D. A. (1978). An evaluation of the teacher consultant model as an approach to mainstreaming. Exceptional Children, 45 (2), 86-91.

- Morsink, C. V., Soar, R. S., Soar, R. M., & Thomas, R. (1986). Research on teaching: Opening the door to special education classrooms. Exceptional Children, 53, 32-40.
- O'Leary, S., & Schneider, M. (1977). Special class placement for conduct problem children. Exceptional Children, 44, 24-30.
- Osborne, S. S., et al. (1991). A longitudinal study of students with learning disabilities in mainstream and resource programs. Exceptionality, 2(2), 81-95.
- Peck, C. A., Donaldson, J., & Pezzoli, M. (1990). Some benefits nonhandicapped adolescents perceive for themselves from their social relationships with peers who have severe handicaps. Journal of the Association for Persons with Severe Handicaps, 15, 241-249.
- Polloway, E. A. (1984). The integration of mildly retarded students in the schools: A historical review. Remedial and Special Education, 5(4), 18-28.
- Sabatino, D. (1971). An evaluation of resource rooms for children with learning disabilities. Journal of Learning Disabilities, 4(2), 84-93.
- Saint-Laurent, L., Fournier, & Lessard, J. C. (1991). Efficacy of three programs for elementary school students with moderate mental retardation. Education and Training in Mental Retardation, 28(4), 333-348.
- Schnorr, R. F. (1992). "Peter? He comes and goes...": First graders' perspectives on a part-time mainstream student. Journal of the Association for Persons with Severe Handicaps, 15(4), 231-240.
- Schulte, A. C., Osborne, S. S., & McKinney, J. D. (1990). Academic outcomes for students with learning disabilities in consultation and resource programs. Exceptional Children, 57(2), 162-171.
- Sitlington, P. L., & Frank, A. R. (1990). Are adolescents with learning disabilities successfully crossing the bridge into adult life? Learning Disability Quarterly, 13, 97-111.
- Smith, H. W., & Kennedy, W. A. (1967). Effects of three educational programs on mentally retarded children. Perceptual and Motor Skills, 24, 174.
- Strain, P. S., & Odom, S. L. (1986). Peer social interactions: Effective intervention for social skills development of exceptional children. Exceptional Children, 52(6), 543-551.
- Strain, P. S., Odom, S. L., & McConnell, S. (1984). Promoting social reciprocity of exceptional children: Identification, target behavior selection, and intervention. Remedial and Special Education, 5(1), 12-28.
- Strain, P. S., & Kerr, M. M. (1981). Mainstreaming of children in schools. New York: Academic Press.

- Thornton, H., & Zigmond, N. (1986). Follow-up of postsecondary age LD graduates and dropouts. Learning Disabilities Research, 1(1), 50-55.
- Thurlow, M. L., Ysseldyke, J. E., Graden, J., & Algozzine, R. (1984). Opportunity to learn for LD students receiving different levels of special education services. Learning Disability Quarterly, 7, 55-67.]
- Thurlow, M. L., Ysseldyke, J. E., Graden, J., Greener, J. W., & Macklenberg, D. (1982). Academic responding time for LD students receiving different levels of special education services (Research Rep. No. 78). Minneapolis, MN: University of Minnesota, Institute for Research on Learning Disabilities.
- Vandercook, T., York, J., Sharpe, M., Knight, J., Salisbury, C., LeRoy, B., & Kosleski, E. (1992). The million dollar question. The Safety Net, 3(1), 1-4.
- Wagner, M., D'Amico, R., Marder, C., Newman, L., & Blackorby, J. (1992). What happens next: Trends in postschool outcomes of youth with disabilities. Menlo Park, CA: SRI International.
- Walker, V. S. (1974). The efficacy of the resource room for educating retarded children. Exceptional Children, 40, 288-289.
- Wang, M., & Baker, E. T.. (1985-1986). Mainstreaming programs: Design features and effects. Journal of Special Education, 19, 503-525.
- Wang, M., & Birch, J. W. (1984). Comparison of a full-time mainstreaming program and a resource room approach. Exceptional Children, 51, 33-40.
- Wang, M. C., Peverly, S., & Randolph, R. (1984). An investigation of the implementation and effects of a full-time mainstreaming program. Journal of Remedial and Special Education, 5(6), 21-32.
- York, J., Vandercook, T., MacDonald, C., Heise-Neff, C., & Caughey, E. (1992). Feedback about integrating middle-school students with severe disabilities in general education classes. Exceptional Children, 58(3), 244-258.
- Ysseldyke, J. E., Thurlow, M. L., Mecklenburg, C., & Graden, J. (1984). Opportunity to learn for regular and special education students during reading instruction. Journal of Remedial and Special Education, 5, 29-37.
- Zigmond, N., & Baker, J. (1990). Mainstream experiences for learning disabled students (Project MELD: Preliminary Report). Exceptional Children, 57(2), 176-185.
- Zigmond, N., Vellacorsa, A., & Leinhardt, G. (1980). Reading instruction for students with learning disabilities. Topics in Language Disorders, 1, 89-98.

Zigmond, N., & Thornton, H. (1985). Follow-up of postsecondary age learning disabled graduates and drop-outs. Learning Disabilities Research, 1(1), 50-55.

INSTRUCTIONAL OPPORTUNITIES IN INTEGRATED CLASSES

Relatively little is actually known about the instructional arrangements teachers use in integrated classrooms or the effectiveness of those arrangements (Ysseldyke, Thurlow, Wotruba, & Nania, 1990). For the purposes of this review, the existing research on instructional opportunities in integrated classrooms will be divided into two main categories: (1) classroom teachers' attitudes toward and skills in making instructional modifications, and (2) the availability and effectiveness of instructional opportunities for students with and without disabilities in integrated classrooms.

Making Instructional Modifications: Teachers' Skills and Attitudes

Classroom teachers' perspectives on instructional modifications. One approach to studying instructional modifications in integrated classes has been to survey educators' perceptions of the types of instructional modifications they are willing and able to make, and then to analyze the attitudinal and practical correlates of those perceptions.

Several surveys have indicated that general education teachers often have negative attitudes toward integration (or mainstreaming), and that they are disinclined to make modifications to their curriculum or methods for students with special needs. (e.g., Coates, 1989; Knoff, 1985; Semmel, Abernathy, Butera, & Lesar, 1991). Other surveys have revealed that classroom teachers' attitudes about integration and the modifications it requires are more positive if teachers anticipate receiving input regarding the types of supports and modifications provided (e.g., Diebold & Trentham, 1987; Myles & Simpson, 1989; Phillips, Alfred, Brulli, & Shank, 1990). For example, Myles and Simpson (1989) found that 86% of the general education teachers who they surveyed were willing to receive students with mild disabilities into their classes contingent upon their participation in the process of determining mainstream supports. The modifications and supports classroom teachers seek most often include: administrative support, consultation services from special educators, inservice training sessions, increased planning time, redefinition of roles, and lowered class size (Glomb & Morgan, 1991; Myles & Simpson, 1989; Phillips, Alfred, Brulli, & Shank, 1990).

Several researchers have investigated general education teachers' willingness and ability to make adaptations to instruction for integrated students (e.g., Bender & Ukeje, 1989; Glomb & Morgan, 1991; Johnson & Pugach, 1990; Munson, 1986-1987; Shumm & Vaughn, 1991; Ysseldyke, Thurlow, Wotruba, & Nania, 1990). Both Shumm and Vaughn (1991) and Ysseldyke, Thurlow, Wotruba, and Nania (1991) found that classroom teachers rated the desirability of a wide variety of adaptations more highly than their ability to make these adaptations. In both studies, the adaptations judged most desirable and feasible related to enhancing the student's social adjustment and motivation (e.g., providing reinforcement and encouragement, establishing a personal relationship with the student, and involving the student in whole class activities), and those rated as least desirable and feasible related to differentiating student goals, materials, and grading criteria. Munson (1986-1987) also found that general education teachers reported that they modified the formats for directions and assignments more often than they made substantive modifications to curriculum content, grading, or instructional materials. Zigmond, Levin, and Laurie (1985)

found that the 24 high school teachers they interviewed did not plan more or implement different instruction in their mainstream classes for students with learning disabilities. The primary accommodation these teachers did make was to lower grading standards. (Zigmond et al. Note that in spite of this lack of accommodation, the students with learning disabilities were obtaining passing grades in approximately 75% of their courses.)

One correlate of teacher implementation of individualized adaptations is teacher skill (Shumm & Vaughn, 1991). Other correlates of increased numbers and types of modification strategies include: smaller class size (Bender & Ukeje, 1989; Munson, 1991), fewer years teaching (Munson, 1986-1987), and in some cases, lower grade level. Although Shumm and Vaughn (1991) found few differences between grade levels, Munson (1986-1987) and Ysseldyke et al. (1990) found that primary teachers reported being much more able to incorporate adapted methods than were intermediate or secondary teachers. Teacher beliefs and attitudes also have been linked to their implementation of instructional modifications (Bender & Ukeje, 1989; Johnson & Pugach, 1990). For example, Bender and Ukeje (1989) found that teacher sense of efficacy predicted the modification strategies teachers used.

How teachers develop the willingness and skills to make modifications in integrated classrooms. Other research, based on observations and interviews with teachers experienced with integration, has examined how teachers develop the willingness and learn the skills required to make adaptations and provide special services in concert with special educators (e.g., Giangreco, Dennis, Cloninger, Edelman, & Schattman, 1993; Janney & Snell, 1994; Janney, Snell, Beers, & Raynes, in press b; Salisbury, Palombaro, & Hollowood, 1993; Kosleski & Jackson, 1993; York, Vandercook, MacDonald, Heise-Neff, & Caughey, 1992). This research has shown that classroom teachers' initial attitudes about the efforts required to make modifications for integrated students, and their perceptions of their own skills in making those modifications, have been altered subsequent to experience with well-planned, supported integration programs. Several of these studies also have analyzed and illustrated the types of modifications being made in integrated classrooms, but have not sought to evaluate the efficacy of those modifications, other than through user-satisfaction.

