FINAL REPORT

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EARLY CHILDHOOD ASSESSMENT PROJECT

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Abstract

From June 1984 through September 1986, the Office of Special Education and Rehabilitative Services, U.S. Department of Education, funded a grant for a project entitled "Implications of Alternative Methodologies for Identifying Children as Handicapped Prior to School Entrance." This project, referred to as the Early Childhood Assessment Project, had as its goal the clarification of issues confronting policy makers in the area of early childhood special education. This goal was to be met by documenting current practices, investigating in depth alternative approaches, and examining the predicted social, political, economic, and educational impact of alternative assessment and decision-making approaches. Despite funding and time reductions for the project, a large data base was collected and analyzed. Proposed studies and others were completed, documented, and disseminated within the project timeline.

This report provides the following summary information about the Early Childhood Assessment Project: (a) objectives, (b) personnel, (c) major studies and their results, and (d) products from project activities.

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Introduction

The Early Childhood Assessment Project was funded in 1984 to investigate issues related to assessment and decision making for handicapped children prior to school entrance. These issues, for the most part, had received little attention by either researchers or practitioners. This lack of information exists despite the dramatic increase in the amount of research that has been conducted on early identification and service provision during the past decade, since services for young handicapped children (at least down to age 3) were included in Public Law 94-142. Before 1978, it was argued repeatedly that too many children were entering school with problems and/or handicaps that directly affected their capacity to learn (e.g., Cowen, Zax, Isso, & Trost, 1966; Davidson, Lichtenstein, Canter, & Cronin, 1977; Kurtz, Neisworth, & Laub, 1977; Lessler, 1972; Rogolsky, 1968; Roswell & Natchez, 1964). It also was suggested that problems exhibited by older children could have been recognized and remediated at an early age (e.g., deHirsch & Jansky, 1967; Fitzsimmons, Cheerer, Leonard, & Macunovich, 1966). Longitudinal studies, such as the Perry Preschool Project (Schweinhart & Weikart, 1981), in fact, indicated that early education significantly reduced the number of children who required special education services when they proceeded through elementary and secondary schools.

Although issues related to early childhood tests and education have been addressed by researchers and practitioners, little attention has been given to critical issues that surround the preschool assessment and decision-making process. Furthermore, research to date
has had limited implications for policy -- for deciding who gets services, what services are provided, who makes the decisions, and what the appropriate decisions are.

During a two-year period, the Early Childhood Assessment Project addressed numerous issues by first describing the current status and practices of early childhood special education programs and preschool screening programs, and then conducting a naturalistic qualitative case analysis of four programs and an integrative policy analysis of findings.

Throughout this research, assessment has been defined broadly as a process of collecting data for the purpose of making decisions about individuals. These decisions may relate to screening, diagnosis (also related to eligibility and placement), intervention, exit, and follow-up. These stages and decision points are shown in Figure 1.

References


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**Figure 1.** Major Stages and Decision Points in the Early Childhood Special Education Assessment and Decision-Making Process.
Research Objectives

The originally proposed research objectives for the project were the following:

Objective 1: To describe current decision-making practices for handicapped children 0-5 years of age, document how assessment data are used to plan interventions, and examine alternative explanations for variability in the process.

Objective 2: To describe current practices in monitoring child progress and making exit decisions for handicapped children 0-5 years of age.

Objective 3: To (a) describe the extent to which, and the manner in which, assessment and decision-making practices differ for mildly handicapped and severely handicapped preschool children, and (b) describe the ways in which assessment and decision-making practices differ for young children who evidence different kinds of handicaps.

Objective 4: To describe and compare existing decision-making approaches in a variety of early childhood screening and service delivery settings and document their social, political, educational, and economic outcomes.

Objective 5: To describe the effects of alternative approaches to assessment and decision making with young children when implemented in a number of settings, and to examine the policy implications of the alternative approaches.

After modification of the project's timeline from three years to two years, the project's activities were outlined as the following four:
(1) Describe current decision-making practices for handicapped children 0-5 years of age, including differences that exist as a function of severity of handicap, document how assessment data are used to plan interventions, and examine alternative explanations for variability in the process.

(2) Describe current practices in monitoring child progress and making exit decisions for handicapped children 0-5 years of age.

(3) Compare existing decision-making approaches in a variety of early childhood screening and service delivery settings and document their social, political, educational, and economic outcomes.

(4) Examine the effects of alternative approaches to assessment and decision making with young children when implemented in a number of settings, as well as the policy implications of alternative approaches.
Personnel

The Early Childhood Assessment Project was directed by James E. Ysseldyke. Dr. Ysseldyke has a strong background in the administration of research projects. He has been Director of the Institute for Research on Learning Disabilities (1977-1983) and Director of the National School Psychology Inservice Training Network (1978-1984). He is a Professor of Educational Psychology at the University of Minnesota.

For more than 10 years, Dr. Ysseldyke's research efforts have focused on the assessment and decision-making process in special education. He is co-author of three textbooks, Assessment in Special and Remedial Education, Critical Issues in Special and Remedial Education, and Introduction to Special Education, and has written numerous book chapters, research reports, monographs, and journal articles, almost all of which relate to assessment and decision making issues in special education.

Management of day-to-day project activities was the responsibility of the project's Associate Scientist, Martha Thurlow. Ms. Thurlow has a strong background in conducting research, overseeing day to day research activities, and translating activities and findings into written reports. She was a Research Fellow for seven years in the Research, Development and Demonstration Center in Education of Handicapped Children at the University of Minnesota, and then served as Associate Scientist and Editor at the Institute for Research on Learning Disabilities. She is author of many journal articles and technical reports related to special education issues.
A variety of student personnel also worked on the project. These individuals were supported as Research Assistants, NIMH trainees, Graduate School Fellows, or Psychometric Assistants. All student personnel associated with the project, their positions, and their dates of employment are shown in the following table.

