

DOCUMENT RESUME

ED 275 094

EC 190 618

**AUTHOR** Felker, Roberta M.  
**TITLE** Special Education Dissemination Project. Final Report.  
**INSTITUTION** National Association of State Boards of Education, Alexandria, VA.  
**SPONS AGENCY** Special Education Programs (ED/OSERS), Washington, DC.  
**PUB DATE** 84  
**GRANT** G008104570  
**NOTE** 258p.  
**PUB TYPE** Reports - Descriptive (141)

**EDRS PRICE** MF01/PC11 Plus Postage.  
**DESCRIPTORS** Decision Making; \*Disabilities; Educational Finance; \*Educational Policy; Educational Technology; \*Exceptional Child Research; \*Information Dissemination; \*Information Needs; Needs Assessment; Program Effectiveness; Pupil Personnel Services; Research and Development; Special Education; \*Theory Practice Relationship

**IDENTIFIERS** National Association of State Boards of Education

**ABSTRACT**

The final report summarizes activities of a 3-year project which accomplished the following goals: (1) identification of the most pressing concerns in special education currently facing state and local education policymakers; (2) location of research information through the U.S. Department of Education and other sources which address these issues; and (3) provision of this information to state and local policymakers in formats specifically tailored to their needs. The project employed a variety of communication mechanisms and formats (newsletters, electronic mail, conferences, research abstracts, issue briefs) to disseminate special education research to more than 3,000 education policymakers and administrators on four identified topics: special education technology, special education finance, related services, and special education program effectiveness. Among conclusions drawn from project evaluation data are that policymakers use research indirectly (rather than directly) to shape policy debates; that custom-tailored communication is a key to effective dissemination; and that dissemination strategies are most successful when selected according to suitability for a specific task, at a specific stage in the policy decision-making process. Appendices, consisting largely of copies of dissemination project materials, comprise 80 percent of the document, and include an annotated bibliography. (JW)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

ED275094

# FINAL REPORT

## SPECIAL EDUCATION DISSEMINATION PROJECT

**Roberta M. Felker, Ph.D.**  
**Project Director**

**Submitted in fulfillment  
of Grant # G008104570**

BEST COPY AVAILABLE

**1984**

*E.O. 1986-18*

## TABLE OF CONTENTS

	<u>Page</u>
I. Executive Summary . . . . .	1
II. The Special Education Dissemination Project . . . . .	2
Background . . . . .	2
Overview . . . . .	2
Goals . . . . .	4
Participants . . . . .	4
Administration . . . . .	6
Audiences . . . . .	7
Products . . . . .	8
Process . . . . .	11
Evaluation . . . . .	12
III. Content as Process: Tailoring Special Education Information for Policy Makers . . . . .	20
Context . . . . .	20
Federal/State/Local Responsibility . . . . .	21
Policymaker Responsibilities . . . . .	26
Policymaker Roles . . . . .	31
IV. Conclusions and Implications . . . . .	35
Table - Barriers to Effective Dissemination . . . . .	40
A Research Design and Dissemination Checklist . . . . .	41
References . . . . .	42
Appendices	
A. Composite of Education Issues Confronting Education Policymakers . . . . .	44
B. Association Newsletter Articles . . . . .	46
C. Research Abstracts I - XV . . . . .	78
D. Policymaker Special Education Bibliography . . . . .	109
E. Issue Briefs . . . . .	118
F. Letter of Transmittal - NASBE . . . . .	219
G. Evaluation Forms . . . . .	223
H. The Process of Research Use . . . . .	239

## I. EXECUTIVE SUMMARY

As policymakers confront the complex requirements of federal and state special education laws and regulations, accessibility to useful research information about special education is critical. Yet even though such information often is sought eagerly, making it available in a timely, relevant and credible manner is a difficult task.

With funding from Special Education Programs (SEP), U.S. Department of Education, the National Association of State Boards of Education (NASBE) took initiative in addressing research dissemination issues such as these. In this effort, NASBE worked in cooperation with other associations representing high-level education decision makers: the Council of Chief State Officers (CCSSO), the National Conference of State Legislatures (NCSL), and the American Association of School Administrators (AASA). From 1981 to 1984, this consortium provided state and local education policymakers with timely research and practice-based information on four special education topics: (1) educational technology, (2) legal considerations, (3) finance, and (4) program effectiveness.

This final report addresses three major questions dealing with the NASBE Special Education Dissemination Project:

- What were the purposes, processes and products of the project?
- What formats and dissemination strategies were most effective with education policymakers?
- What research content was most useful to education policymakers in framing and making policy decisions?

## II. THE SPECIAL EDUCATION DISSEMINATION PROJECT

### Background

In the past two decades, research and commentary on the use, nonuse and misuse of research during the policymaking process has burgeoned. Despite federal expenditures for knowledge production, dissemination and research application which easily total over \$1.5 billion dollars per year, the high hopes expressed for improvement in program and policy have not been realized, and dissatisfaction abounds. Lyons (1969) calls the relationship between the social sciences and government the "uneasy partnership," while Lynn (1978) echoes the same theme in his characterization of the link between knowledge and policy as "the uncertain connection."

Yet policymakers give strong endorsement to the potential of research, as has been shown repeatedly. Caplan's (1976) landmark study at the federal level, and more recent investigations at the state level (Nelson, 1982; Smith and Caulley, 1982) indicate that research does play a prominent role in educational policymaking in areas such as finance and special education. Yet these same authors also note the myriad planning and dissemination issues which inhibit use of research information in policymaking. In short, it is widely believed that the potential of research for informing the process of policymaking has not been realized.

### Overview

During the fall of 1981, a project was initiated to explore the potential of special education research for informing state and local policy regarding the education of handicapped students. The Office of Special Education (now Special Education Programs (SEP)) within the Department of Education, provided funding to the National Association of State Boards of Education (NASBE) to administer

the project in cooperation with the Council of Chief State School Officers (CCSSO), National Conference of State Legislatures (NCSL), and American Association of School Administrators (AASA).

The impetus for this effort was two-fold. First, the provisions of P.L. 94-142 had been fully required for nearly three years. Although many of the provisions were not new, they did create a major overlay of federal policy on existing state and local policy and practice. The problem was not necessarily how to change state law and policy to meet the letter of the federal law, but rather how to meet the broader goal of assuring an effective delivery system at the local level which would meet the spirit of the law. In order to approach this goal, it was seen as both timely and efficient to create a mechanism for providing research and practice-related information to the state and local policymakers primarily responsible for special education policy.

Second, information which may assist policymakers is not always available to them in a useful format. Research reports are often written in jargon which is little understood by policymakers or practitioners, or address issues that appear so remotely related to useful applications that their importance may be overlooked entirely. Special Education Programs recognized the need to address such problems, and also to create a mechanism through which their research results could be disseminated. At the same time, NASBE and the other associations participating in the project sought a way in which they could provide their members -- education policymakers -- with useful information which would assist in the development of effective policies governing the education of handicapped children. Thus, a project to link policymakers with researchers was funded for a three year period beginning October 1, 1981.

## Goals

Three goals were established to guide the three-year effort.

1. to identify the most pressing concerns in special education currently facing state and local education policymakers;
2. to locate information through the U.S. Department of Education and other sources which addressed these issues and which would assist the policymakers in making decisions affecting the education of handicapped children; and
3. to provide this information to state and local policymakers in formats specifically designed to accommodate both the unique needs of the policymakers and the type of information being disseminated.

These goals were accomplished through a series of activities which are summarized in the following sections.

## Participants

Project participants from NASBE, AASA, CCSSO, and NCSL represent the highest level of education policymakers and administrators in the states. Further, these associations have well-established mechanisms for understanding the needs of and communicating with their members.

Each group brought specific perspectives and strengths to the project.

- (1) **NASBE** is a nonprofit, nonpartisan association serving state boards of education, the nation's highest-ranking citizen trustees for the public interest in elementary and secondary education. Nearly 500 members of the state boards in 47 states and five territories belong to NASBE. The primary goals of the association are to strengthen lay leadership in education policymaking at the state level; to promote excellence and equity in the education of all youth; and to encourage citizen support for the vital tradition of free and common public education.

- (2) **CCSSO** is a nonprofit organization representing the public official responsible for education in each state. Chief State School Officers in the 50 states (commonly referred to as State Superintendents or Commissioners of Education), the District of Columbia, and six extra-state jurisdictions are the sole members of the Council. The Council of Chief State School Officers exists to help its members and their agencies fulfill their responsibilities as both state and national leaders in education.
- (3) **NCSL** is the official representative of the country's 7,500 state legislators and their staffs. The organization has three basic objectives: 1) to improve the quality and effectiveness of state legislatures; 2) to foster interstate communication and cooperation; and 3) to assure state legislatures a strong, cohesive voice in the federal system.
- (4) **AASA** is a nonprofit organization whose membership is comprised of 18,000 school district superintendents and central office personnel. The association maintains extensive training, publications, and advocacy programs to meet the needs of these education leaders. AASA has ready access to each of the nation's 16,000 school districts and through a network of 50 state affiliates is also closely tied to regional and state level concerns.

These four groups provided access to a broad cross-section of individuals responsible for the education of handicapped students. Through these organizations, the project directly reached over 3,000 education policymakers and administrators.

### Administration

The primary administration of the project was the responsibility of NASBE. Three professional staff members of NASBE (a half-time project director, full-time project associate, and half-time editor) carried out these responsibilities in cooperation with the project Steering Committee, of which they were members. The project staff facilitated project activities by, for example, developing and recommending topics to be explored; identifying research on selected topics and critiquing relevant research reports; and developing written products. Further, the staff linked the project with the cooperating associations, and with the research community.

Each association designated at least one staff person to comprise the project Steering Committee. The committee was responsible for a variety of tasks. First, these individuals were familiar with the information needs of their members and thus were instrumental in determining the special education issues on which the project should focus. Second, they had direct access to their members, and through association newsletters, conferences, direct mailings and telephone contacts, they created multiple dissemination mechanisms through which project information was provided. Finally, Steering Committee members had substantive experience in defining education issues for their constituents and in designing appropriate dissemination strategies. They played a vital role in the project by defining special education issues of concern, reviewing draft documents in light of their constituents' priorities, and evaluating the progress of project activities.

Members of the Steering Committee established a special education contact network within their respective association's membership. NASBE's network consisted of three individuals from each state -- the chairperson of the state board, a state board member who volunteered or was designated by the chairperson as the special education liaison, and the executive secretary to each board. CCSSO's network consisted of the 50 state superintendents. The chairperson of

the education committees for each of the state legislatures comprised NCSL's network, and AASA established a group consisting of over 200 Educational Service Agencies which serve over 9,000 school districts nationwide.

### Audiences

The primary recipients of project materials included 100 state board members, 50 board executives, 100 state legislators, 50 chief state school officers, and approximately 2,000 school administrators. Analysis of the evaluations of project materials revealed that staff to these individuals also had information requirements and research responsibilities which made them logical audiences for direct receipt of materials. For example, state directors of special education provide substantial support to the state boards and chief state school officers in matters relating to the education of handicapped students. State board attorneys also work closely with their boards and chiefs. Therefore, project materials routinely were sent directly to these individuals. Products also were requested by other state board members and staff persons to state legislators and chief state school officers, for a total of over 3,000 education policymakers, administrators, and members of their staffs.

Although education policymakers and administrators were the focus of the project, another group of individuals vital to the project were not overlooked: specifically, the developers of information -- individuals who work in the areas of education research, policy analysis, and program development. The project developed a two-way communication network with over 100 individuals and organizations specializing in research, policy analysis and program development. The information provided by these groups better enabled the project to develop a variety of products for dissemination to the policymakers and administrators comprising the target audiences.

## Products

Four topics were identified by the policymaker audiences as priorities for project materials:

- (1) special education technology;
- (2) special education finance;
- (3) related services; and
- (4) special education program effectiveness.

Not surprisingly, these topics reflect special education applications of the three priority issues for policymakers as identified in Yff's (1983) survey of five education policymaker organizations: <sup>(1)</sup> money, <sup>(2)</sup> technology, and <sup>(3)</sup> education quality (see Appendix A for Yff's breakdown of these issues). The project utilized a variety of communication mechanisms and formats -- association newsletters, electronic mail, conferences, abstracts, and issue briefs to disseminate special education research information to its audiences about these topics.

**Newsletters:** Each association's newsletter was an already well-established source of information for its target audiences. The flexibility of the newsletters permitted the project to convey information of varying length and depth of substance. Primarily, they provided a mechanism through which other project materials were advertised; for example: "Three new issue briefs will be available soon from NASBE's Special Education Dissemination Project." However, in some instances they were useful for conveying more substantive information such as a noteworthy research finding or change in federal regulation; for example: "...Included in the publication is a brief look at cost estimates derived through a Rand Corporation study...for example, the added cost of direct instructional services is proportionate to the severity of the handicap. The average instructional cost for a blind student was reported to be...."

The newsletters generated interest in the project and its materials and enabled the project to reach its audience on a consistent and predictable schedule. Examples of newsletter notices and articles are included in Appendix B.

**Electronic mail:** NASBE's electronic mail system served a purpose similar to that of the newsletters. Announcements of available materials were made regularly, and recent research findings highlighted. The major difference was the immediate access it provided for the project's audiences. Project materials were requested frequently through the system, primarily by staff persons related to the state board and/or the chief. Although still not part of most policymakers' daily routine, the system reduced dependence on the telephone, and provided project staff with another personal dissemination mechanism.

**Research abstracts:** The research abstracts provided a concise one-page format through which the project's audiences were informed of resources which could assist them in exploring various aspects of special education. Abstracts were provided monthly and each included one to three brief summaries (similar to annotated bibliographies) which described recent publications on research, program, or policy issues. Cost and ordering information was provided for each reference to allow policymakers and their staffs to obtain the publications more quickly. This format allowed the project to develop and provide a cumulative special education bibliography which its audiences could review quickly, and from which they could order particular publications which were relevant to specific issues of concern. The series of 15 abstracts is included in Appendix C. At the completion of the project, all publications

were compiled, with cost and ordering information, into a Special Education Bibliography for Policymakers, included in Appendix D.

**Issue briefs:** The issue briefs were the most extensive and substantive of the project's dissemination mechanisms. Designed to provide in-depth information on specific issues, the briefs include background information, a selective research review, and implications for special education policies and programs. In order to assist policymakers and their staffs in further study, the briefs also contained references for additional reading, and/or state and local contacts to whom they could turn for personal experiences and analyses on the topic. Copies of the six issue briefs are contained in Appendix E. The resumes of six issue briefs appeared in the March, 1985 issue of Resources in Education (RIE), the monthly abstract publication of the Educational Resources Information Center (ERIC). They will also appear in CEC's quarterly abstract publication, Exceptional Child Education Resources (ECER). Copies of the briefs are available in microfiche and paper copy from the ERIC Document Reproduction Service.

The four formats--newsletters, electronic mail, research abstracts, and issue briefs--created a continuum of information from brief one-line notices of a new research publication to more in-depth explorations of the implications of research for a given issue. They could provide the busy reader with a quick reference while making increasingly extensive information available for the individual who was developing policy options on a specific issue at a given time.

## Process

Products geared to and designed for the interests and information needs of an audience are a necessary -- but not sufficient -- part of effective dissemination. The dissemination process itself -- getting the products to the audience -- is more than just an issue of delivery, and is of prime importance.

