Bureau of
Special Education

Research Report #1

Evaluation of the Iowa Renewed Service Delivery System

State of Iowa
DEPARTMENT OF EDUCATION
Grimes State Office Building
Des Moines, Iowa 50319

STATE BOARD OF EDUCATION

Karen K. Goodenow, President, Spirit Lake
Dianne L. D. Paca, Vice President, Garner
Betty L. Dexter, Davenport
Thomas M. Glenn, Des Moines
Francis N. Kenkel, Defiance
Ron J. McGauvran, Clinton
Mary E. Robinson, Cedar Rapids
Ann W. Wickman, Atlantic
George P. Wilson III, Sioux City

ADMINISTRATION

William L. Lepley, Director and Executive Officer of the State Board of Education
David H. Bechtel, Special Assistant
Mavis E. Kelley, Special Assistant

Division of Instructional Services

Sue Donielson, Administrator
J. Frank Vance, Chief, Bureau of Special Education
Jim Clark, Consultant, School Social Work Services
Jeff Grimes, Consultant, School Psychological Services
James Reese, Consultant, Learning Disabilities
Greg A. Robinson, Consultant, Mental Disabilities

Research Report #1

Evaluation of the Iowa Renewed Service Delivery System

Daniel J. Reschly
Iowa State University
Ames, Iowa

Greg A. Robinson
Iowa Department of Education
Des Moines, Iowa

Susan Ward
Iowa State University
Ames, Iowa

February 12, 1990

It is the policy of the Iowa Department of Education not to discriminate on the basis of race, religion, national origin, sex, age or disability.

The Department provides civil rights technical assistance to public school districts, nonpublic schools, area education agencies and area schools to help them eliminate discrimination in their educational programs, activities or employment. For assistance, contact the assistant chief, Bureau of School Administration and Accreditation, Iowa Department of Education.

The evaluation of the Iowa Renewed Services Delivery System (RSDS) is organized around the critical themes and the implementation strategy that provide the foundation for future special education services in Iowa. The themes have determined the content of the evaluation instruments and the key respondents to the data collection efforts. The implementation strategy determines when data are collected.

THEMES

The critical themes for RSDS were determined by the System Development Implementation and Oversight Committee, based on information from hundreds of professional service providers and consumers of special education systems. The diverse information regarding problems in the current system was combined into the following key principles that guided the overall effort to improve special education.

1. Expand options for children and youth with learning and behavioral problems.

2. Integrate resources from regular and special education.

3. Achieve better coordination of services and fuller utilization of personnel.

4. Improve the outcomes of special education services.

These principles are implemented through extensive efforts to change the current system toward much greater emphasis on the following operational procedures.

1. Problem-solving oriented assessment, involving less emphasis on standardized testing and on eligibility determination and more emphasis on programming.

2. Functional assessment of eligibility determination and programming.

3. Direct and frequent measurement of student progress.

4. Outcomes criteria in decision-making at all phases of interventions.

5. Systematic plans to foster effective transition at all ages, from infant and toddler through young adult.

6. Building level plans to tailor special services to the needs of student populations.

7. Greater involvement of parents in decision-making and in the design, implementation, and evaluation of interventions.

8. Staff development to ensure the acquisition of competencies required to implement RSDS.

DATA COLLECTION INSTRUMENTS

Data collection instruments have been developed and used to collect baseline information in the four initial trial sites. The content of the instruments and the respondents are described below.

1. **Intervention Alternatives, General Form:** Completed by a sample of regular education teachers and support services personnel (consultants, psychologists, and social workers). The content includes items on the range and nature of intervention alternatives and the utilization of personnel.

2. **Intervention Alternatives, Specific Form:** Completed by support services personnel and regular education teachers in the context of a specific student who was referred, evaluated for special education eligibility, but not placed. The content includes items on intervention alternatives, pre-referral services, functional assessment, utilization of personnel, parental involvement, and outcomes criteria.

3. **IEP & Student Outcomes Criteria (two separate forms):** Completed by special education teachers in programs for students with mild disabilities, using the context of a specific student currently receiving special education services in a resource teaching program or a special class with integration. The content includes items on functional assessment, outcomes criteria, direct and frequent progress monitoring, and paperwork.

4. **Progress Monitoring:** Completed by a special education teacher or a regular education teacher, in the context of a specific student receiving special education services in a resource or a special class with integration program. The content includes items on

direct and frequent progress monitoring, functional assessment, and parental involvement.

5. **Parental Involvement:** Completed through an interview with parents, using the same student on whom teachers provided information on the IEP, Student Outcomes Criteria, and Progress Monitoring forms. The content includes items on utilization of resources (parents), progress monitoring, and outcomes criteria.

6. **District & Building Plans:** Completed by principals and superintendents; with items pertaining to range of intervention alternatives, utilization of personnel, transition planning and programming, local attendance center, and outcomes criteria.

7. **Staff Development:** Completed by regular and special education teachers, principals, and support services personnel. The content includes items on district/building plans, continuing education needs, functional assessment, intervention alternatives, direct and frequent progress monitoring, and outcomes criteria.

INTERVENTION ALTERNATIVES

The overall goals of the evaluation are to describe current services and staff characteristics, assess the implementation of alternative services, document changes in the delivery of services, and assess the effects of changes. Data will be collected using the instruments described above in three phases, baseline, mid- implementation, and post-implementation. The data collection schedule for the four initial trial sites is Spring, 1989 for baseline, December, 1990-January, 1991 for mid-implementation, and Spring, 1992 for post-implementation. Comparable schedules will be established for future trial sites. For example, baseline data will be collected in March-June, 1990 for the trial sites that will begin implementation of RSDS in Fall, 1990. Preliminary analyses have been completed on the baseline data collection in Spring, 1989.

The expansion of intervention options for students with learning and behavioral difficulties is a key theme in RSDS. The clear intent is to improve services to students experiencing educational problems, including students that might be characterized as "at risk" as well as students classified as disabled. The results described in the following three sections are based on evaluation instruments designed to describe current practices regarding intervention options for students.

Intervention Alternatives - General Form - Regular Education Teachers

The Intervention Alternatives, General Form was relatively brief. This form was completed by 120 regular education teachers in the four trial sites during Spring, 1989. The items on the form sought information on what kind of intervention assistance was available, who was available to provide the assistance, who provided assistance to this teacher during the last

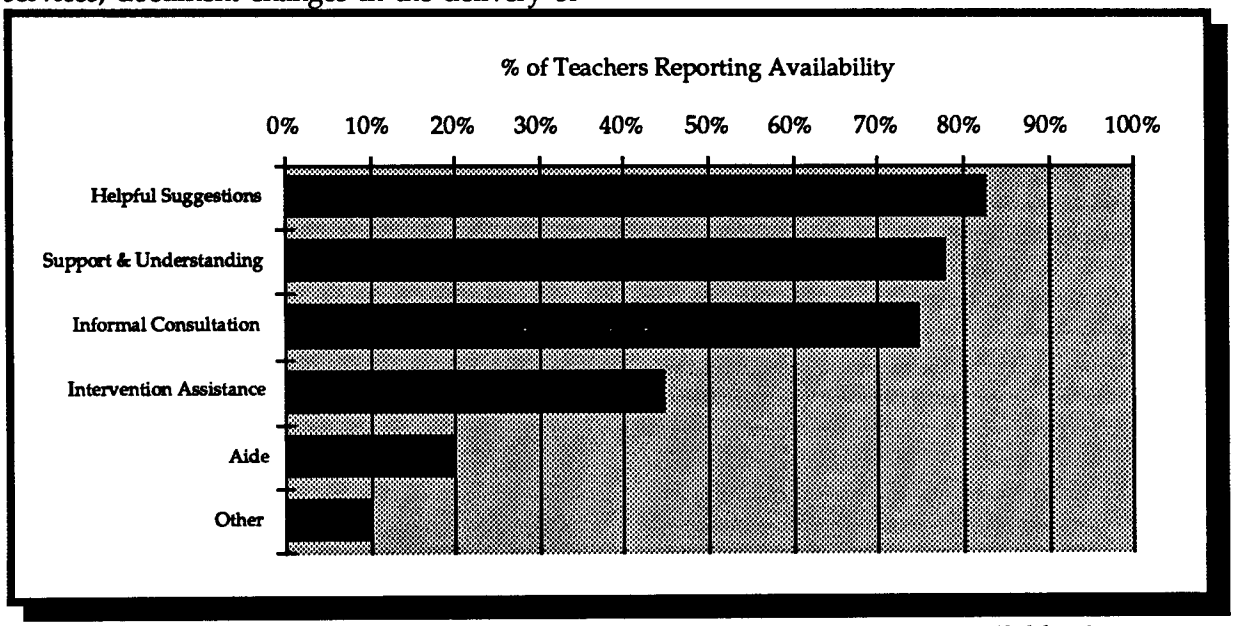

Figure 1. Regular classroom teachers' report of the kind of assistance available for learning or behavioral problems.

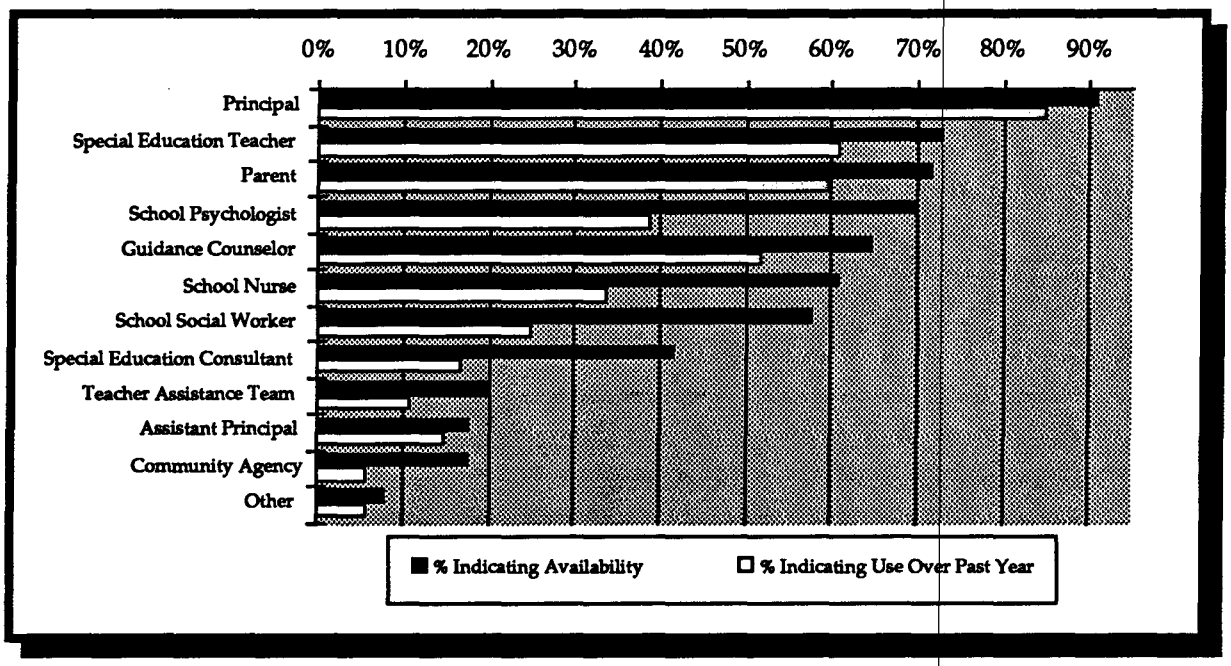

Figure 2. Personnel available to provide assistance to regular education teachers and actual utilization of personnel over past year (specific personnel are listed in order of availability).

year, the kind of assistance that might be provided in the future, and the teacher's estimation of the proportion of students in his/her classroom with learning or behavioral problems, not currently receiving services that address those problems.