A number of studies have shown that classroom teachers' initial hesitations and concerns about integrating students with disabilities were allayed as they were given input into the process, acquired increased ownership of the student, and received adequate support from administrators and specialists (e.g., Giangreco et al.; 1993; Janney et al., in press b; Salisbury et al., 1993). Janney, Snell, Beers, and Raynes (in press b) reported that elementary and secondary classroom teachers' attitudes had converted from hesitation to enthusiasm as they discovered that they and students with moderate and severe disabilities placed part-time in their classrooms would receive adequate supports. The experience of seeing academic and social skill gains in the students with and without disabilities also served as an incentive for increased teacher involvement with integration. However, these teachers were relieved to find that part-time integration did not require them to make significant curricular modifications in order to "fit the students in" to classroom learning activities, as special educators continued their role as the integrated students' primary sources of instruction.

Janney and Snell (1994) and Dyer (1992) found that the teams of elementary classroom teachers and special education teachers they observed made many modifications to materials, objectives, and personal assistance for students with moderate and severe disabilities integrated in their classes. However, there were certain times (primarily during independent drill and practice activities in reading and math, especially if a special education staff person was available) when the student with a disability worked with a specialist on a functional activity that was parallel to the rest of the class. Janney and Snell (1994) concluded that making the more significant modifications which would be required to redesign the instructional formats and teaching methods used in the classrooms they studied (for example, the use of more activity-based lessons and student-directed small groups) were not consistent with these classroom teachers' perceptions of the lock-step curriculum they felt required to follow.

In contrast, Salisbury and her colleagues (1993), in their year study of the full time inclusion of 26 students with mild to severe disabilities in general classrooms, observed changes in teaching methods as the classroom teachers collaborated with specialists to deliver individualized services to the integrated students. These changes included movement toward activity-based instruction, cooperative teaching, and cooperative learning, and away from teacher-directed paper-and-pencil activities. Salisbury et al. (1993) note that the instructional practices observed in this school were influenced by a district-wide effort to incorporate many practices endorsed by the effective schools research, and did not occur solely due to the integration of students with disabilities.

Several studies have illustrated the incidental ways classroom teachers learn to adapt curriculum, provide instruction, and collaborate with special education teachers to provide specialized services within the mainstream (Ferguson et al., 1992; Giangreco et al., 1993; Janney & Snell, 1994; Kozleski & Jackson, 1993). For example, Kozleski and Jackson (1993) spent three years studying the third, fourth, and fifth grade classrooms where a student with severe disabilities was integrated full time. These three teachers reported that the greatest challenge to them was learning how to collaborate to solve problems and to provide classroom supports. All three teachers believed that the planning that occurred before their actual experience with the student was not as valuable as the coaching, direct modeling, and in-class observations provided by support personnel during the year the student was in their class. Other researchers also have reported teachers' preference for consultative support and on-the-spot suggestions and coaching from a special educator over less personalized and less direct ways to learn new skills (Ferguson et al., 1992; Janney et al., in press a & b; Myles and Simpson, 1989).

Inservice training to increase teachers' willingness and skills to make instructional modifications. A number of researchers have surveyed or interviewed general education teachers experienced with integrating students with disabilities regarding their recommendations for inservice training for integration (Bass, 1981; Janney et al., in press a; Kozleski & Jackson, 1993; Logan & Rankin, 1994). Respondents have suggested the following content and methods for inservice training activities.

Recommended content of inservice activities:

- general explanations of special education legislation and of the rationale for integration
- specific information about educational goals for individual students
- ways to adapt and individualize instruction
- collaborative planning, problem-solving, and co-teaching strategies
- behavior interventions and classroom management techniques

Recommended methods for providing inservice training:

- opportunities for visits to pilot or demonstration sites
- impromptu discussions with specialists
- in-class demonstrations by specialists
- opportunities for collegial interactions.

These methods are reported to be more helpful than coursework or large group lectures. Effective inservice in instructional modifications and collaborative teaming, like inservice training for other educational change efforts, must be ongoing, must permeate the school, and must provide teachers with opportunities to learn about and process the change with trusted colleagues (Fullan, 1991).

School variables influencing the design and implementation of instructional modifications. Researchers who have studied schools which have purposefully sought to be "fully inclusive" (e.g., Rainforth, 1992; Salisbury, Palombaro, & Hollowood, 1993; Schattman, 1992) have concluded that the quality of instructional practices implemented in a particular classroom is influenced not only by teacher skills and attitudes, but also by organizational and ideological factors. Rainforth (1992), in an examination of the effects of full inclusion on general education teachers, concluded that inclusion may have amplified attitudes, philosophies, and practices that existed in the school prior to inclusion, rather than new effects having been produced by inclusion. "The nature of the school before inclusion seems to have predisposed teachers both to consider this initiative and to ensure its success" (Rainforth, 1992). Fuchs, Fuchs, and Bishop (1992) discovered that democratic decision-making was a critical predictor of teachers use of specialized adaptations in reading and math. Participatory decision-making has also been associated with positive school climate (Anderson, 1982) and with student achievement (Fraser & Walberg, 1991), and may help create greater commitment in teachers (Clark & Astuto, 1994; Johnson & Germinario, 1985).

Instructional Opportunities Available to Students in Integrated Classrooms

The following areas of research on the amounts and types of instructional opportunities available to students in integrated classrooms are summarized: (1) teacher attention, (2) allocated and engaged time, (3) grouping of students, and (4) instructional formats. As some of this research is purely descriptive, some compares integrated classes with special education classes, and some seeks to show causal relationships between instructional arrangements, the ans student outcomes, research in each area is organized according to the research question addressed.

Teacher attention.

Do students with mild disabilities receive different amounts and types of attention than their classmates without disabilities? Research on teacher attention and teacher-student interactions in integrated classes has indicated that although integrated students with mild disabilities receive equivalent to slightly more teacher time than their nonhandicapped classmates, the difference is not statistically significant (Ivarie, Hogue, & Brulle, 1984; Slate & Saudargas, (1987; Thompson, White, & Morgan, 1982, 1984). Ivarie, Hogue, and Brulle (1984) point out that this statistically insignificant difference may still be significant clinically. for the integrated students.

There is some evidence that the teacher attention directed toward integrated students with mild disabilities is qualitatively different than that directed toward their nondisabled peers. Several researchers have found that students with mild disabilities received more teacher attention related to behavior than to their academic performance (Alves & Gottlieb, 1986; Brady & Taylor, 1989; Slate & Saudargas, 1986, 1987; Thompson et al., 1983). For example, Slate and Saudargas (1986) found a disproportionate amount of teacher attention was directed toward learning disabled boys when they were engaged in off-task behavior in comparison to when they were on task. This occurred even if the amount of inappropriate behavior exhibited by the boys with learning disabilities was equal to the amount exhibited by their nondisabled peers. In contrast, Brady, Swank, Taylor, and Freiburg (1992) found that although students with learning disabilities received more corrections and more reinforcement than their classmates in their middle school science and social studies classes, they did not receive more non-instructional interactions with teachers.

One study (Brulle, Barton, Barton, & Wharton, 1983) revealed that integrated high schoolers with physical disabilities received significantly more teacher assistance, on average, than their nondisabled peers.

Do students with severe disabilities receive more teacher attention in self-contained or integrated classes? Research on teacher attention and interaction with students with severe disabilities has indicated that students with severe disabilities in integrated classrooms experience the same number of one-to-one adult-student interactions (Logan, Malone, & Rankin, 1994) and spend less time alone than comparison students in self-contained classes (Cole & Meyer, 1991; Logan, Malone, & Rankin, 1994). However, the staffing model used appears to determine whether those interactions are with general or special educators. Whereas Cole and Meyer (1991) found that integrated students spent equal time with special

education teachers and less time with therapists than students in self-contained settings, the students in Logan et al.'s (1994) study spent equal time with related services staff, less time with certified special education teachers, and more time with paraprofessionals and general education teachers.

Allocated and engaged time. As time allocated for instruction and learner engagement (alternatively described as engaged time, active responding time, or opportunity-to-learn) are highly related to academic achievement (Good & Brophy, 1986), one focus of research in integrated classrooms has been the relationship of integration with these two variables--both for students with disabilities and for their nondisabled peers.

Is more time allocated for instruction in integrated classes or in special education classes? In general, self-contained, resource, and integrated classrooms for students with mild and moderate disabilities have been found to evidence comparable amounts of time allocated for instruction (Friedman, Cancelli, & Yoshida, 1988; Greenwood, 1991; Rich & Ross, 1989; Thurlow, Ysseldyke, Graden, & Algozzine, 1984; Ysseldyke, Christenson, Thurlow, & Skiba, 1987). These studies, like those from the general education literature (Good & Brophy, 1986), show that, on average, less than half the school day is allocated for instruction. Ysseldyke, Thurlow, Christenson, and Weiss (1987) found somewhat different results in their comparison of time allocated for instruction for students with mild disabilities who spent various portions of their day in resource rooms and integrated classes. In this study, Ysseldyke et al. (1987) found a slightly greater proportion of time allocated for instruction in the special education classrooms.

Are students with mild disabilities more engaged in instruction in integrated or special education classes? What are the correlates of instructional engagement? In the general education literature, student engagement in instruction has been found to occur an average of approximately 70% to 80% of the time allocated for instruction, or approximately 33% of the school day. Regarding the level of engagement and active responding for students with mild disabilities integrated into general education, findings are mixed. Thurlow, Ysseldyke, Graden, and Algozzine (1984) and Ysseldyke et al. (1987) found no differences in total academic responding time between students with learning disabilities in self-contained classes, resource rooms, and general education classes. The integrated students' average academic responding time was no different from that of their nondisabled peers (less than 45 minutes per day across all settings), and differed only in the amount of time they spend engaged in various types of academic responses. (For example, the students with learning disabilities spent more time writing.) In contrast, Friedman et al. (1988) found students with learning disabilities to be more engaged in resource rooms than in general classes.

