School districts and schools collect a wide variety of data, including transcripts, enrollment records, and standard achievement test scores, in an effort to improve their educational offerings and outcomes. However, they often fail to use the data they collect in a systemic manner to identify strengths and weaknesses at their sites, to determine improvement strategies (Levesque, Bradby, & Rossi, 1996), or to monitor progress. Schools often rely on informal, anecdotal information or hunches rather than education research in assessing the quality of their teaching and learning.

Why are local educators reluctant to use formal data to assist in their decision-making processes? First, data are often collected for purposes originating outside the individual school and thus fail to reflect educators’ goals for their own communities. As a result, local improvement efforts rarely stem from state government or agency data. Although somewhat helpful for public relations, these data generally do not help classroom teachers assess the quality of their own teaching or their student’s learning. Second, many educators do not believe that effective use of data can help in the effort to improve teaching and learning. Research, in general, is not a valued enterprise. Third, the
ACKNOWLEDGMENTS

This brief is drawn from a RISER research report entitled *Postschool Outcome Analyses: Their Importance, Use, and Focus for Students with and without Disabilities*. We wish to thank Drs. Lizanne DeStefano, David Johnson, Marlene Simon, and Bruce King for their thoughtful reviews of the research report, and Mary Fish and Cathy Loeb for invaluable editorial assistance.

RISER Information

DIRECTORS

Cheryl Hanley-Maxwell
L. Allen Phelps

PROJECT OFFICER

Marlene Simon, OSERS/OSEP

RISER Staff

Tina Anctil
Jeff Braden
Jacquelyn Buckley
Lana Collet-Klingen
Jami Davis
Simone DeVore
Mary Fish
Latrice Green
Beth Handler
Nan Huai
Jason Hurwitz
M. Bruce King
Marianne Mooney
Laura Owens-Johnson
Jennifer Schroeder
Valli Warren

This brief was supported by a grant from the U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs (#H158J970001) and by the Wisconsin Center for Education Research, School of Education, University of Wisconsin—Madison. Any opinions, findings, or conclusions are those of the authors and do not necessarily reflect the views of the supporting agencies.

INSTITUTE MISSION

The mission of the institute is to expand the current knowledge base related to practices and policies in secondary schools that enhance learning, achievement, and postschool outcomes for students with disabilities.

1. What are critical features of instruction, assessment, and support strategies that promote authentic understanding, and achievement (and performance) for all students?

2. How have changes in authentic inclusive learning and schooling practices affected the school and postschool outcomes (and their interaction) for students with disabilities (collectively and disaggregated) using frames of reference focused on equity, value added, and accountability?

3. How do schools accommodate district and state outcome assessments, and how do such accommodations affect the participation in, reporting of, and validity of assessment?

4. In schools evolving toward authentic and inclusive instruction, what are the roles and expectations of stakeholders as they engage in planning for secondary and postsecondary experiences?

5. What contextual factors are required to support and sustain the development of secondary-level learning environments that promote authentic understanding, achievement, and performances for all students?

6. What strategies are effective in providing both information and support to policymakers, school administrators, teachers, human service personnel, and the community so they utilize the findings to create and support learning environments that promote authentic understanding, achievement, and performance for all students?
capacity of local educators to use data critically and effectively is limited. Using detailed information to plan improvement or change is not a natural process. Educators need help in seeing how data can help them understand what is currently happening at their site and what should happen next.

The first step in implementing the continuous and reflective use of data is to identify the desired outcomes. Central to many reform initiatives is educational accountability, in which communities, schools, and educators take a strong interest in examining and improving student outcomes. Discussions about curricula and instruction are being shaped by the kinds of postschool outcomes it is hoped students will achieve after they graduate from high school. A key consideration for today’s educators is which educational practices best serve learning for every student.