The results in Figure 1 indicate the kind of assistance that was available to the teacher the last time that he/she was confronted with a learning or behavioral problem. The most frequent kind of assistance was "helpful suggestions," followed by "support and understanding," and "informal consultation." Only 45% of the teachers indicated that they received actual intervention assistance.

In Figure 2 results are presented concerning the persons available to provide assistance and the teacher's report on who provided assistance to him/her over the past year. The results in Figure 2 indicate that local building resources are more available and used more often. There were 12 possible sources of information listed on the instrument. School psychologists were the only area education agency service provider that was listed within the top six of the resources that were available and the resources actually used. Based on the results in Figure 2, the support currently provided to teachers comes primarily from building principals, special education teachers, parents, guidance counselors, and school psychologists. Other sources such as school social workers, special education consultants, and teacher assistance teams have not been as available nor utilized as often by teachers. Particularly surprising was the relatively low availability of teacher assistance teams, and the relatively low utilization of those teams that are available.

The results on kind of assistance provided and the availability and utilization of personnel indicate that most of the assistance is not particularly specialized or targeted toward specific interventions for students, and the assistance is provided, by in large, by persons with many other responsibilities. Furthermore, many of these persons do not have specialized training and experience with intervention procedures designed to resolve classroom learning or behavioral difficulties. Greater utilization or greater availability and utilization of support services personnel is needed, along with greater utilization and availability of teacher assistance teams.

Other items on this form related to the provision of direct assistance to students in the classroom (only 11% indicated that such assistance was provided). Some 95% indicated that they might or would definitely welcome such assistance. Most (65%) indicated that there were established procedures in their building for dealing with learning or behavioral problems, and when such procedures did exist, a high proportion indicated that they were followed (92%). This sample of regular education teachers also indicated that there were students in their classroom with problems that were not addressed through current services (48%) and that the percentage of such students was ap-

proximately 11% of the classroom enrollment. On an open ended item asking teachers what those students needed, 39% of the teachers indicated behavioral interventions, 36% indicated academic assistance, and 21% indicated counseling. A number of other needs were identified, but many could not be categorized and none constituted more than 10% of the teachers' responses.

Intervention Alternatives - General Form - Support Services Personnel

Data were collected from 78 support services providers (school social workers, special education consultants, school psychologists) in the four trial sites responded to items seeking information on the kind of assistance they provide to regular education teachers when the latter are coping with students with learning or behavioral problems. The results provided here are summaries for all support services providers. The items on this form sought information on whether or not assistance was provided prior to referral, the kind of assistance provided, as well as the kind of assistance provided after students have received a comprehensive evaluation and deemed ineligible for special education services. There were also items on the paperwork required by the current system, but those results will be discussed in a later section of the report.

Rather large majorities of support services personnel indicated that they do, at least occasionally, provide assistance to regular education teachers in attempts to resolve learning problems (76%) and behavioral problems (93%). However, the frequency with which these services are provided was rather low (see Figure 3). Each of the types of intervention assistance was rated on a Likert Scale anchored by zero equal to never, one equal to seldom, two and three equal to sometimes, and four and five equal to quite often. The most frequent assistance was consultation with the teacher, with a mean of 3.65, indicating that this service is provided sometimes to teachers. Other kinds of assistance related to direct interventions such as establishing a behavioral program or a direct intervention such as social skills were seldom provided to teachers. These results indicate that support services personnel are not utilized to a great extent for providing services to students prior to referral. These findings are most likely due to the lack of availability and time pressures on support services personnel. These personnel are currently engaged to a far greater extent in determining eligibility or maintaining eligibility for special education programs, rather than as resources to teachers for resolving problems prior to referral.

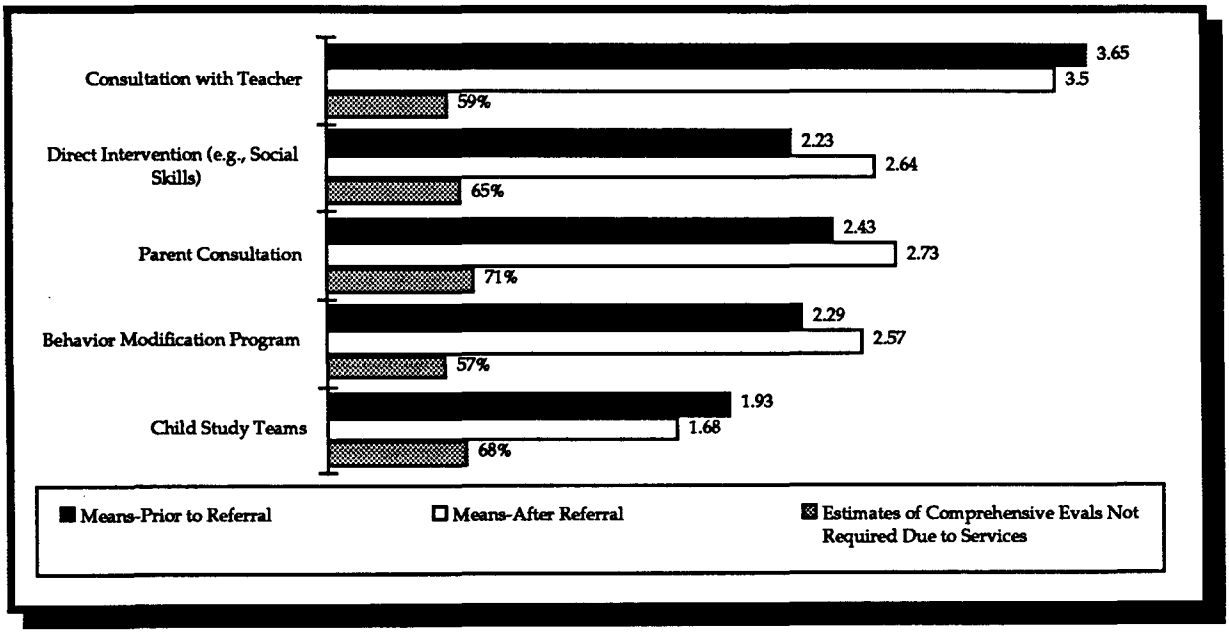

Figure 3. Frequency and estimated effects of support services prior to and after referral for special education eligibility.

Note: 1) The mean data (black & whitelines) were based on a Likert Scale where 0=Never, 1=Seldom, 2 & 3=Sometimes, & 4 & 5=Quite Often.

2) The final line depicted represents the estimates of support services providers concerning the percentage of referrals which would not receive comprehensive evaluations if the prereferral service was provided.

The results of the bottom, checkered-designed line in each category in Figure 3 were obtained in response to the item, "When the following services are provided by you prior to referral, indicate approximately what percentage of students are later referred for a special education eligibility determination evaluation." The responses to this item indicate that the majority of students' problems might be resolved without special education eligibility determination if services such as behavior modification programs, direct interventions, teacher consultation, child study teams, and parent consultation were provided prior to referral. The views of support services personnel are clear. Greater involvement with pre-referral services holds considerable promise for reducing time involved with special education eligibility determination and, perhaps, classification of students as disabled and placement in special education. These results are clearly supportive of the RSDS efforts to provide more intervention alternatives and better utilization of support services personnel.

Support services personnel are not heavily involved with students after comprehensive evaluations when the outcome of the evaluation was the determination that the student was not eligible for special education services. Only 46% of the sample indicated that their services were utilized with such students. Furthermore, the services were not provided very often. The mean for a simple question of "how often?" was 1.91, indicating that post comprehensive evaluation services are, at best, provided sometimes. Support services personnel ratings of the frequency of the provision of various services after the comprehensive evaluations is illustrated by the middle, white line in each category in Figure 3.

The most frequently provided service, both pre-evaluation and post evaluation was consultation ($F = 24.3$, $p < .001$). However, the consultation was rarely of the problem solving variety since target behaviors were rarely defined, careful measurement used, specific interventions implemented, and outcomes evaluated (see next section).

Services to students who were referred, and received a comprehensive evaluation, but not placed are particularly important in the prevention of subsequent referral of the same student in later years. Support service providers are quite familiar with a pattern of repeated referral across school grades, finally resulting in placement in special education. Provision of services to these students in earlier grades may very well prevent the later referrals. Furthermore, the extensive information gathered in the comprehensive evaluation is unlikely to be applied with referred, but not placed students unless there is a continuing involvement of support service personnel. The continuing involvement is fundamental to the changes anticipated in the Renewed Services Delivery System.

Intervention Alternatives - Specific Form - Teachers & Support Services Personnel

The Intervention Alternatives, Specific Form was completed by 126 support services personnel and 108 regular education teachers. A specific student was identified with whom both the teacher and the support services person were familiar because the student had been referred by the teacher, evaluated for special education eligibility, but not placed in a special education program. In some instances both forms were not received on the same student, however the majority were successfully matched. The study of the services provided to a specific student provide valuable information on what actually was done, rather than individuals' reports of what is generally available or provided. Extensive analyses were conducted with these data, often comparing the perceptions of teachers and support services personnel. These data reveal several interesting and, in some cases, disturbing trends regarding current practices. First, a difference between support services personnel and teachers emerged with the analysis of the problem that was viewed as being of greatest concern. Teachers in contrast to support services personnel were more likely to view the primary problem as academic (71% vs. 55%); and less likely to be behavioral (18% vs. 41%). Teachers and support services personnel identified the problem as primarily social skills in 8% and 5%, respectively of the cases. These differences were statistically significant (Chi-square = 10.62, $p < .03$), suggesting that the teachers are more likely to view problems as academic while support services personnel see the majority of problems as academic, but a significantly greater percentage as being behavioral. It is important to note that these data were reported for the same students.

Data concerning pre-evaluation interventions are presented in Figure 4. The views of teachers and support services personnel were sharply varied regarding whether or not a pre-evaluation intervention had been conducted. Some 54% of the teachers reported that an intervention had been conducted, but 75% of the support services personnel answered affirma-

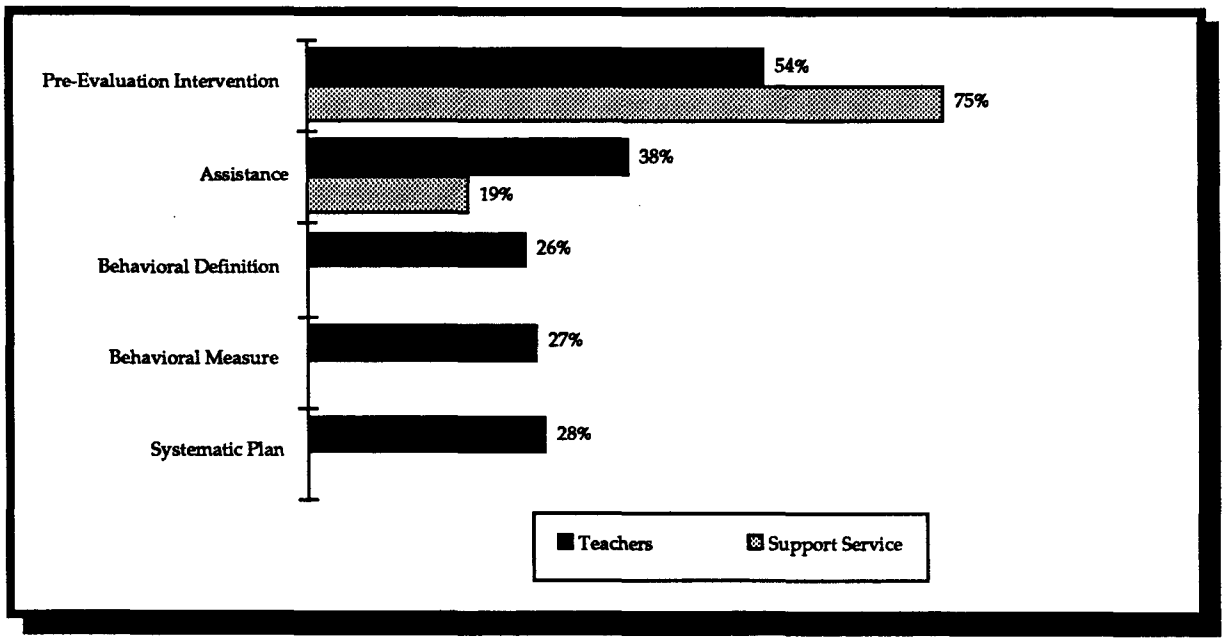

Figure 4. 1989 Iowa pre-evaluation intervention data (For every 100 referrals receiving comprehensive evaluations the following percentages would be in effect).