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<td>Bursaw, Robert</td>
<td>Psychometric Assistant</td>
<td>6/01/84 - 6/15/86</td>
</tr>
<tr>
<td>Lehr, Camilla</td>
<td>Psychometric Assistant</td>
<td>6/01/84 - 8/31/86</td>
</tr>
<tr>
<td>Nania, Paula</td>
<td>Graduate Research Assistant</td>
<td>6/01/84 - 8/31/86</td>
</tr>
<tr>
<td>O'Sullivan, Patrick</td>
<td>Graduate Research Assistant</td>
<td>6/01/84 - 8/31/85</td>
</tr>
<tr>
<td>Weiss, Jill</td>
<td>Graduate Research Assistant</td>
<td>6/01/84 - 8/31/86</td>
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Research Studies: Procedures and Findings

Within the four basic activities of the Early Childhood Assessment Project, numerous studies were completed. These studies, including background information, procedures, findings, and conclusions, are presented here.

Preschool Screening in Minnesota: 1982-83

Background

In recent years, increasing attention has been given to evidence of the efficacy of early intervention. Almost all states now mandate services to preschool handicapped children. The major vehicle for identifying children who need early intervention has been the statewide preschool screening program. While there is a substantial body of literature on the efficacy of early intervention, there is relatively little information on the efficacy of preschool screening. The Early Childhood Assessment Project examined data from the preschool screening of over 45,000 children in order to obtain basic data on several factors related to the screening process.

Procedure

Data from state department screening forms were available for 45,513 children (96.9% of those screened during 1982-83) in 402 school districts. For purposes of analysis, data from these forms were collected on each child's birthdate and sex, along with screening results (problem identified, referral made) in the areas of height, weight, physical health, vision, hearing, fine motor development, gross motor development, speech/language development, social/emotional development, and cognitive development.
Findings

Large variability was found among school districts in the rates of problem identification and referral. Problem identification rates ranged from 0% to 100%, with the average being 31.2% of the students screened. Most of the problems identified were ones that had not previously been identified. Referral rates ranged from 0% to 85.7% of the students screened, with the average being 24.3%. Problems were identified and referrals made most frequently in the developmental areas, especially in speech/language. Boys were more often identified as having problems and more often referred than girls.

Conclusions

The extreme variability that was found in the state screening data is not unlike that found for special education referrals at the elementary school level. Some of the differences in rates might be due to errors made in completing the forms, such as using more than one form per child (if more than one problem was identified or if the child was rescreened). The extent to which such errors significantly influenced the rates was minimal, however, since the number of forms was consistent with previous estimates of the number of children screened. Districts with high rates were not located in any single geographic area, and high and low rate districts were sometimes next to each other. There is a clear need to examine possible economic, social, political, and educational factors that may be related to rates, and to examine discrepancies in rates for boys and girls.

Current Screening and Diagnostic Practices for Identifying Young Handicapped Children

Background

In 1977, Minnesota became the first state to have a comprehensive, free screening program for preschool-age children. Since that time other states have started programs of their own. Yet, little research has been conducted on the preschool screening process and how decisions are made. During 1984-85, the Early Childhood
Assessment Project studied current screening and diagnostic practices in Minnesota programs.

Procedure
A survey was sent to all agencies involved in screening or diagnostic assessment of children from birth to six years of age. Information was obtained on the tools, professionals, and criteria used for decision making for both screening and diagnostic assessment, as well as on the populations served. Opinions about existing gaps or duplications in services for handicapped preschool children also were surveyed. Over 500 responses to the survey were received. Most were from preschool screening programs in public school systems.

Findings
Despite the large number of agencies and individual programs involved in the assessment and diagnosis of children before they reach school age, there is considerable similarity in the procedures used. The primary instrument used for screening in the areas of speech and language, motor, social/emotional, and cognitive development is the Developmental Indicators for the Assessment of Learning (DIAL), followed by the Denver Developmental Screening Test (DDST). In general, different tools are used for diagnostic assessments, and these vary greatly among programs. This is in contrast to the areas of hearing and vision, where most programs use the same tool for screening and diagnosis (audiometer for hearing, HOVT/STYCAR for vision).

Most criteria for making decisions to refer children following screening are normative in nature, usually expressed as 1 to 2 SDs below the mean, or some percentage of delay. Decisions about eligibility following diagnostic assessment also are usually based on normative criteria. However, more "clinical judgments" are made in relation to diagnostic assessment.
Conclusions

Minnesota is a leader in providing services for young handicapped children. An essential element of service provision is the ability to identify children early, before they reach school age. Many agencies are involved in early identification and treatment in Minnesota. Although they provide a network that is among the best in the nation, certain issues still must be addressed.

The almost exclusive reliance on the DIAL and DDST for screening in the developmental areas may be unwarranted. The DIAL has questionable validity and relatively poor test-retest reliability. The DDST has norms based only on children living in Denver. Thus, even though most programs use some kind of normative criteria for making decisions, the decisions still may be based on technically inadequate information. This is complicated by some reliance on clinical judgment as a decision criteria.

The finding that over half of the respondents believe that some gaps or duplications exist in service to children also points to the need for continued progress. If such gaps and duplications do not actually exist, there clearly is a need for the perceptions to be addressed in a systematic manner.