The project dissemination process was a personalized process -- individualized in several ways for each education policymaker group. First, the announcements in association newsletters were timed and geared specifically to the current activities and priorities of the members. Products were highlighted in conjunction with an upcoming conference session on a similar topic; research findings were publicized as they related to future agenda items. Second, all project products carried the name of each policymaker group. The information, which covered topics selected as important by the policymakers themselves, came from "their" organization, and "their" organizational representative (the project Steering Committee member) was known and available to answer questions or provide additional copies of a publication. Third, other personalized communication strategies were employed on a regular basis. For example, the issue brief mailings were accompanied by a personal letter from the organizational Executive Director (see Appendix F). These letters highlighted particular points of interest to the specific policymaker audience, and encouraged them to keep in touch with project staff through the evaluation forms or through a quick letter or phone call. In addition, the project director and other project staff corresponded directly with individuals and organizations who provided or requested information. Such a personalized dissemination process served not only to help establish the credibility of the content of the products, but to broaden the dissemination network as individuals "passed the word" (and the products) on to colleagues.

## Evaluation

Evaluation of written products was an integral part of the project activities. This activity was accomplished most directly through the use of an evaluation form which was enclosed with the issue briefs and the abstracts. The form asked respondents to provide the following information.

- o Position (state board of education member, state legislator, chief state school officer, local school administrator, other (e.g., consultant, staff, etc.))
- o Name/Address (optional)
- o Anticipated use of material (personal information, background for staff training, background for policy decisions, other)
- o Usefulness of content (from 1- not useful to 5- very useful)
- o Suggested changes to increase the usefulness of the content
- o Appropriateness of format (from 1- not appropriate to 5- very appropriate)
- o Suggested changes to increase the appropriateness of the format
- o Comments

Respondents were asked to mail completed evaluation forms to their representative association (i.e., NASBE, NCSL, AASA, CCSSO) which forwarded the forms to NASBE staff. Appendix G contains selected evaluation forms and correspondence.

As of September 30, 1984, the following data had been compiled.

## ISSUE BRIEFS

N = 201; 134/66% state policymakers; 67/34% local policymakers from 46 states

### A. Usefulness of content

1	2	3	4	5
Not Useful 0/0%	8/4%	Useful 40/20%	82/41%	Very Useful 71/35%

"Good resource - I know very little about the subject."

"I enjoy the brief concise summaries and explanations."

"Excellent compilation of material."

### B. Appropriateness of format

1	2	3	4	5
Not Appropriate 3/1%	14/7%	Appropriate 56/28%	52/26%	Very Appropriate 76/38%

"Very good."

"Use booklet form - too many inserts."

"Try a bound pamphlet."

"Hole punch."

"Slim notebook."

"Particularly like the inserts as they can be distributed based on the appropriate target group or topic."

### C. Use of material

- o Background for policy decisions: 73/38%
- o Background for staff training: 54/27%
- o Personal reference: 81/40%
- o Other: e.g., Dissemination to local districts/library: 44/22%

### D. General comments

"Your topics are timely:"

"Excellent information; we have put it to good use."

"Like the briefness so a busy person can get the gist of the matter without necessarily doing the extra reading."

"Excellent product!"

"Keep 'em coming!"

E. Other issues of concern (in order of priority)

- o Residential placements
- o Least restrictive environment
- o Finance
- o Discipline/Suspension and expulsion
- o Graduation requirements
- o Extended school year
- o Rural issues
- o Interagency agreements

ABSTRACTS

N = 127 policymakers from 34 states

A. Usefulness of content

1	2	3	4	5
Not Useful		Useful		Very Useful
0/0%	0/0%	39/31	62/49%	26/20%

B. Appropriateness of format

1	2	3	4	5
Not Appropriate		Appropriate		Very Appropriate
0/0%	2/1%	41/32%	27/21%	58/46%

C. Use of material

- o Background for policy decisions: 72/57%
- o Background for staff training: 50/39%
- o Personal information: 93/73%
- o Other: e.g., Purchasing resources for library and SETRC Network: 30/24%

D. General comments

"A service such as yours will be helpful in keeping up-to-date as well as in selecting resources for purchase . . . We will be looking forward to future abstracts."

"It is felt that the Abstract is concise and of appropriate length for State Board of Education members. Maryland plans to order two of these documents quoted in Abstract I."

Analysis of these data, combined with the informal information obtained on an on-going basis by project staff, revealed several interesting points.

### Content of Useful Information

Seventy-six percent of the respondents to the issue briefs and 69 percent of the respondents to the research abstracts rated the usefulness of the content as 4 or 5 on a scale of 1 to 5, with 3 being "useful" and 5 being "very useful." This relatively high rating of usefulness supports the following hypotheses.

First, the broad special education topics covered in project publications, such as computer technology and finance, are ones of interest and concern to policymakers. Weiss and Bucuvalas (1980) found that the criterion "deals with a high priority issue" was named as either an essential (33 percent) or highly desirable characteristic of written material (47 percent) by policymakers they surveyed. Further, Nelson (1982) indicates that such written research reports are most useful to policymakers during the first and second stages of the policymaking process (awareness and policy formulation) when they are learning about emerging trends and problems and debating and shaping policy alternatives.

Second, specific content of the issue briefs, including delineation of federal/state/local roles and responsibilities; examples of state and local programs; cost/benefit and demographic data; and implications for policymakers' concerns with quality, equity and finance responds to policymakers' needs for information. In general, these categories of content are supported as useful by Weiss & Bucuvalas (1980) as well, who found that criteria such as "adds to practical knowledge about the operation of policies or programs," "has direct implications for a course of action," and "raises new issues or offers new perspectives," were rated as either essential or highly desirable in written material by 59 to 86

percent of policymakers interviewed. Thus it appears that the issue briefs were successful in operationalizing such criteria in the field of special education.

### Format of Useful Information

Analysis of the data on the format of project materials involved a dual consideration. First was the concern with the design of the product itself: page size, print type, binding and the like which were assessed on the evaluation questionnaire. Responses to the question on the appropriateness of the format indicated that 64 percent of the respondents rated the issue brief format as either 4 or 5, "very appropriate," while 67 percent gave the research abstracts the same rating. Written comments on this aspect of the product ranged from praise for the current format to suggestions for stapling, hole punching, and binding.

The second aspect of the format issue is that involving descriptive characteristics of the writing style of the materials: Dimensions such as clarity and language.

Informal feedback from policymakers and from Steering Committee members emphasized the importance of three primary characteristics: clear, understandable writing (i.e., no jargon); descriptive charts and graphics; and brevity. Weiss echoes these classic injunctions: "start a report with a brief summary of the results, avoid jargon, write graceful prose, use charts, maps and other attractive graphics, interpret the meaning of statistical statements, and write in terms that have meaning for the policy audience" (Weiss, 1978, 69). Weiss and Bucuvalas' later research also confirms that the criteria of "understandably written" and "objective" rank high (second and third) in policymaker ratings of criteria for useful studies, with 89 percent and 82 percent ranking them as either essential or highly desirable respectively (Weiss and Bucuvalas, 1980, 184). According to

both written comments and oral feedback, project materials were rated high on usefulness because "the critical information was accessible and understandable" (state policymaker).

The following chart provides a useful contrast and summary of the format-content relationship in policy-oriented and discipline (research) oriented reports (Takanishi, 1981).

=

## A Comparison of Discipline- and Policy-Oriented Reports

Elements	Discipline-Oriented	Policy-Oriented
<b>Title</b>	Description of theoretical foundations and research conducted, e.g., a longitudinal study of the effects of participation in early intervention programs	Description of policy issues and/or recommendations, e.g., lasting effects of preschool participation
<b>Audience/ Goal</b>	One's peers  To contribute to theory and disciplinary development	Variety of decisionmakers and their needs for information  To provide policy-relevant information
<b>Summary Statement</b>	Abstract describing the research problem, methods, results, and implications for future research and theoretical modification	Executive Summary presenting policy questions and choices, methods of approach to these questions, findings, and recommendations for action
<b>Body of Report Introduction</b>	Statement of the problem, placing the study in proper theoretical and research tradition, illustrating how the study contributes to an understanding of that problem	Presentation of policy questions, assessment of the politics of the issue, policy options available, methods used to determine alternative effects of these options
<b>Data Collection</b>	Detailed description of methods according to scientific standards of reporting	Description of methods without use of terms unfamiliar to non-researchers, but without sacrificing evidence of the reliability and validity of methods
<b>Data Analysis</b>	Detailed description of analytic techniques according to scientific standards of reporting	Description of methods without use of terms unfamiliar to non-researchers. Thoughtful conversion of results into tabular and graphic form so that major findings are effectively communicated to those without advanced statistical training
<b>Discussion</b>	Recommendations for further research and revisions in theoretical understanding as a result of the study	Recommendations for action, presentation of the costs (not purely fiscal) and benefits of alternative actions. Discussion of administrative and political feasibility of alternatives. Identification of issues for further study

### III. CONTENT AS PROCESS: TAILORING SPECIAL EDUCATION INFORMATION FOR POLICYMAKERS

#### Introduction

The previous section provided an overview of the project, including a description of the actors and activities. This section illustrates the process of tailoring information for education policymakers, using the project issue briefs as an example.

#### Context

The content of each issue brief was introduced with a short background section which established a context for policymaker consideration of the issue. Because these audiences usually have at least some familiarity with the topics, three to five paragraphs was usually sufficient to quickly bring the reader up-to-date and to focus attention on the current information which comprised the main body of the brief.

The project used two primary approaches to establishing the context: a factual approach and an historical approach. These were not discrete categories, but rather reflective of an emphasis that was suggested by the extent to which the topics seemed to lend themselves to one or the other approach. More concrete topics such as computer technology, finance, and program evaluation seemed to be more persuasively introduced by a presentation of compelling facts. For example, the background on computer technology is presented with bulleted data such as the following:

- Special education teachers perceive the need for new media formats and manipulative approaches which Computer Assisted Instruction (CAI) can meet. A 1978 survey of 30,000 special education teachers found that for every one teacher of students using CAI, five additional teachers perceived the need for CAI.

Data such as these serve to draw attention to the immediacy of policy concerns about computer technology. Similarly, data introducing the finance issue brief highlight the continuing increase in numbers of handicapped children of all ages served by public school programs, and the dramatic increase in special education revenues since passage of P.L. 94-142.

For other topics such as LRE, related services and preschool special education, a short narrative history served to establish timeliness. The history usually emphasized major legislative and judicial commitments, and concluded with, for example, the current status of a societal trend such as early childhood education, or current solutions to problematic areas such as LRE and related services.

Following the background section, the organization of the main body of research was tailored to the topic and types of information deemed relevant. Generally speaking, a breakdown of federal, state and local responsibilities was presented. The next section outlines how the content was focused according to these three categories of policymaker impact.

**Federal/State/Local Responsibility:** The different roles played by federal, state, and local governments influence both policy and program implementation. Delineation of these respective responsibilities helps the policymaker to focus on the parameters of his or her domain; for example, it is important for a state official to focus on both the constraints and possibilities defined at the federal level, and the potential impact of state decisions at the local level. In organizing this content breakdown, the information progressed in specificity; the national data tended to be very broad, the local data very specific. This content provided a broad

perspective for the policymaker audiences at any level, as well as the targeted information that was most useful for them.

### **Federal Impact**

The content regarding federal impact on special education topics fell into three basic categories: legislative information, judicial information, and financial information. All six issue briefs review at least one of these categories. Four of the issue briefs--related services, LRE, evaluation, and preschool--explain relevant federal legislation; for example, the pertinent sections of Public Law 94-142 and its accompanying regulations are excerpted.

The national impact of judicial interpretations is particularly relevant to the issue of related services. Thus, a major section of this issue brief describes the extent to which the courts shape education policy when they define how the related services mandate is to be fulfilled.

In the category of financial information, the issue brief on special education finance presents national cost estimates developed by a 1981 Rand Corporation study. For example:

- The total cost of special education and related services per handicapped child was an estimated \$3,577, approximately 2.17 times greater than the cost of regular education per non-handicapped child.
- The added cost of special education and related services above the cost of regular education was estimated as \$1,927 per handicapped child.

It is acknowledged in the issue brief that these data are broad, based only on averages, and that:

...policymakers must determine when national estimates...will suffice and when district cost reports and surveys are most useful. Their conclusions

will vary according to the political culture, traditions and policy needs of their state.

The finance brief also includes a section discussing the extent of federal support for the total cost of special education--estimated at not more than 15 percent--and the friction resulting from the failure of Congress to appropriate funds matching the P.L. 94-142 authorization levels.

### **State Impact**

The issue brief content regarding state responsibility combines general information, and specific information that informs through examples. Again, legislative and financial information was a major content focus. Generalizations about the status of state statutory requirements are included in the briefs on related services, program evaluation, and preschool special education. State financial support for special education is described in a section of the finance brief. Examples of individual state approaches to the specific issue are included in all but the LRE brief, which focuses more on local approaches.

The related services and preschool issue briefs emphasize state statutory requirements because these two are topics of current priority and activity in many state legislatures. In the related services area, legislatures are working to bring state law into conformance with P.L. 94-142 mandates. In the area of preschool special education, many legislatures are expanding their mandates to include younger children and to eliminate restrictions based on handicapping condition. Thus, state statutory requirements are presented as both part of the problem and part of a solution that can be influenced by informed action on the part of state policymakers.

Charts also are included to provide policymakers with a perspective on how the progress in their state compares to other states.

State variables are particularly emphasized in the finance issue brief, which notes, for example, that "state support for special education programs is influenced by a number of factors--size, wealth, political climate, structure used to provide basic financial support to local school systems, and relative prominence of the state contribution to the total funds available for public schools." Explaining the difficulty in estimating average state support for special education, the brief presents data compiled by ETS, such as the following.

Among states reporting for 1978-79:

- State support for special education varied from a high of 98% in Montana to a low of 17% in Oklahoma.
- At least 22 states contributed 50% or more of the total fiscal resources for special education.

The fact that policymaker decisions must be tailored to individual state and local needs has important implications for disseminating information. Rather than trying to generalize, it is often more useful to provide examples of how individual states or local districts are approaching a problem or issue. This strategy was used effectively in the evaluation, preschool, and computer technology issue briefs. The preschool issue brief reviews several early childhood special education programs that have been created at the state level. The computer technology issue brief presents information about state education agency uses of computers by describing systems that have been implemented in three different states: Colorado, Florida and New Hampshire.

A section of the program evaluation brief presents the definitions for evaluation that are used in four states: California, Maryland, Massachusetts and North Carolina. Maryland, for example, defines evaluation as "an analysis of discrepancies between standards or objectives and actual performance." Massachusetts uses the following definition: "The process of providing technically adequate, useful, and timely information relevant to decisionmaking." These four states have developed their own evaluation manual for use by local districts, and the issue brief describes each of these guidebooks according to its purpose, content and format. Each example includes a state or local contact person, from whom an interested policymaker could obtain current program information.

### **Local Impact**

Content regarding local government impact on and response to an issue is most suited to the specific, example-oriented approach described above. The computer technology issue brief describes specific local education agency uses of technology in administering special education programs. The preschool issue brief describes local demonstration programs, featuring a variety of approaches such as home-based and school-based models.