What process variables correlate with level of academic engagement of students with mild disabilities? Studies of academic engagement show great variations across students and within individual students across time (Ysseldyke et al., 1987). Thus, some researchers have investigated the process variables in a setting which contribute to learner engagement. For example, Friedman et al. (1988) found that students with learning disabilities were more engaged during teacher-directed lessons than during seatwork both in the resource room and in integrated classes; however, the type of activity affected the level of engagement more in

the general class than in the resource room. Smaller student-teacher ratios during instruction were predictive of superior student engagement in studies by Thurlow, Ysseldyke, and Wotruba (1988) and Ysseldyke, Thurlow, Christenson, and McVicar (1988). The level of peer engagement in the learning task also has been found to correlate with the academic engagement of students with learning disabilities (Friedman et al., 1988).

Are students with severe disabilities more engaged in integrated or special education classes? Logan, Malone, and Rankin (1994), in another study comparing full-time integrated and self-contained classes for students with moderate, severe, and profound disabilities, found that in both integrated and self-contained settings, students with disabilities were actively engaged in learning approximately 28% of the time.

How does integration affect allocated time and academic engagement for general education students? Chow et al. (1980) found a decrease in engaged time during math for students without disabilities in integrated classrooms, whereas Baker and Zigmond (1990) judged active engagement of students without disabilities to be the same (30%-40% of time allocated for reading and math) before and after the integration of students with learning disabilities.

In their study of several elementary schools, Hollowood, Salisbury, Rainforth, and Palombaro (in press) found that time allocated for instruction in both classrooms that included a full time student with severe disabilities and classrooms without a student with severe disabilities was approximately 75%. (The integrated students with severe disabilities actually had 89% of their day allocated for instruction.) Students in all classrooms spent comparable amounts of that allocated time actually engaged in instruction (82% for students without disabilities in integrated and non-integrated classrooms; 70% for students with severe disabilities). Hollowood et al. (in press) note that these figure are not only comparable across the integrated and non-integrated groups, but are in the upper range of that reported in other studies. For all students, a high proportion of their engaged time was spent in active engagement (42% for nondisabled students in integrated classrooms; 45% for nondisabled students in non-integrated classrooms, 36% for students with severe disabilities). Thus, the presence of a student with severe disabilities did not significantly affect the level of engagement for students without disabilities. Hollowood et al. (in press) also examined the sources of disruption to instructional time, and found no differences between integrated and non-integrated classes in the sources of disruption. The disruptions that did occur were due to administrative interferences, transitions, and nondisabled students, rather than being attributable to the presence of students with severe disabilities.

Instructional formats and grouping of students.

What instructional arrangements do classroom teachers use when students with disabilities are integrated? Several studies have indicated that when students with mild disabilities are placed in their classes, classroom teachers tend not to significantly alter their teaching practices (e.g., Baker & Zigmond, 1990; Ysseldyke, Thurlow, Wotruba, & Nania, 1990; Zigmond, Levin, & Laurie, 1985). For example, Baker and Zigmond (1990) found that the primary change in teacher behavior during math and reading when students with learning disabilities were integrated into five elementary classrooms was that teachers used fewer

workbooks and worksheets. Deno, Maruyama, Espin, & Cohen (1990) observed similar amounts of teacher-led and independent instruction in integrated classes and resource rooms. Ysseldyke et al. (1990) analyzed 197 regular education teachers' responses to a survey about the instructional arrangements they used to meet the needs of students with mild disabilities in their classes. Ysseldyke and colleagues found that 51% of the sample reported no alterations in their use of small groups, or in group size, as a result of integrating students with disabilities in their classes; 39% responded that they had made such changes. The most frequently named method of instructing students with disabilities was direct instruction (60% of the respondents). Cooperative groups were named second most frequently (20%), followed by discovery (18%) and independent work (17%).

Logan, Malone, and Rankin (1994) compared the instructional arrangements used with 27 students with severe disabilities who were integrated full-time into general education classes with the instructional arrangements used for a comparison group in self-contained classes. They found similar instructional structures being used for students in both settings. Regarding grouping arrangements, integrated students with severe disabilities engaged in slightly less small group instruction, slightly more one-to-one instruction, and similar amounts of independent work than their counterparts in self-contained classes. The greatest difference in grouping arrangement was seen in the percentage of whole class instruction: 47% of the instruction in the self-contained classes (which were staffed by two adults) was delivered to the whole class of six to eight students; 36% of the instruction in the general education class was delivered to the "whole class" (defined as nine or more students at a time). Logan and his colleagues also investigated the types of materials used by students with severe disabilities and found that students with severe disabilities in general education were provided with manipulatives and hands-on materials as much as the students in self-contained classes, but that the integrated students used fewer functional materials and more readers, paper, and pencils. Integrated students spent slightly less of their time (8% less) with "no materials" than students in self-contained classes.

What instructional arrangements are most effective in integrated classrooms? Research on the effectiveness of various instructional arrangements (i.e., teacher behaviors, instructional formats, student groupings) in meeting the academic and social needs of students in integrated classes is summarized below.

Teacher behaviors. In a large-scale study of 118 classroom teachers, Larrivee (1986) analyzed the relationships between 42 teacher behaviors (e.g., questioning strategies, teaching style, academic learning time, individualization) and both academic performance and social behavior of integrated students with mild disabilities. Fifteen specific teaching behaviors were consistently related to desired academic and social outcomes for integrated students. These behaviors included: frequent positive feedback; supportive, encouraging responses to students in general and low-ability students in particular; asking questions and providing learning tasks to which students could respond correctly; little non-instructional time; and low rate of student off-task behavior. Larrivee (1986) notes that the profile for teachers effective with integrated students "is remarkably similar to that of the overall effective teacher, based on...[the] teacher effectiveness literature" (p. 176).

Student groupings. Logan and Holland (1994) compared sight word acquisition for students with moderate mental retardation taught in small groups of either general education or special education students. They found a slight advantage to the special education-only groups, but note that this advantage may have been largely due to the fact that the special education groups had fewer students.

Cooperative learning. Cooperative learning structures are probably the best-documented interventions in integrated classrooms. Results have been somewhat inconsistent, though generally positive. Ongoing use of carefully-structured cooperative learning groups has been linked to increased social acceptance of students with disabilities (Madden & Slavin, 1984; Slavin, Madden, & Leavey, 1984); more positive interactions between children with and without disabilities (Lew, Mesch, Johnson, & Johnson, 1986; Putnam, Rynders, Johnson, & Johnson, 1989); and academic achievement gains (Jenkins et al., 1994; Lew, Mesch, Johnson, & Johnson, 1986; Madden & Slavin, 1984; Slavin, Madden, & Leavey, 1982).

Jenkins and his colleagues (1994) examined the effectiveness of cooperative learning as part of an alternative approach for organizing reading and language instruction in integrated classrooms. The approach utilized Cooperative Integrated Reading and Composition (CIRC) (Stevens, Madden, Slavin, & Farnish, 1987) conducted without ability groups, along with cross-age peer tutoring and minimal (20-minutes per day) supplementary instruction by compensatory and special education teachers for certain students. Jenkins et al. (1994) found significant effects on reading and language scores for general education, remedial, and special education students in their experimental school, but no significant effects on social behavior.

Peer tutoring. Peer tutoring has been linked to increased academic and social skills of students with a variety of disabilities at a variety of ages. For elementary students with learning disabilities, peer tutoring has been effective in teaching spelling (Mandoli, Mandoli, & McLaughlin, 1982) and math (Phillips et al., 1993). High school students with learning disabilities and behavior disorders have improved their test scores (Bell et al., 1990; Maheady, Sacca, & Harper, 1988), and demonstrated increased on-task behavior (Haisley, Tell, & Andrews, 1981) after participation in structured peer tutoring sessions.

For students with autism, research has documented increased skills in reading, language, and math, as well as increased free-time social interactions (Kamps, 1992; Kamps, Locke, Delquandri, & Hall, 1989; Kamps, Barbetta, Leonard, & Delquandri, 1994) after implementation of peer tutoring programs. Peers of students with severe multiple handicaps have effectively assisted in teaching motor and social responses (Brady, Martin, Williams, & Burta, 1991).

Direct instruction and errorless learning. The efficacy of direct instruction in producing academic gains for students with learning disabilities in both resource rooms and regular classes has been demonstrated (Becker, Englemann, Carnine, & Rhine, 1981; Greenwood, Carta, Arreaga-Mayer, & Rager, 1991 [cited in Bulgren & Carta, 1992]).

In a unique study, Logan and his colleagues (Logan, Lavine, Piperno, Uggla, Hartley, Nee, & Diaz, 1994) tested the ability of general education teachers to teach sight words to students with mental retardation in brief one-to-one instructional sessions. Students were taught sight words under two conditions: by general education teachers using an error-correction procedure, and by special education teachers who used an errorless learning approach. Sight word acquisition was nearly equivalent under both conditions. Logan et al. (1994) hypothesized that the process of collecting, report, and analyzing data for the study facilitated the general education teachers' ability to instruct the students, as their rate of success in teaching sight words increased during the course of the study with only minimal intervention or training.

Self-monitoring. Several researchers have investigated ways to assist students with learning disabilities to compensate for their distractibility, thereby enhancing their academic engagement and subsequent learning. For example, self-monitoring has been shown to improve both students' on-task behavior (Prater, Hogan, & Miller, 1992; Rooney, 1984) and their academic skills in mainstream classrooms (Prater et al., 1992).