Nationwide, many educators are embracing the challenge to ensure that students with disabilities receive the best education possible by sharing a commitment to raise standards and expectations for all students. The Individuals with Disabilities Education Act (IDEA) Amendments of 1997 reflected the recognition that high expectations, access to the general education curriculum, and public accountability are key elements in improving results for students with disabilities. IDEA requirements call for the inclusion of students with disabilities in state and district assessments and the reporting of performance goals and indicators. Targeted outcomes for students with disabilities, which now broadly focus on the transition to adult life, reflect a commitment to help these students achieve academic, occupational, and social competence and become productive and independent adults. Perhaps the most appropriate standard for assessing the effectiveness of instructional programs and practices is the equality of results achieved for students with and without disabilities (Hahn, 1997). It is imperative that educators have parallel goals and outcome expectations for both groups. Ultimately, all of our nation’s future citizens are not well educated unless each acquires the knowledge and skills needed to achieve a high quality of life in adulthood, including the ability to function effectively and fully in tomorrow’s workplace.

**Restructured and Inclusive High Schools**

The Research Institute on Secondary Education Reform for Students with Disabilities (RISER) is conducting a 5-year research study on practices and policies that improve learning opportunities and postschool outcomes for students with disabilities in significantly restructured high schools. Using a conceptual framework of restructured schools developed by Newmann and Wehlage (1995), we selected four high schools for intensive and longitudinal analysis based on their active promotion of and participation in “authentic and inclusive teaching and learning” practices for all students, including those with disabilities. These schools provide students with disabilities with accommodations and support that allow equitable access to the standard core curriculum and learning experiences with high authenticity in the general education classroom. Many school reform efforts assume that strong external accountability systems (such as statewide academic performance testing and widely accessible school report cards) are a key element in improving educational outcomes and school performance. However, a study of 24 restructuring schools found that schools with strong external accountability tended to have limited capacity for improvement. In this study of selected schools demonstrating high levels of authentic achievement, strong internal accountability measures (i.e., staff identification of clear standards for student performance, staff collection of information to monitor student success, and strong peer pressure within the faculty to meet established goals) provided a capacity for changing curriculum and instruction that does not exist in many high schools (Newmann, King, & Rigdon, 1997). Thus, understanding how restructured high schools use internal and external accountability systems to improve learning experiences and outcomes for students with and without disabilities is pivotal to improving both student performance and equity in high school reform efforts.

The four RISER study schools range in size from 400 to 1,000 students in grades 9-12 or 7-12. They are located in a major urban setting and in smaller communities in the northeast and southwest. Students with disabilities represent approximately 16% of the
student population in these schools (Site 1 = 22%, Site 2 = 16%, Site 3 = 16%, and Site 4 = 11%), a percentage that compares favorably with the percentage of students with disabilities found in high schools nationally (14%; U.S. Department of Education, 1998-99). For each individual site, it remains somewhat unclear why the school’s percentage of students with disabilities is higher or lower than the national average. One factor may be that the schools accept students referred from outside their geographical boundaries. In Site 4, for example, where the percentage is lower than the national average, the school district has a program for students with severe disabilities that is housed in another high school. Therefore, the students with disabilities at Site 4 are primarily those with mild disabilities. The majority of students with disabilities in these schools are categorized as learning disabled. Additionally, in each school community, the definition of student success is linked closely to traditional academic achievement standards, with each site reporting more than 75% of its graduates going on to 2- and 4-year colleges and universities.

Site 1 was built “from the ground up” in 1985 with a mission of authentic student learning and performance. The primary pedagogical vehicle is the evaluation of student work through portfolios. This school offers a community-service and internship program through which students are prepared for work, citizenship, and further study. During the last 2 years of high school, students complete a series of portfolios, which determine their eligibility for graduation. Students with disabilities are included in the general education classroom and receive services from the resource room as needed. The focus of the resource room was described by one teacher as “...helping students develop strategies to cope with academic demands, and to advise the faculty on ways to accommodate such students’ learning needs and styles.” Furthermore, all teaching and learning in Site 1 reflect five “habits of mind” (Connections, Perspective, Evidence, Speculation, and Significance) that the faculty works to infuse in student work and in their own teaching. The faculty has created a learning community that supports authentic student performance and a vision of high intellectual quality work for all students.