The LRE issue brief presents findings of a 1981 study conducted by JWK International on local public programs that have successfully included severely handicapped students in less restrictive environments. Three of these school districts are highlighted in the issue brief: the Tacoma, Washington Public Schools; the Madison, Wisconsin, Metropolitan School District; and the Albuquerque, New Mexico, Public Schools. For each, the

issue brief describes the program's goals, how the program works, and why it is effective. Researchers at JWK drew several conclusions of interest to policymakers, and these are presented in the brief, as follows:

...The study determined that the following factors are critical in serving severely handicapped students in the LRE:

1. an appropriate service delivery plan for severely handicapped students,
2. organizational support for the education of severely handicapped students,
3. personnel assigned to provide administrative assistance and instructional leadership,
4. positive attitudes among school personnel toward severely handicapped students and the LRE concept,
5. a responsive staff development program,
6. acceptance of the severely handicapped by the non-handicapped community, and
7. acceptance of the LRE concept by parents of the severely handicapped.

Organizing information by delineating the areas of federal, state, and local responsibility maximizes its usefulness to education policymakers working at various levels.

Another information category included in the issue briefs was information that directly related to a policymaker's formal decisionmaking responsibilities. These responsibilities are considered next.

### Policymaker Responsibilities

By far the most critical responsibilities granted to education policymakers are those of ensuring quality and equity. The broad area of education quality includes policies to ensure academic rigor, strong curricula, and qualified teachers. The broad area of equity includes policies to assure that all students have equal access to a quality education. A third area of policymaker responsibility is that of finance; education officials are responsible for efficient fiscal administration and cost containment practices. These three

important policy concerns--quality, equity and finance--were emphasized in the issue briefs, and each is covered briefly in the following sections.

Quality: The issue brief on evaluation highlights the issue of quality education programming. Though program monitoring is acknowledged as an explicit purpose of evaluation, the brief states that evaluation efforts must go beyond asking about a program's compliance with laws and regulations:

...agencies are moving to a broader focus on program quality and effectiveness, that is, asking about the extent to which program goals and objectives are being met; about, in effect, whether or not students are benefitting from special education.

In the preschool issue brief, quality is addressed through a major section reviewing research on the efficacy of early childhood education for handicapped children. The brief reports that efficacy studies of preschool programs have documented substantial gains "across diverse handicapping conditions and all degrees (mild, moderate, severe) of impairment. Long-range studies have found that these gains do not disappear over time." Major findings are briefly summarized, as in the following example.

...McNulty (1983) reports an analysis of the findings of fourteen long-range studies of handicapped and low-income children served by a variety of infant and pre-school developmental programs. Compared to children who did not have pre-school, the children served by these programs: 1) consistently scored higher on achievement measures, 2) required fewer special education placements, and 3) were retained in grade less often.

The area of education quality also includes specific policymaker responsibilities for personnel preparation, curricula, and oversight and monitoring. Three of the issue briefs--related services, computer technology, and preschool--highlight teacher training as an essential element in achieving education quality. The computer technology brief states that: Teachers who work with special education students must be trained both in the use of computers and in the evaluation and production of curricular

programs and materials. Most special education teachers have no experience in applying computer technology to the needs of handicapped students, nor is there evidence that many teacher training institutions are providing such instruction to new teachers.

The related service brief notes the importance of positive attitudes as well as expanded skills, pointing out that:

Catheterization, for example, is an easy process, but the idea that it is part of a teacher's job description is not so easy for school staff to accept. Yet an expanded definition of education brings with it an expanded role for all personnel associated with educating handicapped children.

With regard to curricula, the LRE brief describes the need to provide direct support for the LRE principle by "teaching positive attitudes toward people with disabilities, breaking down prejudicial interactions between disabled and non-disabled students, and age-appropriate teaching and learning." The computer technology brief stresses development and acquisition of quality special education courseware.

Quality and equity concerns are interrelated, as illustrated by a major section of the finance brief, entitled "How Are Special Education Funds Distributed?" The answer involves mechanisms that vary from state to state because each must develop a formula that encompasses state mandates and responds to state needs. All formulas, however, are attempts to balance quality and equity goals. The issue brief analyzes the commonly-used funding formulas--pupil-based, cost-based, and resource-based--according to their relative strengths in promoting these twin goals, and provides a chart detailing the varied approaches used in the fifty states.

Equity: At the state policy level, equity is most often pursued through attempts to spread costs and benefits equitably among all local school districts in the state. The finance issue brief discusses three specific

sources of potential inequity in the distribution of funds to local districts: 1) differences among districts in the numbers and characteristics of students that require special education; 2) variations in the costs districts must pay; and 3) variations in the fiscal capacities of different districts. The computer technology issue brief reminds policymakers that equity "must be addressed in terms of both the number of computers available to special education students and the way in which they are used." The brief states that:

A growing number of educators are espousing the position that access to computers and computer training is further separating education's "haves" from its "have-nots." Already, the lack of involvement and/or low level involvement (e.g., drill and practice) of handicapped and other minority populations is well documented.

The LRE issue brief emphasizes the need for public education systems to ensure that decisions about special education placements are free of economic incentives, i.e., that children are not placed in particular programs simply because the state may reimburse proportionally more for some programs than it does for others.

A specific responsibility relating to equity is that of determining eligibility for special education programs. This task is particularly problematic with regard to providing preschool programs, related services, and least restrictive placements. Currently, eligibility determinations vary considerably from state to state as officials grapple with different methods for achieving equity. The preschool issue brief summarizes the degree of accord that exists among the 50 states with respect to defining the preschool handicapped population, reviews the difficulties involved, and emphasizes steps that must be taken to reduce the probability of misdiagnosis. However, even if the system of determining eligibility minimizes the chance

that children are left out who are in need, policymakers must then contend with meeting those needs with limited resources.

**Finance:** Financial considerations pervade all policy decisions. In recent years particularly, the need for efficient administration and cost-containment practices is paramount and, compared to regular education, the higher costs of special education require policymakers to balance issues of program efficacy and fiscal responsibility. The finance brief emphasizes the importance of funding predictability in fostering planning and public confidence. "Predictability..." states the brief,

...permits policymakers to estimate and obtain appropriate levels of support from taxpayers and other revenue sources without losing credibility. Because many special education costs are unpredictable (e.g., children identified in the middle of the year), districts prefer state funding formulas that accommodate variability and ensure their own budget predictability. Cost-based formulas may offer the greatest predictability for districts and the least for states.

The brief also explains how state funding formulas can influence the efficiency with which districts operate their special education budgets.

In reviewing costs associated with computer technology, this issue brief explains that although hardware has become more affordable, the costs of courseware remain high and are not likely to decrease. In the preschool issue brief, research on cost-effectiveness is reported from both national studies and long-range program evaluations. For example, the brief reports that:

In a study of a two-year preschool program (Schweinhart and Weikart, 1981), the following economic benefits were projected: savings of \$3,353 per child as a result of reduced need for special education services; and an increase of \$10,798 per-child lifetime earnings based on achievement of a higher educational level.

In the issue brief on program evaluation, it is noted that education policymakers at all levels have become more involved with evaluation because of increasing public concern about accountability and cost-effectiveness.

In reviewing the content of the six issue briefs related specifically to policymaker responsibilities for ensuring quality, equity and fiscal accountability it is clear that hard decisions are often required. Working with limited resources to both identify and implement effective education policies, policymakers find themselves playing a vital role in moving school systems forward. In short, effective policymakers are leaders and change agents, and incorporate an awareness of this role into their deliberations and actions. This leadership role is the final content emphasis of the issue briefs, and is the focus of the following section.

### Policymaker Roles

Policy leadership in special education involves both traditional and non-traditional roles in planning, coordinating, and organizing collaborative efforts. The sensitivity of many special education issues requires leadership in building public awareness, which presupposes awareness on the part of the policymakers themselves. The progressive nature of many special education mandates turns policymakers into change agents who must take the initiative in overcoming organizational and attitudinal barriers to change.

Planning and Coordinating: Traditionally, board members and administrators are charged with the planning and coordination of the public education system under their jurisdiction. Advances in both computer technology and program evaluation can assist in planning and coordinating

special education, as is pointed out in these two issue briefs. For instance, evaluation can facilitate more informed planning for technical assistance and staff development, as well as long-term data base development regarding, for example, state special education student achievement norms.

The other four issues seem to offer more challenges than solutions to the planner. For example, the mandate for related services moves special education policymakers into new, non-traditional coordinator roles. P.L. 94-142 requires that school-age handicapped youth be provided with services that were previously provided more often by other agencies, services such as physical therapy or special transportation assistance. The issue brief acknowledges that expanded obligations on the schools inevitably tax existing resources; the challenge facing education policymakers is to coordinate service delivery with other state and community agencies, including those for health, public welfare, mental health, and vocational education. These diverse agencies often have conflicting priorities that frustrate coordination efforts. The issue brief describes Maryland's State Coordination Council (SCC) as one example of an effective approach. Similar issues relating to the collaborative leadership role are discussed in the issue briefs on preschool, LRE, finance, and computer technology.

**Leadership:** Special education issues demand proactive leadership on the part of education policymakers. To fully meet the challenges of special education, policymakers, as well as other education personnel, must be both thoroughly informed and actively involved. In the field of computer technology, for example, it is imperative that special educators develop technical communication skills necessary to establish a speaking relationship

with the computer professional...." Active involvement is emphasized in the program evaluation issue brief; each step in the design of an adequate evaluation includes itemized "Quality Considerations for Policymakers" to help policymakers ensure that evaluations will provide policy-useful data.

Special education also imposes a major responsibility on education policymakers to raise others' awareness and support, both internally and externally. Internal support for computer technology poses a leadership challenge that is outlined as follows by the issue brief:

For many, computer technology foreshadows radical change--in styles of learning, definitions of basic skills and even in the function of the classroom as the locus of learning, and in the role of the teacher and the student. Well-timed, accurate information as well as on-going administrative support are critical to successfully overcoming the natural reluctance of many special educators toward computers in schools.

The LRE brief addresses the role of local officials in overcoming attitudinal barriers to change:

One cannot really expect the least restrictive environment principle to succeed if it flies in the face of a segregationist philosophy or a custodial outlook toward disabled students. However, if the principle of normalization...were adopted at the system level, implementation of the LRE would serve simply to translate system-level belief into service-level practice.

Overcoming external barriers to change is also a critical leadership role. Without broad-based public support, the spirit of special education policies and programs cannot truly be implemented, and as agents for change, policymakers must assume a responsibility for winning over traditional pockets of resistance. The related services mandate often poses challenges to public support "because of the threat of scarce resources being taken from the nonhandicapped in order to serve the handicapped." The brief suggests that education officials encourage parents and teachers of all

children to work more closely together. The evaluation brief emphasizes how program evaluation can:

Provide a context for public dialogue about how best to meet the needs of children. This type of discussion contributes to genuine, lasting community commitment by increasing public understanding of program parameters such as...what goals the program is intended to accomplish and what results are being produced...and whether available resources are adequate for achieving the expected results.

In conclusion, the six issue briefs addressed a range of content that was identified by education policymakers themselves as relevant to special education policy. They provided: first, a context within which the policymaker can focus his or her consideration of the issue; second, federal-, state-, and local-level policy-relevant information; third, policymaker responsibilities with respect to quality, equity and finance; and fourth, content relevant to the complex role of education policymakers as leaders and change agents.

#### IV. CONCLUSIONS AND IMPLICATIONS

The Special Education Dissemination Project reached over 3,000 education policymakers and administrators with information about special education research and practice during the three-year period from 1981 to 1984. The following section highlights conclusions drawn from project evaluation data, and draws dissemination implications for researchers and policy organizations.

##### Conclusions

1. Education policymakers need and want research: research of high technical quality, specific to their particular context and relevant to their current problems. These qualities--specificity, availability, quality and timelines--are those which Bardach's (1977) theory of dissemination would predict, and which other researchers have also identified. Put simply, such characteristics help assure that policymakers can obtain needed information more easily, feel more confident using it without lengthy verification, and thus can apply it in policy debates more quickly.
2. Despite the persuasive logic of the linear relationship between information and policy presented above, policymaker "use" of research cannot generally be expected to be so direct and instrumental but must instead be recognized in more relevant interactions and discussions. For example, Weiss (1978) reviews the uses of research in shaping policy debates and providing a common language for policy discussions. Similarly, Husen (1983) supports an "enlightenment" model of policy use, wherein research sensitizes policymakers to new issues and

orientations and thus indirectly shapes the way people think of policy issues (see Appendix H for a brief overview of various models of and constraints in the use of research in policymaking).

3. Research "translation" is necessary (a conclusion supported by others including Lynn (1976) and Caplan (1975)). Most research must be re-written and reformatted so that it is short, free of jargon, easy to find main ideas and conclusions, and specific to a salient policy issue.
4. Alternatively, the "education" of researchers might explicitly include the topic of research use and dissemination for specific non-researcher audiences. Practitioners as well as policymakers complain about the inaccessible nature of much education research. Those responsible for the production of research might make a more proactive response to such concerns (see, for example, the Research Dissemination Checklist at the end of this section).
5. Policymaker organizations can be effective research brokers (see Sundquist's (1978) call for more such research brokers), able to translate the often vague and equivocal language of research into understandable English with application to specific policy contexts (c.f. Caplan's (1975) caution that more interaction between policymakers and researchers might not improve communication between them). To do so effectively, however, these organizations require reliable sources of research data in areas of policy interest and application; appropriate in-house dissemination channels; and staff members willing and capable

of both interpreting research reports with integrity, and conveying the possibilities of such reports in personal and written formats.

6. Despite the debate about the advantages of a power-cost strategy of mass-produced and standardized information, it appears that, for these audiences and circumstances at least, face-to-face and custom-tailored communication is a key to effective dissemination. Such personalized communication allows policymakers to assess more reliably the credibility of the information and its source, and to have an immediate and trusted organizational contact with whom to mull over the relevance of the information to their own policy circumstances. Nelson & Kirst (1981) identify "expertise and empathy (as) the key ingredients" (24) in such informal dissemination networks. Project experience supports the critical nature of the human dimension in making dissemination "work."

7. Dissemination strategies are most successful when selected according to their suitability for a specific task, at a specific stage in the decision-making process. For example, the public policy literature refers to four stages of the policy process: awareness; policy formulation; management/oversight; and impact. Project experience supports the findings of Nelson & Kirst (1981) and others who emphasize that the stage in the policy cycle makes a difference in the type of communication used by policymakers: new information was most often requested in the awareness and policy formulation stages of a state/local issue; written research reports and analyses were probably more useful during these times.

## Implications

"We need a greater recognition of the role that information plays in policy before we can expect dissemination to get better."

"We need professional disseminators. The job won't be well done until it is treated as something more than an afterthought."

"Dissemination will never be effective on purpose. Nobody (except people who do research on it) gets any benefit from dissemination... Researchers...get other bennies. Policymakers get all the information they want whenever they need it...Dissemination is its own barrier."  
(Quoted in Bellavita, 1981, 17).

The debate about the form and purposes of dissemination continues: what can and should it accomplish? for whom? when it is successful? how can we tell? The uncertainties surrounding research dissemination and utilization continue, and there is ample literature to support any of a number of perspectives (see, for example, Knott and Wildavsky, 1980; Weiss, 1978; Bardach, 1977)

Table 1 on the following page highlights six categories of barriers to effective research utilization including barriers in the presentation of information, in the policy process, in the character of particular policy issues, and in the actions and attitudes of policymakers, researchers and the producer-user link. This project confronted issues in all these categories, and supports the conclusions detailed above. Possibly the clearest and most useful implications from the project, however, specifically address the information barrier. Project experience confirms the possibility of disseminating research to policy audiences;

it also underscores the necessity and priority of translating this research into a policy-relevant form. The following checklist is designed as one way of helping to bridge this gap.