References

- Alves, A. J., & Gottlieb, J. (1986). Teacher interactions with mainstreamed handicapped students and their nonhandicapped peers. Learning Disability Quarterly, 8, 77-83.
- Anderson, C. S. (1982). The search for school climate: A review of the research. Review of Educational Research, 52, 368-420.
- Baker, J., & Zigmond, N. (1990, April). Mainstreaming learning disabled students: The impact on regular education students and teachers. Paper presented at the Annual Meeting of the American Educational Research Association, Boston, MA. (ERIC Document Reproduction Service No. ED320373)
- Bass, M. B. (1981). Special education inservice priorities for regular educators. (ERIC Document Reproduction Service No. ED 231162)
- Becker, W. C., Englemann, S., Carnine, D. W., & Rhine, W. R. (1981). Direct Instruction Model. In W. R. Thine (Ed.), Making schools more effective: New directions from Follow Through (pp. 95-154). New York : Academic Press.
- Bell, K., et al. (1990). Facilitating mainstreaming of students with behavioral disorders using classwide peer tutoring. School Psychology Review, 19(4), 564-573.
- Bender, W. N. (1985). Differential diagnoses based on the task-related behavior of learning disabled and low-achieving adolescents. Learning Disability Quarterly, 8, 261-266.
- Bender, W. N., & Ukeje, I. C. (1989). Instructional strategies in mainstream classrooms: Prediction of the strategies teacher select. Remedial and Special Education, 10(2), 23-30.
- Brady, M. P., Swank, P. R., Taylor, R. D., & Freiberg, J. (1992). Teacher interactions in mainstream social studies and science classes. Exceptional Children, 58, 530-540.
- Brady, M. P., & Taylor, R. D. (1989). Instructional consequences in mainstreamed middle school classes: Reinforcement and corrections. Remedial and Special Education, 10(2), 31-36.
- Bulle, A. R., Barton, L. E., Barton, C. L., & Wharton, D. L. (1983). A comparison of teacher time spent with physically handicapped and able-bodied students. Exceptional Children, 49(6), 543-545.
- Bulgren, J. A., & Carta, J. J. (1992). Examining the instructional contexts of students with learning disabilities. Exceptional Children, 59(3), 182-191.
- Byrd, D. E. (1990). Peer tutoring with the learning disabled: A critical review. Journal of Educational Research, 84(2), 115-118.

- Chow, S. H., et al. (1980). A study of academic learning time of mainstreamed handicapped students. Final Report. Berkeley, CA: Far West Laboratory for Educational Research and Development. (ERIC Document Reproduction Service No. ED199990).
- Clark, D. L., & Astuto, T. A. (1994). Redirecting reform: Challenges to popular assumptions about teachers and students. Phi Delta Kappan, 75, 513-520.
- Coates, R. D. (1989). The Regular Education Initiative and opinions of regular classroom teachers. Journal of Learning Disabilities, 22, 523-536.
- Cole, D. A., & Meyer, L. H. (1991). Social integration and severe disabilities: A longitudinal analysis of child outcomes. Journal of Special Education, 25(3), 340-351.
- Diebold, M. H., & Trentham, L. L. (1987). Special educator predictions of regular class teacher attitudes concerning mainstreaming. Teacher Education and Special Education, 10(1), 19-25.
- Dyer, R. (1992). How regular classroom teachers make instructional adaptations for mainstreamed students with mental retardation. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Blacksburg.
- Ferguson, D. L., Meyer, G., Jeanchild, L., Juniper, L., & Zingo, J. (1992). Figuring out what to do with the grownups: How teachers make inclusion "work" for students with disabilities. Journal of the Association for Persons with Severe Handicaps, 17, 218-226.
- Fraser, B. J., & Walberg, H. J. (1991). Educational environments: Evaluation, antecedents, and consequences. NY: Pergamon.
- Friedman, D., Cancelli, A., Yoshida, R. (1988). Academic engagement of elementary school children with learning disabilities. Journal of School Psychology, 26(4), 327-340.
- Fuchs, L. S., Fuchs, D., & Bishop, N. (1992). Instructional adaptation for students at risk. Journal of Educational Research, 86(2), 70-84.
- Giangreco, M., Dennis, R., Cloninger, C., Edelman, S., & Schattman, R. (1993). "I've counted Jon": Transformational experiences of teachers educating students with disabilities. Exceptional Children, 59(4), 359-372.
- Glomb, N. K., & Morgan, D. P. (1991). Resource rooms teachers' use of strategies that promote the success of handicapped students in regular classrooms. Journal of Special Education, 25, 221-235.
- Good, T. L., & Brophy, J. E. (1986). School effects. In M. C. Wittrock (Ed.), Handbook of research on teaching (3rd ed.). New York: Macmillan.

- Graden, J., Thurlow, M., & Ysseldyke, J. (1983). When are students most academically engaged? Student's academic responding time in different instructional ecologies. (IRLD Report #119). Minneapolis, MN: University of Minnesota. (ERIC Document Reproduction Service No. ED237214)
- Greenwood, C. R. (1991). Longitudinal analysis of time, engagement, and achievement in at-risk versus non-risk students. Exceptional Children, *57*(6), 521-535.
- Haisley, F. B., Tell, C. A., & Andrews, J. (1981). Peers as tutors in the mainstream: Training "teachers" of handicapped adolescents. Journal of Learning Disabilities, *14*(4), 224-226.
- Hollowood, T. M., Salisbury, C L., Rainforth, B., & Palombaro, M. M. (in press). Use of instructional time in classrooms serving students with and without severe disabilities. Exceptional Children.
- Ivarie, J., Hogue, D., & Brulle, A. R. (1984). An investigation of mainstream teacher time spent with students labeled learning disabled. Exceptional Children, *51*, 142-149.
- Janney, R. E., & Snell, M. E. (1994). How elementary school teachers include students with extensive disabilities in general education classes: Accommodating difference to achieve belonging. Manuscript submitted for publication.
- Janney, R. E., Snell, M. E., Beers, M., & Raynes, M. (in press a). Integrating students with moderate and severe disabilities into general education classes: Advice from teachers and administrators. Exceptional Children.
- Janney, R. E., Snell, M. E., Beers, M., & Raynes, M. (in press b). Integrating students with moderate and severe disabilities: Classroom teachers' beliefs and attitudes about implementing an educational change. Educational Administration Quarterly.
- Jenkins, J. R., Jewell, M., Leicester, N., O'Conner, R. E., Jenkins, L. M., & Troutner, N. M. (1994). Accommodations for individual differences without classroom ability grouping: An experiment in school restructuring. Exceptional Children, *60*(4), 344-358.
- Johnson, L. J., & Pugach, M. C. (1990). Classroom teachers' views of intervention strategies for learning and behavior problems: Which are reasonable and how frequently are they used? Journal of Special Education, *24*, 69-84.
- Johnson, G. S., & Germinario, V. (1985). Relationship between teacher decisional status and loyalty to the principal. Journal of Educational Administration, *23*(1), 91-105.
- Kamps, D. M. (1992). Teaching social skills to students with autism to increase peer interactions in an integrated first-grade classroom. Journal of Applied Behavior Analysis, *25*, 281-288.

- Kamps, D. M., Barbetta, P. M., Leonard, B. R., & Delquadri, J. (1994). Classwide peer tutoring: An integration strategy to improve reading skills and promote peer interactions among students with autism and general education peers. Journal of Applied Behavior Analysis, 27(1), 49-61.
- Kamps, D. M., Locke, P., Delquadri, J., & Hall, R. V. (1989). Increasing academic skills of students with autism using fifth grade peers as tutors. Education and Treatment of Children, 12, 38-51.
- Knoff, H. M. (1985). Attitudes toward mainstreaming: A status report and comparison of regular and special educators in New York and Massachusetts. Psychology in the Schools, 22, 411-418.
- Kosleski, E. B., & Jackson, L. (1993). Taylor's story: Full inclusion in her neighborhood elementary school. Exceptionality, 4, 153-175.
- Larrivee, B. (1986). Effective teaching for mainstreamed students is effective teaching for all students. Teacher Education and Special Education, 9(4), 173-179.
- Lew, M., Mesch, D., Johnson, D. W., & Johnson, R. (1986). Components of cooperative learning: Effects of collaborative skills and academic group contingencies on achievement and mainstreaming. Contemporary Educational Psychology, 11(3), 229-239.
- Logan, K., & Holland, L. (1994). Sight word acquisition in teacher-directed small groups: Learning with peers without disabilities and peers with disabilities. Unpublished manuscript. Gwinnett County, Georgia, Public Schools.
- Logan, K., Lavine, B. A., Piperno, M., Uggla, N., Hartley, P., Nee, K., & Diaz, E. (1994). A comparison of sight word learning of students with moderate disabilities when taught by regular and special education teachers. Unpublished manuscript. Gwinnett County, Georgia, Public Schools.
- Logan, K. R., Malone, M. R., & Rankin, D. H. (1994). What is happening in inclusive elementary classrooms: A data-based report. Unpublished manuscript. Gwinnett County, Georgia, Public Schools.
- Logan, K. R., & Rankin, D. H. (1994). Tentative project results: Project STEPS. (OSERS Grant No. HO86D2002). Gwinnett County Public Schools, Lawrenceville, GA.
- Madden, N. A., & Slavin, R. E. (1984). Cooperative learning and social acceptance of mainstreamed academically handicapped students. Journal of Special Education.
- Maheady, L., Sacca, M. K., & Harper, G. F. (1988). Classwide peer tutoring with mildly handicapped high school students. Exceptional Children, 55, 52-59.

- Mandoli, M., Mandoli, P., & McLaughlin, T. F. (1982). Effects of same-age peer tutoring on the spelling performance of a mainstreamed LD student. Learning Disability Quarterly, 5(2), 185-189.
- Myles, B. S., & Simpson, R. L. (1989). Regular educators' modification preferences for mainstreaming mildly handicapped children. Journal of Special Education, 22(4), 479-489.
- Phillips, N. B., et al. (1993). Combining classwide curriculum-based measurement and peer tutoring to help general educators provide adaptive education. Learning Disabilities Research and Practice, 8(3), 148-156.
- Prater, M. A., Hogan, S., & Miller, S. R. (1992). Using self-monitoring to improve on-task behavior and academic skills of an adolescent with mild handicaps across special and regular education settings. Education and Treatment of Children, 15(1), 43-55.
- Putnam, J. W., Rynders, J. E., Johnson, R. T., & Johnson, D. W. (1989). Collaborative skill instruction for promoting positive interactions between mentally handicapped and nonhandicapped children. Exceptional Children, 55(6), 550-557.
- Rich, H. L., & Ross, S. M. (1989). Students' time on learning tasks in special education. Exceptional Children, 55(6), 508-515.
- Rooney, K. J. (1984). Self-recording of attention by learning disabled students in the regular classroom. Journal of Learning Disabilities, 17, 360-364.
- Salisbury, C. L., Palombaro, M. M., & Hollowood, T. M. (1993). On the nature and change of an inclusive elementary school. Journal of the Association for Persons with Severe Handicaps, 18, 75-84.
- Schattman, R. (1992). The Franklin-Northwest Supervisory Union: A case study of an inclusive school system. In R. Villa, J. S. Thousand, W. Stainback, & S. Stainback (Eds.), Restructuring for caring and effective education (pp. 143-159). Baltimore: Paul H. Brookes.
- Schumm, J. S., & Vaughn, S. (1991). Making adaptations for mainstreamed students: General classroom teachers' perspectives. Remedial and Special Education, 12(4), 18-27.
- Semmel, M. I., Abernathy, T. V., Butera, G., & Lesar, S. (1991). Teacher perceptions of the regular education initiative. Exceptional Children, 58, 9-24.
- Slate, J. R., & Saudargas, R. A. (1986). Teachers' behavior toward LD and non-LD children: A strategy for change. Journal of Learning Disabilities, 18(3), 139-144.
- Slate, J. R., & Saudargas, R. (1987). Classroom behaviors of LD, seriously emotionally disturbed, and average children: A sequential analysis. Learning Disability Quarterly, 10, 125-134.