Site 2 focuses its reform efforts on the implementation of personalized learning plans and community-based learning for all students. The personalized learning plans help students reflect and connect their experiences in school to their future life and career goals. These plans also engage students with personally relevant, challenging, motivating, and accountable educational activities. Special education services are provided, in almost all cases, within the general education program. Special education is viewed not as a program, but rather as a support system for general education. There are no resource room or pullout programs operated by special education within the building. Personalized learning plans, in addition to individualized education plans, are used to guide student program and placement decisions. All students, including students with disabilities, are also extended opportunities to participate in independent study courses. This diversity and range in educational opportunities for students have given the high school program added flexibility to meet the wide range of student needs.

In Site 3, reform efforts are evident in the curriculum and instructional methods used. The curriculum and instruction are interdisciplinary, inclusive, performance-based, group process–oriented, and team-taught. As part of the curriculum, students complete a 40-hour community service requirement. In addition, their high school experience includes a series of portfolio projects, requiring students to demonstrate their understanding and/or skill level in specific areas. In this community, the definition of student success is linked closely to personal growth and community involvement as well as to traditional academic achievement standards. Students with disabilities are included in the general education classroom for most subjects, and all classes are heterogeneous.

Site 4 opened its doors in 1989 with a special emphasis on interdisciplinary course offerings and the inclusion of students with disabilities in regular classrooms. Team teaching is a trademark of this school, featuring special education teachers joined with regular education teachers to provide instruction for a particular course. The school’s Learning Center, a resource for students staffed by school personnel, allows all students to receive academic accommodations in a structured
RISER learning environment during the school day, as well as before and after school. Exclusive course offerings for special education students include a study skills course and a self-advocacy course.

Method

Instrument

Having determined in a previous study (Mooney & Phelps, 2001) that faculty and staff at RISER sites valued the same postschool outcomes for students with and without disabilities, we developed a survey to identify educators’ perceptions of the usefulness of collecting certain postschool outcome information. The survey presented six open-ended questions with the intent of answering the overall question, “In what ways would postschool outcome data on students with and without disabilities prove useful to your instructional practices and schoolwide policy development?”

Sample

The faculties and staff members of the four RISER sites served as the convenience sample for the study. Of the 215 surveys mailed, 152 useable surveys were returned for a total return rate of 71.0% (Site 1: 29 responses [72.5%], Site 2: 33 responses [82.5%], Site 3: 69 responses [92.0%], and Site 4: 21 responses [35.0%]). The respondent demographics are provided in Table 1 below.

<table>
<thead>
<tr>
<th>Table 1. Respondent Demographics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>Gender</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Current Position</td>
</tr>
<tr>
<td>General education teacher</td>
</tr>
<tr>
<td>Staff</td>
</tr>
<tr>
<td>Special education teacher</td>
</tr>
<tr>
<td>Administrator</td>
</tr>
<tr>
<td>Guidance counselor</td>
</tr>
<tr>
<td>Paraprofessional</td>
</tr>
<tr>
<td>Vocational education teacher</td>
</tr>
<tr>
<td>Years of experience in field of education</td>
</tr>
<tr>
<td>1-5 years</td>
</tr>
<tr>
<td>6-10 years</td>
</tr>
<tr>
<td>11-15 years</td>
</tr>
<tr>
<td>16-20 years</td>
</tr>
<tr>
<td>21-25 years</td>
</tr>
<tr>
<td>26-30 years</td>
</tr>
<tr>
<td>30+ years</td>
</tr>
<tr>
<td>No response</td>
</tr>
</tbody>
</table>
Data Collection Procedures

We mailed self-administered surveys to the RISER contact person at each site, along with a cover letter containing introductory comments. The contact person then distributed the surveys to the individual faculty and staff members for completion within 2 weeks. Surveys were coded to ensure anonymity of the respondents. To assist respondents in completing the survey, we included directions and definitions of terms with the survey.

Data Analyses

The open-ended responses were transcribed verbatim. A constant-comparative coding method was used to identify coherent categories and recurring themes within and across questions (Lincoln & Guba, 1985; Strauss & Corbin, 1987). The data presented represent aggregate responses from the four sites. As noted in the earlier RISER study (Mooney & Phelps, 2001), the educators in these schools place a high priority on obtaining postschool outcome information describing the status and success of their graduates in postsecondary education, employment, and independent living situations. For graduates with and without disabilities, educators judged the following outcomes most important:

1. Type of postsecondary education institution and program attended
2. College completion status
3. Type of employment obtained
4. Level of job satisfaction

In considering these indicators, the survey did not precisely specify the nature of the data to be collected, nor how it would be aligned with school-based data. Thus, it is important to recognize that the respondents made certain assumptions about these matters when describing how they could use postschool outcome information.