## A RESEARCH DESIGN AND DISSEMINATION CHECKLIST

### 1. Knowledge of the audience

- o Who are the potential users of the information?
- o What do they want to know that you can tell them?
- o Who are the gatekeepers and opinion leaders?

### 2. Knowledge of your dissemination goals

- o What do you want to accomplish?
  - awareness that your information exists?
  - understanding?
  - specific action?
- o What type of response do you want?
- o How will you know if you accomplish your goal?

### 3. Knowledge of communication strategies

- o What type(s) of information does your audience consider credible and useful?
  - statistics (national/state/local)?
  - narrative/personal example?
  - executive summary?
- o What do they read?
- o What type(s) of newsletters or journals does their organization publish?
  - use of white space?
  - language?
  - use of headings/titles?
  - presentation of research and conclusions?

### 4. Knowledge of timing

- o When does your audience want and use information?
- o What are the planning, budgeting and decisionmaking cycles?

### 5. Knowledge of the message

- o Are you presenting your information in the audience's language?
- o Is what you're saying:
  - well presented: clear and understandable?  
well organized?  
complete?
  - relevant: clear implications?  
high quality?

TABLE 1

BARRIERS TO EFFECTIVE DISSEMINATION

Information	Policy Process	Policy Issues	Researchers	Policymakers	Producer-User Link
poor presentation	o Don't know who key policy actors are	o Politics outweigh research	o Uninformed about policy issues	o Unable to act	o Failure to translate research
limited relevance	o Information outweighed by other concerns	o Values outweigh research	o Concerned with professional discipline	o Only want to support existing position	o Insufficient dissemination sources
unclear conclusions	o Don't know best time to disseminate	o Issues too complex	o No concern for dissemination	o Unwilling to accept information	o No effective links
poor scholarship	o Don't know immediate information needs	o Too much information available	o Uncommitted to policy relevance of work	o Can't understand information	o Inadequate dissemination management
	o Don't know long range information needs	o Issues too well-defined	o Uninformed about policy process	o Unclear how policymakers get or use information	o No concern for dissemination
	o Don't know how information contributes to policy		o Unrealistic conclusions/recommendations		
	o Don't understand policy process		o Conservative conclusions/recommendations		

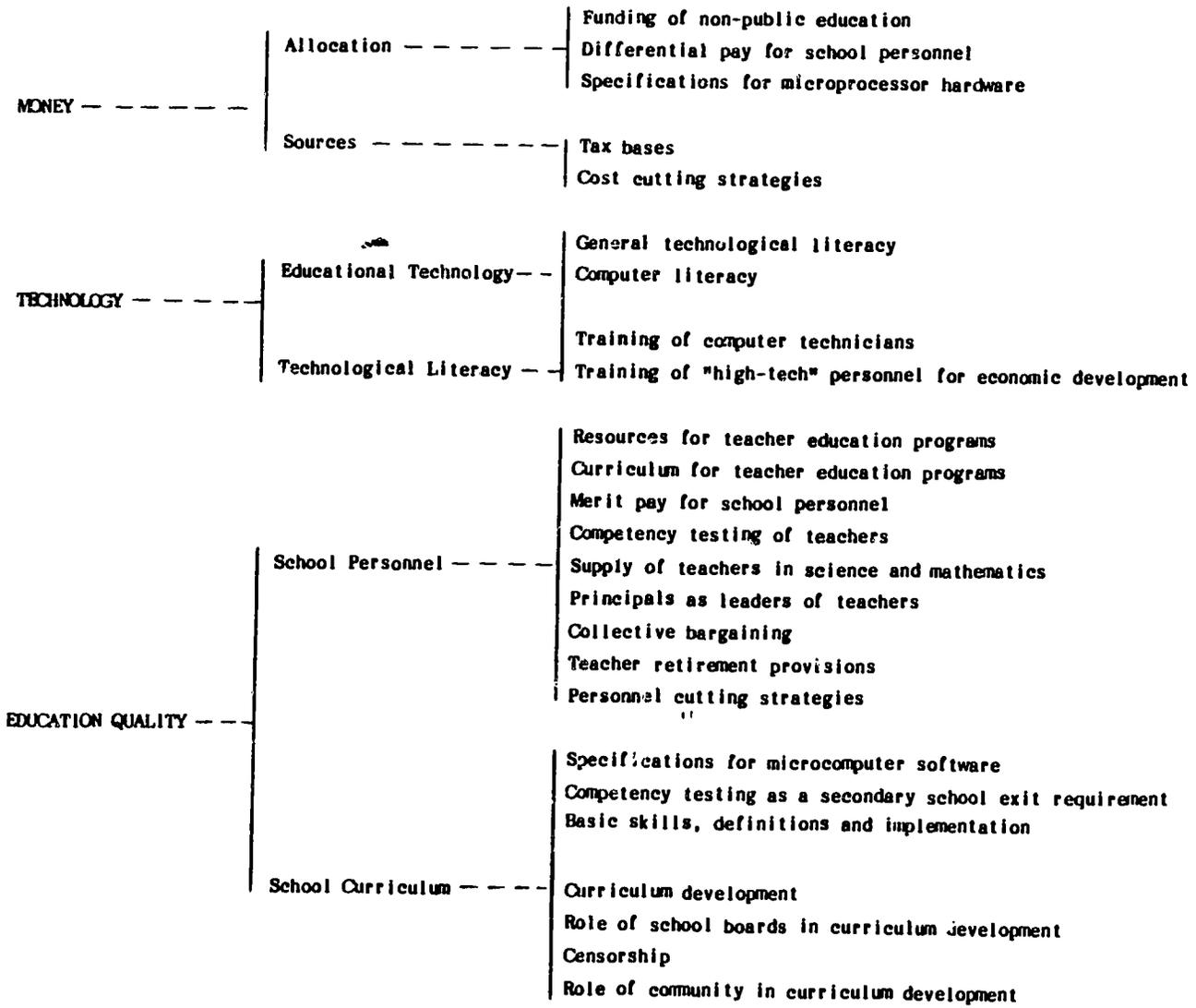
## REFERENCES

- Bardach, E. Implementation game. Cambridge: MIT Press, 1977.
- Bellavita, C. What do information producers do to disseminate their products? CA: IFG, 1981.
- Caplan, N., A. Morrison and R.J. Stambaugh. The Use of Social Science Knowledge in Policy Decisions at the National Level: A Report to Respondents. Ann Arbor, MI: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, University of Michigan, 1975.
- Cohen, D.K. and J.A. Weiss. Social Science and Social Policy: Schools and Race. In C.H. Weiss, ed. Using Social Research in Public Policy Making. MA: Lexington-Heath, 1977, 67-83.
- Coleman, J.S. Policy Research in the Social Sciences. Morristown, NJ: General Learning Press, 1972.
- Knott, J. and A. Wildavsky. If dissemination is the solution, what is the problem? Knowledge: Creation, Diffusion and Utilization, 1,4, June 1980, 537-578.
- Lynn, L.E., Jr. (ed.). Knowledge and Policy: The Uncertain Connection. Washington, D.C.: National Academy of Sciences, 1978.
- Lyons, G.M. The Uneasy Partnership. New York: Russell Sage, 1969.
- National Academy of Sciences. The Federal Investment in Knowledge of Social Problems. Washington, D.C.: National Academy of Sciences, 1978.
- Nelson, L. Avenues of communication: Bridging the gap between research and policy. IFG Policy Perspectives, Spring, 1982, 1-4.
- Nelson, L. J. and Kirst, M.W. What are the information preferences of state education policymakers? Stanford, CA: IFG, 1981.
- Sharpe, L.J. The social scientist and policymaking: Some cautionary thoughts and transatlantic reflections. In C.H. Weiss, ed. Using Social Research in Public Policy Making. MA: Lexington-Heath, 1977, 37-53.
- Simon, H.A. Administrative Behavior. (3rd ed.) New York: Free Press, 1976.
- Smith, N.L. and D.N. Caulley. The Interaction of Evaluation and Policy: Case Reports from State Education Agencies. Portland, OR: NW Regional Educational Laboratory, 1982.
- Sundquist, J.L. Research brokerage: The weak link. In Lynn, L.E. (Ed.). Knowledge and Policy: The Uncertain Connection. Washington, D.C.: National Academy of Sciences, 1978, 126-144.

REFERENCES (Cont.)

- Takanishi, R. Preparing a Policy-Relevant Report: Guidelines for Authors.  
Los Alamitos, CA: SWRL Educational Research and Development Center, 1981.
- Weiss, C.H. and M.J. Bucuvalas. Social Science Research and Decision-Making.  
New York: Columbia University Press, 1980.
- Y'f, J. Identifying policymaker information needs for the ERIC System.  
Washington, D.C.: ERIC Clearinghouse on Teacher Education, 1983.

**Appendix A**  
**Composite of Education Issues Confronting**  
**Education Policymakers**



Yff, J. "Identifying policymaker information needs for the ERIC System." Washington, D.C.: ERIC Clearinghouse on teacher education, 1983.

**Appendix B**  
**Association Newsletter Articles**

# The State Board Connection

An informal publication by the National Association of State Boards of Education

Vol. 2, No. 8

December, 1983

## ABOUT NASBE 1984 NASBE Meeting Dates

Have you purchased your 1984 calendar yet? Be sure to reserve the following NASBE meeting dates:

- April 27 - 29      Central Regional Meeting  
                                 Omaha, Nebraska
- May 4 - 6            Northeastern Regional Meeting  
                                 Wilmington, Delaware
- May 18 - 20        Western Regional Meeting  
                                 San Diego or San Francisco,  
                                 California
- May 19 - 22       Southern Regional Meeting  
                                 Wilmington, North Carolina
- October 9 - 14    Annual Meeting  
                                 Dearborn, Michigan

## New Staff Members at NASBE

Several new members have joined NASBE in recent weeks. Terri Perun and Sheila Williams have joined the word processing staff, Nancy Lerner is our new receptionist, (Regenia Miller has moved from receptionist to word processor/secretary), and Paul Jargowsky has come on board as a research associate for the family life education and teacher incentives and educational standards projects.

Peggy Torosian is NASBE's new Director of Public Relations and Development. Peggy served for 6 years as Assistant Campaign Director and Director of Individual and Planned Gifts for National 4-H Council. She has also worked as Director of Membership Services and Development for the Adult Education Association of the U.S.A. and as Staff Associate of association programs and the Educational Foundation of the American Association of University Women.

## Technical Assistance Available

The NASBE Family Life Education Policy Project still has a slot available for a state desiring technical assistance. If your state board would be interested in working with NASBE staff and consultants on expansion of state policy in family life education, please notify Lana Muraskin at our office. The family life project

is funded by the Ford, Geraldine R. Dodge and Huber foundations, and is designed to study New Jersey's family life education mandate, provide assistance to four states interested in considering family life education policies, and prepare a guide for policymakers. States interested in technical assistance do not have to commit themselves to policy changes, and the type of assistance is negotiable. There is no cost to the state board for assistance as we have foundation support for this program.

**NASBE's Special  
Education Project  
Now Publishing  
Research Abstracts**

Do you need additional information about special education? NASBE's Special Education Dissemination Project is publishing monthly abstracts entitled, "Research & Resources on Special Education." Please review the sample enclosed with this issue of The State Board Connection. If you would like to receive additional abstracts and other Project materials, contact Roberta Felker at NASBE. Meanwhile, we would like to alert you to the following new resource on preschool special education.

Effectiveness of Early Special Education for Handicapped Children reviews research regarding whether preschool programs are a sound investment, in terms of both benefits to the child and savings to the taxpayer. "It is no longer debatable," concludes the study, "that early special education programs provide immediate and long term gains for handicapped children...(with) diverse handicapping conditions and all degrees of impairment." Commissioned by the Colorado General Assembly and conducted by the state Department of Education, the report also documents studies of early special education programs in four Colorado school districts. These programs were found to be cost-effective, saving districts about \$1500 per handicapped pupil over three years, through a reduction in the need for more costly services in the elementary grades. Surveys of parents, teachers and administrators indicate a very positive attitude toward preschool education on the part of all these interested adults.

McNulty, B.A., Smith, B. and Soper, E.W. Effectiveness of Early Special Education for Handicapped Children, 32 pp. Single copies are available free by contacting Brian McNulty, Colorado Department of Education, 303 W. Colfax, Denver, CO 80204; (303) 534-8671, ext. 210.

**Training Project on  
Educating LEP  
Students Begins**

The National Center for Education Statistics projects that the non-English background population in the U.S. will grow to 34.7 million by 1990 and 39.5 million by the year 2000. Education for assimilation of this segment of the population into today's complex workforce will require high quality planning and

# The State Board Connection

An informal publication by the National Association of State Boards of Education.

Vol. 3, No. 1

January, 1984

## ABOUT NASBE

NASBE/CCSSO  
Legislative  
Conference To Be  
Held in Washington, DC

The NASBE/CCSSO Joint Legislative Conference will be held March 26-27 in Washington, DC. We hope you're planning to attend! Michael Barone of The Washington Post will speak on what's ahead in national education policy, and 1984 Presidential candidates will discuss their views on education. For more information, contact the NASBE office.

State Policy  
Information Network  
Will Link Major  
State Associations

With interest in the quality of public education greater now than in recent times, state board members and other policymakers at the state level are considering a host of new policies to promote educational excellence. The informed development, selection and implementation of policies can be aided by consideration of relevant research findings and other sources of information. Research and information available to support educational policymaking is stronger than it has ever been before, but often is not used because it has not been available in a timely manner and a useful form.

The associations serving state policymakers -- NASBE, the Council of Chief State School Officers, the Education Commission of the States, the National Governors' Association, and the National Conference of State Legislators -- have formed the State Policy Information Network to help their memberships incorporate research findings and other information into their policy deliberations. NASBE is the prime contractor and lead agency in the Network, which has been funded for two years by the National Institute of Education.

Initially, the Network will select a small number of high priority issues (e.g., teacher quality, technology) and combine information about current policy development in the states with the most relevant research findings on the topic. Each association will then try a number of different ways of packaging and disseminating the information, through seminars, conferences, electronic mail, etc., and will learn from its own efforts and those of the other associations the best ways to use different approaches. Based on what is learned from these initial efforts, the Network will select additional policy issues around which to synthesize and disseminate information.

In addition, the project will help strengthen and increase the ties between the community of state policymakers and the educational research community, by creating and capitalizing on opportunities for policymakers and leading researchers to interact with each other. This will help policymakers get the most useful information and analyses, and will help researchers and research funding agencies better understand and respond to the needs of policymakers.

Michael Cohen has recently joined the NASBE staff to direct the Network project. Before coming to NASBE, Mr. Cohen spent over ten years at the National Institute of Education. For the past five years, he was Senior Associate and Team Leader of the Effective Schools Team, where he was responsible for directing NIE's research efforts on teacher and school effectiveness. In that capacity, he has worked extensively with educators and policymakers at the local and state level to help them understand and use research findings to improve educational quality.

**Two New NASBE  
Publications  
Released**

Enclosed with this mailing are two new NASBE publications. Policy Options for Quality Education, a report of NASBE's Task Force on Education Quality, highlights policy questions that must be answered as states work for educational change. Bylaws, Standing Resolutions and Position Statements, 1984 contains the operating rules and resolutions adopted by the NASBE membership at the 1983 annual meeting. If you would like more copies of either of these publications, contact the NASBE office.

**Special Education  
Project Hears From  
Researchers & State  
Directors . . .**

Did you know that NASBE's Special Education Dissemination Project has been in contact with over 50 state and national research organizations as well as state directors of special education as part of its ongoing search for research information of relevance to policymakers? Exciting materials are coming in, and you'll be hearing about them in future issues of The State Board Connection as well as through project issue briefs and abstracts.