- Slavin, R. E., Madden, N. A., & Leavey, M. (1984). Effects of cooperative learning and individualized instruction on mainstreamed students. Exceptional Children, 50, 433-434.
- Thompson, R., White, K. R., & Morgan, D. P. (1982). Teacher-student interaction patterns with mainstreamed mildly handicapped students. American Educational Research Journal, 19(2), 220-236.
- Thompson, R., White, K. R., & Morgan, D. P. (1984). Teacher-student interaction patterns in mainstreamed classrooms. Remedial and Special Education, 5(6), 51-61.
- Thurlow, M. L., Graden, J., Greener, J., & Ysseldyke, J. (1983). LD and non-LD students' opportunities to learn. Learning Disability Quarterly, 6, 172-183.
- Thurlow, M. L., Ysseldyke, J. E., Graden, J., & Algozzine, B. (1984). Opportunity to learn for LD students receiving different levels of special education services. Learning Disability Quarterly, 7, 55-67.
- Thurlow, M. W., Ysseldyke, J. E., Wotruba, J. W., & Algozzine, B. (1993). Student and instructional outcomes under varying student-teacher ratios in special education. Elementary School Journal, 93, 305-320.
- York, J., Vandercook, T., MacDonald, C., Heise-Neff, C., & Caughey, E. (1992). Feedback about integrating middle-school students with severe disabilities in general education classes. Exceptional Children, 58, 244-258.
- Ysseldyke, J. E., Christenson, S., Thurlow, M., & Skiba, R. (1987). Academic engagement and active responding of mentally retarded, learning disabled, emotionally disturbed, and non-handicapped elementary students. (Report No. 4). Minneapolis, MN: University of Minnesota, Instructional Alternatives Project. (ERIC Document Reproduction Service No. ED293264)
- Ysseldyke, J. E., Thurlow, M. L., Christenson, S. L., & McVicar, R. (1988). Instructional grouping arrangements used with mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students. Journal of Educational Research, 81, 305-311.
- Ysseldyke, J. E., Thurlow, M., Christenson, S. L., & Weiss, J. (1987). Time allocated to instruction of mentally retarded, learning disabled, emotionally disturbed, and nonhandicapped elementary students. Journal of Special Education, 21, 43-55.
- Ysseldyke, J. E., Thurlow, M. L., Wotruba, J. W., & Nania, P. A. (1990, Summer). Instructional arrangements: Perceptions from general education. Teaching Exceptional Children, 4-8.

CHAPTER III

REPORT OF FOCUS GROUP RESEARCH

This chapter presents the findings of the focus group research conducted by the Virginia Department of Education (VADOE) as part of its efforts to study the effects of integrating students with disabilities in general education classrooms in the Commonwealth's public schools. The focus group sessions were conducted with an advisory panel convened to assist the VADOE with this project. The purpose of the focus group research was to gain a greater understanding of the ways that various groups (e.g., educators, parents, administrators, agency representatives) think and feel about the integration of students with disabilities into general education classrooms.

METHOD

Focus group research is a method for exploring a topic and generating hypothesis, not a suitable method for generating predictions or forming conclusions.

For the present research, participants were the 17-member HJR 102 Advisory Panel, and the moderators were the authors of this report. The Advisory Panel met on July 22, 1994, at the University of Virginia Center in Richmond. One of the moderators introduced the panel to the focus group concept and process. The VADOE's "working definition" of integration was presented: "Integration refers to teaching Individualized Education Program (IEP) objectives within general education settings." Participants were assured that the purpose of the focus groups was not to provide answers, reach agreement, or debate positions. Instead, they were encouraged to freely express their thoughts, feelings, ideas, and experiences across a broad range of considerations relevant to integration.

Participants then were divided into three groups representing school-based, division-based, and state-wide interests. Nine stimulus questions (based on the requirements of HJR 102) were presented to the participants and discussed in a pre-determined sequence. Moderators recorded each comment on chart paper but did not participate in the discussion, other than to ask for clarification of participants' comments.

Following the focus group meeting, the comments were transcribed and sorted into categories. Nine primary themes emerged which represent participants' beliefs and attitudes about the critical considerations for integration. Each of these themes is summarized briefly below.

RESPONSE SUMMARY

Overarching Concerns: Flexibility and Communication

Two themes--flexibility and communication--pertained to virtually every aspect of integration discussed by participants. These themes related both to the process of changing from separate to integrated special education programs and to the design and delivery of services and supports of individual students. Participants expressed the need for local administrators, parents, teachers, and support staff to have (and use) flexibility in making decisions about individual students' educational programs, allocating staff and other resources, developing and implementing staff development activities, and designing curricula and instructional activities. One participant expressed the desire for "no boxes" into which students had to be fit. Another participant commented: "Doing the same thing for everyone isn't equal."

Communication was the second overarching theme. Participants spoke of improving parents', educators', school board members', and the public's understanding of integration through improved "PR" efforts. There was much discussion of the confusion that has resulted due to several factors, including: (a) the variety of practices which occur under the rubric of "integration"--some being more extensive reforms than others; and (b) the different "mindsets" which people have about their schools, children, and learning as a result of their training and experience. Several participants related that experiences where teachers and students were not properly supported have given integration a bad name in some people's minds. Effective communication may change those perceptions, and be an important tool in the process of designing and delivering integrated services for individual students.

Expectations and Attitudes

Participants noted that people's expectations and attitudes may function as either incentives or disincentives for inclusive service delivery. Positive attitudes about change and overall professionalism of teachers were seen as supportive of integration. Respondents cited "belief in the potential of all students," "willingness to collaborate," and "an openness to try new things" as positive predispositions. Among the barriers to inclusion were "fear of the unknown," "turf issues," "mandated collaboration," and "frustration with integration done poorly." Several participants also commented that special education's protective, "Statue of Liberty" mentality is an obstacle to greater integration.

Leadership

Participants noted that leadership and policy at all levels influence provision of more integrated services. Overall there was a call for greater flexibility and support for those willing to try innovative approaches. "Administrators must have a vision and take the first steps," and they should "expect collaboration as part of the teachers' job."

Categorical funding has created the impression that "dumping into special education accesses federal resources," and the state's "case load standards appear to provide more incentives for self-contained services which use a pull-out model." Regulations governing how special education students are "counted" in different settings are unclear and poorly understood. Several respondents requested a "weighting system" to adjust class size for inclusion. Categorical teacher certification was also cited as a barrier.

Participants raised many questions about the state's position on integration and the level of assistance the Virginia Department of Education will provide for schools. In particular, participants asked about release of the report "Learning Together," extension of the successful IPOP model, and compatibility of inclusion with the Governor's initiatives such as "Champion Schools" and the Strike Force recommendations. "How monitoring by the U.S. Department of Education fits into all this" was also an issue.

Program Planning

Participants viewed "thorough" and "thoughtful" planning as essential to the "long-term success" of integrated programs. A broad array of program planning issues that teams need to address was mentioned. Some of these include: staff development and ongoing support, scheduling (e.g., students, paraprofessionals, co-teachers, planning time, and physical space requirements). In addition, participants noted that program planners need to design integrated programs with the safety of all students in mind. Efforts need to be undertaken to coordinate specific student learning needs (e.g., use of a wheelchair, use of an audio trainer, post-secondary education goals) with existing environmental considerations (e.g., crowded hallways, noisy air conditioning systems, technology classes where noise and dust levels are high, limited remodeling budgets).

A number of the program planning concerns were related to funding. Many participants indicated that adequate funding will be required to provide "appropriate student support" and allay "fears" of professionals and families that students with disabilities may be "dumped without support" into mainstream classrooms "to save money." Participants also noted that local, state, and federal policies and procedures may need revision to ensure that designated special education dollars follow identified students into mainstream classrooms at appropriate support levels.

Participants identified a number of potential fiscal incentives and disincentives for integrated program development. These programs may: reduce long-term support costs by producing more independent citizens, provide higher quality educational experiences for all students, focus new classroom support on low-achieving and/or students "at risk," and engender better skills and attitudes among future taxpayers because of the strong emphasis on social skills goals (e.g., teaming, communicating, cooperating) in integrated settings. Potential disincentives include: categorical funding may limit program planner's options; participants perceive that integrated programs are not adequately funded under the current methodology; and many questions remain unanswered about the actual costs of integrated programs. Some of the participants believe that integrated programs cost more because of the additional paraprofessionals, co-teachers, and planning time requirements, while others think that these programs cost less because of a reduction in separate self-contained

classrooms, reduced transportation, and specialists working primarily as consultants rather than direct service providers.

All three groups stressed that additional public education funding is needed to provide all students with smaller, better classes. One participant noted, "Allocating insufficient resources is always a struggle." Participants commented that, given limited resources, support services need to be coordinated to meet as the individual, small group, and classroom needs. Participants raised questions regarding the appropriate allocation of limited resources: "What level of intensity of services is needed?" "What are the learning priorities for students in these situations?" "What are the social learning priorities for these students?"