tively to this item (Chi-square = 4.99, $p < .03$). Although support services personnel thought that an intervention had been conducted, only a very small proportion indicated being involved with the intervention (only 14%). Some 38% of the teachers reported that they received assistance, but the source of assistance was most often the principal (44%), the teacher working independently (40%), another regular education teacher (33%), a school psychologist (26%), a special education teacher (19%), or guidance counselor (19%). The percentages reported in Figure 4 reflecting indices of quality of the interventions suggest that most of the interventions lacked essential features such as a behavioral definition, a behavioral measure, a systematic plan, and an evaluation of outcomes. However, the plans that were developed and implemented were judged by teachers to be successful in 66% of the cases. The results in Figure 4 indicate rather clearly that most students receiving comprehensive evaluations did not receive systematic, well-planned, and carefully evaluated interventions prior to consideration of eligibility for special education. A further interesting result was the difference between support services and teachers regarding whether more assistance might have prevented a comprehensive evaluation. Most of the teachers (72%), in contrast to 39% of support services personnel, thought that a comprehensive evaluation would have been required even if more assistance had been available. Even if the teachers' estimate of the number of comprehensive evaluations that might have been prevented through provision of more problem-solving assistance prior to referral is accepted, over 1/4 of all students currently receiving comprehensive evaluations might have had problems resolved within regular education without consideration of eligibility. A reduction of this magnitude would markedly increase the amount of time support services personnel could devote to providing more direct support to teachers.

According to teachers as well as support services personnel, parental involvement prior to the referral and the performance of the comprehensive evaluation was largely restricted to consent and notice, informal conferences and, to some extent, parental assistance with intervention implementation (roughly 25% of the cases). Both groups also regarded the absence of greater parental involvement as the preference of parents.

Several items were used to assess the nature of the comprehensive evaluation, particularly the teachers' role in assisting with that evaluation. Teachers and support services personnel disagreed rather significantly over whether an interview was conducted with the teacher to establish specific questions to guide the evaluation (36% of the teachers vs. 64% of support services personnel answered "yes" to that question, Chi-square = 17.01, $p < .001$). Most of the participants in both groups indicated that observations were conducted in the classroom but the typical outcome of these observations was general comments about the students rather than specific counts of precisely-defined behaviors. These results suggest that the typical student

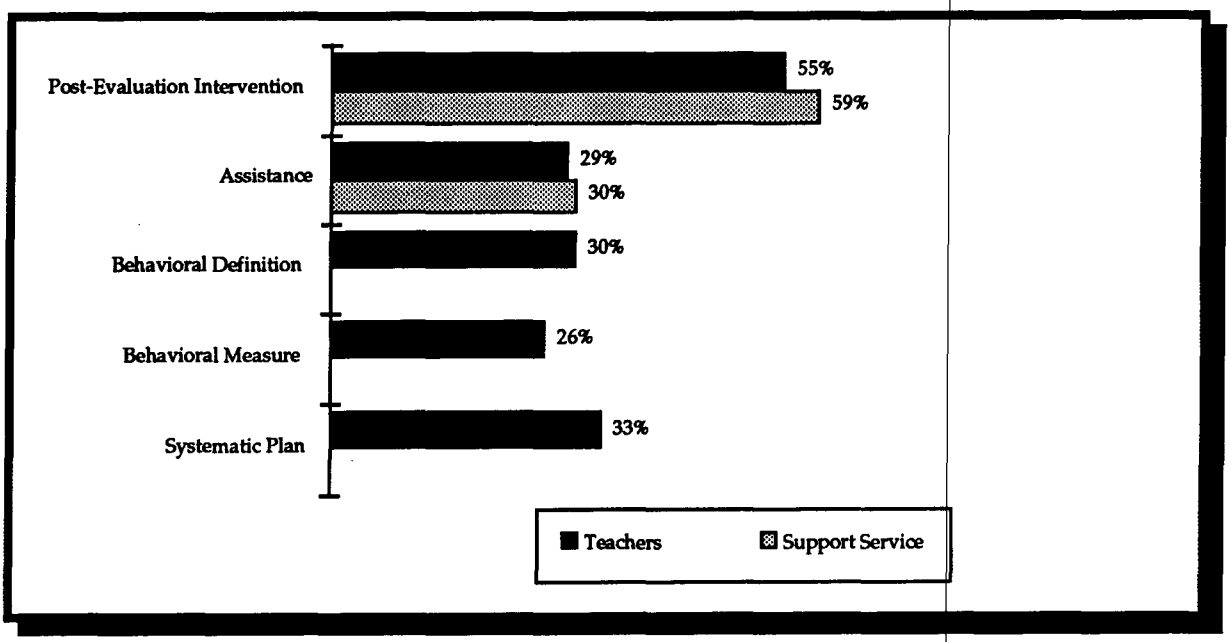

Figure 5. 1989 Iowa post-evaluation intervention data (For every 100 referrals receiving comprehensive evaluations the following percentages would be in effect).

who is referred and evaluated, is usually not studied through systematic behavioral observations; rather, the observations are more anecdotal in nature.

Results are provided in Figure 5 concerning the kind and nature of interventions carried out after the comprehensive evaluation was completed with the specific student. Implementation of interventions at this stage is crucial to assist the teacher and student in achieving problem resolution. Again, it is crucial to note that the students on whom these data were reported were provided comprehensive evaluations, but were not eligible for special education placement. Intervention assistance from support services personnel was only slightly more available after the comprehensive evaluation (see Figure 5). Both teachers and support services personnel indicated that approximately 55-60% of students did receive interventions after the evaluation, but teachers reported a low rate of assistance and support services personnel indicated that, for the most part, they were not involved in providing such assistance. The vast majority of the interventions, 65-75%, failed to meet well accepted criteria reflecting quality. The vast majority did not involve a behavioral definition of the problem, a behavioral measure of the problem behavior, nor a systematic plan. However, when plans were developed and implemented, some 75% were judged by teachers to be successful. Teachers listed the following persons as sources of assistance in these interventions; school psychologist (41%), Chapter 1 teacher (31%), principal (31%), special education consultant (18%), school social worker (18%), and special education teacher (17%). Again, parents were not, for the most part, involved with these interventions and that lack of involvement was again attributed to parental choice.

The pattern that emerges from these results is disturbing. A significant proportion of students do not receive high quality interventions, either before or after comprehensive evaluations are conducted. Furthermore, there is reason to believe that a significant number (at least 25%) of the comprehensive evaluations could be prevented if greater assistance was provided. Most disturbing is the evidence on quality of interventions. In the vast majority of cases, these students did not receive interventions that reflected widely accepted best practices, such as developing a definition of the target behavior that is measurable and observable, development and implementation of a measure of the behavior, design and implementation of a systematic plan to improve the problem behavior, and systematic evaluation of the effects of the plan. Indeed, efforts to resolve problems that do not reflect these important quality indices can hardly be called interventions, and they are certainly not behavioral interventions. The role of support services personnel, school psychologists, school social workers, and special education consultants does not reflect heavy involvement in the development of interventions, either before or after comprehensive evaluations. These data, as well as other existing sources of data suggest that support services personnel are

currently involved primarily with carrying out eligibility evaluations. One of the most important goals of RSDS is to improve the availability of interventions for students, to improve the quality of those interventions, and to ensure greater availability of support services personnel to assist teachers with the design, implementation, and evaluation of interventions. These baseline data from the four trial sites unequivocally establish the need for the changes contemplated in RSDS.

The results in this section also clearly reveal certain staff development needs. Although consultation was frequently reported by support services personnel, the vast majority of those consultative services were not problem-solving in nature. Problem-solving consultation, through collaborative relationships, wherein problems are defined behaviorally, precise measures developed, intervention plans designed and implemented, and outcomes evaluated were typically not provided to students considered for special education classification and placement. Secondly, problem-solving assessment wherein specific questions are established and then assessment procedures developed to address those questions was not implemented in the vast majority of these cases. Furthermore, the classroom observation was typically anecdotal, rather than well structured and designed so that data on problem behaviors could be developed. Finally, parents were not, for the most part, active participants in efforts to resolve problems. These areas are currently being addressed through efforts to develop training modules, videotapes, and training in the trial sites.

INDIVIDUALIZED EDUCATIONAL PROGRAMS & STUDENT OUTCOMES CRITERIA

Samples of special education teachers (total n = 115) from the four trial sites provided information concerning the nature of current individualized educational programs and the implementation of student outcomes criteria. The content of these forms included items on functional assessment, outcomes criteria, direct and frequent progress monitoring, and paperwork.

All of the data reported (see Figure 6) in this section involve teacher self-report by those directly involved with resource teaching programs or special classes with integration. Generally, these results indicate that teachers are using IEPs closely matched to general goals and specific objectives and that the objectives are written in behavioral, measurable terms (100% of respondents). Furthermore, some 91% indicated that a systematic method was established for measuring each objective, typically a direct measure of the skill (90%), a criterion-referenced measure (76%), an indirect measure (77%), or a standardized test (68%). The kind of score yielded by the measure was most often reported to be a comparison of peers (77%) followed by a behavioral count (58%), a percentage score (44%), comparison to past scores (26%), or a standard score (11%).

According to these teachers, a measure was used to assess the student's progress on a daily or weekly basis (54%), and the results were used to

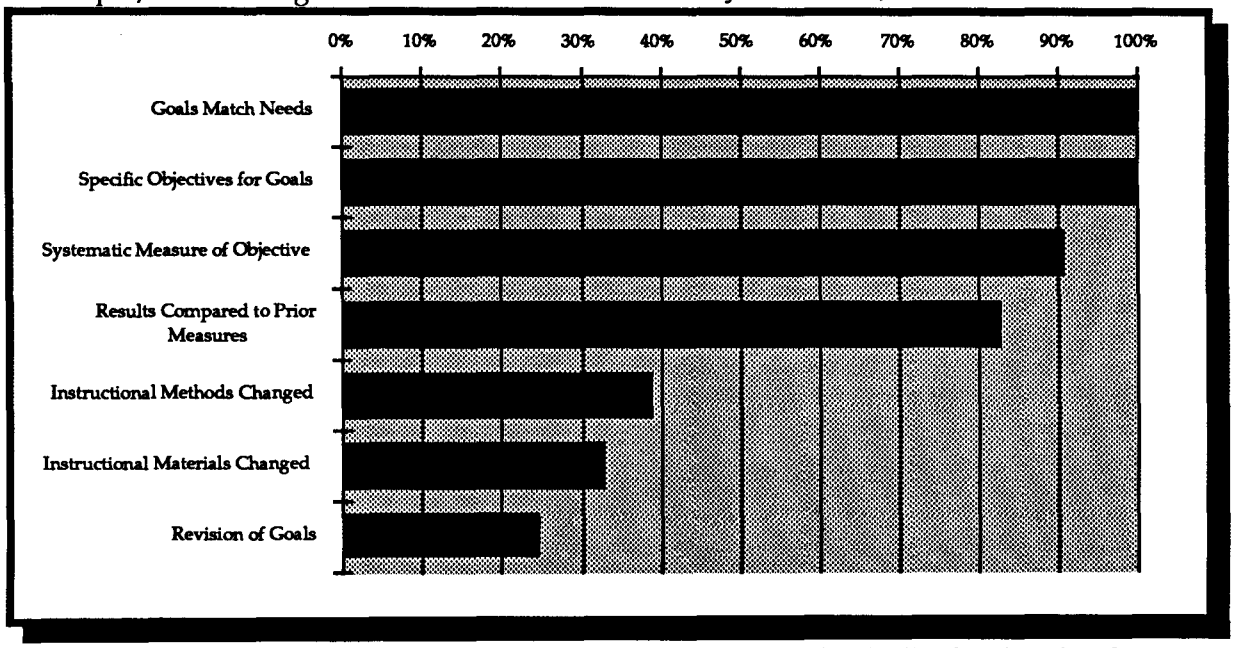

Figure 6. Percent answering yes to questions concerning Individualized Educational Programs.