**We'd Like to Hear  
From You Too!**

MEANWHILE...DO YOU KNOW of any products and/or research information on special education currently available in your state, through your state department or perhaps through local colleges, universities or research centers? Just give Roberta Felker, Cindy Chambers or Dinah Wiley a call at 800-368-5023 with the information -- or, better yet, drop a copy in the mail. We'd be delighted to hear from you, and to include your state's information in our project publications on what's happening in special education around the country.

# The State Board Connection

An informal publication by the National Association of State Boards of Education.

Vol. 3, No. 2

February, 1984

## ABOUT NASBE

### Update on the NASBE/CCSSO Legislative Conference

Plans are now well underway for the 1984 NASBE/CCSSO Legislative Conference, to be held March 25-27 at the Capitol Holiday Inn, Washington, DC. Activities will begin with a Sunday, March 25 reception and dinner for conference attendees, sponsored by the Agency for Instructional Television.

Focusing on the theme, "The Education Agenda in an Election Year," the conference will feature the following speakers on March 26 and 27:

- o Secretary of Education Terrel Bell.
- o Senator Jennings Randolph (D-WV);
- o Senator Claiborne Pell (D-RI);
- o Congressman William Goodling (R-PA);
- o Michael Barone of the Washington Post;
- o representatives from the Democratic and Republican parties;
- o representatives from major voting blocs, including minorities and women; and
- o members of the business community, who will discuss the role of education in economic development.

A workshop, "How to Press Your Points with Your Members: Lobbying Hints from Congressional Staffers" will also be held. Time has been set aside for conference participants to visit with their senators and congressmen on Tuesday, March 27 from 12:00 - 5:00 p.m. (If you want to schedule an appointment with your representative, please call his/her Washington, DC office. The telephone number for Senate information is (202)224-3121; House information is (202)225-3121.) We urge you to take advantage of this opportunity to interact with congressional policymakers on issues of interest to you as education leaders.

**Registration  
Information:**

Location - Capitol Holiday Inn  
550 C Street, S.W.  
Washington, DC 20024  
phone: (202)479-4000

Room Rates - \$58/single \$68/double

Conference Fee - \$105

Registrar - Regenia Miller, NASBE  
701 N. Fairfax Street  
Suite 340  
Alexandria, VA 22314  
phone: (703)684-4000

**New Staff Member  
Kathryn O'Boyle**

The pleasant voice you hear when you call the NASBE office is that of our new receptionist, Kathryn O'Boyle. M'. O'Boyle has worked previously as an office manager in a national insurance company. We're glad to have her with us.

**Special Education  
Dissemination Project:  
Interim Evaluation  
Report**

As you know, the Special Education Dissemination Project is well into its third year, and it's time to take stock of how we're doing! We compiled the reactions to our products which you've been sending us -- and combined them with similar information sent in by the school administrators, members of education committees of the state legislatures, and chief state school officers. Highlights of our findings include:

- o 72% of state and local policymakers from 43 states find the content of the products "very useful;"
- o 64% of these policymakers find the format "very appropriate."

Your comments have also been both gratifying and useful, e.g., "I like the briefness so a busy person can get the gist of the matter without necessarily doing the extra reading." PLEASE KEEP THOSE EVALUATION FORMS COMING! As you can see, we do read them, and the information they provide is invaluable to us and to our funding agent, Special Education Programs, U.S. Department of Education.

# The State Board Connection

An informal publication by the National Association of State Boards of Education.

Vol. 3, No. 3

March, 1984

## ABOUT NASBE

### NASBE/NSBA Joint Committee Meeting

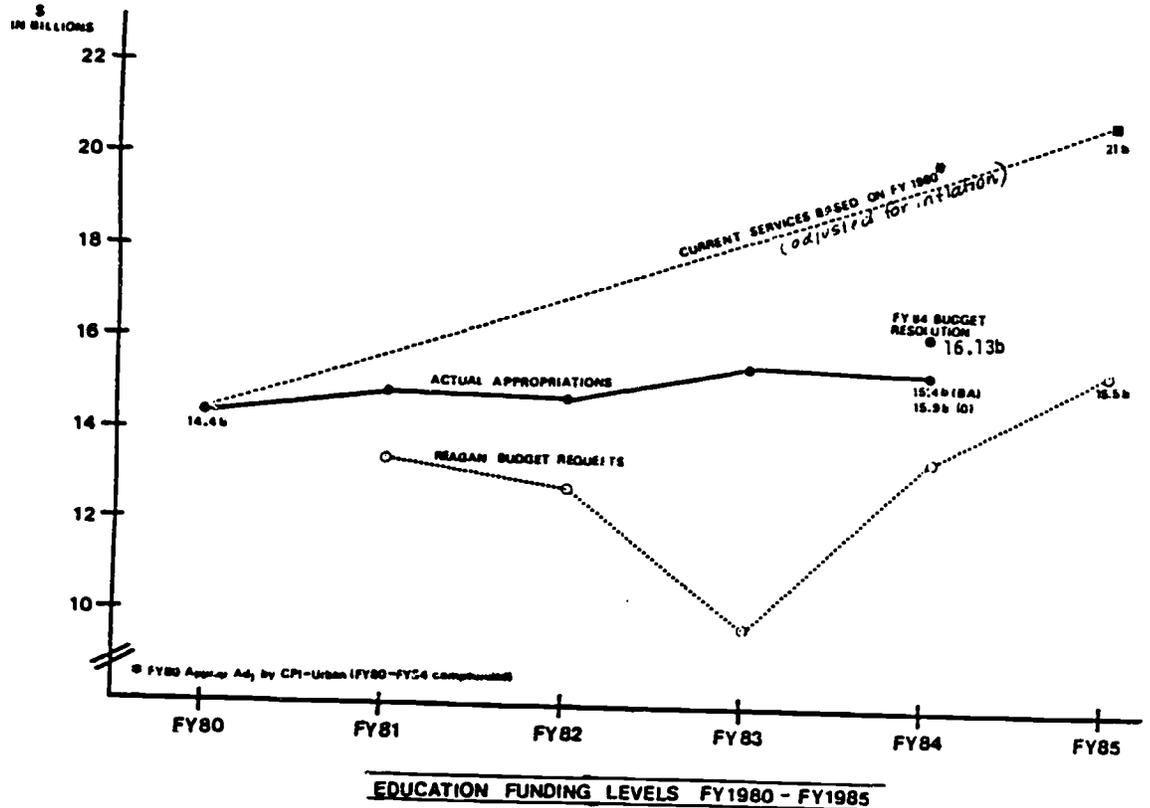
An outstanding NASBE/National School Boards Association Joint Committee meeting was held February 28-29 in the NASBE offices. The eighth in a series of joint meetings held during the past four years, it focused on the pursuit of educational excellence at the federal, state and local levels. A few highlights:

Peter Gerber, Senior Associate, the National Institute of Education, on "Excellence Continued: State and Local Roles": One hundred eighty state-level task forces on issues related to educational excellence have been formed since the release of the National Commission on Excellence report. (Before the report was released there were 20 such task forces.) There is a trend toward centralization of authority and a strengthening of the role of state officials in educational decisionmaking. State legislatures are establishing more rigid guidelines for curriculum reform, testing, and teacher preparation and retention. Projections for state spending for education have also increased -- by \$1 billion this year. Further increases in state-level funding are expected next year.

(NOTE: For further information on excellence efforts in the states, Dr. Gerber recommended the following publications: Meeting the Challenge: Recent Efforts to Improve Education Across the Nation, a report on state and local initiatives in educational reform, available free from the National Commission on Excellence in Education, Room 222, 1200 19th Street, N.W., Washington, DC 20208, phone (202)254-7920; and Education under Study, an analysis of recent major reports on education, available @ \$5.00 prepaid from the Northeast Regional Exchange, Inc., 160 Turnpike Road, Chelmsford, MA 01824, phone (617)256-3987.)

Michael Cohen, Director, State Education Policy Consortium, NASBE, on "Emerging State and Local Issues": State strategies for improving educational quality are likely to be most effective when they:

- focus on the improvement of teaching practices (i.e., classroom management and instructional skills) and schooling processes (i.e., goal setting, curriculum



COMMITTEE FOR EDUCATION FUNDING  
2/21/84

States should provide data to members of Congress indicating numbers of students who are unserved as a result of reductions in federal funding. Members of Congress should be encouraged to think of education not as a domestic spending program but as an investment in America's future.

The NASBE/NSBA meeting was attended by state board members Mark Fravel of Virginia, Roger Lincoln of Washington and Bob Wolfenbarger of New Jersey. For more information, contact Phyllis Blaunstein at the NASBE office.

Another Resource from the Special Education Dissemination Project

The Special Education Dissemination Project has identified a resource which provides timely information on state support for elementary, secondary, and higher education.

State Support for Education: 1982-83 includes extensive data which are organized into five chapters: 1) regional trends; 2) demographic characteristics of the states; 3) state support for elementary/secondary education; 4) state support for higher education; and 5) the relationship between state support for elementary/secondary and higher education. The introduction suggests at least four valuable policy-oriented uses of these comparative data: 1) comparison of state funding decisions; 2) rough analysis of "how well we're doing;" 3) stimulation of specific questions; and 4) reexamination of fundamental policy issues. Policymakers are encouraged to make the most effective use of the data by knowing the questions they want answered, looking for patterns, being satisfied with rough judgments, and being wary of simple answers. Overall, this document provides a valuable source of state education data with which analyses of state special education funding can be made more efficiently.

Angenblick, J. and G. Van De Water. State Support for Education: 1982-83. Denver, Colorado: AVA, Inc., 1983. Available for \$15.00 (\$13.50 for orders of 5 or more) from: AVA, Inc., P.O. Box 20276, Denver, CO 80220; phone (303)832-3444.

**Monographs on  
Bilingual Education  
Published**

Two new monographs have been produced by NASBE's bilingual education project. The first, Education for Language Minorities: The Perspectives of Administrators, Parents, and Youth, highlights multiple issues affecting language minority children from the federal, state, local, parent and student perspectives. A copy of the monograph is enclosed with this mailing. Additional copies may be ordered @ \$6.50 from NASBE.

The second monograph, A Policymaker's Guide to Special Language Services for Language Minority Students, is in press and will be sent to NASBE members next month. For more information, contact Ron Howard at the NASBE office.

**What Has NASBE  
Done For You  
Lately?**

During the last quarter, NASBE has:

- provided each state board member with a subscription to the weekly newspaper Education Week;
- helped defeat provisions in the Senate's version of the Vocational Education reauthorization bill which would have given approval authority for state vocational education plans to an advisory council rather than the state board and would have clouded the authority of state boards to act as state boards of vocational education;

# The State Board Connection

An informal publication by the National Association of State Boards of Education.

Vol. 3, No. 4

April, 1984

## ABOUT NASBE

### LEGISLATIVE CONFERENCE REPORT:

#### Education Issue Dwarfed by Economic Concerns



Columnist Michael Barone  
Addresses Legislative Conference

Education is a major issue in this election year, second only to unemployment in public opinion polls according to political consultant Robert Jones, the opening speaker at the NASBE/CCSSO Legislative Conference. Conference speakers seemed to be in agreement that the report of the National Commission on Excellence in Education has helped raise education to a high level of national attention.

But Washington Post columnist Michael Barone suggested that we won't hear much about the Commission's recommendations in this election year because the major political actors don't agree with all of the Commission's recommendations. "Walter Mondale will not support merit pay; Gary Hart is uncomfortable with 'children-oriented' politics; and President Reagan, although he supports merit pay and better discipline in schools, has not mentioned any willingness to increase federal funding for these programs," he said.

The overriding issue in the 1980s, according to political analyst Denis Doyle, will be the budget deficit. "The budget deficit swamps debate about any other issue," said Dr. Doyle. "Although the so-called 'new federalism' espoused by President Reagan in his early days in office has become a dead issue, the budget deficit has created de facto new federalism. We have entered a 'zero sum' era in which no increase in federal spending for education is likely."

Susan Frost, Executive Director of the Committee on Education Funding, told participants there is a bipartisan movement afoot on Capitol Hill to increase federal appropriations for education from the current \$15.4 billion to \$17.8 billion.

Asked if the administration would send a signal to Congress in support of such an increase, Education Secretary Terrel Bell said it would depend on what other appropriations are packaged with it. "If we are to provide more money for education, we must take money from other budget categories or increase taxes," he said. Money on a round trip to Washington loses value; states are in a better position to increase taxes."

- Assist with the identification, cultivation and solicitation of support from corporate and independent foundation leadership and decisionmakers;
- Provide advice and counsel on current and emerging NASBE membership and public education needs; and
- Contribute to the positive public image of NASBE at state and national levels.

NASBE leadership serving on the Development Council include: **Mark Fravel, Jr.**, Chairman, VA; **Carolyn W. Bergen**, IL; **Rosemary K. Clarke**, NV; **Karen Goodenow**, IA; **Ernestine Griffin**, AK; **Elizabeth Helms**, VA; **John O. Hershey**, PA; **Robert E. Livingston**, SC; **Harriett C. Meloy**, MT; **Robert L. Newton**, AR; **Joseph D. Parker**, SC; **Carl Pforzheimer, Jr.**, NY and FL; **Henry E. Pogue**, IV, KY; **William J. Ridley**, MN; **Joseph C. Savery**, MA; **Frederick K. Schoenbrodt**, MD; **Gordon Schultz**, KS; **Louis Smerling**, MN; **Norman O. Stockmeyer, Sr.**, MI; **Jack Whiteman**, AZ; **Martha Wise**, OH.

We are grateful for the willingness of these volunteer leaders to collaborate on the establishment of a long-range, comprehensive public relations and development program for the Association. The State Board Connection will carry new items about Development Council plans and activities throughout the year. A progress report by a member of the Council to the membership will be featured in each spring area meeting. Next Council meeting: June 2, 1984, NASBE Offices, Alexandria, Virginia. For further information contact Peggy Torosian, Director, Public Relations and Development, NASBE.

#### **New Publications From Special Education Project**

Three new issue briefs on special education will be available soon from NASBE's Special Education Dissemination Project. The briefs explore three important and timely issues for policymakers:

- 1) Evaluation of Special Education Programs -- How can states assess and improve the quality of programs for handicapped students?
- 2) Least Restrictive Environment (LRE) -- How are policymakers and administrators implementing the provision of P.L. 94-142 which requires handicapped children to be educated with non-handicapped children to the maximum extent appropriate?
- 3) Preschool Programs for Handicapped Children -- When are states required to provide services to handicapped pre-school children and how well are the needs of these children being met?

For copies or more information, contact Roberta Felker, Cindy Chambers or Dinah Wiley at the NASBE office.

**Policy maker's Guide Released**

NASBE's Bilingual Education Training project has recently released a new publication, A Policy maker's Guide to Special Language Services for Language Minority Students. A copy is enclosed with this mailing. If you have questions about the project or would like additional copies of the monograph, contact Ron Howard at the NASBE office.

**PRESIDENT'S CORNER**

Comments from  
NASBE's President  
Jolly Ann Davidson

The 1984 NASBE/CCSSO Legislative Conference was most successful and the largest registration we have ever had. We certainly owe a debt of gratitude to our NASBE staff for the wonderful job they all did.

We are now looking forward to the Area Meetings and sincerely hope that they too will experience larger than ever attendance. The programs sound excellent and offer state board members the opportunity to interact and share on a very personal level. For these meetings to really be successful, we need strong participation from each state -- so if you have not registered please hurry and do so.