Some of the program planning recommendations of participants include: assigning students with disabilities to classrooms in their neighborhood schools, using "natural proportions" when developing heterogeneous classroom rosters, and providing professional development opportunities (e.g., discussions, site visits, ongoing staff workshops, classroom observations, consultant time) for team members to develop the commitment and program planning skills needed to provide appropriate mainstream learning for all students through a "continuum of support" services model.

Teamwork/Collaboration

During the focus group discussions, participants frequently referred to "collaboration." Participants noted that new programs need be developed by "teams working together" and representing the unique interests of the various "stakeholders" (e.g., teachers, specialists, building level administrators, central office administrators, parents, students with disabilities, typical peers, community agency representatives). Such teamwork would help ensure "fair" and "appropriate" decisions and safeguard the "educational equity" of all students.

Many participants cited the importance of students and families as team members in the development of integrated programs. Numerous participant comments were made about the importance of student involvement. Inclusive programs provide opportunities for students with disabilities and their peers to support each other and to learn together through ongoing academic and social experiences. One participant noted that integrated programs fail without support from the general and special education students. Participants indicated that students change their perceptions of themselves and their peers as a result of their participation.

Family involvement facilitates the discussion of issues, concerns, and suggestions related to student needs and appropriate support services. Participant comments indicated that home-school collaboration can produce "better understanding" and "program support." As one parent participant states, "Teachers and administrators need to understand that the starting point for all students is the general education classroom and that is the first place to start in making placement decisions . . . Administrators must understand that the desire

for better LRE opportunities is not going away -- the demands are only going to increase in the future."

Other benefits of ongoing collaboration and teamwork include the development of "respect for each other's turf." As professionals and families becoming more aware of each other's contributions and skills, new understandings can "reduce potential turf conflicts," and help collaborators develop a broader sense of "educational responsibility" for all students, not just the ones they have traditionally served. Participants also indicated that while teamwork and collaboration are important, they "are not easy" to achieve because of limited time, a lack of administrative support, poor communication skills, and differences in professional philosophy. As one focus group member noted, "For some people, on both sides, this is a highly emotional issue . . . not just a logical issue. Because of that, lots of problems exist." Participants stressed that teams need ongoing "opportunities" to develop skills and time to collaborate with each other.

Participants indicated that decision-making teams were needed at all levels of public education (e.g., building, division, state, and federal) to address various program development issues. Finally, they noted that teamwork and collaboration were needed within teams and across teams to ensure understanding, program support, service delivery and coordination.

Staff Development

Participants viewed effective, ongoing staff development as a key to integration. They mentioned providing staff at all levels (and also parents and nondisabled peers) with a variety of opportunities to learn from one another and from outside trainers. Suggested topics for staff development sessions included: what integration is and is not, team building, collaborative skills, facilitating friendships, communication skills (including skills for communicating with parents), conflict resolution, instructional strategies, classroom adaptations, and problem-solving skills. Ongoing workshops and individualized training sessions which provide opportunities for problem-solving, dialogue, and feedback on teachers' attempts to use their new skills were suggested. The value of visiting other integrated schools was also mentioned.

Impact on Students

Integration has both short- and long-term effects on students with disabilities as well as their general education peers. Respondents indicated that these effects could be positive or negative; integration was seen as having potential and/or actual benefits as well as risks to both populations of students. Positive considerations included opportunities to learn with their peers, acceptance by peers, active participation in the school community, and "keeping special students from feeling special or different." Participants saw "all students (including those at risk) learning from one another," changing their perceptions of each other through

their experiences, and benefitting from special education resources, modifications, and teachers.

Suggestions provided by focus group participants included preparing general education peers to work with students with disabilities, to understand exceptions allowed for special students, and to be involved in program planning, "buddy systems," and advocacy. "Starting with children as young as possible" and the need for "ongoing group meetings among students" were also noted.

Concerns related to the impact of integration on students included the belief of some parents, teachers, and administrators that special education students would "slow down" or "disrupt" the education of regular students. Discipline; lack of support for students with behavior disorders, medical problems, and severe needs; and student rights issues (e.g., to a safe environment, an appropriate education, confidentiality) were additional considerations. Questions were raised about how the resources needed to support special needs students in general education would affect other (e.g., gifted, at-risk, average) students.

Curriculum and Instruction

This theme dealt with meeting social, academic, and other needs of both general and special education students in the context of integrated service delivery. Respondents noted that practices such as "helping all students regardless of labels" and making "instructional modifications to suit each child, including general education students" facilitated integration. A developmental ("not just disability") focus and identification of learning and social priorities were noted. The "student's total program needs to be considered" -- present as well as future needs.

Respondents identified a range of specific needs including:

- Age-appropriate programming
- Help for older students to be included in the post-school community
- Adaptations and accommodations
- Different criteria and expectations for different students
- A wide variety of materials, equipment, and personnel (e.g., assisted listening devices, aides, interpreters, teachers), especially for students with moderate/severe needs for whom adaptations may not be enough.
- More meaningful assessment/performance assessment

- More varied group practices and involving all students supporting one another
- More meaningful learning experiences/real world applications for learning
- Varied teaching and learning styles
- Curriculum adapted to meet students' IEP goals and objectives
- Focus on continuous progress instead of one curriculum/pace for all
- Functional IEPs relevant to the general classroom
- Support for medical needs (e.g., nurses, equipment)
- Related services

It was noted that "support services need coordination to meet individual needs, small group needs, and general classroom needs". Several respondents questioned how to meet the needs of students (especially those with moderate/severe disabilities) given limited resources, and the extent of federal, state, and local support to provide the resources necessary to meet student needs in integrated programs.

CHAPTER IV

REPORT OF VIRGINIA SPECIAL EDUCATION ADVISORY COMMITTEE FOCUS GROUP SESSION

This chapter presents the findings of a focus group session conducted with representatives of the State Special Education Advisory Council as part of the Virginia Department of Education's examination of the effects of integrating students with disabilities into general education classrooms. Council representatives who took part in the focus group session included a school social worker, a parent from an association for children with hearing impairments, a speech-language pathologist, an elementary school principal, a division director of special education, and a local school board member.

Participants were asked to discuss the effects of integrating students with disabilities into general education classes on:

1. curriculum and instruction opportunities for students with and without disabilities;
2. allocation of instructional and support staff;
3. general education class size; and
4. staff development needs.

A moderator from outside the group led the discussion, which lasted for approximately ninety minutes. A second moderator recorded the responses on chart paper. The responses are summarized below.

Response Summary

Overarching Concerns: Flexibility and Communication

Consistent with the findings of the focus group research conducted with the HJR 102 Advisory Panel, participants in this focus group revealed two overarching concerns which pertain to virtually every aspect of integration discussed: flexibility and communication. These two themes were reflected in comments related to the implementation of systems change efforts, student placement, the provision of resources and supports to students and teachers, and curriculum.

Effects of Integration on Curriculum and Instruction Opportunities

In discussing this question, the group emphasized the potential for positive effects of integration for all students and for teachers, given that the right support systems are in place. The discussion focused primarily on the positive effects of integration on students, and on strategies to facilitate the provision of individualized supports in integrated classrooms, although the group also mentioned several potential challenges to quality instruction in integrated classrooms.

Effects on students with disabilities. The group believed that, in general, instructional opportunities increase for students with disabilities in integrated classes. The group listed a sense of belonging, increased self-esteem, and improved social skills as results of the instructional opportunities provided in integrated classes. The challenges to appropriate curriculum and instruction which were mentioned by the group focused on students with more severe disabilities, especially at the secondary level. Three participants cautioned that adapting the high school curriculum may not be feasible for some students, and urged using a flexible curriculum incorporation both general and special education components rather than taking an "all or nothing" approach. Another concern raised for students with severe disabilities was that assigning one-to-one aides may result in the student's being "on an island," rather than truly integrated into the class.

Effects on students without disabilities. The group reported being pleased with the increased assistance that collaborative teaching models provide for students without disabilities, especially those in need of extra help although not identified for special education. They reported that having students with disabilities and special education teachers in the general classroom has increased nondisabled students' understanding of individual differences and decreased behavior problems. One participant noted that some parents of general education students perceive that instructional opportunities for their child will decrease when students with severe disabilities who need a lot of attention are integrated.

Effects on teachers. Several participants indicated that teachers gain enthusiasm for their work when they see the positive results of integration, but also stressed that teachers' enthusiasm may falter if they feel unsupported in their integration efforts.

Facilitators. *Cooperative learning* was the only teaching method specifically mentioned as a facilitator of quality instruction in integrated classes. The group stressed that flexibility in teaching methods was required in order to provide appropriate individualization.

The creation of *collaborative planning* time for teams of teachers was a second facilitator discussed. The group was unanimous in its belief that effective teaching in integrated classrooms requires more planning, especially at the middle and high school levels. Some suggested ways to provide team planning (and co-teaching) time included: block scheduling, changing the timing of the school day to give teachers coordinated planning time, and hiring lunch room aides in elementary schools.

The third type of facilitator discussed by the group was the development of a receptive *climate for change* at the building level. Participants discussed the advantages of "selling" integration not only to teachers, but to parents, and urged creating support in the building for the school program as a whole--not just for the integration effort. One participant recommended improving the child study process in an effort to avoid unnecessary referrals to special education. This participant noted that his school district has indeed experienced reduced referrals since improving the functioning of their child-study teams.

Another participant mentioned that when teachers take the lead to initiate integrated programs, other teachers will follow suit. Another reported that initially, teachers may accept students because they think they will get extra help in their classroom, but that once the child begins to demonstrate growth, the teacher's motivation becomes intrinsic.

Effects of Integration on the Allocation of Instructional and Support Staff

The general response of the group to this question can be summarized as: "It depends." Although integration does not necessarily require more staff, it may require different staffing arrangements, and definitely requires more flexibility in staffing. The following issues and concerns were raised: (1) students with disabilities who are integrated part-time do not always "count" toward general education instructional staff allocation; (2) the need for additional supports for students with disabilities may hinder other change efforts such as initiatives to lower general education class size; (3) students with similar disabilities are sometimes placed in general education classes in groups in order to enable a special education teacher with the appropriate certification to provide support for them there, although integrating students as a group is not best practice; and (4) when resource teachers first start working in integrated classrooms, it can appear that there are fewer teachers, as they spend part of their time in several classrooms and do not have a classroom of their own.