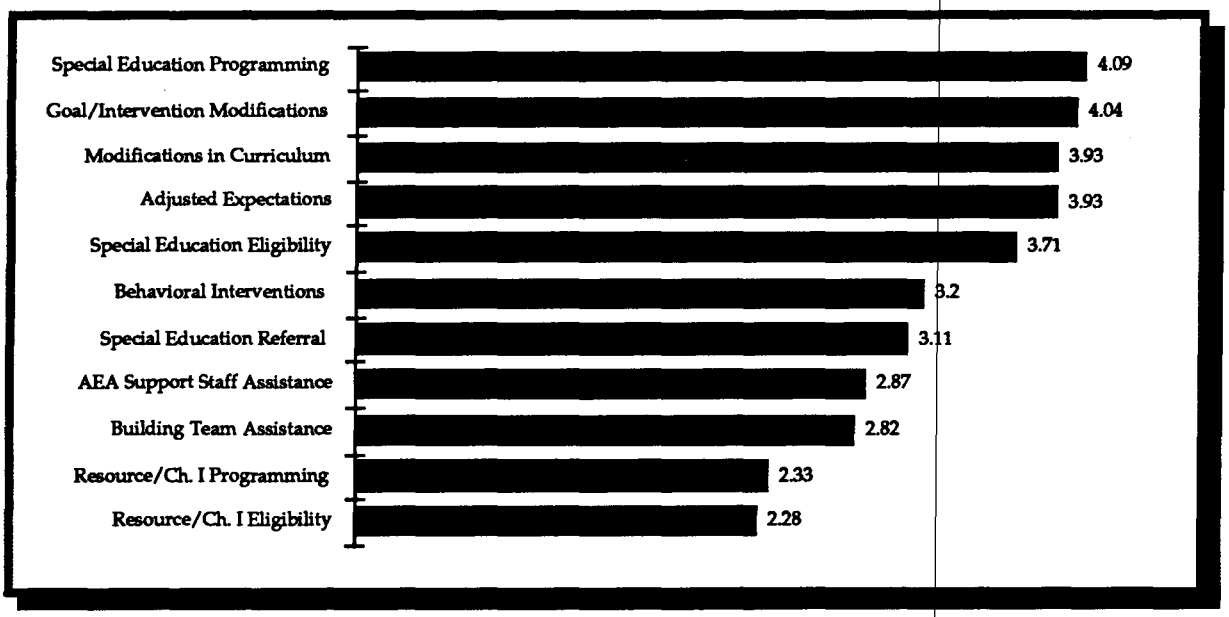

Figure 7. Mean ratings of kinds of decisions influenced by outcome data (Likert Scale 1-5).

compare the student's performance to prior measures of the skill (83%). However, the kind of measure used was rarely a curriculum-based measure (14%) or, presumably, another measure that could be represented graphically in order to systematically monitor progress on a frequent basis. As a result of the measures that were used, teachers reported that methods of instructions were sometimes changed (39%), materials changed (33%), or goals revised (25%). These latter results suggest that the measures of progress are not used very frequently in modifying the instruction received by students. Several additional items, to be discussed later, sought information on parental involvement and the kind and nature of paperwork required in the current system. The results from the IEP form suggest that, according to the teachers, instruction is based on general needs and specific objectives, measures of progress are used, and measures are used on a daily or weekly basis in about half of the cases. As noted later, the kind of measure typically used is not amenable to systematic progress monitoring. The relatively infrequent use of these results to modify instruction is a further area of concern.

The collection of data in order to implement outcomes criteria decision making was assessed through special education teachers reporting data collection and decision-making procedures with a specific student with a disability for whom they were providing instruction. These self-report data indicate that teachers collected data regularly (85%) with nearly 80% reporting collecting data at least on a weekly basis. Nearly all (97%) reported using a systematic method to collect the data, typically, daily work (91%), standardized tests (87%) (most often the Woodcock-Johnson), teacher-made tests (71%), curriculum-based measures (62%), and systematic observations (52%). It should be noted that teachers could indicate use of more than one method. Results are displayed in Figure 7 concerning how this information was used in various decisions. All responses were on a Likert Scale, where one was anchored by "not at all", three was anchored by "sometimes", and five was anchored by "very much." The results depicted in Figure 7 indicate that the outcome data collected by teachers were used most often in special education programming decisions (mean = 4.09), followed by goal/intervention modifications (mean = 4.05), modifications in curriculum (mean = 3.93), and adjusted expectations (mean = 3.93), and special education eligibility (mean = 3.71). These data strongly suggest appropriate use of the outcome data being collected by special education teachers, but there is still a relatively heavy reliance on standardized tests, instruments that have less usefulness for assessing outcomes of specialized instruction.

PROGRESS MONITORING

Data were collected concerning progress monitoring with a specific student currently receiving special education services in a resource teaching program or a special class with integration. The progress monitoring items were completed by the student's special education teacher (n = 129) or the regular education teacher (n = 83). Results for nearly all items will be presented separately for special education and regular education teachers. Results are pre-

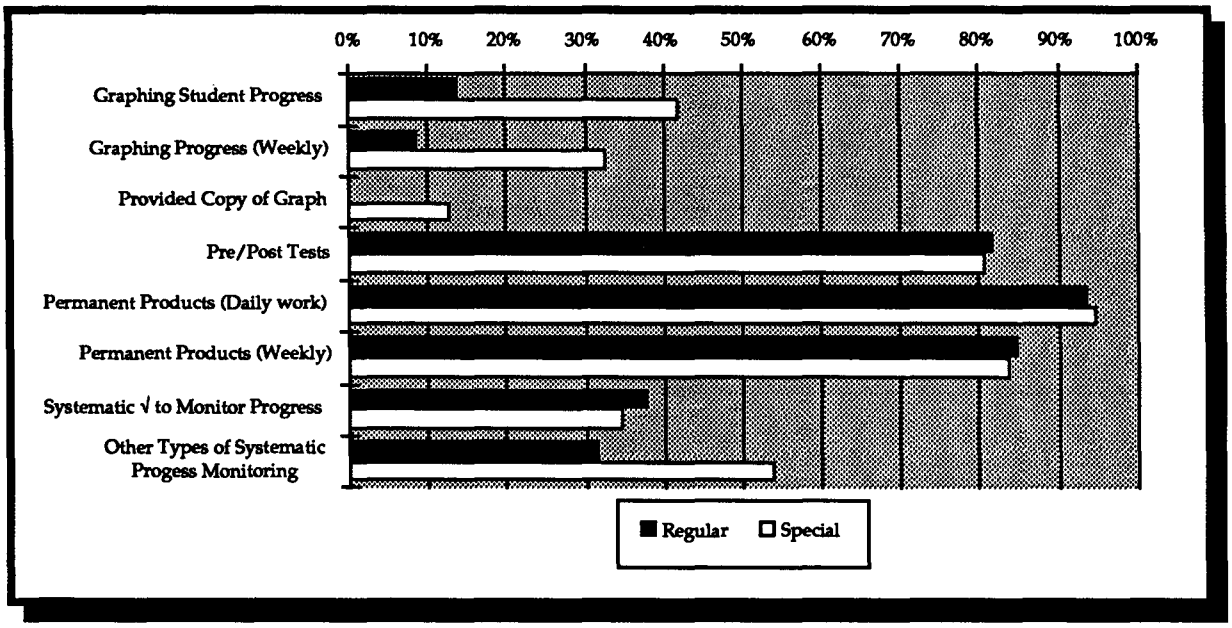

Figure 8. Academic progress monitoring procedures.

sented in Figure 8 concerning progress monitoring procedures in academic skills areas and in Figure 9 concerning non-academic skills such as social skills assistance, school survival skills assistance, and support services assistance. The data in Figures 8 and 9 generally indicate that somewhat more systematic progress monitoring procedures are used in special than in regular education. However, the frequency with which a number of procedures are used indicates considerable need for further training and implementation of best practices regarding progress monitoring. A good illustration is the item concerning graphing student progress (see Figure 8). Only 14% of regular and 42% of special education teachers reported graphing student progress, and the frequency with which graphs were updated weekly was only 9% and 33% in regular and special education, respectively. Moreover, virtually no respondents provided copies of the graphs that they were using. The most frequent form of progress monitoring is some kind of permanent product such as completion of daily work assignments. Moreover, these permanent products are collected at least weekly (approximately 85% of the time) in regular and special education. However, systematic progress monitoring at particular, specified times, was relatively infrequent in regular education, and occurred with only 1/3 to 1/2 of the students in special education.

As might be expected, only about half of all

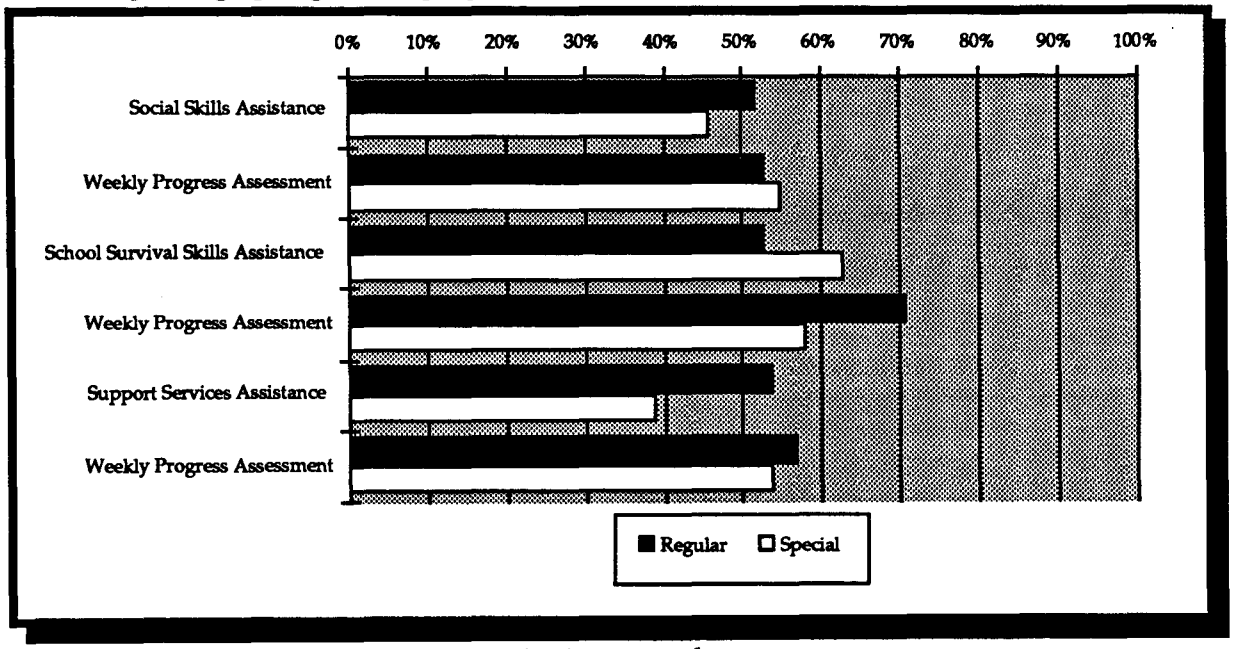

Figure 9. Non-academic progress monitoring procedures.