Emerging Themes

Six prominent themes and related points of interest emerged from the data. If substantial, meaningful, school-specific postschool outcome data were readily available to local educators, they would use this information to (a) inform current instructional practices, (b) encourage curriculum development and change, (c) improve student preparation and learning for the “real world,” (d) initiate changes in schoolwide policy, (e) change faculty and staff expectations and attitudes, and (f) measure general reform effectiveness. The order in which the themes are listed and discussed reflects the frequency with which each use was suggested by the overall set of respondents.

- Informing Current Instructional Practices
- Encouraging Curriculum Development and Change
- Improving Student Preparation and Learning for the “Real World”
- Initiating Changes in Schoolwide Policy
- Changing Faculty and Staff Expectations and Attitudes
- Measuring General Reform Effectiveness

Figure 1. Six emerging themes.
Informing Current Instructional Practices

The vast majority of responses revealed that postschool outcome data could be used to examine the impact of teaching on student learning and to judge the effectiveness of current instructional practices. Outcome data could be used both to inform current instructional practices generally and also to identify specific classroom practices that need to be adapted, modified, or replaced to better promote student learning. Respondents highlighted certain instructional practices as potential areas of examination, including (a) the effective use of class time, (b) student grouping alternatives, (c) differing teaching styles, and (d) the use of active learning experiences in the classroom. A special education teacher reported that collecting data would help her “see if my efforts as a teacher helped or hindered my students.”

Encouraging Curriculum Development and Change

Three fourths of respondents indicated that postschool outcome data could be used to promote curriculum development and/or change. Specifically, educators thought such data could help them to (a) shape and restructure the curriculum by revamping existing units and programs and developing more applicable and realistic lessons; (b) diversify the curriculum by expanding program offerings and alternatives that address weaker performance areas or areas of neglect; and (c) meet students’ unmet needs. Specific suggestions for curriculum expansion or “filling the gaps” included study skills courses, job market training, life skills programs, career education experiences, cooperative teaching activities, authentic methods of student and program assessment, and additional college preparation courses. One general educator suggested, “Postschool information would illustrate our weaknesses and shortcomings and illuminate unmet student needs.”

Many respondents recognized the value of using postschool outcome data to justify changing the emphasis placed on certain components or expected outcomes of the curriculum. Concern was voiced about the need to justify curriculum changes and/or their expected outcomes to groups outside the school (i.e., parents, school board members, community members). Across the survey questions, specific components of the curriculum were repeatedly emphasized as areas of concern. They included alternative programming, definitions of success, vocational and life skills development, and assessment methods. For example, several respondents saw the value in using postschool outcome data to justify reducing the emphasis on certain postsecondary education outcomes and broadening the definition of success to include more postschool outcomes than simply college attendance.

Improving Student Preparation and Learning for the “Real World”

A review of postschool outcome data would help educators to better understand student needs, goals, and options after high school and revise their teaching accordingly. These data would also provide information on student postschool achievement versus potential performance, satisfaction levels, level of knowledge of postschool options, and measures of self-sufficiency. With this information, educators could modify their teaching to better prepare students for the “real world” by sharing with them the potential outcomes of their learning experiences.

The preparation of students with disabilities for life after high school was of particular concern. Many respondents surmised that outcome data could be used to identify concerns specific to this group of graduates, such as the availability and use of postschool support systems and the further development of student self-advocacy skills. One general educator commented that she “needs to know if new reforms are helping all students achieve their postsecondary goals,” and if not, “how to revise our current practice.”

Approximately half of the respondents indicated that postschool outcome data could be used to empirically support existing “ideas for change.” For example, an emphasis on the need for development of life skills that lead to a “quality” postgraduate life for individual students was evident across the survey responses. Respondents were generally concerned with the development of self-sufficiency, lifelong learning skills,
and adult life preparation. They also saw a need for the exploration and expansion of vocational education options, including community-based learning and school-to-work opportunities, to meet the needs of students who are not college bound. Finally, respondents thought that postschool outcome data would help build career support into educational discussions and force teachers to consider more options for non–college bound students.