Several participants offered strategies to address these problems. A primary suggestion was to create a system for tying staffing to the intensity of students' needs, rather than simply to numbers of students. A second recommended strategy was to place support personnel (e.g., psychologists and social workers) in schools instead of in central office so that they can provide more support directly to teachers and students. A third strategy suggested was to assign each special education and remedial teacher to three or four general education classrooms at the same grade level.

Effects of Integration on General Education Class Size

Responses to this question varied, with participants indicating that general class size sometimes stays the same, and sometimes increases when schools are transitioning from traditional to integrated services. One participant mentioned that reduced class size can be an incentive for general education teachers to receive special education students.

Effects of Integration on Staff Development Needs

Effective staff development was viewed as critical to the success of integrated programming. Suggested strategies included using team meetings to problem-solve and provide information before moving forward with integration, having teachers identify their own training needs, and using school psychologists and social workers to conduct disability awareness activities for staff and students before placing students with disabilities in general education classes.

CHAPTER V

SPECIAL EDUCATION FUNDING

Local special education programs are funded with local, state and federal funds. In 1994-95, approximately 67% of the cost for these programs was supported with local funds. The state share of the cost for the programs was 24% and the federal funds accounted for 9%.

State Funding: Standards of Quality (SOQ)

Local school divisions receive the majority of the state funding for special education programs from the Special Education SOQ account. This program provides assistance to local school divisions for the salary cost for special education teacher positions required in addition to the instructional positions funded from the Basic Aid account.

The number of special education instructional positions are calculated for each school division utilizing the December 1 special education child count and the caseload standards established for each disability category by the Board of Education. The salary cost for the required number of positions is calculated utilizing the statewide prevailing salary amount approved by the General Assembly. The state/local share of the calculated salary cost is determined according to a locality's composite index of local ability to pay. In 1996-98, the Department of Education's budget included \$319.5 million for this program.

It cannot be determined at this time if the current state funding methodology for special education provides incentives or disincentives for the development of integrated programs. One of the key variables for determining state special education fund allocations for each locality is the information provided on the December 1 child count. This report lists the percent of time during the school day that special education services are provided to a student. The amount of special education being provided can be ambiguous, however, when services are provided in integrated settings. Many localities have interpreted special education to mean the amount of time a child spends with a special education teacher. This interpretation may result in inaccurate data being provided on the December 1 child count which would generate funding for more or fewer teachers than required to meet the special education program standards. More detailed reporting requirements would be necessary to determine if the state funding method provides incentives or disincentives.

In addition, integrated instruction may require a need for additional personnel that are not recognized by the current funding formula. For example, additional instructional aides are often needed, particularly in the initial stages of integrated instruction. Also, the development of these programs may reduce the number of required of special education teachers.

Federal Funding:

Federal funds for special education are awarded to the state through Part B of the Individuals with Disabilities Education Act. Each state is awarded an annual grant based on its prior year December 1 count of children receiving special education and related services. Regardless of the wealth of a locality or the disabilities of its students, each school division receives the same dollar amount per child. In 1995-96, localities received \$382 per pupil.

The federal grant awards provided to localities are not impacted by the way the students with disabilities are educated. Therefore, there is no incentive or disincentive for integrated program development provided by these funds.

CHAPTER VI FINDINGS AND RECOMMENDATIONS

Effects on Curriculum and Instruction Opportunities for Students With and Without Disabilities

Findings indicate that curriculum and instruction opportunities for students both with and without disabilities is at least equal to and frequently better when students with disabilities are educated appropriately in classes alongside their peers without disabilities. While little empirical evidence exists, it seems that outcomes for both groups of students are often better when students are educated appropriately in integrated environments. It has been suggested that several factors influence these positive results.

The additional support provided to the general education classrooms when students with disabilities are placed in these settings often have positive benefits to the entire class. This support may include an assistant for part or all of the school day, consultation and collaboration among specialists, and additional professional staff development opportunities which benefit the entire class.

Instructional strategies are often modified in general education settings when students with disabilities are included in these classes. These strategies usually result in more varied instructional presentation and may include such strategies as peer tutoring, cooperative learning groups, and the use of technology. The individualization needed for the student(s) with disabilities can also be more effective for other learners and is often generalized for use with the entire class. This seems to have positive benefits on all students. On the other hand, students with disabilities who are accustomed to smaller classes must be helped to adjust to the demands of classrooms with more children.

The appropriate and successful integration of students with disabilities often requires building mechanisms to support the teachers involved. This may include planning time for the general education classroom teacher with specialists who can collaboratively problem-solve. Teacher assistance teams have been shown to be effective in some schools. Collaborative teaching teams is another effective strategy. Common to all of these approaches is the ability of those involved to communicate effectively about successes and problems and to plan together.

For students with disabilities, goals and objectives listed in individualized education programs (IEPs) often are more advanced and appropriate to the child's chronological age and learning expectations. Students with disabilities who do not have cognitive impairments are often expected to achieve at or near the same academic goals expected of the rest of the class. Students with significant cognitive disabilities are often expected to achieve communication and social goals, along with functional objectives, which will be critical to success as a working, independent adult.

The appropriate integration of students with disabilities does not and should not result in lesser learning expectations for those without disabilities. In fact, some findings indicate that students without disabilities achieve better results in integrated settings. This likely results from the increased individualization and/or variety of instructional presentation methods which occur. It is important to note, however, that when appropriate mechanisms, supports, and adaptations are not provided, curriculum and instruction for those with and without disabilities can be inadequate.

Effects on the Allocation of Instructional and Support Staff

Allocation of instructional and support staff is regulated by Virginia's Special Education Program Standards. Virginia's licensure requirements are categorical, and, therefore, students are assigned to special education teachers with endorsements which correspond to their specific category of disability. For example, a student with a specific learning disability is assigned to a teacher with a licensure endorsement of specific learning disabilities. In addition, class size standards are specified in the Program Standards which mandate a maximum number of students per teacher and assistant based upon two levels of services to be provided. These levels are delineated as less than 50 percent and 50 percent or more time spent in special education. Although requests for waivers to these regulations may be submitted to the Department of Education by a locality with a rationale, local allocation of staff frequently matches the state's requirements.

Federal law favors the use of the child's neighborhood school, and the literature endorses the use of a student's neighborhood school to effectively educate students in integrated settings. Educating students with disabilities with their neighborhood peers seems to result in learning and relationships which better transfer into home and neighborhood settings. The use of Virginia's Special Education Program Standards provides a hurdle to the use of this practice. These standards were designed to promote the practice of geographically grouping students of like-disabilities as a resource-efficient practice. While similar practices have been and continue to be used in many parts of the United States, parents and advocacy groups are beginning to challenge the practice from a civil rights access perspective.

Findings indicate that local flexibility of staff is needed when appropriately educating students with disabilities in general education settings. One strategy employed by localities to overcome the state's regulatory hurdle has been to require teachers to acquire multiple endorsements. When teachers have a number of endorsements, they may serve students with a variety of disabilities. Schools are then able to serve students in their buildings with full-time specialists on their staffs. Another strategy has been the use of itinerant teachers who are responsible for students in several schools. The advantages of having the specialists on-site are apparent. The ability to provide

additional support at times of unexpected need is critical and can be more readily obtained when specialists are full-time staff in a school.

While many believe that categorical licensure and Special Education Program Standards are federally required, they are not. This is an approach which Virginia has historically taken. The state Board and Department of Education are currently reviewing Virginia's requirements for teacher licensure for possible revision.

Effects on General Education Class Size

General education class size is regulated by the Standards of Quality which specify maximum class sizes at §22.1-253.13:1.,G, and states the following:

"Licensed instructional personnel shall be assigned by each school board in a manner that produces divisionwide ratios of students in average daily membership to full-time equivalent teaching positions, excluding special education teachers, principals, assistant principals, counselors, and librarians, that are not greater than the following ratios:

- (i) twenty-five to one in kindergarten with no class being larger than thirty students; if the average daily membership in any kindergarten class exceeds twenty-five pupils, a full-time teacher's aide shall be assigned to the class;
- (ii) twenty-four to one in grade one with no class being larger than thirty students;
- (iii) twenty-five to one in grades two and three with no class being larger than thirty students;
- (iv) twenty-five to one in grades four through six with no class being larger than thirty five students; and
- (v) twenty-four to one in English classes in grades six through twelve. In addition, instructional personnel shall be assigned by each school board in a manner that produces schoolwide ratios of students in average daily memberships to full-time equivalent teaching positions of twenty-five to one in middle and high schools."

It is important to note that while special education teachers are excluded, along with other personnel, from the pupil-teacher ratios, all students are included. Therefore, the integration of students with disabilities in general education settings does not allow schools to go beyond these maximums to include students with disabilities in these settings.

In practice, many localities in Virginia operate at pupil-teacher ratios below those required by the State. When this practice exists, it is possible that localities exceed their own official or unofficial policies to achieve integrated settings for students with disabilities. The literature indicates that a number of different practices are being used

nationally to diffuse local concerns about increased class sizes when students with disabilities begin to be educated in general education classrooms. These practices include weighting students with disabilities so that these students are counted as more than one student, providing classroom assistants for integrated settings, and decreasing the class sizes for those general education teachers who are assigned students with disabilities.

Whenever students who have been served traditionally in pull-out programs are suddenly included into the general education settings, certainly increased class sizes will be felt. Although Virginia's Standards of Quality provide limits and, in effect, require spaces for students with disabilities in general education settings, the reality is that changing practices may result in sudden increases in typical class sizes when localities have operated below the standard set by the State. The Individuals with Disabilities Education Act has required since 1975 the placement of students with disabilities in the least restrictive environment. This means that students are to be segregated only when their needs cannot be met in the general education setting with appropriate modifications. Recent interpretations and changing philosophy have created sudden impacts in some localities, including increased class sizes. This should be viewed as a local issue as schools work to improve the achievement of all students while meeting the requirements of federal law. The Department has staff available who meet regularly with local special education administrators to provide technical assistance should a locality need it.