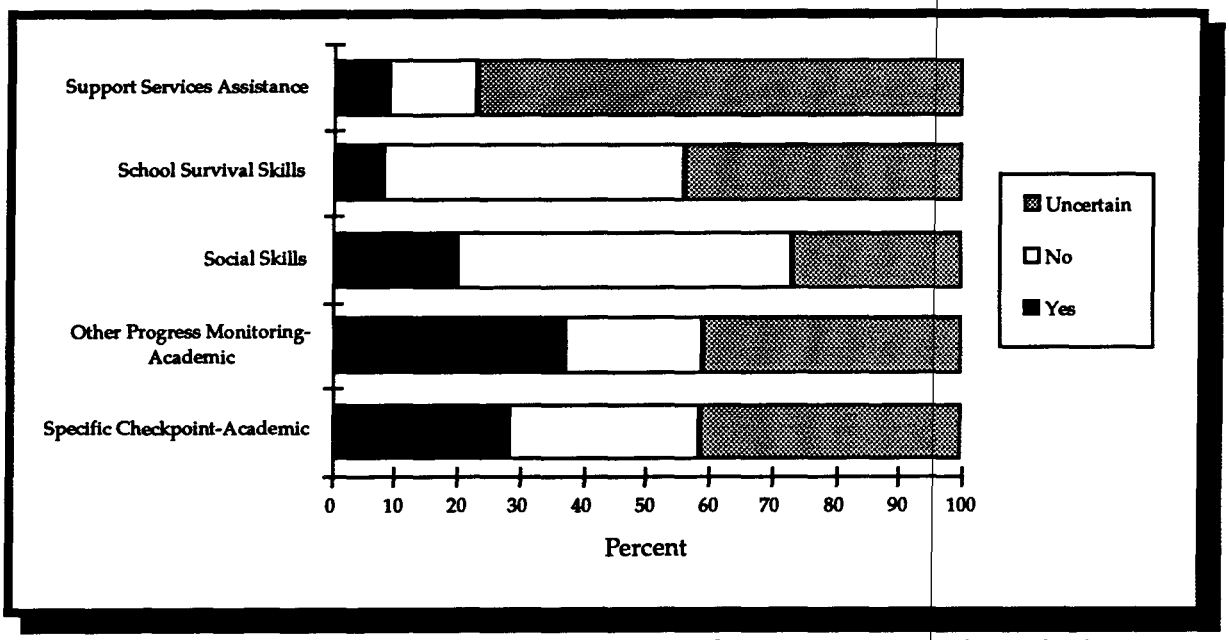

Figure 10. Quality of the progress monitoring procedures (Percent meeting criteria).

students receive interventions related to social skills, school survival skills, or other kinds of support services assistance. In each of these areas, progress monitoring is considerably less frequent.

Regular and special education teachers were asked to indicate the specific method used to collect data for systematic checkpoints to monitor progress, other types of systematic progress monitoring, social skills progress monitoring, school survival skills progress monitoring, and support services progress monitoring. The procedures described were then evaluated according to criteria for progress monitoring measures; specifically, whether specific behaviors were assessed, whether the assessment method could be used repeatedly, whether the assessment method could be used frequently, and whether the results could be represented graphically. The overwhelming majority of the procedures described failed to meet one or more of these criteria. The results in Figure 10 clearly indicate that considerable work is needed regarding the development of appropriate progress monitoring procedures. Further support for this conclusion is provided by responses to the item, "Would you like to learn more about methods to monitor student progress?", which was answered affirmatively by 85% and 81% of the regular and special education teachers, respectively.

Results concerning different methods for monitoring progress in the academic areas of reading, mathematics, spelling, and written expression are presented in Figures 11-14. Gen-

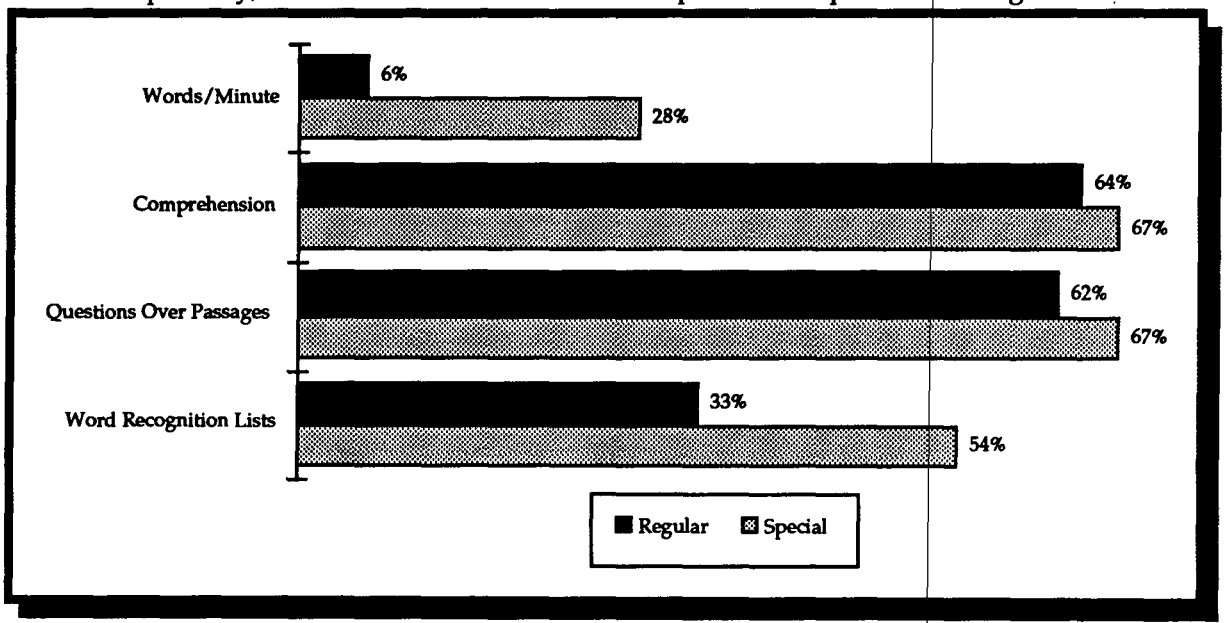

Figure 11. Methods to assess progress in reading.

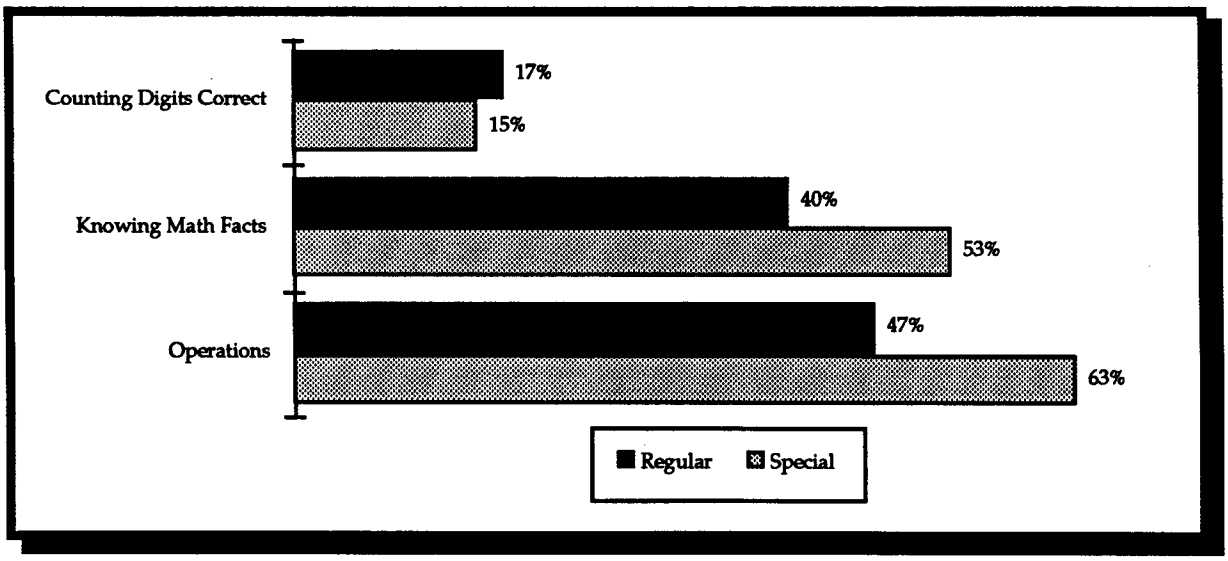

Figure 12. Methods to assess progress in mathematics.

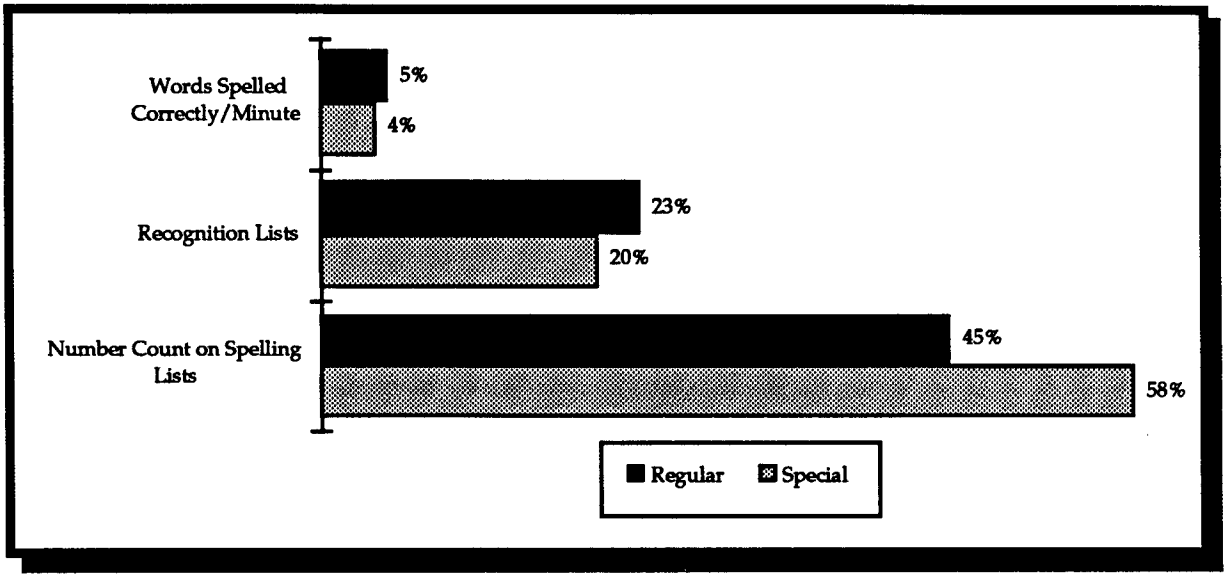

Figure 13. Methods to assess progress in spelling.

