

Learning Opportunities and Performance Outcomes in Inclusive Elementary Classrooms



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THE QUESTION

Does being educated in a general education classroom that enrolls students with disabilities affect the learning opportunities provided to and educational outcomes attained by students without disabilities? If so, in what ways?

This question is one that has been asked by many involved in the education of children. Educators, parents, school boards, policy makers, and researchers have all questioned how educating students with a range of abilities in general education affects the teachers' ability to teach. Concerns are often expressed about whether inclusive education is compromising the opportunities for quality instruction available to students without disabilities. The focus of most research to date has been on the child with a disability and how an inclusive service delivery approach supports and advances educational progress. However, there has been growing interest in the educational program being provided to children without disabilities in inclusive settings and the effects such an approach has on student learning outcomes.

Typically, those critical of inclusive educational practices have suggested that such an approach requires too many modifications by the teacher to accommodate the wide range of learning needs in the classroom. Critics surmise that the curriculum offered to students in the class will be "watered down" and performance expectations will be lowered. They further suggest that teachers are unable to meet the demands of such a diverse group of learners potentially harming the education of students without disabilities. Researchers whose work has supported inclusive educational practices argue that general education teachers can, indeed, meet the needs of students with and without disabilities when collaboration, administrative support and appropriate professional development are in place. While trends supportive of inclusive education exist,

data are needed to help local school personnel gain resources and support for school improvement initiatives and reforms like inclusive education. Both groups, proponents and critics, are concerned about learning opportunities and results in general education classrooms. What is unclear is how an inclusive approach affects students without disabilities in general education classrooms.

The studies summarized in these pages were designed to contribute to the discussion of this important question and provide interested stakeholders with a starting point for planning and evaluating the educational programs for students in public schools. While many findings emerged from this multi-site project, we have elected to summarize only those that are statistically and educationally meaningful for decision-making and practice. Copies of detailed research papers are available to interested individuals upon request.

THE CONTEXT

To understand the results of individual studies, it is important to first understand the context within which the information was collected. These studies focused specifically at the elementary level, in part because of limited resources but, to a greater degree, because this is the level at which many public schools begin the transformation to inclusively delivered services and supports. Our partners in this project were:

- Three school districts that varied in their racial/cultural composition, economics, size, locale, and histories of special education reform in three states (Illinois, Missouri, and Pennsylvania)

- These districts represented suburban, urban fringe/metropolitan, and urban environments and each was engaged in inclusive educational reforms for at least 8 years prior to the project
- Nine target schools were selected for more in-depth study based upon nomination, administrative support, and teacher willingness to complete project measures
- From these nine schools we were able to obtain consent from 39 teachers in grades 3 and 4 in round one of data collection, and 51 teachers in round two (grades 4 and 5). We were also able to obtain consent and assent from 318 students in these classrooms who did not have a disability. This design allowed us to follow students across a two-year period to determine longer-term effects of being in classrooms with students with a range of disabilities.
- We focused only on students without disabilities in these three grades, and collected information from their teachers and parents, as well as the principals of the schools.

Rigorous research procedures were used so that the findings from this study would be defensible to practitioners, policy makers, and researchers. The following summaries of individual studies follow similar formats. While the information is brief, the results are significant. We invite your reactions to this information. Contact information for the site investigators is presented at the conclusion of this report, as is information about how to obtain PDF versions of this and other products related to our work.

STUDY ONE

What do inclusive schools look like?

In order to answer the central question of this study, it was critical to identify the level to which and the ways that students with disabilities were included in the regular education classrooms. It was also important to establish how key groups within the school community viewed the inclusion of children with disabilities and the impact this inclusion had on the overall education of children.

We focused on understanding the context and service delivery patterns of 9 schools from the three participating districts in Illinois, Pennsylvania, and Missouri. These nine schools varied in the extent to which they were including students with mild, moderate, and severe disabilities in general education classrooms. For this study, we were interested in exploring the connection between level of implementation and the viewpoints of principals in those schools. We conducted semi-structured interviews with principals, rated the quality of school programs using a

rubric based assessment, and analyzed service delivery data pertaining to students with disabilities. We then examined the relationship between principal leadership practices and markers of inclusiveness and program quality.