Instructional Decision-Making Practices of Teachers of Preschool Handicapped Children

Background

Increasing emphasis is being placed on early interventions and their effectiveness for handicapped children. There also is growing interest in finding ways to increase the effectiveness of early interventions, with special attention given to the instructional process. However, before we can even begin to think about ways to improve the process, we must know more about it, and especially about the current practices of teachers working with preschool handicapped children. One study conducted by the Early Childhood Assessment Project was designed to look at current practices, especially those
related to making instructional decisions and evaluating student progress.

Procedure
Ten teachers of preschool handicapped children agreed to be interviewed over the telephone. All had been recommended for participation by their districts' Special Education Directors or Preschool Program Coordinators. They were identified as being good teachers. The interviews focused on (a) IEP development, (b) changes in IEPs and instructional plans, (c) monitoring progress, and (d) program exit criteria.

Findings
The teacher interviews presented a general picture of decision making in preschool programs for handicapped children. For example, when developing initial IEPs, teachers usually rely on behavioral observations and ability test scores. Speech therapists and parents often are involved in this process. When teachers change instructional plans and IEPs they commonly base these changes on the child's progress on IEP objectives and on informal behavioral observations. When other sources are used for input in making changes, they are most often the speech therapist and parents. The involvement of many people, good within-staff communication, good parental input, and good communication between parents and staff are factors that raise teachers' satisfaction with the IEP review/revision process. Dissatisfaction with the process centers around paperwork and demands for formal assessment that take away from instructional time.

Overall, teachers devote differing amounts of time to student evaluation. Few teachers have time for evaluation built into their schedules, even though most feel it would be advantageous. Behavioral observations are the most popular method for monitoring pupil progress. The information gathered in evaluations generally is shared with other teachers or parents; it is not often used to change IEP goals or instructional plans, and it is not often a basis for making decisions about whether students are ready to exit from special
education programs. Chronological age and the attainment of age-appropriate or kindergarten-level skills are the most frequently named factors upon which program exit is based.

**Conclusions**

Exemplary practice cannot be described as occurring in any single specific way. The interviews of 10 teachers did not reveal consensus about how to evaluate students and make decisions in early childhood education programs for the handicapped. Still, what teachers in these programs tend to do is much like what elementary special education teachers do. Instructional decisions are based more heavily on behavioral observations than on data from systematic evaluations of student progress. Generally student progress is not monitored in a direct or continuous fashion, as the research literature recommends.

Exit Criteria in Early Childhood Programs for Handicapped Children

**Background**

Most states are actively involved in the development or revision of eligibility criteria for special education programs, including early childhood programs. Criteria for exit from special education programs are less frequently discussed. In order to determine the extent to which exit criteria exist, and what information is being used to decide that a child is ready to leave a program, a nationwide survey of preschool programs that serve handicapped children was conducted.

**Procedure**

Information was obtained from 178 early childhood education programs for handicapped children in eight states. Most respondents were program directors, teachers, or superintendents. They completed a postcard survey that asked whether their program had written guidelines for determining when a child would no longer receive special services. In addition, they provided a description of their program's criteria, whether written or not.
Findings

Slightly over half of the returned postcards indicated that the programs did not have written exit criteria. The existence of exit criteria did not appear to vary as a function of the community in terms of urban, rural, or suburban populations. Both postcards indicating the existence of written exit criteria and those indicating no formal written exit criteria listed an average of 2.3 criteria per card, with the child's chronological age listed most often as a basis for exit. Results from formal tests, exit decisions based on team staffings, the child's developmental skill level, and alternative program offerings were the next most frequently listed criteria. Comparison of the criteria listed by "Yes" postcards and "No" postcards revealed many similarities in criteria. However, those programs with formal written exit criteria listed the use of state guidelines, some sort of discrepancy formula index, and results from formal testing more frequently than those without formal written exit criteria. Those programs specifying that they did not have formal written exit criteria listed the availability of alternative programming and parental input as criteria more frequently than programs that had formal exit criteria.

Conclusions

The basis for dismissing young children from an early childhood special education program varies widely from program to program across and within states. The most commonly cited criterion for children exiting a program is chronological age. If age is the sole criterion, decisions based on factors that are directly related to the child's needs for services are precluded. Fortunately, the results suggest that other factors do play a prominent role in determining whether a child will exit from a particular program. In order for children to benefit equally from services they receive and not get caught in a revolving door with no exit or unpredictable exit, criteria must be defined, developed, and implemented.
Predicting Preschool Screening Outcomes Using Demographic Variables

Background
In 1982-83, Minnesota school districts referred between 0% and 86% of the children they screened, with the average being 24%. While we know from this that referral rates vary widely, we do not know what causes the wide differences in referral rates. It may be that referral rates are somehow related to general social, economic, and educational factors often studied by demographers, such as funds available for special education, the number of families in poverty, the education level of parents, and so on. One study of the Early Childhood Assessment Project looked at the relationship between PSS referral rates and general demographic and educational variables describing Minnesota school districts. We asked two questions: (a) Do the social, economic, and educational characteristics of school districts help to identify screening programs with extremely high and low referral rates, and (b) How well do the social, economic, and educational characteristics relate to referral rates for all school districts?

Procedure
Screening forms from 398 school districts in 1982-83 were analyzed, and the overall referral rate for each district was calculated. Social, economic, and educational variables describing the school districts were statistically encompassed in five general demographic/educational factors. These general factors were entered into statistical analyses to see whether they could help identify the 10 districts with the highest and lowest referral rates. Then, the general factors were evaluated to see how well they predicted district referral rates for all school districts.