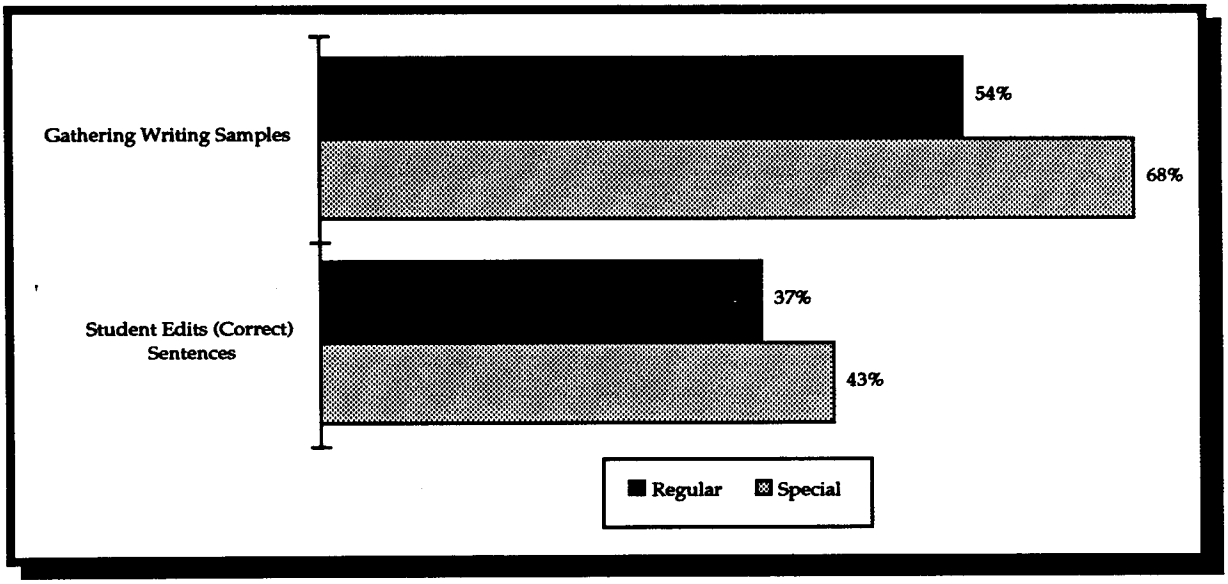

Figure 14. Methods to assess progress in written expression.

erally, the procedures used most frequently are unlikely to be useful in frequent and repeated assessment, nor do they yield precise behavioral counts that can be graphed as a means to monitor progress. The use of indices such as words read correctly per minute (see Figure 11) or digits entered correctly (see Figure 12) in timed samples was relatively low in regular and special education. These results suggest relatively infrequent use of curriculum-based measures, a finding somewhat inconsistent with results reported in a prior section concerning individualized educational programs. However, this discrepancy may well be explained best by acknowledging the wide-spread lack of information on just what curriculum-based measurement involves. The results on progress monitoring, a critical factor in the delivery of effective specialized instruction and of other interventions, suggest considerable need for staff development and further training of teachers and support services personnel. Progress monitoring procedures that meet reasonable criteria such as direct and repeated measurement, precise behavioral units, and graphing of progress are infrequently implemented in the current delivery system. The RSDS emphasis on improved progress monitoring is strongly supported by these results.

STAFF DEVELOPMENT

The results presented concerning intervention alternatives, IEP development, outcomes criterion, and progress monitoring provide ample justification for the RSDS emphasis on staff development. The staff development form was completed by teachers (n = 159; 55 special education, 92 regular education, and 12 Chapter I), support services providers (n = 64), and principals (n = 104). Items were included on these forms to determine the degree to which staff development is part of the current building plan or in the area education agency professional development plan. Content concerning functional assessment, intervention alternatives, direct and frequent progress monitoring, outcomes criteria, and the kind of support provided for persons attempting to implement new competencies. Many of the items were the same on all three forms, allowing comparisons of the responses by teachers, support services personnel, and principals.

The three groups differed significantly concerning whether a comprehensive staff development plan was available in their building/AEA (Chi square = 26.3, $p < .001$). Generally, principals were more likely to report the existence of a comprehensive staff development plan (62%) with considerably lower percentages of teachers (44%) and support services personnel (20%) agreeing that such a plan existed. Similar results were obtained on the item concerning whether the staff development plan was in a written form (Chi square = 10.8, $p < .01$). The establishment of priorities for training needs was also an area of disagreement among teachers, support services personnel, and principals (Chi square = 20.0, $p < .01$). Principals reported the training needs were prioritized (75%) but only 50% of teachers and 38% of support services personnel reported establishment of priorities.

Results concerning the content of staff development plans are presented in Figure 15. The five content areas in Figure 15 are critical to RSDS reforms. Percentages of the three groups indicating that staff development plans included content in the five areas are displayed in Figure 15. The first trend apparent is that support services personnel have generally received greater continuing education over the five themes, but even for this group, less than one-half reported staff development in the critical areas of direct and frequent progress monitoring and outcomes criteria. Teachers generally reported considerably lower continuing education over the five areas. Three of the areas yielded statistically significant differences in the groups; functional assessment (Chi square = 37.7, $p < .001$) where support services reported considerably greater continuing education, and outcomes criteria (Chi square = 12.5, $p < .05$) where support services and principals reported greater continuing education, and working with students with learning and adjustment problems (Chi square = 6.4, $p < .05$) where, again, support services and principals reported greater continuing education. The overall magnitude of the percentages indicates that considerable continuing education is needed for all groups over each of the areas, particularly in the areas of functional assessment for teachers, direct and frequent progress monitoring for everyone, and outcomes criteria for everyone.

Results concerning three staff development strategies are displayed in Figure 16. The three groups were asked to respond to three items seeking information on 1) whether new staff were mentored or used shadowing procedures; 2) whether experienced staff were able to model effective procedures for other persons; and 3) whether staff support and information sharing teams were used. The first trend in Figure 16 is the clear difference in perception in principals and the other groups concerning the availabil-

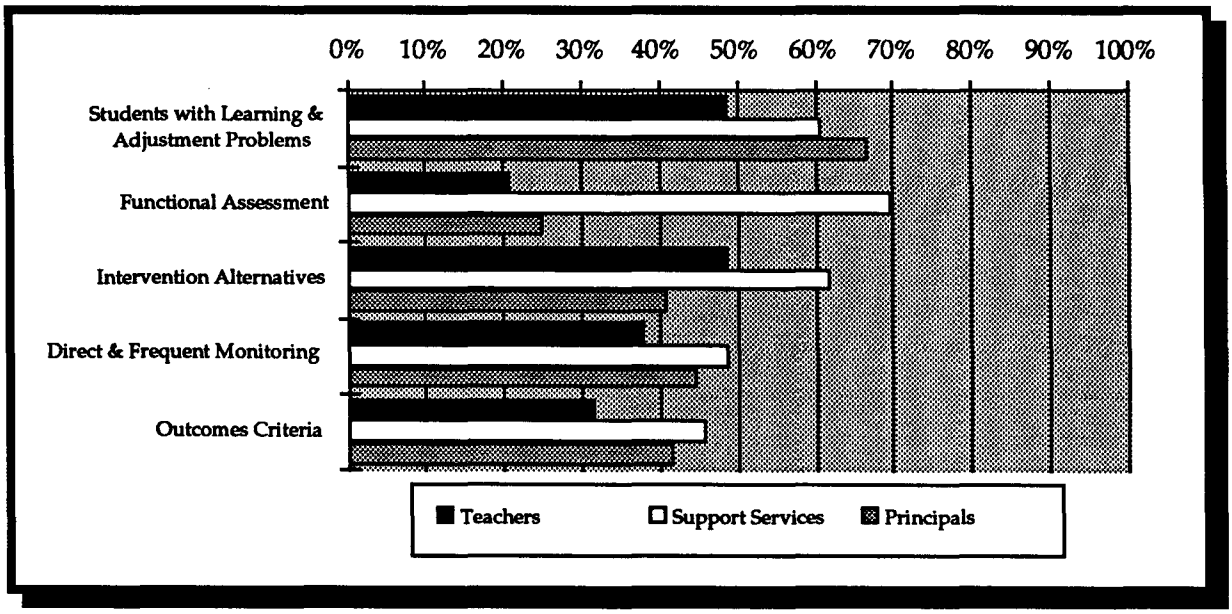

Figure 15. Content of staff development plans (Percentages indicate content areas included in staff development plans of designated groups).

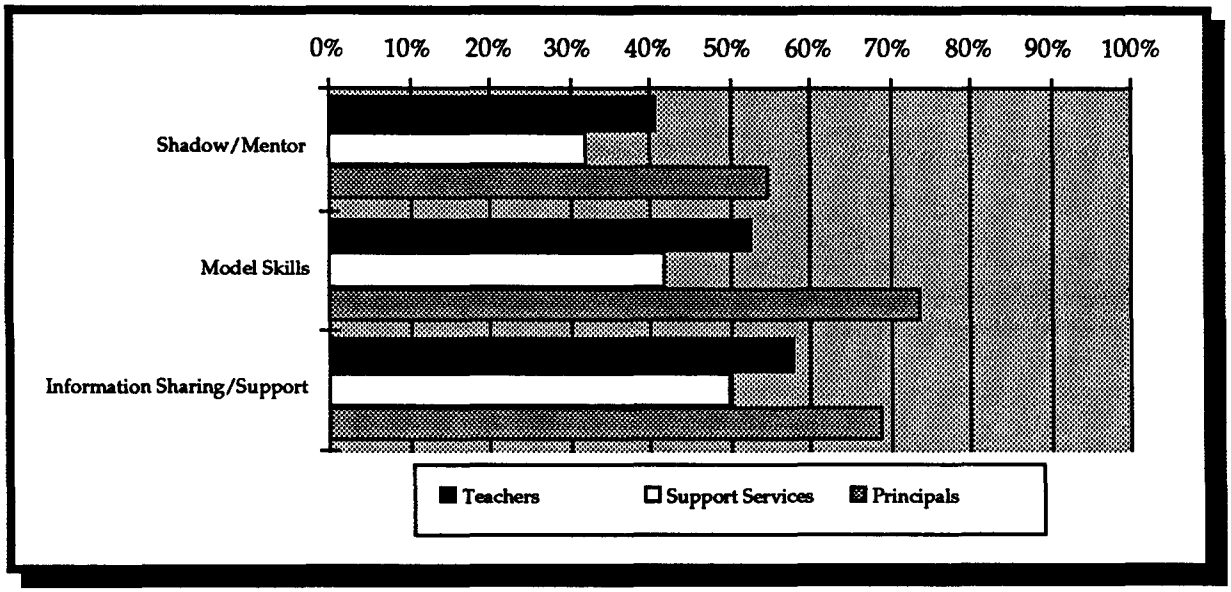

Figure 16. Staff development strategies.

ity of these strategies. Secondly, these highly desirable strategies appear to be generally more available for teachers than for support services personnel. Third, the actual use of these strategies, particularly effective techniques such as mentoring/shadowing, and modeling skills was relatively low, involving less than half of the teachers and support services personnel. These results clearly indicate the need for the use of more effective strategies in continuing education efforts directed at teachers and support services providers.

Further support for this interpretation was apparent from responses to three items concerning the nature of inservice meetings in recent years (data not shown). Generally, inservice meetings have been oriented to a greater extent toward knowledge acquisition than toward the development of skills, and inservice meetings often deal to a significant extent with administrative updates rather than skill development. As might be expected, there were some differences in perceptions across the three groups of the latter three items.