It was just a year ago at these Area Meetings that the Commission on Excellence Report was being released. Now a year later it is an appropriate time to assess just what has been accomplished and what lies ahead.

Certainly it is obvious from experiences in some states that it is imperative we reaffirm aggressively the importance of lay governance and the critical leadership of state boards of education. It is also a necessity for us to do everything within our power to retain education as a top priority with the public, politicians and the media. 1983 was a year of reaction, 1984 should be a year of accountable action and state boards of education must assert their leadership and authority. Let's celebrate excellence by sharing through our Area Meetings. See you there!

**FROM THE STATES**

**New Board Members**

Congratulations and welcome to new state board members:

- o C. Diane Bishop and Ray Borane in Arizona.
- o John L. Ward in California.

# The State Board Connection

An informal publication by the National Association of State Boards of Education.

Vol. 3, No. 5

June, 1984

## ABOUT NASBE

### NASBE Holds Two Successful Area Meetings

What has 52 eyes, roots in nine different states, and tons of energy and enthusiasm? The **NASBE Northeast Area Meeting**. It was held in Wilmington, Delaware, May 4-6, and the 26 participants came away from the meeting with lots of ideas for creating effective partnerships with state legislators, governors, local school boards and other public and private citizen groups.

The conference opened with presentations by NASBE staffers Michael Cohen and Lana Muraskin on the role of state policymaking in school effectiveness and family life education. Clarence Daniels of D.C. and Richard Kirk of Delaware, members of the NASBE Legal Conference, spoke on legal issues pertinent to school partnerships. A panel discussion on private-public partnerships featured speakers from Wilmington and Boston, and representatives of state and local government presented a panel discussion on state and local legislative partnerships. After remarks by NASBE President Jolly Ann Davidson and a federal legislative update by NASBE Governmental Affairs Committee Chairman Al Jones, a representative of each member state reported on recent state activities to promote educational excellence. NASBE Development Council Chairman Mark Fravel, Jr. gave a report on current Council fund raising and public relations activities (see enclosed report). And closing remarks were made by NASBE Executive Director Phyllis Blaunstein and Northeast Area Director Joe Savery. We thank NASBE Vice President Ken Hilton; Area Director Joe Savery and members of the Delaware State Board of Education and State Department of Education for their assistance in planning and hosting the meeting.

The **Western Area Meeting** was held in San Diego May 18-20 and was attended by nearly 50 members from 13 states, American Samoa, Guam and the Northern Marianas. Not to be outdone by their Northeastern counterparts, the Western member states also focused their meeting discussions around effective partnerships. Presentations on state board-business partnerships, state board-governor partnerships, and state board-student partnerships were heard, along with talks on excellence issues and the politics of policy development.

NASBE Governmental Affairs Director Brenda Welburn discussed federal legislation and its effect on states,

Education Policy Consortium with data on how state board members obtain and use information. The latter data will be combined with data from the other Consortium organizations to help us better understand our members' information needs and how we can work together more effectively to meet those needs.

**Development Council  
Report**

Enclosed with this mailing is a report to the membership from NASBE's Development Council. We encourage you to look it over and to offer the Council your suggestions for NASBE's fundraising and public relations campaigns. For more information, contact Peggy Torosian at the NASBE office.

**Special Education  
Staff Report at  
Major Convention**

Roberta Felker, Dinah Wiley and Cynthia Chambers, staff of NASBE's Special Education Project, provided a detailed description of the project's activities to participants of the 1984 Council for Exceptional Children (CEC) convention in Washington, D.C. on April 27. The convention draws nearly 3,000 educators, consisting primarily of classroom teachers, involved with educating handicapped students. It offered a unique opportunity for sharing information on the goals, activities and outcomes of NASBE's project. The conference participants were quite interested in the type of special education information which is needed by education policymakers. Further, they wanted to know what had been learned through the project about the most effective way of reaching policymakers with information regarding the education of handicapped students. The conference also provided the opportunity for project materials to be disseminated to individuals directly involved with handicapped students. Dr. Felker made a similar presentation to the President's Committee on Mental Retardation in Boca Raton, Florida in May, highlighting the relationship between policymakers and researchers in special education. The content of that presentation will be available as an Issue Brief in late summer.

**PRESIDENT'S  
CORNER**

**Comments from  
NASBE President  
Jolly Ann Davidson**

After participating in two very successful NASBE Area Meetings, I am again reminded of the value of such convenings in keeping us informed about education issues. It was a joy to share the experience with our Northeastern and Western colleagues.

A note on business matters: With this mailing is a letter which explains NASBE Bylaws changes regarding nomination of NASBE officers. I would like to stress the importance of your participation in the Area Director nomination process through your recommendations to your area nominations committee. A letter requesting your nominations is forthcoming.

# The State Board Connection

An informal publication by the National Association of State Boards of Education.

Vol. 3, No. 6

July, 1984

## ABOUT NASBE

**We're On Our  
Way to Michigan**



**Summer Leadership  
Conference Will  
Focus on Reform  
Issues**

**Notes on the  
NASBE Board  
of Directors  
Meeting**

Enclosed with this mailing are registration materials for the 1984 Annual Meeting October 10 - 13 in Dearborn, Michigan. Pre-conference sessions on Wednesday, October 10 will include a special seminar on retraining displaced workers, a governmental affairs workshop, and a seminar on speaking to the media.

For the first general session, beginning Thursday, October 11 at mid-day, we have invited noted businessman Lee Iaccoca to speak to us on our theme, **1984 and Beyond**. His remarks will be followed by sessions on education imperatives in the future, minority/majority issues, high tech vs. "low tech," competition for scarce resources and regional differences. Other meeting highlights are outlined in the enclosed brochure. We encourage you to register now for what promises to be an outstanding meeting!

Now that the "era of the report" has passed, we are entering a period of reform in education. State boards are now setting agendas that will affect education policy for the next generation.

NASBE President Jolly Ann Davidson and the NASBE Board of Directors feel that state board chairmen need an opportunity to review recent reform efforts, consider consequences -- both intended and unintended -- of policy actions, and strategically plan for the future. Consequently, NASBE is planning a Summer Leadership Conference for state board chairmen August 17 - 19 in Breckenridge, Colorado (near Denver). Information on the conference has been mailed to all state board chairmen.

In addition to their decision to hold a Summer Leadership meeting, the Board of Directors, meeting in Alexandria, Virginia June 2 - 3, set priorities for the 1985 budget planning process, reviewed the 1984 budget, approved a registration fee for the 1984 Annual Meeting, and conducted the annual evaluation of the executive director.

## States Evaluate Special Education Efforts

How some states are helping local districts assess and improve the quality of programming for handicapped children is one of the main topics discussed in a new issue brief available from NASBE's Special Education Dissemination Project. According to the brief, a growing number of state and local education agencies are moving beyond simply looking at procedural measures of program performance and are seeking to prove that their programs are not just "working" -- but are effective and of high quality. For example:

- In 1981, Nebraska's Program Effectiveness Development Committee developed a set of six standards ("service goals") based on their perceptions of the characteristics of an effective special education program. The model was field-tested in 20 school districts during the 1983-84 school year.

The issue brief also addresses the essentials of an adequate evaluation and provides "a Consumer's Guide for Policymakers" to help policymakers in making sense of the often extensive reports which result from evaluation efforts. To obtain a copy of the brief call Roberta Felker, Dinah Wiley or Cynthia Chambers of the NASBE staff.

## How to Recognize Effective Principals

NASBE has recently published and sent to state board chairmen a new monograph, A Policymaker's Guide to Improving Conditions for Principals by Lori A. Manasse. In the next few issues of The State Board Connection we will feature key points from the publication. Following is an excerpt on recognizing effective principals:

Effective principals see themselves as leaders. Despite ambiguous roles, differing expectations and often conflicting demands, they have clear visions of their schools. They create personal action agendas to turn those visions into reality. They use the many daily interactions in their fragmented and varied work day not only to solve immediate problems, but also to collect and monitor activities. They are objective in their perceptions and interpretations and able to see patterns in information collected over a period of time from a variety of sources. They are distinguished from less effective principals by their strong personal sense of leadership, their focused involvement in change, and their highly developed analytic skills.

Because they are committed to excellence, effective principals are rarely content with maintaining the status quo. Their active involvement in change suggests that creating conditions to support them may require new definitions of organizational roles for schools. Their involvement is essential for the success of any educational innovation. They are likely to require more building level autonomy than they have traditionally been given. They are likely to be organizers and questioners. They function best in settings which support norms of continuous learning and continuous improvement.

# The State Board Connection

An informal publication by the National Association of State Boards of Education.

Vol. 3, No. 7

August, 1984

## ABOUT NASBE

### Southern Regional Meeting Held in Atlanta

Twenty-eight state board members and other state education leaders met in Atlanta July 28 for the NASBE Southern Regional Meeting. Those who attended agreed that the meeting format -- a one-day seminar with only two speakers and plenty of time for discussion -- was very productive. Steve Cobb, the state legislator in Tennessee who was the prime sponsor of that state's recently enacted teacher incentive plan, talked about the critical components of a workable plan and the politics of instituting reforms in this area. Cecil Golden, who is Chairman of the Florida Council on Education Management, outlined the steps Florida has taken to make school principals as skillful as the best managers in the private sector. An outline summary of the comments made by the two speakers is available upon request from NASBE. Our thanks to Southern Area Director **Norma Turnage** and Georgia State Board Member **Carolyn Huseman** for their work in planning the meeting.

### New Staff Arrive, "Old" Staff Depart



Donna Duquette

Long-time NASBE staffers **Karen Powe**, **Ron Howard** and **Elaine Holbrook** will be leaving the fold in August. Karen is on her way to California and then Kuwait with military husband Mark; Ron is going to North Carolina to become Director of Educational Services for a state center for handicapped children, and Elaine is moving to California. Our best wishes go with them!

Welcome to new staff members **Donna Duquette** and **Karen Prudente**. Donna Marie Duquette, an attorney and former teacher, joined the NASBE staff in May as a research assistant for health projects. Donna has had a variety of teaching experiences with handicapped children and adults. A graduate of the University of Michigan Law School and a member of the D.C. bar, she will also be assisting with the NASBE Legal Conference.



Karen Prudente

Taking over Elaine's position as executive assistant to the director is Karen Prudente, whose experience includes two prior positions as assistant to the director, for Nedley Fabrics in New York City and for Maritime Seafood in Washington, D.C.

State certification requirements that recognize what we now know about effective principals, and which utilize performance evaluations and outcome measures, can serve as incentives to universities and local districts to improve training programs and selection practices. Certification should require mastery of prescribed content and demonstrated ability to perform specified skills. Certification requirements that utilize performance data will motivate local agencies to develop performance standards and appropriate information systems. Certification systems can encourage positive norms of continuous improvement and professional development by building in requirements for continuing education.

**Special Education for  
Preschool and Limited  
English Students  
Explored**

NASBE's Special Education Dissemination Project publishes monthly abstracts of publications that may be particularly helpful to policymakers. In the July abstract, two publications are reviewed which explore special education for handicapped preschool and limited English proficient students. Policy Considerations Related to Early Childhood Special Education, by Barbara J. Smith, explores the issue of providing services to handicapped infants and preschool-age children and their families, beginning with a review of the literature and a description of the current status of state and federal policy. Smith then provides an analysis of five major factors found to influence the development of public policy governing services to very young handicapped children: 1) defining the population to be served, 2) delineating the scope of services to be provided, 3) designating the service provider, 4) determining whether the policy is to be mandatory or voluntary, and 5) identifying availability of funding and resources.

An Appropriate Education for Handicapped Children of Limited English Proficiency, by L. Baca and J. Bransford, explores the issue of educating handicapped children who come from homes where languages other than English are relied upon for communication. The authors review the available research on both regular and bilingual special education and conclude that children involved in learning environments which employ the use of two languages perform at a level equal to or higher than their monolingual counterparts. Based on a historical and legal review, the report establishes that handicapped students who are of limited English proficiency have the right to participate in bilingual education programs. The authors discuss a number of factors influencing this participation: accessibility, resources, costs, personnel preparation, parental and community support, and program evaluation. Each report is available for \$4.00 (\$3.40 CEC members) from the ERIC Clearinghouse on Handicapped and Gifted Children, Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091.

# The State Board Connection

An informal publication by the National Association of State Boards of Education.

Vol. 3, No. 8

September, 1984

## ABOUT NASBE

### Alcohol Education Guidelines Project Activities in Full Swing

The Alcohol Education Guidelines Project, now in its third year, is funded by the Distilled Spirits Council of the U.S. (DISCUS). One of the many objectives of the project is to identify exemplary alcohol abuse prevention programs. Thanks to the help of **Joe Savery**, Massachusetts state board member, the alcohol education program in Lee, Massachusetts is being spotlighted in the NASBE/DISCUS/NFL annual media campaign against alcohol abuse.

Public service announcements, starring the students of Lee High School and Brian Holloway of the New England Patriots, will highlight the cooperation between the schools and community of Lee in developing their alcohol education program. TV and radio announcements will be heard during select football games this fall and print ads will be seen in a variety of popular magazines. A brochure, prepared by NASBE, will be sent to individuals requesting additional information on beginning an alcohol education program in their community. This is the ninth year DISCUS and the NFL have sponsored such a media campaign and the second year in which NASBE has participated.

### New Project on Adolescence Begins

In May of this year, NASBE initiated a new project funded by the Tobacco Institute. The purpose of the project is to highlight the needs of adolescents and families and to define the roles of the school and community in addressing those needs. The first activity was the production of a 20-page booklet for parents titled Helping Youth Decide. The booklet offers advice on how to communicate with your young teen and how to make mutually agreeable decisions together. Preview copies shown to parents and psychologists have drawn high praise.

The Tobacco Institute is undertaking a large scale effort to distribute the booklet to parents across the country. A press conference to announce the booklet and the project will be held in Washington, D.C. on September 25 with **Jolly Ann Davidson** and other members of NASBE Executive Committee representing NASBE. Jolly will also be doing a number of media interviews following the press conference. Parents will receive Helping Youth Decide, free of charge,

by sending in a coupon which will appear in a variety of popular magazines and newspapers.

### **Special Education Project Concludes Activities**

NASBE's Special Education Dissemination Project concludes its third and final year on September 30, 1984. Designed to provide research and practice-based information to education policymakers, the project has reached over 3000 individuals with information on topics such as microcomputer use in special education, financing special education programs, and programs for handicapped preschool children. The recipients of project materials include state board members, state legislators, chief state school officers, and local school administrators.

Supported for the past three years by Special Education Programs, U.S. Department of Education, NASBE has administered the project in cooperation with the American Association of School Administrators, National Conference of State Legislators, and Council of Chief State School Officers. Among its recent accomplishments, the project developed (1) monthly research abstracts which described special education publications available to assist policymakers and administrators, (2) four issue briefs on the topics of program evaluation, preschool, least restrictive environment, and finance, (3) a comprehensive report on the activities and findings of the project, and (4) major presentations delivered to such groups as NASBE's Legal Conference, the Council for Exceptional Children, and the President's Committee on Mental Retardation.

The response to the project's activities and materials has been extremely enthusiastic. At this writing, NASBE is pursuing funding to continue the activities of the project. We will keep you informed of our progress. In the meantime, please do not hesitate to contact Roberta Felker, Dinah Wiley, or Cynthia Chambers if you would like to receive any project materials or if you need any information concerning special education in your state.