Findings
Only 53% of the low-referral and high-referral screening programs were correctly identified using the general demographic/educational factors. A coin toss could have done just as well. The general factors also did not help in predicting the referral rates of school
districts statewide. Only 3% of the variance in referral rates was accounted for by the social, economic, and educational characteristics of the districts.

Conclusion and Implications

Our results indicated that the general social, economic, and educational variables typically studied by demographers do not help explain the wide differences in referral rates among school districts. These results are surprising since it is generally thought that minority children, and children from poor, uneducated family backgrounds tend to be referred more often. It must be remembered, however, that this study looked at differences across many screening programs; it did not consider what goes on in specific school districts. The factors we studied probably do influence screening outcomes in some districts. But on a statewide basis the factors were not related to screening referral rates.

It may be that other differences among school districts account for wide referral rate differences in Minnesota. For example, screening programs may vary widely in their purposes, relations with other service providers, attitudes about screening, special education, and the responsibilities of public agencies, among other things. One screening program may aim to provide special education services as soon as possible to all potentially handicapped children, another may emphasize health promotion and education, and still another may operate with the belief that screening cannot identify most handicapped children. Such very different goals, practices, and attitudes about preschool screening carry very different expectations for screening referral rates. These, and perhaps other more specific factors must be studied if we want to gain a clearer picture of why preschool screening referral rates differ so markedly.
An Ecological Study of School Districts with High and Low Preschool Screening Referral Rates

Background

The implementation of the Education for All Handicapped Children Act (P.L. 94-142) has resulted in the emergence of screening programs nationwide to identify handicapped and at-risk preschool children. Minnesota has been a forerunner in this movement since 1977. During 1984-85, the Early Childhood Assessment Project examined data from the screening programs of over 400 school districts within the state. One principal finding was the wide variation that exists in the percentage of preschool children referred for further evaluation following screening. During the 1982-83 school year, referral rates ranged from a low of 0% to a high of almost 86%. Analyses also indicated that broad social, economic, and political factors accounted for only about 3% of the variance in referral rates. To further explore the variance in referral rates among districts, preschool coordinators were interviewed.

Procedure

Telephone interviews were conducted with 17 preschool coordinators representing districts with either very high or very low preschool screening referral rates. Interview questions focused on several components: (a) screening personnel, (b) diagnostic tools, (c) assessment process, (d) procedures for notifying the public, (e) types and availability of programs, and (f) other factors believed to influence referral rates. Interview data were analyzed qualitatively and descriptive comparisons were made between school districts with high and low referral rates.

Findings

High and low referral rate districts used similar procedures to inform the public of their screening programs. There were no specific tests or assessment procedures that were more closely associated with either a high or low referral rate district. In fact, for the most part, factors viewed as contributing to an increase or decrease in the referral rate were similar for high and low referral districts. Two
possible exceptions to this finding were noted. First, high referral rate districts tended to grant more decision-making authority to speech clinicians and preschool teachers. Second, high referral districts generally more often served severely handicapped students.

Conclusions

No obvious screening or school district variables directly related to the variance in early childhood referral rates within Minnesota were identified. High and low referral districts cited similar factors as contributing to the rate of referral. However, most of the people interviewed did not perceive the referral rates as accurate and offered varied explanations to explain the discrepancy. Although record-keeping errors may have occurred to some extent, the rates do seem to reflect actual differences among districts. There may exist indigenous social, economic, and political factors that influence referral practices in a subtle way, and whose effects may not be immediately apparent to those intimately involved in the process. In-depth ecological research continues to be needed to explore factors affecting referral rates.

Assessment Practices in Model Early Childhood Education Programs

Background

Early childhood education expanded significantly in the 1960s, when extensive funding was provided to develop and implement early educational programs for young handicapped children. The interest in early childhood education and assessment consequently spurred the development of many new marketable tests, the majority of which were of poor quality. During 1985-86, the Early Childhood Assessment Project studied assessment instruments used in national model programs serving young handicapped children. Factors that influence the selection of tests and continued use of tests also were studied.
Procedure

Demonstration projects funded by the Handicapped Children's Early Education Program (HCEEP) were subjects. These projects have received national recognition as model programs in the field of early education. Information was obtained about demographic characteristics of the projects and factors influencing the selection and continued use of tests. The last section of the survey requested a list of actual tests, as well as informal methods of assessment, used for five different assessment purposes. Fifty-four responses to the survey were received.

Findings

Results from the survey indicated that the selection of tests in HCEEP demonstration projects is based largely on recommendations by other professionals and on technical considerations (norms, validity, reliability). The continued use of tests reportedly is influenced most by information gathered from the test's results, and next by the test's norms, validity, and reliability. However, examination of the tests revealed that many HCEEP model demonstration projects are using devices that are technically inadequate based on the information provided in the tests' manuals. Specifically, of the 19 instruments used by five or more programs, only three were technically adequate on all three dimensions.

Over 100 tests were listed by the 54 projects. Nineteen tests were used by five or more programs and only one test was used by over half of the responding programs. Most tests were used for several purposes (screening, classification/placement, instructional planning, pupil evaluation and program evaluation). Other methods of assessment that were used fell into 10 categories. Nearly all of the respondents listed parental involvement and observational methods. Results suggested that tests were used more frequently than other methods when making decisions about classification and placement, instructional planning, and pupil evaluation.
Conclusions

Practitioners might explain the use of technically inadequate devices by saying they are the only ones available. Still, using a technically inadequate device cannot be justified or excused because of the important decisions that are made on the basis of data gathered from such devices. In this study, technical adequacy was determined from information provided in test manuals. Practitioners might also consider other factors, including additional research studies and qualitative information about methods used to obtain statistics. But, technical adequacy should always be considered and should be reflected in the manuals of devices selected for use.