**Initiating Changes in Schoolwide Policy**

Educators thought outcome data could be used in several ways to initiate changes in schoolwide policies and practices, including (a) developing admissions policies and strategies; (b) diversifying and broadening course offerings; (c) improving accessibility of school activities; (d) designing more inclusive and student-centered policies; (e) determining staffing needs; (f) determining special services offerings; (g) promoting better use of resources and moneys; (h) coordinating transition services; and (i) enhancing conversations across disciplines on key issues surrounding integration and standards. Both special educators and general educators felt that they could use postschool outcome data to make policy more student-centered, more practical, and more explicable to local students, parents, taxpayers, employers, and community members. “Using postschool outcome data to design policy gives all students the chance for an equal education that maximizes their potential,” reported a special educator.

**Changing Faculty and Staff Expectations and Attitudes**

Several educators commented extensively on the potential use of postschool data to foster teachers’ acceptance of inclusive practices. Outcome data could be shared with colleagues and community members to help eradicate prejudice and lack of understanding about students with disabilities by providing concrete examples of productivity and success. Respondents hoped to reinforce the belief that all students are educable and capable of attaining high performance standards if they are taught with a variety of timely and personalized teaching strategies. One general educator hoped that “the data would help us to see kids with and without disabilities as individuals with futures, as potentially empowerable people.”

About half of the respondents also thought postschool data might be useful in reexamining whether teacher expectations of student postschool outcomes and options are realistic. Several respondents suggested that data could help define gaps and inconsistencies between their school mission and student outcomes, ultimately leading to a reexamination of the school’s mission and philosophy. These respondents indicated that they would use postschool outcome data to examine the relationship between higher expectations and actual student performance.

**Measuring General Reform Effectiveness**

Approximately one quarter of respondents felt that the collection of postschool outcome data would assist them in measuring the impact of general reform initiatives and would answer questions about the value of specific reform efforts. For example, one could use postschool outcome data both to assess the adequacy of schools’ academic and social support frameworks and to examine the links between course requirements, state requirements, disciplinary practices, and inclusive practices. Specific school reform efforts could be examined to determine their long-range success or failure on a schoolwide basis and their impact on individual students’ lives. A general educator stated, “As professionals, we need to measure whether inclusion is really working. While performance in school is important, it is the outcomes that are crucial.”

Educators viewed the collection of postschool outcome data as an opportunity to address concerns about both inclusive schools and classrooms, and authentic practices within these schools. Six questions concerning the effectiveness of education reforms were mentioned frequently:

1. How well are we preparing students with and without disabilities for inclusive postschool environments?
2. Are we able to create equity and heterogeneity in the classroom simultaneously?
3. How do we provide in-school support services for students with disabilities while still allowing students to learn and develop their self-determination skills and increase independence?
4. Do we lessen the value placed on postsecondary preparation and training by using the inclusion model for all students?
5. Can we predict or measure the positive and negative effects of inclusion on students with and without disabilities?
6. Does inclusion allow us to pursue authentic outcomes for all students?

Discussion

Major Findings

The results of this survey expand our knowledge of how postschool outcome data may be used in restructured inclusive high schools. In a review of each school’s documents (i.e., handbooks, district reports, selected follow-up studies, newsletters, etc.), we learned that these schools traditionally only monitor postschool status and outcomes through students’ entry into college rather than through systematic and comprehensive graduate follow-up data collection efforts such as vocational outcomes, wage and salary information, involvement in community activities, and independent living measures. Educators in these schools rely primarily on personal contacts with graduates for “proof” that the school is successful. Moreover, when schools have collected some postschool data (mostly at the district or state level), they frequently have not used the information for school improvement or change. Nonetheless, when educators in reformed inclusive high schools were asked how they would use postschool outcome data, they provided a variety of detailed suggestions ranging from curriculum development to school policy to attitudinal changes. Despite this broad range of responses, there remains a clear disconnect between the types of postschool data the schools would like to collect and their intended uses for the data. For example, the respondents did not indicate specifically how they would use this information “to improve students’ preparation for learning in the real world” or “to change the curriculum.” Further, individual schools are often unable to make the changes needed to improve curriculum and instruction due to the current climate of state-led standards-based school reform, which places a significant emphasis on high-stakes testing and student results. The demands of standards-based reform may prevent schools from promoting contextual and authentic learning experiences, notwithstanding postschool outcome data revealing that graduates with disabilities participate less frequently in employment and college. Despite these complex challenges, these educators are beginning to look at the collection and use of postschool outcome information in order to make future decisions about their individual schools. In the survey responses, educators expressed a strong interest in participating in any effort to collect and use postschool outcome data that would help them gain more information about their students’ lives following high school.