### **State Leadership To Improve School Leadership**

In the past two issues of *The State Board Connection* we have provided excerpts from NASBE's monograph, *A Policymaker's Guide to Improving Conditions For Principals' Effectiveness*. In this concluding article on the publication, we would like to provide the recommendations for state policymakers:

The training, selection, evaluation and compensation of principals are under the direct administration of local education agencies. It is essential, however, that state officials take a leadership role to improve conditions for principal effectiveness, both directly and indirectly. Apart from their direct influence on state certification

# AAESA REPORT: PERSPECTIVE ON SERVICE

Vol. 1 No. 4  
Sept.-Oct. 1983

Published by the American Association of Educational Service Agencies

## A Special Resource for Special Ed

Since 1976 the cost of educating handicapped students has increased by 50 percent—a financial burden in administrative, teaching and resource expenses that education service agencies are all too aware of because of the predominance of direct services to the handicapped provided by these agencies.

Computers are gaining “widespread acceptance as one of the most cost-efficient ways to meet these needs,” according to an information brief prepared by the National Association of State Boards of Education (NASBE) and the American Association of School Administrators. Furthermore, special education teachers overwhelmingly endorse the use of computers for instructional uses. But what is the state of the art right now, and what are the practical potentials of computer use in special education?

Specific applications of computer technology in special education administration include:

- Counts of students screened, assessed, placed and reviewed
- Computation of reimbursement according to state/federal formulas
- Generalization of standard local, state and federal reports
- Reports of students' due process status and compliance with PL 94-142
- Child counts cross-referenced by class, teachers, school and handicap
- Detailed records and summaries of diagnostic testing
- Personalized mailings to parents regarding IEP meetings and review
- Audit trails for program placement and review
- IEP goals and objectives from curriculum files
- Generation of quarterly student reports



Training Session at the Region IV Education Service Center, Houston, TX.

- Electronic mail
- Reminders when notices are due or should be sent
- Interactive access to related service information, such as transportation.

A variety of technologies have application to special education in the classroom, including microcomputers, videodiscs, telecommunications and communication aids. The National Association of State Boards of Education/AASA brief, however, focuses on computers because they are becoming the most accessible of the technological resources.

Computer-assisted instruction, it says, could include drill and practice, tutorial dialogue, simulation and games and computer literacy/programming. Computers can aid in motivating students with academic and/or self concept problems, providing positive reinforcement, adjusting to the different response rates of students to verbal or written questions, encouraging them to have more reflective thinking, and giving them immediate

performance feedback.

However, commands need to be simple and consistent, teachers must anticipate slower response time from students who cannot type and must “hunt and peck” on the keyboard, some software provides extraneous written information that frustrate students, and teachers cannot assume that a student who performs well on a computer can apply his/her learning

Continued on page 3

### Coming Up

- Oct. 21-23— AASA Technology Conference  
Minneapolis, MN
- Feb. 22-23— AAESA Management Workshop,  
Las Vegas, NV
- Feb. 23-27— AASA Annual Convention,  
Las Vegas, NV

## Here and There . . . continued from page 2

### Sound Advice on School-Industry Cooperation

Educational service agencies are experienced at developing partnerships with business/industry for schools, and that experience can capitalize on the current stepped-up interest of school-business links, spurred primarily by the business involvement in North Carolina Governor Jim Hunt's Task Force on Education for Economic Growth.

To avoid a "quick fix" approach to using this new interest in linking career experiences with career opportunities, Donald Clark, president of the National Association for Industry-Education Cooperation, has sent along some advice for improving school-industry cooperation.

Because of new demands and changing times, he says, there must be a complete "refocus" of academic and vocational programs to prepare youth and adults for productive work. This will require considerable school-business cooperation, he says.

First, he says, there should be a centralized structure to focus on in-service training of staff for the broader career education that will be needed—and this is an area that "offers industry an opportunity to help strengthen instruction at all levels of education." In addition, Clark says:

- Schools will need a broader base of volunteer resources (personnel, facilities, materials, and equipment) from business and industry.
- Educators should take the initiative in providing primary financial support for the coordination function.
- State legislatures should provide funding for state and local education agencies to strengthen school-industry cooperation, primarily by establishing Industry-Education Councils.
- State education departments should have a business-school coordination plan to help their career education and vocational education staff and other departments identify and use the resources of the business/professional community in a coherent, organized manner.
- There needs to be additional research to determine what works and what doesn't in developing linkages between education and the employment community.

However, Clark concludes, "there is sufficient experience and evidence

in using industry's volunteer resources effectively in career education to leverage change in the school program."

### Carbon-Lehigh Develops Successful Checklist To Evaluate Media

How do you decide what is an appropriate teaching tool, especially when you must adhere to new curriculum guidelines set by the state?

For the 14 school districts served by the Carbon-Lehigh Intermediate Unit at Schnecksville, PA, the process has become a lot easier, thanks to a new system developed by unit staff.

The Pennsylvania Department of Education requires that planned curriculum courses specify the content, objectives, expected levels of student achievement and evaluation. At the core of all curriculum development are the "Twelve Goals of Quality Education," a proposed set of curriculum regulations.

William Albright, director of Curriculum for the intermediate unit when its curriculum model was put in place in 1980, incorporated these proposed and current regulations into the model, and Jack Goodman, director

of the instructional Media Center, developed a form to reflect these standards and to guide purchase of media materials. It is a one-page form, which encourages teachers to use it. Because of the impact of computers on the classroom, an additional courseware form was prepared that follows the same guidelines.

Because of the high demand for both of these evaluation tools, Albright and Goodman merged the two into a checklist form that includes the 12 goals, as well as 63 descriptors and expected student achievement levels.

It still is a single page, not to appear formidable, but now uses both sides of a sheet. It includes space for all the information necessary, including method of review, overall evaluation and suggested appropriate grade level, as well as space for comments by individual evaluators.

Because of the current interest in and demand for "vigorous and challenging" content in instructional materials, says Wanda McDaniel, director of Basic Instructional Services for the intermediate unit, there must be speedy but also "practical and economical procedures" to identify appropriate teaching tools. Carbon-Lehigh believes it has found that way.

## A Special Resource . . . from page 1

to a different context. Also, the brief warns, handicapped students must not be isolated from more advanced applications of the computer. The level of computer-assisted instruction must be determined on the basis of "individual ability and interest, not on the basis of a 'handicapped' label" it says.

Despite its obvious advantages, computer technology is not easy to implement in special education. There are "human and organization issues" to consider, says the brief, such as resistance to change, local political situations that affect access to computer technology by handicapped students, and the extent of participation by teachers and administrators in the planning for computer technology. Other issues are the need to acquire familiarity and "computer language," training of teachers that focuses on helping them understand when and how computers have an advantage over other teaching devices. Also of concern are the changing roles of teachers using computer-assisted instruction, inappropriate use which results either from unrealistically high

expectations or unnecessarily narrow applications and the problems arising from a commitment to equity in access to computers.

In addition, the brief states, there are technical issues that must be solved, such as acquisition of appropriate hardware, meeting the cost, the availability of quality courseware, and arranging for physical accommodations to computers in classrooms.

The brief also includes a number of references for more information, as well as examples of the application of computers to special education.

These are excerpts from the publication, "What Can Computer Technology Offer Special Education?" Also available in the series are "Related Services for Handicapped Students: Legal Considerations" (available now) and "Finance for Special Education" and "Evaluating Special Education Projects" (both to be ready soon). A copy of each brief is being sent to all AAESA members. For additional copies or other information, contact Nancy Miller, AASA, 1801 North Moore Street, Arlington, VA 22209.

# AAESA REPORT:

Vol. 2 No. 2  
April-May 1984

# PERSPECTIVE ON SERVICE

Published by the American Association of Educational Service Agencies

## Talking About Telecommunications Pays Off

This fall, Penny Dickhudt, Southwest and West Central Educational Cooperative Service Unit (Marshall, MN) coordinator of special projects, coordinated a big event. She gave more than 50 speeches throughout the cooperative service unit areas on telecommunications, preparing superintendents, school boards, administrative teams, faculty members and community groups for a big happening in the Minnesota Valley.

A proposal which she authored—the Minnesota Valley Tele-Network—was funded as a model demonstration site. Those which will be participating in the unique project, modeled after the Trempealeau County, WI, system, will be Appleton, Dawson/Boyd, Madison, Milan, Montevideo, Ortonville, Granite Falls, Maynard, Benson and Pioneer Public Television.

The project will: enable cooperating school districts to offer broader curricula to their students by sharing teachers and classes; enable postsecondary institutions to offer degree and continuing educational opportunities to adults, including vocational and community education; and enable business, social and public service, government, health, recreational and cultural organizations to access educational programs and information via the network.

Part of the preparation has included trips by groups of superintendents, principals, teachers and school board members to Trempealeau County, where eight K-12 schools are using interactive telecommunications. Also, Northwestern Bell is conducting a study to determine the cost of using optic fiber in the Minnesota Valley in-

teractive telecommunications system, which will cover an 18-county region.

Another project of the Minnesota Tele-Media Joint Powers Board, which sponsored the telecommunications proposal, is a request for funding for two instructional television fixed service interactive systems, submitted to the National Telecommunications and Information Administration. Under this proposal, two clusters of schools would be able to operate independent of each other, or could link together to work as a single unit.

Particular praise has been given to Wallace Johnson, superintendent of the Dawson/Boyd Schools, for his work on the Minnesota Valley Tele-Network, and to Supt. Norman Miller of Luverne and Supt. Wallace Schoeb of Fulda for their leadership on the cluster plan.

## Financing Education of the Handicapped: Policies to Consider

In recent years, no other new responsibility of public education has created as much change, or as heavy a fiscal burden, as that of educating the handicapped. Nor, has any other service contributed as much to the growth and importance of educational service agencies. Helping schools with technology is newer and a rapid riser, but in terms of fiscal impact, educating the handicapped is and will continue to be a major function of many education service agencies.

The leadership of educational service agencies should be aware of the policy issues facing states as they con-

tinually seek to maintain or improve the education of the handicapped, in the face of fiscal constraints and competing interests.

Research on the financing of education for the handicapped has been weak in the past, but as part of a project administered by the National Assn. of State Boards of Education, in cooperation with other groups including the American Assn. of School Administrators, national data has been surveyed and collected. According to the recent paper on financing, special education revenues increased by 84

Continued on page 3

## Coming Up

- May 10-12—AAESA Executive Council meeting, Allentown, PA
- June 28-30—"Building Partnerships for Quality Education in Rural America," Washington, D.C.
- July 13-15—AASA Small School District Administrators' Conference, Rockport, ME.
- July 22-25—Five-State Regional Service Agency meeting, Rochester, MN.
- Sept. 19-21—AAESA-AASA "I Care" Legislative Conference, Washington, D.C.

# ESAs, Policies, and Politics

Using case studies of two educational service agencies—with dissimilar political relationships—William Firestone of Research for Better Schools presents some policy issues to consider in the tension between ESAs and state education agencies. His article, appearing in the February EDUCATION AND URBAN SOCIETY, describes the interplay of ESAs in the efforts of state education agencies to provide services to local school districts—or carry through on state mandates involving local school districts.

The relationship between ESAs and the state education agencies vary from state to state, he points out, but it rarely is a line relationship; frequently, the ESAs “have an independent

base with the state legislature that allows them some autonomy.” While having a narrow range of influence on ESAs in many instances, state education agencies, nevertheless, want intermediate units that both provide good services to local school districts and carry through on their (SEA) initiatives.

Another point made by Firestone is that ESAs constitute “politics of unimportant agencies.” ESAs, he says, are not very visible and their operations “are difficult to describe with either rational planning or interest group bargaining models. Rather, they seem to be especially sensitive to changing macro-trends of sentiment and resource availability and to chance events.”

## Five-State Meeting Set

Services agencies in a five-state Midwest area will be meeting together again this summer—an event which has become a tradition. The meeting is for representatives of regional service agencies in Wisconsin, Michigan, Iowa, Nebraska, and Minnesota and will be held at Rochester, MN, from July 22-25.

Heading the list of presentations will be Bob Stephens of the University of Maryland, who will give recent research data on educational service agencies; Walt Turner of AASA, executive secretary of AAESA, who will

provide a welcome; and personnel from the McRel lab and the U.S. Dept. of Education. Mini-sessions will be held on self-evaluation of a regional agency, cost effectiveness studies, formulas for distribution of funds in a regional service agency, technology, computer usage and staff development.

Those from outside the five-state area who would like to attend should contact Les Marisko at Franklin School, Room 102, N. Broad St., Mankato, MN 56001, or (507) 389-1125. Deadline for pre-registration is July 1.

*Handicapped . . .  
Continued from page 1*

percent between 1975-76 and 1981-82 among the states. However, the percentage of state support varied widely—from a high of 98 percent in Montana to a low of 17 percent in Oklahoma. At least 22 states contributed 50 percent or more of the total funding for special education. However, as the authorization level for federal funds has increased, the actual appropriation has been only modest. Under the law, the federal contribution should be 40 percent, but the actual federal share is closer to 15 percent.

States use one of three basic types of funding for special education—pupil-based, resource-based and cost-based. Many states have mixed these approaches, attempting to accommodate variations in the number and handicapping conditions of students needing services and the costs of the services.

Each state situation will be different, but the research paper suggests what policymakers should consider in devising funding strategies for the education of the handicapped:

- Decision-making needs

Policies should be compatible with other state funding policies and prac-

Continued on page 4

*Here and There . . .  
Continued from page 2*

educational computer projects—although they are of high interest. This year, NDN awareness sessions on the projects were televised in three Texas regions and these videotapes of six projects—implementation of computer-assisted instructional systems; occupational training and counseling programs through computers; a course in programming; problem-solving and computer literacy; computer-managed criterion-referenced testing and instruction in basic math; computer applications in teacher training, word processing and administration, and a computer program to improve math skills—were made available to the other 17 regions in the state.

Also out of Texas—Region VI at Huntsville was one of the sponsors of a drive-in conference to discuss what the various national reports on excellence are saying. Jack Davidson, superintendent at Tyler, presented an analysis of findings and recommendations from 14 of the national reports.



ESA Council President Jerry Stout addresses the awards banquet.

# Perspective Profile: Allan Barnes

## The View From The Top is Good

"A professional educator who wants to get something done can do it here. Money's no problem." And the scenery is great, the amenities as good as any small city, the people supportive, and the challenges interesting. But you can't be afraid of flying.

That's how Allan Barnes, director of the Southeast Regional Resource Center at Juneau, Alaska, describes the setting for his job. Head of the only regional service agency still operating in Alaska (at one time there were five), Barnes has a budget of more than \$3 million to serve 17 school districts, almost one-third of those in the state. The consortium of school districts, contracting with the center for a variety of services, stretches from Yakutat to Annette Island, or 300 miles north to south. The center's area is 90 miles east to west, bounded by Canadian provinces on the east and the Pacific Ocean on the west.

The districts range from the 4,500-student Juneau system, where the center is located, to rural school districts with as few as 35 students.

Some of Barnes' staff members are "on the road" 50 percent of the time, but there are no interconnecting roads among the communities. Airplanes and the Alaska marine highway are the only way to travel.

"People who stay here a year or more tend to become permanent," says Barnes, "because they've decided they want to be here." It is an "exciting" professional environment because schools are well funded and "there is an abundance of resources." The center, for example, has been involved with computer networking since 1977, and the state education



Allan Barnes

department has a well-developed computer curriculum project, as well as other uses of technology. The center, which is the newest member of AAESA, also receives both state and federal funds for projects.