Decisions that are made about children in HCEEP programs are based on more than one test. Additional sources of information, including teacher input, IEP review, parent input, and systematic observation, become especially important when the inadequacy of tests is considered. It is possible that these other methods of assessment should be given more emphasis when making decisions about children. Further research on the effects of doing so is, of course, needed.

Decision-Making Practices of a National Sample of Preschool Teachers

Background

As the number of special education programs serving preschool children continues to increase in our country, questions are being asked about the teacher practices within these programs that increase the effectiveness of interventions. Current research suggests that initial instructional decisions should be considered tentative and that instructional plans should be revised on the basis of results from continuous and direct monitoring of student progress. Little is known about how teachers make instructional decisions for their young handicapped students. The extent to which the recommended model of decision-making is being employed in preschools for handicapped children needs to be documented. The purpose of this study was to describe the relationships between assessment practices, decision-
making, and educational interventions in early childhood special education programs.

Procedure

A national sample consisting of 60 professionals serving preschool handicapped children was surveyed. All respondents had been recommended as exemplary teachers by their district's office of special education. The survey asked for information regarding the respondents' procedures in developing IEPs, in monitoring student progress, and in changing IEPs. Respondents also were asked to indicate their extent of agreement or disagreement with statements reflecting beliefs and practices in assessment, decision-making, and instructional planning.

Findings

A general description of the current practices of teachers serving handicapped preschoolers resulted. Respondents indicated that when developing IEPs, they use assessment information from many sources. Almost all relied on some kind of behavioral observations, current staff input, and parent input. The source of information most frequently used was performance on criterion-referenced measures. When monitoring student progress, considerably fewer sources of information were used. Again, the majority employed behavioral observations, and student performance on criterion-referenced measures was used most often. Respondents who indicated the frequency with which they monitored progress generally did so informally on a daily basis, and formally on a quarterly basis. The majority responded that they recorded student progress at least weekly. The greatest number of respondents changed student IEPs once a year and used behavioral observations, progress on previous IEP objectives, staff input, and parent input to do this. Progress on previous objectives was listed as the one source used most often. For the most part, reactions to statements reflected consensus among all teachers; inconsistencies in ratings arose for statements indicating a desire for more data and a belief that evaluation infringes on intervention time.
Conclusions

Although it appears that evaluation and monitoring procedures exist, the extent to which they are used systematically or regularly is questionable. Results of the teacher survey indicated heavy use of behavioral observations, mostly informal, in developing and changing IEPs and in monitoring student progress even though large amounts of other types of assessment data were available. It is not clear that decision making is based on a hypothesis testing model, nor does it appear that monitoring of student progress is conducted in a direct and continuous fashion as suggested by the literature. These results reflect the average practices of professionals serving handicapped preschool children. More investigation is needed to determine the manner in which individual teachers make decisions for individual pupils over time.

Preschool Screening Referral Rates in Minnesota School Districts Across Two Years

Background

The proportion of children referred from Minnesota preschool screening programs in 1983 varied widely, ranging from 0% to over 50%. Although we know that referral rates may be different from one district to the next, little is known about the consistency of rates within screening programs from one year to the next. The extent to which referral rates change over time has important implications for many preschool youngsters, and for policy makers who must decide whether rate differences reflect actual differences in the number of handicapped children. As one part of the Early Childhood Assessment Project, this study looked at the 1979-80 and 1982-83 referral rates of Minnesota school district screening programs. First, we looked at the general consistency of average rates over time, and also at the extent to which each district's rate changed over time. Second, we looked at the extent to which socioeconomic status variables, district variables, and screening practices differentiated districts with rates that stayed the same or changed significantly (both increased and decreased) over time.
Procedure

Preschool screening referral rates for each of the two school years were calculated for 219 Minnesota school districts that screened at least 25 children in each year. The districts were rank-ordered in terms of the difference between the two years' referral rates. Three groups of districts were identified: those whose rates increased the most, those whose rates decreased the most, and those whose referral rates were the same for both years. The socioeconomic variables used were median level of education, median income, median home value, and percentage below the poverty level for the residents within each district. The district variables were total enrollment, percent minority, and student-staff ratio. Group means for all seven of these variables were compared to determine whether any of them differentiated the three groups or any group from the state. The screening practices we looked at were the tests used, the personnel who did the screening, and the criteria used to decide failure in each screening area.

Findings

The state's average referral rate for the second year was almost exactly the same as for the first year. This was the case even though there was wide variation among the rates for each year. Wide variations in the differences between first year and second year rates were observed in individual districts, ranging from -58.5 to +36.1. This variation is more than would be expected as a result of normal population fluctuation. Yet, none of the variables we looked at was significantly different for any of the three groups; they did not provide any clues as to why some rates changed considerably and some remained the same from one year to the next.

Conclusion and Implications

Although the state as a whole appears to be consistent in terms of the percentage of children referred from screening, this consistency is not reflected in the data from many individual districts. In addition, basic socioeconomic, educational, and screening variables are not related to referral rate consistency. It
possible that changes within district factors, such as program personnel or philosophy, were behind the referral rate fluctuations. Further examination of such possibilities clearly is warranted.