BUILDING/DISTRICT PLANS

The major focus for RSDS is the development of building level plans that carefully tailor the provision of services to identified needs of students. Data were collected from samples of principals (n=110) and superintendents (n=36)

TABLE 1

Current Status of Building Plans Concerning Services to Students with Learning and Adjustment Problems

Item	Principals YES	Superintendents YES
Written Procedures for Teachers to follow to obtain assistance (separate from special education)	36%	64%
Crisis Management Teams	32%	50%
Building Teacher Assistance Teams	35%	
Chapter I Services	67%	
Written Guidelines for Chapter I Eligibility	82%	55%
Written Guidelines for Exiting Chapter I Services	55%	
District Guidelines for Provision of Resource Teaching Program Services		69%
Written Guidelines for Exiting Resource Teaching Program Services	46%	
Systematic Method to Evaluate Services for Students Who Are At-Risk or Have Disabilities	17%	

concerning the range of intervention alternatives, current utilization of personnel, transition planning and programming, and utilization of the local attendance center. These results provide a valuable baseline to assess the degree to which change occurs over the three-year period of RSDS implementation in the trial sites.

Information on Table 1 summarizes responses to nine items concerning current Chapter I programs, special education resource teaching program, and crisis management services. It is significant to note that approximately two-thirds of the principals reported the existence of Chapter I services, which we would interpret as indicating Chapter I is available in the vast majority of elementary schools in Iowa. However, written procedures for teachers to obtain assistance, separate from special education, crisis management teams, and building/teacher assistance teams, are apparently available in only about one-third of the local attendance centers. Of special concern was the low rate of involvement by AEA support staff in building teacher assistance teams (data not shown). A great deal of work is needed regarding evaluation of students in programs and evaluation of programs. Typically, written guidelines for discontinuation of either Chapter I or resource teaching program services are available in only about one-half of the buildings and only 17% of the principals reported the existence of a systematic method to evaluate services for students

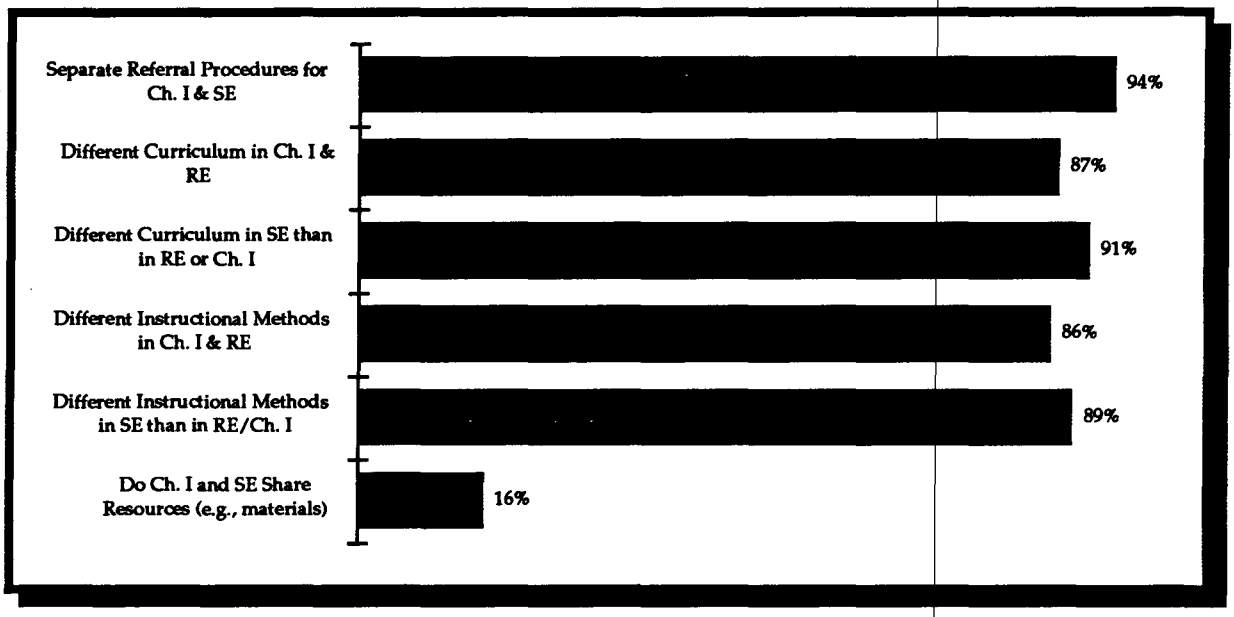

Figure 17. Separation of services to students with learning and behavior problmes (Curriculum & methods).

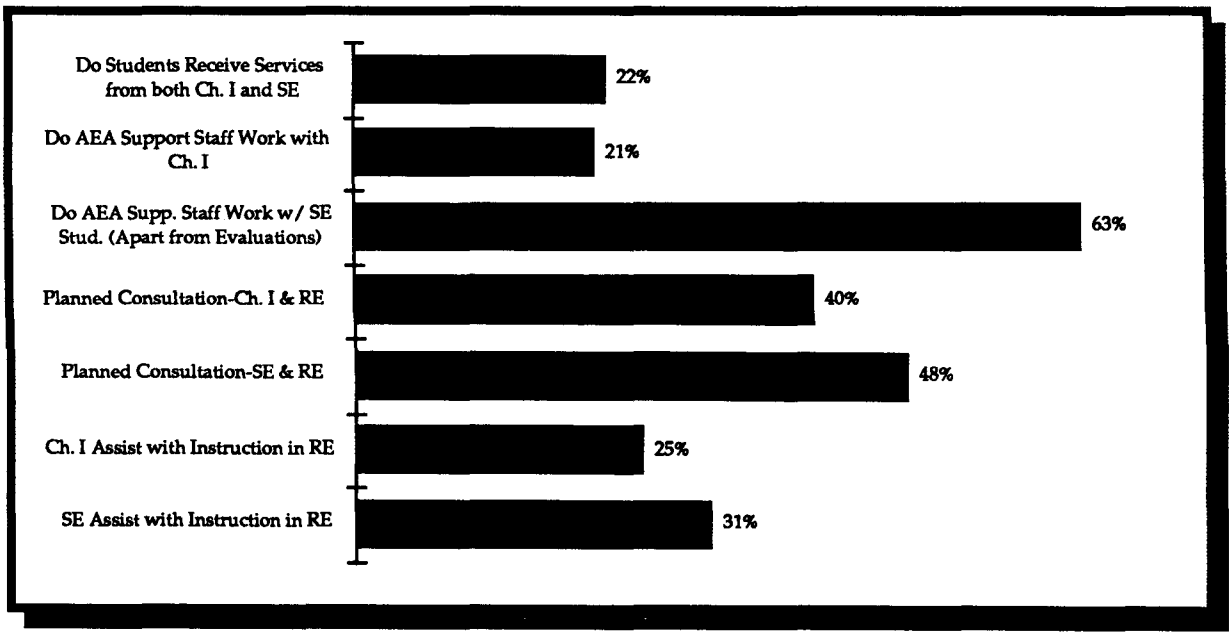

Figure 18. Separation of services to students with learning and behavior problmes (Support Services & Consultation).

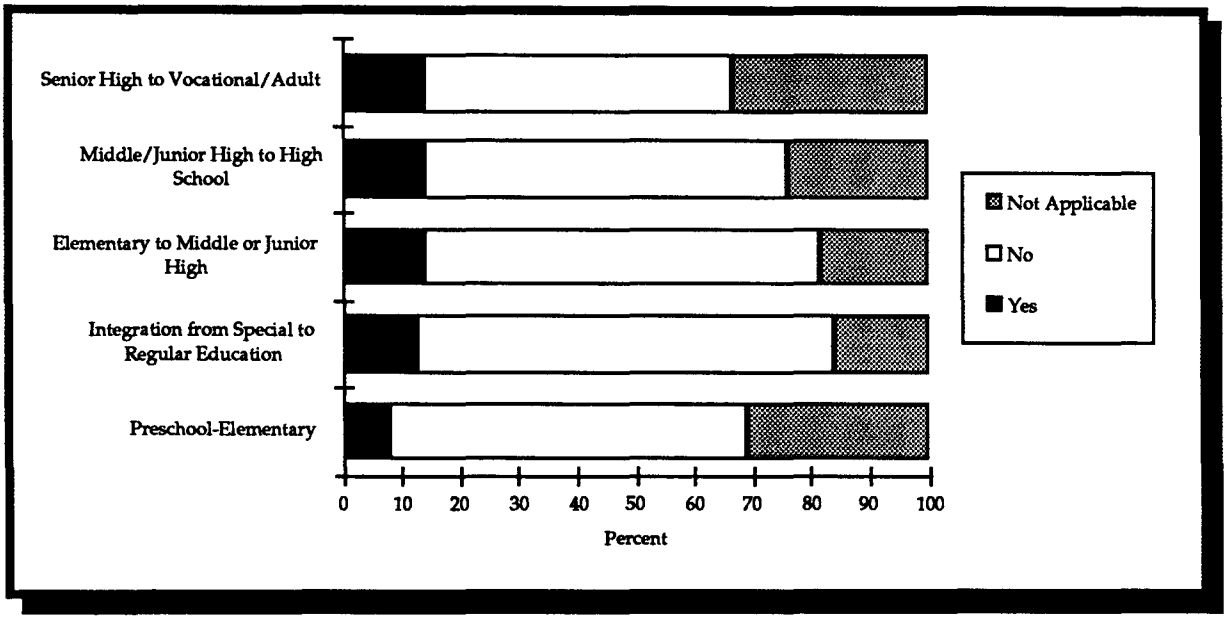

Figure 19. Transition services: Written standard procedures.

who are at-risk or have disabilities.

The fuller utilization of personnel and greater integration of current programs serving students with learning and behavior problems are critical objectives in RSDS. The results in Figures 17 & 18 suggest considerable separation between Chapter I and special education services. This separation is due in large part to existing regulations. However, that separation extends to the involvement of AEA support personnel with Chapter I students (only 21% of the principals indicated that AEA support services personnel work with Chapter I students-see Figure 18). Furthermore, the content or the instruction in Chapter I and special education does not appear to be closely matched to curricular objectives or instructional procedures in regular education. These results clearly support the RSDS objectives of greater integration of programs that have similar purposes and fuller utilization of personnel to assist regular educators in delivering programs to students with learning and behavioral difficulties.

Transition from various levels of services, at different ages, or across settings, is critical to insuring positive outcomes for students who are at-risk or have disabilities. Principals were asked to respond to items concerning the availability of "written standard procedures regarding transition times." The percentages reporting

such procedures in Figure 19 indicate that, for the most part, systematic planning for transition is far from uniform across the state of Iowa. The most frequently cited transition point is from senior high to vocational training or other adult roles. Only 14% of the principals reported standard transition planning at this critical stage. Similar percentages were reported for the availability of transition services for other critical changes, such as from preschool to elementary school or with the integration of students from special to regular education. The nature of transition services reported across the different age levels varied as should be expected. The most frequent transition service provided from preschool to elementary school was kindergarten screening activities. The most frequent transition service for students who are placed out of special education is monitoring the student in regular education. Orientation was the most frequent transition service reported for elementary to junior high/middle school or middle school/junior high to senior high school. Career exploration was the most frequently reported transition service for students moving from senior high to adult roles. These results suggest the need for greater emphasis on transition services throughout the students' school career, extending to the early adult years. These transition services are largely unavailable now, an area which trial sites are tempting to address through implementation of RSDS.

Principals were requested to provide information concerning the number of students attending educational programs at other schools in order to receive needed services. Some 58% of the principals indicated that one or more students in their building did attend another school. A similar item was included on the form completed by superintendents requesting specific information on the number of students for whom the district was paying tuition in order for services to be provided by another district or another agency. The results varied considerably and need to be interpreted within the context of overall district size. The clear trend in the results was for students in small school districts to be placed in another district in order to receive certain services, e.g., special class programs. In large districts a substantial number of students attend another school building, outside of the local attendance center, in order to receive necessary services. Our impressions of these data are that students receiving resource teaching programs are generally served at the local attendance center, but students needing more intensive special education programming such as special classes with integration are frequently placed in another district (small schools) or receive those services at another attendance center (large school districts).