Effects on Staff Development Requirements

As schools are moving to site-based management, including responsibilities for students with disabilities, school principals are key to appropriately providing environments which are accessible to students with disabilities. This includes appropriate decision-making as well as building and classroom accessibility. It is critical that principals be knowledgeable about the legal requirements of the Individuals with Disabilities Education Act as well as the federal and state regulations which govern this Act. Findings indicate that some principals are not knowledgeable nor see themselves as responsible for the education of these students. Central office administrators are often viewed as the supervisor of these programs.

Findings indicate that teachers need meaningful staff development opportunities in order to effectively integrate students with disabilities in the general education setting. Indications are that this should be on-going and include opportunities prior to changing practices as well as after students are integrated. Staff development needs are as individual as the people involved. In fact, the literature has begun to address the need for "capacity building" as opposed to traditional staff development practices. The difference entails providing opportunities for learning based on individual school needs as opposed to system perceptions. Determining within a school the strengths of the staff and building learning opportunities for staff which will meet the teaching needs of the

school may be a better approach to staff development rather than the traditional "one size fits all" approach often used.

Special education teachers need opportunities to learn more about the general education system and practices. Special education programs have often been operating separately from the general education programs, and special education teachers may know little about the curriculum being provided in general education settings. General education teachers need opportunities to learn about the disabilities of the students to be included in their classrooms as well as specific information about the individual students which may be of use in appropriately designing the classroom to meet the needs of all students. Both groups of teachers need opportunities to learn about and practice collaborative and consultative skills. Teachers have not traditionally been expected to work with other adults to jointly plan and implement educational opportunities for students. These skills cannot be expected to emerge without effective opportunities to learn them.

While not always thought of as staff development, the inclusion of teachers and parents in decisions can provide the ownership, and thus, the motivation to learn what is needed to be successful. Teachers and parents sometimes report that teachers are introduced to a student with a disability as a member of the class on the first day of school. With no preparation or knowledge of a change such as this, motivation to be successful can be damaged with no ill intent.

Recommendations from these findings would indicate that school principals need to be knowledgeable about special education law and the needs of students with disabilities. In addition, schools should

- identify the strengths of the building staff,
- identify the needs of the school including consensus-building with parents and teachers on a school philosophy and knowledge and skills needed,
- provide learning opportunities prior to expecting changing practices,
- provide individualized learning opportunities on an on-going basis, and
- evaluate the staff development provided by assessing teacher competencies and teacher perceptions.

Potential Fiscal Incentives and Disincentives.

The literature is not conclusive on the long-term effects on costs to the increased use of educating students with disabilities in general education classrooms. Some cost studies have shown increased costs, and some have demonstrated decreased costs. The fiscal effects of integrating students with and without disabilities in learning environments depends upon the ways that services have traditionally been provided in localities. The elimination of a significant number of separate special education classrooms as well as a notable decrease in separate transportation systems can offer pivotal incentives to integrated education options. However, if a locality has not traditionally operated a separate transportation system and has an abundance of classrooms available, a negative impact may be realized. In either case, costs for staff development may increase. In the beginning stages of integrated education as a new local practice, success may require an abundance of classroom teaching assistants. There has been some evidence indicating that general education teachers need less support in their classes after a few years due to their increasing comfort levels. Therefore, local fiscal incentives and disincentives play a larger role than state and federal incentives and disincentives.

As noted in Chapter V, Special Education Funding, it cannot be determined if the current state funding methodology for special education provides incentives or disincentives unless more detailed reporting requirements for the December 1 child count are initiated. There is no incentive or disincentive provided by federal funds.

Conclusion

As with any changing practice or reform initiative, much time is needed to address the variety of challenges which may surface. The Virginia Department of Education is aware of the many challenges localities face as they work to integrate appropriately students with disabilities into general education settings and has worked to assist localities with their efforts to integrate students with and without disabilities.

The Department has developed and made available to schools materials entitled ACCEPT: Integrating Students with Disabilities. These materials include a document which provides useful information to schools who are beginning to integrate students with disabilities. Also included are some public awareness materials including a brochure and poster which may be acquired in multiples should a school desire them.

The Department, for a number of years, provided funding to host an annual conference entitled "On Common Ground" which focused on the appropriate integration of students with disabilities. This was open to teachers, parents, and administrators around the state and featured nationally recognized experts as well as practitioners within the state who were working successfully to integrate students with disabilities with their typical neighborhood peers.

The Department of Education was also awarded a five year federal Systems Change grant in the late 1980s which was used to assist selected localities around the state who were interested in changing the way students with disabilities were educated. This effort increased the awareness of the success that could be realized by integrating students with severe disabilities. Localities able to serve as demonstrations to the rest of the state was the result.

A number of Technical Assistance Centers are funded by the Department of Education to provide assistance to teachers and other service providers who have responsibility for students with disabilities. Much of their work over the past few years has focused on the integration of students with disabilities.

Effective communication with local administrators responsible for the education of students with disabilities is critical. To ensure a two-way dialogue, the Department has multiple mechanisms for communicating critical information to local school systems. These include a monthly meeting with representatives from each Superintendent's study regions as well as a designated representative who meets monthly with local special education administrators during their regional meetings.

The State Special Education Advisory Committee, comprised of representatives of more than 25 professional and advocacy groups, meets quarterly. Over the past few years, this committee has focused a number of its meetings on this topic and has provided advice to the Department and the Board.

As previously stated in this report, the Department has studied the current program standards which govern the way that special education programs are staffed. Funding is tied to these standards. Current structures which require categorical identification of students with disabilities and teacher endorsement parallel to these disability categories provide important safeguards but may contribute to fiscal concerns in implementing a more integrated model.

APPENDIX A
COMMITTEE MEMBERS

Committee Members

Patricia Abrams, Associate Director, Office of Special Education

David Aldrich, Specialist, Office of Special Education

Suzanne Creasey, Associate Director, Office of Special Education

John Mitchell, Associate Director, Office of Special Education

Canice Razlaff, Specialist, Office of Special Education

Paul Raskopf, Specialist, Office of Special Education

John Rickman, Specialist, Office of Policy

Kwanghyoung Yi, Specialist, Office of Research and Evaluation

The following participated on a panel which advised the committee:

**Ms. Valerie Barrett, Specialist, Office of Elementary and Middle School Instruction,
Department of Education**

Ms. Marisa Brown, Parent and Chair, State Special Education Advisory Committee

Ms. Linda Dinnauer-Metz, Board for Virginians with Disabilities

Ms. Carol Osborne, Teacher, Henrico County Schools

Mr. J. Richard Plaughter, Principal, James Wood Middle School, Winchester, Va.

Mr. Frank Sparks, Special Education Supervisor, Roanoke County Schools

Mrs. Cherie Tokomoto, Director, Parent Educational Advocacy Training Center

Ms. Mary Young, Teacher, Loudoun County Schools

Ms. Dori Huffman-Latter, Teacher, Charlottesville City Schools

Mr. Steve Waldron, Department of Rights for Virginians with Disabilities

Ms. Anne Williams, Parent

APPENDIX B
HOUSE JOINT RESOLUTION 102

GENERAL ASSEMBLY OF VIRGINIA -- 1994 SESSION

HOUSE JOINT RESOLUTION NO. 102

Requesting the Department of Education to study incentives for integrating students with disabilities into general education classrooms in the Commonwealth's public schools.

Agreed to by the House of Delegates, February 1, 1994

Agreed to by the Senate, March 8, 1994

WHEREAS, the early identification and enrollment of students with disabilities in appropriate instructional programs is the responsibility of local school boards pursuant to the Standards of Quality, and each school division is directed by statute to "provide free and appropriate education, including special education, for the handicapped children residing within its jurisdiction in accordance with regulations of the Board of Education"; and

WHEREAS, pursuant to the Education for All Handicapped Children Act (P.L. 94-142) of 1975 (EAECA), renamed the Individuals with Disabilities Education Act (IDEA) in 1990, federal education funds are available to states providing a "free and appropriate education" for students with disabilities; and

WHEREAS, the required free and appropriate education must be provided at public expense, under public supervision, at no charge; and must be provided pursuant to an individualized education plan (IEP) tailored to meet the unique educational needs of the particular student; and

WHEREAS, federal law directs that students with disabilities should be educated in the "least restrictive environment" and that these students are to be separated from their peers only when the appropriate education cannot be provided satisfactorily in the general education classroom with supplemental aids and services; and

WHEREAS, the practice of returning special education pupils to the general education classroom has received renewed focus as courts have construed the IDEA to require school divisions to justify decisions to educate students with disabilities outside the general classroom environment; and

WHEREAS, integrating students with disabilities in general education classes may include a variety of practices that may or may not require certain support services; and

WHEREAS, according to the 1992 Report of the Department of Education on the Special Education Model Curriculum for Regular and Vocational Educators and Recommendations for Its Use (ED 23), over 110,000 students with disabilities receive special education services in Virginia's public schools, and about 67 percent of these students receive over 40 percent of their instruction in the general education classroom; and

WHEREAS, inclusion may not only enhance educational and developmental opportunities for students with disabilities but also promote increased awareness and learning opportunities for their peers without disabilities; and

WHEREAS, current state practices for reimbursing local school divisions for pupils in special education may include real and perceived fiscal disincentives for providing services in general education classes; now, therefore, be it

RESOLVED by the House of Delegates, the Senate concurring, That the Department of Education be hereby requested to study the effects of integrating students with disabilities in general education classrooms in the Commonwealth's public schools. In conducting its study, the Department shall consider, among other things, the effects of integrating students with disabilities in general education classrooms on curriculum and instruction opportunities for students with and without disabilities; allocation of instructional and support staff; general education class size; staff development requirements; and potential fiscal incentives and disincentives. The Department shall collaborate with academic researchers and specialists as well as organizations representing the interests of students with disabilities, parents, and other groups, and representatives of general and special education programs throughout the Commonwealth. All agencies of the Commonwealth shall provide assistance to the Department, upon request.

The Department shall complete its work in time to submit its findings and recommendations to the Governor and the 1995 Session of the General Assembly as provided in the procedures of the Division of Legislative Automated Systems for the processing of legislative documents.