The implications of these findings for school districts hinge on the explanations for variations in referral rates. If rates are changing due to variations in the application of criteria, then the district must examine why this is occurring. If variations reflect population changes, we need to study this further. At the bottom of it all is a need for each school district preschool screening program to keep track of its own referral rates and practices.

An Ecological Investigation of Assessment and Decision Making for Handicapped Children Prior to School Entrance

Background

During its first year of funding, the Early Childhood Assessment Project focused its research efforts on describing the current status of early childhood special education programs and preschool screening programs. These research efforts demonstrated that considerable variability existed in the results of screening efforts, and that the variability was not related in any direct way to factors derived from various social, economic, and educational variables. Even those school districts that were very different in their preschool screening referral rates did not differ to a significant extent on a variety of variables that local school district personnel suggested might be the differentiators. The only slightly related variable was that high referral rate districts more often than low referral rate districts tended to grant more decision making authority to speech clinicians and preschool teachers during the screening process. Studies of the diagnostic assessment process similarly revealed considerable variability, with a variety of procedures being used, under various situations, and for differing amounts of time. Instructional decision making also was characterized by differences from one program to the next and even within programs. Exit criteria and the nature of follow-up procedures showed less variability because most programs did...
not have specific written criteria, other than age limits, and because most programs did not attempt to follow-up their students.

During 1985-86, the Early Childhood Assessment Project directed its activities toward the critical issues that surround the assessment and decision making process and toward the collection of information that would have implications for policy -- for deciding who gets services, what services are provided, who makes the decisions, and what the appropriate decisions are. This information was collected by conducting a naturalistic investigation of the assessment and decision making process as it relates to preschool special education programs. The study was conducted in four early childhood special education programs. The major objective was to study and describe the programs and their decision making process in detail using naturalistic procedures and a case study approach.

Procedure

Four school districts with programs serving preschool age special education students participated. The four sites represented a range in demographic characteristics and in approaches to screening and/or diagnostic assessment. Data collection procedures included: (a) observations of meetings, classroom activities, screening, and assessment procedures, (b) extensive interviews with various staff and administrative personnel, (c) file searches, and (d) parent surveys.

Findings and Conclusions

Detailed information on preschool screening, diagnostic assessment procedures, the instructional programs, program exit procedures, and follow-up data on student participants was gathered for each site. This information was presented in detail so that it could be used as a basis for conducting policy analyses. A major finding, above the specific details of each program, was that all programs were very open to the research process. All were committed to the children they served and were looking for information that could help ensure that the best practice possible was being implemented. The variety in approaches to different aspects of the
Policy Analysis of Screening and Referral
for Early Childhood Special Education Programs

Background
Screening functions as an initial sorting procedure to identify children who may have special education needs. Although most states now have implemented some form of preschool or early school screening program, a variety of concerns about screening still exist. Furthermore, the social, political, and educational factors that influence screening are unknown. In-depth naturalistic case studies of screening programs in four districts, conducted during 1985-86, were used as a basis for a policy analysis of screening and referral practices.

Procedures
Four screening programs in urban, rural, and suburban school districts were studied in detail using a naturalistic case study procedure. Extensive descriptions were developed. These were used as the basis for a policy analysis and the development of guidelines and considerations in preschool screening and referral.

Findings and Conclusions
The policy analysis revealed several important issues, including definitional considerations, variations in participation rates, and limited relationships between screening procedures and screening outcomes. Three factors potentially accounted for variations in referral rates. First, referral rates are lower when certain children who will receive services are not screened, but rather are preselected or "pre-screened," and automatically enter the program. A second factor that contributes to lower referral rates is the existence of some kind of second-level screening ("re-screening") or decision process. The use of separate referral criteria and procedures in the speech/language area is a third factor, but one which is related to
higher rates of referral. Many questions and issues remain for policy makers because the desirability of higher or lower referral rates has not yet been addressed satisfactorily.

Policy Analysis of Diagnostic Assessment in Early Childhood Special Education Programs

Background
Comprehensive diagnostic assessment occurs following the identification of children with potential problems, in order to determine which children are in need of special services. In contrast to screening, various procedures are used to obtain in-depth information about specific behavioral domains. The procedures used, the time taken, and the personnel involved in the diagnostic assessment process can vary greatly. While some researchers have looked at specific tests used during diagnostic assessments at the preschool level, little attention has been given to the influence of social, political, economic, and educational factors on the diagnostic assessment process, or the impact of various diagnostic assessment approaches on placement and service outcomes. The current analysis was an attempt to do so by using in-depth naturalistic case studies of diagnostic assessment procedures in four districts as the basis for a policy analysis of diagnostic assessment.

Procedures
A naturalistic case study procedure was used in four school districts to study diagnostic assessment approaches for preschool children. The four districts were in rural, suburban, and urban settings, and reflected a range of approaches to diagnostic assessment. Extensive descriptions of the diagnostic assessment procedures were developed, and used as the basis for a policy analysis and the formulation of guidelines and considerations in preschool diagnostic assessments.
Findings and Conclusions

The policy analysis revealed several important considerations for programs to address. A primary issue is whether it is appropriate for placement decisions to take precedence over intervention decisions at the point of diagnostic assessment. Diagnostic assessment in most programs appears to be driven by the need to identify the right children rather than by the need to identify intervention needs of children. Another critical issue relates to the technical adequacy of instruments used in diagnostic assessments. All programs need to consider whether the decisions they are making are based upon appropriate information. If not, the reasons for collecting such information must be questioned. Further, the extent to which criteria of eligibility are actually used in the decision-making process should be examined by all programs.