PARENT INVOLVEMENT

Increased parental involvement in the areas of assessing needs, designing programs, monitoring and assisting with interventions, and evaluating programs are key objectives in RSDS. Interviews with samples of parents were conducted in each of the trial sites. The interviews were with the parents of the students on whom information was provided by teachers on the in-

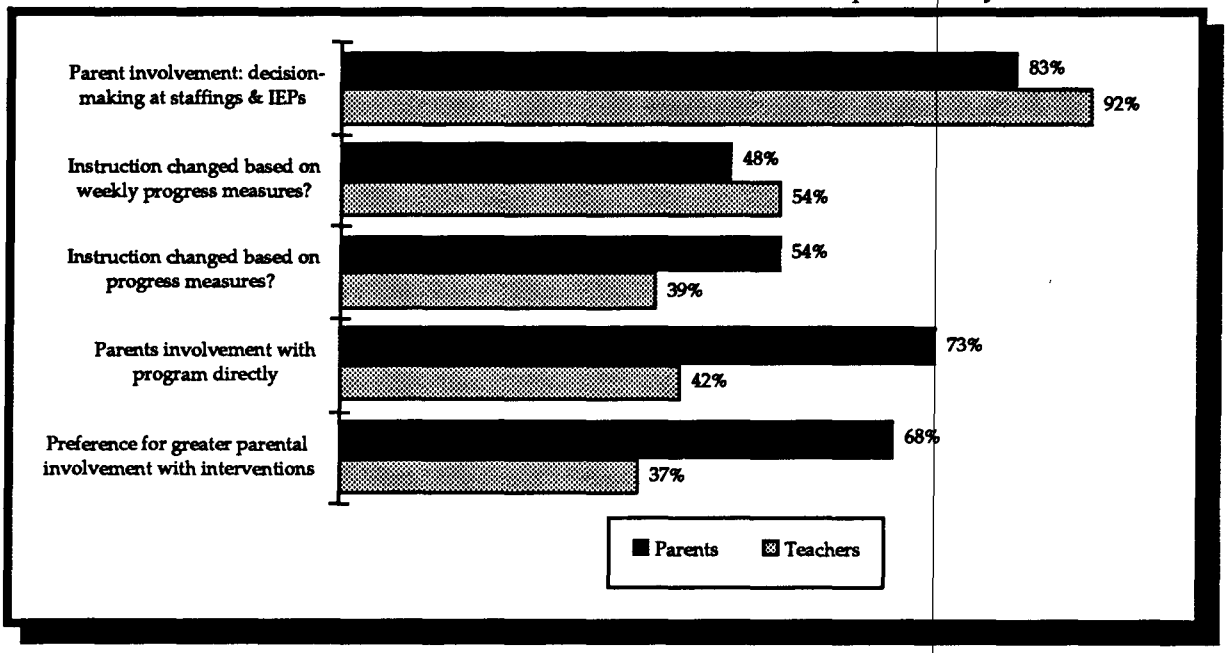

Figure 20. Parents and teachers perceptions of parental involvement.

dividualized education program, progress monitoring, and outcomes criteria forms. Several items were identical or parallel, permitting comparisons of the perceptions of teachers and parents on critical issues related to the provision of services to students with disabilities.

A very high proportion of the parents reported attending the child's last staffing (90%). Only 16% of the parents indicated that the time scheduled for the staffing was difficult for them. Most of them (76%) reported that the IEP was written at the time of the meeting. Three items organized into a Likert Scale format were used to assess parents' perception of their influence on staffing and IEP decisions. The response choices varied from "1" (very little) to "3" (some) to "5" (very much). The mean for the item on "How much influence have you had in dealing with special education staffings and IEP meetings?" was 3.53, indicating that parents believe they have had at least some influence, but on the average, well short of either much or very much influence. A mean rating of 2.68 was obtained on the item "To what extent would you like to have more influence?", suggesting a slight preference toward increasing the amount of influence on critical decisions. It should be noted, however, that only 29% of the parents selected the response choice of "No greater influence." Apparently, parents do want some more influence, with about 27% indicating that they either want "much" or "very much" more influence. The most frequent response to the item, "How much information have you been asked to give out at a staffing or IEP meeting?" was "some", selected by 47% of the parents. About equal percentages of parents indicated that they wanted either less involvement with providing information or more involvement with providing information. The information reviewed thus far suggests at least a moderate level of satisfaction by parents with their influence and involvement concerning special education staffings and IEP meetings. Clearly, there is sentiment among a substantial proportion, though a minority, of parents for a greater influence and more involvement.

Five of the items are summarized and displayed in Figure 20 concerning parents and teachers perceptions of degree of parental involvement. Please note that the information provided was in relation to the same student. An overwhelming majority of parents and teachers agreed that parents were involved with decision making at staffings and IEPs. Similarly, there was close agreement between parents and teachers concerning the frequency with which the student's progress is measured at least weekly. However, discrepancies were identified regarding parents and teachers perceptions of how frequently the school communicated with the parents regarding progress. Teachers thought that communications were more frequent than reported by parents. In addition to the data displayed in Figure 20, 45% of the parents indicated that they preferred that the school communicate with them more frequently. A considerably higher percentage of parents than teachers reported that parents were directly involved with programs for students with disabilities, but only 33% of the parents indicated that they had direct involvement with carrying out academic or behavioral interventions and only 26% reported exerting a direct influence on designing those interventions. Parents to a much larger extent than teachers expressed a preference for greater involvement of parents with interventions.

The results reported in this section suggest that many parents of students with disabilities would prefer greater involvement, particularly a more active role in designing and carrying out interventions with students. Furthermore, a substantial proportion of parents would prefer more frequent communication from the school concerning their child's special education programming. These results establish the legitimacy of the RSDS goals concerning greater involvement of parents and a more active role for parents in designing and carrying out interventions.

PAPERWORK

Special education teachers and support services personnel were asked to provide information concerning the kind and nature of paperwork requirements in the current system. The average amount of time devoted to paperwork was 21% and 28% for special education teachers and support service providers, respectively. Support service personnel reported that some 50% of their paperwork requirements were related to eligibility determination; 44% related to designing programs, IEPs, annual reviews, and placement; and 6% devoted to monitoring, revising, evaluating instruction/interventions. In contrast, special education teachers reported that only 5% of their paperwork activities were related to eligibility determination, but 43% was related to designing programs, IEPs, annual reviews, and placement and an additional 32% devoted to monitoring, revising, evaluating instruction/interventions. In Figure 21 means for

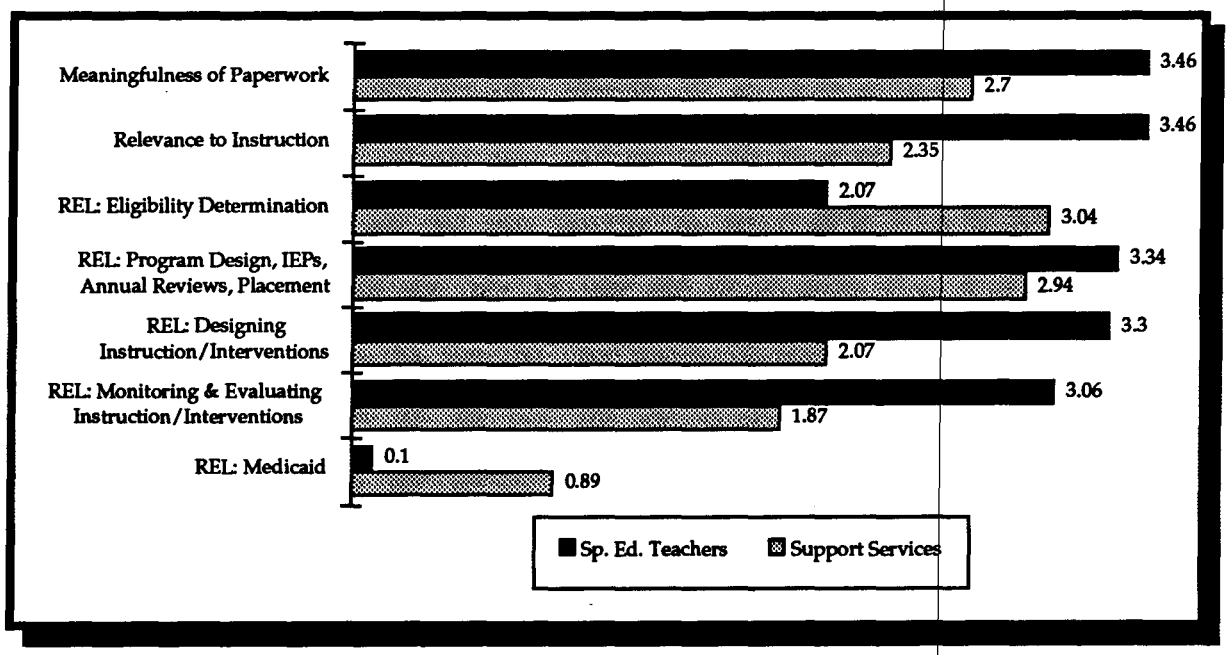

Figure 21. Special education teachers and support services perceptions of paperwork requirements (means graphed are based on ratings using a 5-point Likert Scale).

Note: 1) Anchor statements for top category were 1=not useful; 3=uncertain; & 5=very meaningful. Second category used anchor statements: 1=not relevant; 3=uncertain; & 5=very relevant. Remaining categories used anchor statements: 0=not at all; 2=relates somewhat; & 4=very much.
2) REL = "Related to"

special education teachers and support services personnel are graphed concerning ratings of various paperwork activities. Generally, special education teachers regarded the paperwork as more meaningful and more related to instruction while support services personnel indicated lower means for the usefulness of their paperwork activities in designing programs or monitoring and evaluating student progress. Both groups indicated relatively low amounts of times devoted to paperwork required by Medicaid reimbursement.

The current system requires a considerable amount of paperwork. The meaningfulness of that paperwork is questionable, particularly from the point of view of support service personnel. Much of the paperwork for support service personnel is related to eligibility determination, with lesser time and attention devoted to designing programs, implementing interventions, and evaluating outcomes. The themes in RSDS are expected to produce changes in kind of paperwork, particularly for support service personnel. Although the amount of paperwork required may not change, the kind of paperwork required should change considerably. Paperwork related to interventions can be expected to be regarded as more meaningful and to have a desirable impact on the effectiveness of services for students.

SUMMARY

The results reported here reflect baseline data in the four initial trial sites in the Iowa Renewed Services Delivery System. These data were collected late in spring semester, 1989. Comparable data collection efforts will occur in spring, 1990 in the five additional trial sites that will begin implementation of RSDS in fall, 1990. It is important to emphasize that these data reflect baseline, i.e., the nature of services prior to efforts to implement RSDS. The baseline results for the four initial trial sites indicate unequivocally the need for changes in the delivery of services to students who are at-risk or have disabilities in the State of Iowa. The current system places primary emphasis on development of programs for students with disabilities and the delivery of those programs in settings outside of regular education classrooms. The efforts of support services personnel are directed primarily toward determination and maintenance of eligibility. Programs such as Chapter I and resource teaching programs are largely separate from each other and from regular education. There is relatively little emphasis on efforts to resolve problems in regular education through utilization of the expertise

of support service personnel. Although assessment activities are prominent in the current system, functional assessment procedures leading to interventions as well as systematic and frequent progress monitoring are secondary to standardized testing and eligibility determination.

Significant improvements related to the critical RSDS themes are anticipated in each of the trial sites. These improvements will be assessed through further data collection efforts that will occur approximately 18 months after each trial site initiates the reforms associated with RSDS.