Results revealed that despite being considered inclusive:

- Schools varied markedly from one another in their level of implementation,
- Level of implementation was unrelated to the percent of time students with disabilities spent in general education or to our measure of program quality
- Schools with stronger administrative support and commitment reported serving more students with disabilities, including those with severe disabilities, in general education for a greater percentage of time
- Schools that were more inclusive in their

level of implementation had principals who voiced stronger philosophical commitment and support for inclusive education

- Principals of schools with more pull-out and less inclusive practices were more conditional and guarded in their support for inclusive education
- Despite differences in philosophy, support, and commitment all principals reported common views about the

importance of shared governance, team work, the involvement of parents, and their definition of inclusive education (individualized, flexible services and supports)

- Principals expressed a similar set of concerns about staffing (shortages, turnover and quality), time demands related to special education, meeting individual student needs, and parents (demands, litigation, communication)



Bottom line: Principals make a difference in the level of implementation in a school and consequently how inclusively that school functions. Not all schools labeled inclusive are, and not all schools incorporate students with disabilities in ways that reflect recommended practices or the intent of IDEA. Those that do, reflect a culture, language, teaching practices, and leadership that support the meaningful incorporation of all learners.

STUDY TWO

Does inclusive class membership affect instruction?

Advocates of inclusive education contend that inclusively delivered instruction does not detract from the learning opportunities and flow of instruction in general education classrooms. Critics, on the other hand, argue that students with disabilities place support demands on classroom teachers that take away from their ability to provide instruction to students without disabilities. Several methods and sources of data were used to develop a thorough and complete picture of each classroom and its instructional program. Three types of data were gathered on elementary classrooms in the nine schools reported previously.

For this study, we observed the *instructional practices* in 39 classrooms the first year, and 52 classrooms the second year using a measure of classroom ecology, and student and teacher interactions. Each student was observed over time and in a variety of academic settings for a total of three hours. We also analyzed the *rigor of teacher assignments* in writing and math gathered over six months on 318 students using

a standards-based rubric. Writing assignments were rated on construction of knowledge, elaborated written communication, and grammar. Math assignments were rated on analysis, mathematical concepts, and written mathematical communication. Finally, we asked participating teachers to complete an *attitude survey* in the fall and spring each year, to determine if there were relationships among class composition, teacher attitudes about inclusive education, and the nature of their teaching practices.

Statistical analyses were used to determine the relationship between the percent of students with IEPs in the class and how much change occurred from year to year for students and classrooms on each of the measures. We found that:

- Teachers tended to spend more time on whole class instruction as the percent of students with IEPs in the class increased.

- As the percent of students with IEPs in the class increased we found an increase in the amount of time teachers spent on reading instruction
- There was no relationship between the percent of students with IEPs in the class and the attitudes of teachers. Teacher attitudes were moderately positive across all schools.
- There was no relationship between the percent of students with IEPs in the class and the rigor of assignments teachers gave in writing and math



Bottom Line: The percent of students with IEPs in the class did not significantly influence how teachers taught, what their attitudes about inclusive education were, or the rigor of the assignments they gave in writing and math. Teacher attitudes in our sample were moderately positive regardless of locale and implementation level in their school. There were significant relationships between class membership and time spent in reading and whole class instruction, but these relationships were very small and statistically limited. Concerns about negative effects due to the presence of students with disabilities in the class are not supported by our data.

STUDY THREE

Does inclusive class membership affect social outcomes of students without disabilities?

Since an elementary school classroom is about more than just academics, it was important to look at the social implications of inclusive educational practices for students without disabilities. Previous research on inclusive education has studied the social outcomes of inclusively delivered instruction, but the vast majority of this research occurred at the preschool level. If schools and districts are to feel confident in their policy decisions to adopt an inclusive approach to education, then defensible data on social, as well as academic, outcomes are needed.

Participants in this study were the teachers and students who participated in Study 2. Three types of measures were used in this study: rating scales, survey, and direct observation of students' social interactions. Teachers were asked to complete two *social skills rating scales*. These scales asked teachers to rate the general level of students' social

skills, and more specifically their school adjustment, problem behavior, and social competence. Each scale was completed twice each year for two consecutive years. An *attitude measure* developed by the project was used to assess typical children's attitudes about children with disabilities. Project staff in each site administered the student attitude survey in small groups to 318 students without disabilities. Finally, we observed *social interactions* occurring in classrooms over several months and coded observations using the ecobehavioral observational tool from Study 2.