Next Steps

The significance of our study lies in the discovery that educators in restructured high schools do value the collection and use of postschool outcome data. To this end, the following steps can be taken to support educators in pursuing this promising effort.

1. Examine the need for and feasibility of collecting and analyzing data at the school level. Local data collection will help schools become “data-driven” and to see how data can help them understand what is happening at the school and what should be changed or continued. It is important to remember that “it is the school’s purposes and questions that turn data into meaningful information” (Keeney, 1998, p. 42).
2. Use “home-grown” sources of postschool outcome data when teaching educators how to collect, analyze, and use data. Allow for a certain degree of local customization in the development of performance measures and related assessment instruments to improve the
chances that local educators will find the data meaningful and relevant (Stecher et al., 1995). School improvement strategies (such as critical friends groups or teacher-led action research studies) should be developed to promote the ongoing and reflective use of data to meet school and community expectations.

3. Create a data collection and dissemination process that links school and classroom practices with students’ postschool performance in order to inform local school leaders about the effectiveness of school practices and policies. To examine the ways in which school and classroom practices are affecting student outcomes, the current systems for data collection need to be revised to capture data on relevant indicators and link it to school performance data. With data collection systems using individual student-graduate records that include high school data (e.g., grades, courses completed, and key individualized education program information) and postschool outcome data (e.g., employment patterns, earnings, and postsecondary education attainment data), educators can disaggregate information to make meaningful and richly informed decisions about changes in curriculum and instructional practices. Local school leaders can then design and offer professional development options closely aligned with the school’s strategic plan for changing practices to raise student achievement and improve postschool outcomes.

4. Use available resources to help with planning, coordination, collection, interpretation, and reporting of data. Educators and school leaders should seek support from universities, school improvement networks, local and regional collaboratives, and other area schools to gather and analyze relevant information. By participating in these special projects or networks, educators can document and share strategies and practices that transform data into locally useful information for reflecting upon, measuring, and communicating school improvement and change efforts.

5. Develop a deeper understanding of the role of data in whole-school reform efforts that focus on inclusive and authentic practices as their core. The efforts outlined above will provide a useful foundation for ongoing school-specific discussions that involve educators, parents, and community members in considering important questions, such as “what should graduates of this school know and be able to do?”

6. Build a system-wide commitment to practices and programs that help all students achieve successful outcomes and ensure that each student can aspire to goals of academic and occupational excellence. In data-rich schools, data can be used as tools to examine counterproductive and/or ineffective school practices and take action to improve practices and policies based on what the data reveal.

References


**OTHER PUBLICATIONS**

Listed below are anticipated topics that RISER will be writing about in newsletters. Single copies are free.

- Accommodating Diverse Learners in Regular Education Settings
- Educational and Transition Planning
- Effective Instructional Practices in Schools of Authentic Inclusive Learning
- Classroom Teachers’ Views on Inclusion

Research Institute on Secondary Education Reform (RISER)

for Youth with Disabilities

1025 West Johnson St., Suite 461
University of Wisconsin—Madison
Madison, WI 53706
(608) 263-0630 fax: (608) 265-0538

Permission to copy is not necessary. This publication is free upon request.
Please add me to your mailing list so I will receive future RISER publications.

Name: ____________________________________________________________

Street Address: ____________________________________________________

City: ___________________________  State & Zip Code: _________________

Phone: __________________________ __________