Policy analysis of the diagnostic assessment process is difficult because the outcomes are so difficult to evaluate in terms of appropriateness. This is complicated by the fact that the diagnostic assessment process in early childhood special education programs changes rapidly, so that there is little consistency from one year to the next. Unfortunately, data typically are not collected to document the exact nature of changes and their effects on program costs and student outcomes.

Policy Analysis of Instructional Intervention and Decision Making in Early Childhood Special Education Programs

Background

Instructional intervention in early childhood special education programs refers to those organized opportunities and experiences that are provided to eligible children. The goal of these activities almost always is to enable participants to function in mainstream educational environments to the extent possible. Little attention has been given to the process of making decisions related to instructional interventions, although much attention has been given to specific interventions that have been used. In general, issues related to the
influence of social, political, economic, and educational factors on
instructional intervention decision making have not been addressed.
The current study and policy analysis used an in-depth naturalistic
case study approach in the area of instructional intervention.

Procedures
The instructional intervention decision-making process was
examined in four school districts in which a naturalistic case study
approach was used to gather information. Extensive descriptions of
instruction and decision-making processes related to instruction were
developed. These were used in a policy analysis of instructional
intervention and related decision making in early childhood special
education programs.

Findings and Conclusions
Several issues relevant to policy considerations were revealed.
First, to a large extent, programming decisions are influenced by
scheduling considerations and the availability of specialists.
Second, the isolation of the early childhood special education
programs and their frequent movement from one location to another
suggests that they are in a lower-status position in the power
structure of the educational system. Third, programs do not view
evaluation activities as part of their function. The efficacy of
interventions rarely are tested and program revision is based on staff
judgment.

Policy Analysis of Exit Decisions and Follow-Up
Procedures in Early Childhood Special Education Programs

Background
Data collected previously by the Early Childhood Assessment
Project had indicated that only about one half of districts nationwide
have written criteria for deciding when a child is ready to exit from
an early childhood special education program. Whether or not written
criteria exist, considerable variability is evident in the bases for
making exit decisions, with chronological age being the most commonly
cited criterion. Little research has been conducted on issues related to exit criteria or to the follow-up of students after they do leave early childhood special education programs. The social, political, economic, and educational factors that influence exit decisions and follow-up are unknown. During 1985-86, naturalistic case studies of early childhood special education programs were conducted in four school districts. Information from these case studies was used as the basis for a policy analysis of exit decisions and follow-up procedures.

Procedures

Extensive descriptions were written of decision making related to exit and of follow-up procedures and data for the four case study sites. The four programs were located in urban, suburban, and rural communities.

Findings and Conclusions

Information collected during the case studies indicated that when exit decisions are made they are usually made by a team of professionals or by a program administrator, and they are made because of age or educational gains or the existence of more appropriate programs in the district. However, exits at times other than the end of the year were infrequent. Similarly, the collection of follow-up information in a systematic way is variable in occurrence. Although programs are interested in such information, the resources to collect it are not available. All programs do attempt to pursue some kind of follow-up, but the extent to which this is possible is very limited, resulting in information that contributes minimally to program planning.
Project Products

The Early Childhood Assessment Project has proceeded under the belief that researchers have an obligation to document their activities and findings, and to make this information available to the public. The major vehicles for dissemination used by the Early Childhood Assessment Project have included: (a) annotated publication lists, (b) research reports, (c) ERIC citations, (d) summary reports, (e) journal articles, and (f) presentations at professional meetings.

Annotated Publication Lists

The Early Childhood Assessment Project continuously updates an annotated list of all its publications. This list, which provides the basic findings or conclusions of each publication, has been sent to all persons requesting information and has been distributed at all major conferences at which presentations were made by project personnel. Approximately 300 lists have been distributed in this manner. A copy of the annotated publication list is provided in Appendix A.

Research Reports

Research reports present the rationale, procedures, results, and implications of research activities. During its two years of funding, the Early Childhood Assessment Project produced 14 research reports:


No. 3 Instructional decision-making practices of teachers of preschool handicapped children by J. E. Ysseldyke, P. A. Nania, & M. L. Thurlow (September, 1985).

No. 4 Exit criteria in early childhood programs for handicapped children by M. L. Thurlow, C. A. Lehr, & J. E. Ysseldyke (September, 1985).

No. 5 Predicting outcomes in a statewide preschool screening program using demographic factors by J. E. Ysseldyke & P. O'Sullivan (October, 1985).


No. 7 Assessment practices in model early childhood education programs by C. A. Lehr, J. E. Ysseldyke, & M. L. Thurlow (April, 1986).

No. 8 Decision-making practices of a national sample of preschool teachers by M. L. Thurlow, P. A. Nania, & J. E. Ysseldyke (April, 1986).

No. 9 Preschool screening referral rates in Minnesota school districts across two years by R. A. Bursaw & J. E. Ysseldyke (April, 1986).


ERIC Citations

Upon publication, research reports from the Early Childhood Assessment Project were sent to the Educational Resources Information Center (ERIC). In this way, each report is announced in the monthly abstract journal of the ERIC system (Resources in Education). In addition, it is made available in both microfiche and paper forms through the ERIC Document Reproduction Service (EDRS).

The process of assigning an ERIC number to each publication and preparing it for availability through EDRS takes about 15 months. When the numbers are available, they are added to the annotated publication list to further ensure the accessibility of products from the Early Childhood Assessment Project.