Statistical analyses were used to determine the relationship between the percent of students with IEPs in the class and how much change occurred from year to year for students and classrooms on each of the measures. We found that:

- Students were very positive in their attitudes about being in classes with children who have disabilities
- Scores on the student attitude measure increased as the percent of students with disabilities in the class increased
- Ratings of problem behavior did not differ across schools and were unrelated to the presence of students with disabilities in the class
- Teachers' ratings of students' social skills and competence were similar across schools and were unrelated to the presence of students with disabilities in the class
- Across all schools and classrooms with varying types and percentages of students with IEPs, interactions among students were observed to be positive with very low levels of negative behavior



Bottom Line: In elementary classrooms located in schools that vary in their level of implementation, we found that a variety of social outcomes and interactions were unaffected by the presence of students with IEPs in the class. Students without disabilities were, in fact, uniformly positive in their attitudes about being in classrooms that included peers with disabilities and improved in their attitudes about students with disabilities as they had greater exposure to them in the class. Concerns about negative effects due to the presence of students with disabilities in the class are not supported by our data.

STUDY FOUR

Does inclusive class membership affect academic outcomes of students without disabilities?

Ultimately, the primary mission of a school is to meet the academic needs of its children. Educational researchers seek to inform the teaching profession by shedding light on those practices that enhance or detract from the educational process. In this area of educational research there is still much to be discovered. The results of this study, however, suggest that inclusive classrooms do not impede the academic progress of children without disabilities.

In this final study, the focus was on gathering data about student learning. Participants in this study were the teachers and students from Study 3. Four sources of academic data were used to determine the academic effects of inclusive class membership on classmates without disabilities.

- **REPORT CARD GRADES** in reading, math, social studies and science

- **STANDARDIZED TEST SCORES** (national percentile ranks were used and converted to Z-scores to accommodate for the different types of tests used in each district)
- **AUTHENTIC STUDENT WORK** samples (two samples of writing and math work from each child in the fall and spring were collected for two years for 318 students without disabilities, resulting in over 6000 samples of math and writing work. These samples were rated using the standards-based rubric from Study 2)
- **TEACHER RATINGS OF STUDENT ACADEMIC COMPETENCE** (teachers completed an Academic Competence measure that assessed each child's motivation, reading and math competence, intellectual functioning, and overall academic competence)

Statistical analyses were used to determine the relationship between the percent of students with IEPs in the class and how much change occurred from year to year for students and classrooms on each of the measures. We found that:

- Report card grades, authentic student work, and standardized test scores were unaffected by the percentage of students with IEPs in class
- There was no evidence that teachers altered the rigor of their assignments

in math or writing in classrooms that included students with disabilities

- Higher teacher ratings of student academic competence were associated with increased percentages of students with disabilities in the class
- As the percentage of students with IEPs in the class increased, we found a concomitant increase in both math report card grades, and teacher ratings of student academic competence



Bottom Line: In elementary classrooms located in schools that vary in their level of implementation, we found that a variety of academic performance indicators were unaffected by the presence of students with IEPs in the class. Concerns about negative effects due to the presence of students with disabilities in the class are not supported by our data.

IMPLICATIONS

This project sought to answer a very important question and in doing so bring to light both what was learned and what questions beg further study. Does being educated in a classroom that enrolls students with disabilities affect the instructional context and learning outcomes of classmates without disabilities? Simply stated, in schools varying in implementation status (degree of inclusion of children with disabilities) and demographics, our research team found no harm to the instructional context, social, or academic outcomes for children without disabilities, nor any evidence that teachers watered down the curriculum to accommodate learners with disabilities. Findings from this study may be added to those from previous studies to quell concerns of some teachers, administrators, policymakers, parents, and other stakeholders that inclusive educational settings are detrimental to students who do not have disabilities.

Studies about potential peer effects are extraordinarily complex and this series of studies is not without limitations. It is prudent to recognize that our sample of grades 3,4, and 5 provides a narrow glimpse into the totality of elementary schools. Further, even though

we had a comparatively large number of classrooms and student participants, several “high powered” analytic techniques could not be used because our sample size was too small. Despite the limitations in these studies, our procedures were rigorous, our sites diverse, and our measures defensible. We have confidence in our findings and believe they make a significant contribution to discussions about inclusive educational reform.

We caution readers not to construe our findings of “no harm” as it relates to the percentage of students with disabilities in the class as support for escalating the number of children with IEPs in general education classrooms (more is not better in this case). No classroom in our sample exceeded six students with IEPs. Leadership practices, classroom resources, staff training, and the nature of these children’s support needs all factored into our schools’ ability to effectively educate all learners in these classrooms without harm to the education of students without disabilities.

The schools in this study have helped the educational community learn that, while inclusively written policies are necessary, they

are not sufficient for transforming the culture of schools into flexible, supportive, and instructionally effective learning environments for all students.

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