Summary Reports

One-page summary reports of individual studies were prepared to provide specific feedback to research participants and others interested in particular studies. These were written to be relatively nontechnical, so that they could be read easily by the lay person. While originally developed for research participants, the study summaries have provided an important avenue for dissemination of research findings to wider audiences.
Journal Articles

Whenever possible, findings from the Early Childhood Assessment Project were submitted to journals in the form of articles. Several manuscripts had been accepted for publication before the end of the project. These are listed here. Several others had been submitted for publication and were under consideration at the end of the project.


Presentations at Professional Meetings

Personnel on the Early Childhood Assessment Project have been actively engaged in the dissemination of research findings at professional meetings at the local and national levels. These activities have enabled the Early Childhood Assessment Project to reach a variety of audiences to present research findings and their implications. Some conference papers that have been presented are listed here.


The Early Childhood Assessment Project (ECAP) is funded by Special Education Programs (Grant No. G008400652) to study the process of identifying as handicapped and providing services to children between birth and six years of age. The project is examining the policy implications of alternative approaches to the assessment and decision-making process.

Summaries of publications from the project are attached. The complete publications may be ordered using the form below. To cover costs for xeroxing, mailing (first class) and handling, there is a $5.00 charge for each publication (except Research Report No. 10, for which the charge is $10.00). ENCLOSE A CHECK OR MONEY ORDER MADE OUT TO THE UNIVERSITY OF MINNESOTA (ORDERS CANNOT BE PROCESSED WITHOUT PAYMENT FIRST). Send orders to ECAP Editor at the above address.

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PUBLICATIONS

Early Childhood Assessment Project
University of Minnesota

Research Reports


This paper summarizes data from over 45,000 children screened in 402 Minnesota school districts. Analyses revealed large variability in problem identification and referral rates, and some differences as a function of the child's sex. Implications for further research and practice are discussed.


This paper reports the results of a survey of over 550 programs/agencies involved in screening or diagnostic assessment of children 0-6 years. Data are presented on populations served, professionals and tools used in screening and diagnosis, decision-making criteria for referrals and eligibility, and perceived gaps and duplications in services.

No. 3 Instructional decision-making practices of teachers of preschool handicapped children. J. E. Ysseldyke, P. A. Nania, & M. L. Thurlow (September, 1985).

This paper describes the findings from interviews of teachers about IEP development and revisions, student evaluation, and program exit criteria. Relationships between reported practices and recommendations from research are examined.


This paper presents data on written exit criteria from 178 early childhood programs for handicapped children from across the U.S. Almost half of the responding programs had written exit criteria, yet chronological age was the most commonly cited criterion. Overall, the bases for exiting children from programs varied widely across and within states.

No. 5 Predicting outcomes in a statewide preschool screening program using demographic factors. J. E. Ysseldyke & P. O'Sullivan (October, 1985).

This paper summarizes the results of several statistical analyses designed to examine the contribution of demographic and educational factors in predicting outcomes from preschool screening. General social, economic, and educational factors did not help explain wide differences in referral rates among school districts. Cautions and implications for policy are discussed.
No. 6


This paper reports the findings from follow-up interviews with school districts found to have either high or low referral rates from preschool screening. Examination of information on public awareness, professional background of decision makers, front-line personnel, screening instruments, diagnostic process, severely vs. mildly handicapped children, available services, and other variables did not reveal any factors clearly associated with referral rate. Alternative hypothesis are generated to explain these findings.

No. 7


This paper describes the results of a survey of HCEEP demonstration projects. Factors influencing the assessment procedures of these projects are summarized, and specific assessment devices used by them are evaluated. Although technical adequacy was reported to be an important factor in the selection and continued use of tests, most tests used by the projects are technically inadequate. Implications for practice are discussed.

No. 8


This paper documents the assessment and decision-making practices of a national sample of teachers serving handicapped preschool children. Teachers reported on their use of various types of assessment information for educational programming. The extent to which evaluation and monitoring procedures are used systematically or regularly is discussed.

No. 9


This paper describes the results of a comparison of the preschool screening referral rates for developmental problems from two years. Although there was overall consistency from one year to the other, there also was considerable variation in consistency among districts. The differences in consistency were not related to various district and SES characteristics, nor to the districts' screening practices. Implications of these findings are highlighted.

No. 10


This paper gives detailed reports on four early childhood special education programs that were studied using a naturalistic case study approach. The four sites represented a range in approaches to screening and/or diagnostic assessment. Data collection procedures included (a) observations of meetings, classroom activities, screening, and assessment procedures, (b) extensive interviews with various staff and administrative personnel, (c) file searches, and (d) parent surveys. The reports presented in this paper were the basis for a series of policy analyses of current practice (see Research Reports 11-14).

This paper integrates the findings from the four ecological case studies. The focus is on information related to the screening and referral process, especially social, political, economic, and educational influences and outcomes. The results of this policy analysis are summarized within a set of implications and guidelines for screening and referral practices.


This paper integrates the diagnostic assessment findings from four ecological case studies. Social, political, economic, and educational influences on the diagnostic process, as well as various outcomes, are analyzed. The results of this policy analysis are summarized within a set of implications and guidelines for diagnostic assessment practices.


This paper provides an integrative summary of the research findings related to instructional intervention and decision making in early childhood special education programs. Four ecological case studies are used as the basis for a policy analysis of social, political, economic, and educational influences on instruction. A set of implications and guidelines concludes the report.


This report addresses exit decisions and follow-up procedures in early childhood special education programs. Based on results of an in-depth ecological study of exits and follow-up in four programs, as well as other research findings, this report provides an integrative summary and policy analysis of current practice. Implications for the future and guidelines are drawn from the integrative summary.