No one service stands out as more important than others, says Barnes, because the needs of the districts are so varied. The most effort is given over to curriculum development and planning, cooperative special education and school facilities planning. Superintendents from the participating districts serve as the governing board for the center.

How could a former school administrator from Chicago find happiness in Juneau? "People don't realize that this is like stateside," says Barnes. He plays handball and racquetball regularly, skis in the winter, travels around the state frequently, lives in a condominium, not an igloo, and enjoys weather that usually is only 10 degrees cooler than Seattle. Barnes has been with the center for eight years, coming to Alaska from a superintendency in Washington State.

"The isolation doesn't get to me," he says firmly.

*Handicapped . . .*  
*Continued from page 3*

tics; funding formulas should be relatively logical, straightforward and simple; and funding formulas should be capable of being easily modified in response to economic changes or to new knowledge regarding costs and/or needs. "The more complex the formula, the more likely it is that any single change will require reworking the whole formula," says the research paper.

- Appropriate education placements  
Policies should minimize misclassification, avoiding financial incentives to place children in particular programs simply because the state reimburses proportionately more for those programs; nor should the formulas create incentives to keep children in particular programs when they are no longer appropriate.

- Policies should reinforce the least restrictive environment placements; and they should avoid stigmatizing labels (several states categorize by placement rather than handicap, others have adopted more generalized categories for handicapping conditions).

- Equitable treatment of districts.  
Policies should accommodate varying student needs across districts, keeping in mind that districts differ in the numbers and characteristics of students that require special education; policies should take cost variations into account, such as price variations, economies of scale and different conceptions of best practice; and policies should adjust for the fiscal capacity of the districts.

- Efficient administrative and cost-containment practices  
Policies should be predictable, which will foster planning and public confidence (cost-based formulas may offer the greatest predictability for districts and the least for states); formulas should help to contain special education costs; and formulas should minimize reports, recordkeeping and state administration. Each AAESA member will receive a copy of "Financing Free and Appropriate Public Education for Handicapped Students." Additional copies can be obtained from Nancy Miller, AASA, 1801 N. Moore St., Arlington, VA 22209.

# AAESA REPORT:

Vol. 2 No. 3  
July-August 1984

# PERSPECTIVE ON SERVICE

Published by the American Association of Educational Service Agencies

## Special Education Resources Available

Need to know some of the best resources and most recent research on special education? As part of a Special Education Dissemination Project of the National Assn. of State Boards of Education, a series of monthly newsletters on resources on technology, finance, legal considerations and program evaluation have been made available to educators and educational administrators. The NASBE project has been conducted with the cooperation of the American Assn. of School Administrators, the Council of Chief State School Officers, and the National Conference of State Legislatures.

Instead of just listing the resources, the newsletters provide full descriptions of the content of the studies. Some resources listed are national in scope, such as those done by the Rand Corp. or the Educational Testing Service. Others, such as one on the *Legal Aspects of the Education of the Handicapped*, were produced for more limited audiences, this particular one by the Ohio School Boards Association for its members. Another resource, this one from a state perspective, is *Special Education Program Evaluation: A Management Tool*, published by the Massachusetts Dept. of Education.

The abstracts, which began in July 1983, are being sent to AAESA members. Additional copies are available from NASBE, 701 N. Fairfax St., Suite 340, Alexandria, VA 22314. Ask for Research and Resources on Special Education.

## Don't Miss The 1984 Legislative Conference

Educational leaders will have their own campaign for quality education—at the sixth annual "I Care" legislative conference in Washington, D.C., sponsored by the American Association of Educational Services Agencies and the American Association of School Administrators.

At a time when the nation will be making major decisions about the kind of policies it wants in education, there is no better place for teams of education leaders—school superintendents, assistant superintendents, federal program coordinators, school board members and others who care about what happens in schools, to make their presence and their views known in Washington.

But, first, participants at the "Campaign '84; Quality Education" conference will get the background they need to talk about the issues with their Congressmen and their communities back home. There will be speeches, workshops and discussion sessions. There will be a "rally" with members of Congress at a prestigious reception for

them, and visits to Capitol Hill as well.

Speakers at the conference will include broadcaster Howard K. Smith; Sen. Robert Stafford (R-VT), chairman of the education, arts and humanities subcommittee; and Sen. Ernest Hollings (D-S.C.), a member of the Senate appropriations and budget committees and a leader in the fight against tuition tax credits. Church and state issues will be addressed by the Rev. Jerry Falwell, head of the Moral Majority.

A special feature of this year's conference will be a seminar on "Visionary Leadership," preceding the "I Care" conference. The one and one-half day seminar will be limited to 100 registrants.

The "I Care" conference registration will be Wednesday, Sept. 19, with the first general session at 2 p.m. The closing session will be Friday afternoon, Sept. 21. Site of the "campaign activities" will be the new J. W. Marriott Hotel, midway between the Capitol and the White House.

For further information, contact AAESA, 1801 N. Moore St., Arlington, VA 22209.

## Coming Up

- |             |   |
|-------------|---|
| Sept. 18    | AAESA Council Meeting, Washington, D.C.                 |
| Sept. 19-21 | AAESA/AAESA Legislative Conference, Washington, D.C.    |
| Oct. 7-10   | Rural Education Association Annual Meeting, Olympia, WA |



# Stateline

June, 1983

Volume 4, Number 3

Newsletter of the Council of Chief State School Officers

## Connecticut Teacher Honored as Teacher of The Year

Leroy Hay, a teacher of English and futuristics at Manchester High School in Manchester, Connecticut, has been named 1983 Teacher of the Year. Hay believes that technology will cause "education to reexamine and redefine its very existence" and also lead to a "better understanding of the process of decision making."

Hay, 38, was chosen from the nation's more than one million elementary and secondary school teachers in the annual awards program which focuses public attention on excellence in teaching. The competition, now in its thirty-second year, is sponsored by the Council of Chief State School Officers, The Encyclopaedia Britannica Companies, and *Good Housekeeping Magazine*.

### Taught for 17 Years

Hay, a 17-year veteran of teaching, has taught for 15 years at Manchester High School. He is chairman of the English department; teaches English, futuristics and theatre arts; heads the faculty curriculum committee; directs



A "Golden Apple," a symbol of excellence in teaching, was presented by First Lady Nancy Reagan to 1983 Teacher of the Year LeRoy Hay, a teacher of English and futuristics at Manchester High School, Manchester, Connecticut. The presentation was made in the First Lady's Garden at the White House on April 13, 1983.

the school's plays; and is a past president of the Manchester Education Association.

The finalists for the 1983 program were Harriet Donofrio, a biology teacher from Cape Henlopen High School, Lewes, Delaware; M. Gene Ulrich, a biology teacher at North High School, Sioux City, Iowa; and Nancy O'Donnell, a third grade teacher at Perry Elementary School, Perry, Oklahoma.

### Teacher to Speak

The National Teacher of the Year is often requested to speak at national and state education conferences and workshops. By speaking throughout the country, the teacher of the year helps to restore public confidence in education and also instills the pursuit of excellence in local education programs.

To learn more about inviting the 1983 Teacher of the Year LeRoy Hay to your meeting, contact Rich Bagin, the program's coordinator, at (202) 624-5883.

## Project Studies Higher Ed Connections

The State Education Research Center, a joint effort of the Council of Chief State School Officers and the National Association of State Boards of Education, has received a project award to ultimately strengthen collaborative decision making by education policymakers at the high school and college levels.

Funded by the College Board's Educational Equality Project, the six-month effort will study current state initiatives to improve academic preparation of students for college and to provide them equitable access to college opportunities.

### To Survey States

The project's staff will survey each state to determine what articulation policies and programs exist and the factors which have either nurtured or hindered such efforts.

Martine Brizius will coordinate the project. Brizius was formerly Deputy Director of the National Advisory Council on Women's Educational Programs and also previously directed the Office of Organizational Analysis and the Diffusion Program for the New Jersey State Department of Education.

Assisting Brizius will be research associate Harry Cooper. Cooper was formerly a senior researcher for the *Wilson Quarterly*.

### Advisory Council Meets

The project's advisory council met on May 17th to properly shape the most effective course for the project. Iowa Chief Robert Benton and CCSSO Executive Director William Pierce are members of the advisory council.

Further information on the project can best be obtained from Brizius at (703) 684-4000.

## Joint Project to Assist Special Educators

Chief state school officers and other policymakers at the state level are constantly making decisions that affect special education programs. Having the appropriate resources is necessary if those decisions are to be sound.

Providing those resources is the goal of a project in which the Council is involved with three other organizations: the National Association of State Boards of Education (NASBE), the National Conference of State Legislatures, and the American Association of School Administrators.

### State Resources

Funded to NASBE by the Special Education Program of the Education Department, the project is in its second year and is now producing resources especially tailored for the state-level decision maker. Project staff is focusing primarily on information about special education finance, technology, legal considerations, and program effectiveness.

### Questions Addressed

More specifically, these questions are being addressed as resources are prepared:

1. How can state and local decision makers afford to provide out-of-state placement for handicapped children when programs for the majority of students are being cut?
2. Can they include mediation in their due process procedures and still meet the requirements of Public Law 94-142?
3. Can they require that handicapped students pass minimum competency tests before issuing those students high school diplomas?
4. What technology exists that will enable state departments and local districts to better manage information related to the handicapped children they serve?

5. What technology exists that can assist handicapped children in learning basic skills?

6. How do states and local districts effectively address such issues as transportation in rural areas, related services, and interagency agreements?

### Issue Briefs Produced

Project staff is now preparing "issue briefs" on technology and finance. Others will be prepared within the next few months, and information about them sent to all state departments of education. For information on providing access to state resources that might be useful to the project, contact Roberta Felker or Cynthia Chambers at NASBE at (703) 684-4000, or call Patrick Martin at the Council at (202) 624-7750.

## Public Confidence Campaign Initiated

The Council of Chief State School Officers has joined with ten other national education organizations, representing teachers, administrators, school board members, and parents in a nationwide effort to build greater confidence in education through encouraging excellence and improving education.

The Forum of Education Organization Leaders recently adopted the theme, "Public Education: A Sound Investment in America," and is urging all educators to support its effort. William Pierce, Executive Director of CCSSO, has noted, "It is not often that the two major teachers' groups and most of the major administrative and board-related groups agree on the same issue." "For that reason, chiefs are urged to consider using this theme if they plan on embarking on a thematic approach to increase public confidence in education," Pierce concluded.

### Six Objectives Cited

The national initiative focuses on the six confidence-building objectives adopted by the Forum in 1979. They are:

- Encourage school to improve programs and instructions for students and citizens.
- Help citizens understand the value of education in our democratic society.
- Increase the personal experiences parents and non-parents have with the schools.
- Encourage and enable educators to become effective leaders for education in their communities.

### Materials Sent

A packet of materials on the use of the theme has been sent to each chief state school officer and public information officer in each state education agency.

The Forum of Education Organization Leaders is composed of representatives from the American Association of Colleges for Teacher Education, American Association of School Administrators, American Federation of Teachers, Council of Chief State School Officers, Education Commission of the States, National Association of State Boards of Education, National Association of Elementary School Principals, National Association of Secondary School Principals, National School Boards Association, National Congress of Parents and Teachers and National Education Association.

For further information on this and other CCSSO public confidence activities, contact Rich Bagin at (202) 624-5883.



## Tax Bill: IDB Volume Cap

### NCSL Seeks 'Public Purpose' Exclusion

The House Ways and Means Committee March 1 reported amendments to HR 4170, referred to as the tax bill. Several provisions in the bill are important to state operations: a \$150 per capita volume cap on industrial development bonds (IDB), extension of authority to issue mortgage revenue bonds, and restrictions on state and local sale-leaseback arrangements. These and other revenue measures added to the bill will raise approximately \$21.6 billion through FY 1987.

#### Tax Cuts Revised

The additional revenue measures include a "freeze" on all 1981 tax cuts that have not yet gone into effect and an extension of the 3 percent telephone excise tax until 1987, among other modifications. Cigarette taxes would decline from the current 16 cents per pack to 12 cents in 1985 (rather than to 8 cents in '85 under the 1981 tax legislation). Some members worked to retain the entire 16 cents per pack, but compromised on an increase in distilled spirits taxes to make up the difference.

On the spending side, the package also contains provisions to revise the Social Security Disability Insurance program, notably to impose a medical improvement standard for benefit termination and to continue benefits through the administrative law judge appeal process.

#### IDB's And Public Purpose

The rule governing debate on HR 4170 was defeated in November, thus the bill's IDB provisions—scheduled to go into effect Jan. 1, 1984—have clouded the tax-exempt bond market because of the bill's pending status.

The NCSL, the National League of Cities, and the Municipal Finance Officers Association have worked since that time to exempt from the volume cap "public purpose" projects, including ports, airports, water and sewer projects, and transportation facilities.

The House Committee did adopt a public purpose definition covering airports, government owned and operated convention center or trade show facilities, docks, wharves, mass commuting and parking facilities, and storage and training facilities. Noticeably absent from the list were water and sewer projects and solid waste disposal.

Floor consideration of the tax bill may be delayed pending agreement

by the Administration's bipartisan congressional task force on a deficit reduction package of approximately \$50 billion in increased revenues and additional spending reductions.

#### Action Alert!

Legislators are urged to contact House members and Senate Finance Committee members to oppose a volume cap and support exemptions for public purpose projects and distressed areas from IDB restrictions.

NCSL contact: Susanne Hiegel, Washington.

### NCSL Opposes Reimbursement Changes Immigration Reform Up Soon

A bill proposing to grant legal status to thousands of illegal aliens may be considered on the floor of the House of Representatives in March. The Immigration Reform and Control Act of 1983, HR 1510, currently authorizes 100 percent reimbursement to state and local governments for the costs they incur providing health care and public assistance to persons legalized under the Act for a four-year period. Legalized persons will be ineligible for federal means-tested programs for up to five years. There will be an effort to modify or delete the reimbursement provision on the House floor. Alternative provisions place the financial risks of the legalization program on state and local government. The NCSL opposes efforts to replace reimbursement with a limited block grant to states.

#### Immigration Task Force To Meet

The NCSL Task Force on Refugees and Immigration is scheduled tentatively to meet May 18-21, 1984, in Miami, FL. Senator David Roberti (CA), chair, and Rep. Jane Barnes (IL), vice chair, will preside.

NCSL contact: Joy Wilson, Washington.

The Economic Development Administration of the U.S. Department of Commerce has awarded NCSL a grant to provide technical assistance to the legislatures on expanding export trade. The project also will provide support to the NCSL Task Force on Foreign Trade and the States.

The project will issue a briefing book on the role of legislatures in developing and expanding exports; conduct three regional conferences; and provide technical help on foreign trade initiatives to individual legislatures. The first seminar, for the Midwest and South, is scheduled May 3-5 in Nashville; the second, for the West, in Denver June 14-16; and the third, for the East, in Boston July 25 during the NCSL Annual Meeting.

NCSL contact: Dan Pilcher or Lanny Proffer, Denver.

Members of the NCSL Education and Labor Committee heard at a recent Denver meeting from education administrators and chief executive officers alike that, on the changing nature of education and work, efforts should not be concentrated solely on "high tech," as that field will have its limits. They stressed more concentration on good basic skills, employability skills, and technical literacy that will put students in the flexible position to gain new jobs and job training as needs and demands change throughout their lives.

Leaders of NCSL's Special Committee on Health Care Cost Containment—Sen. Prescott

## Capital to Capital

National Conference of State Legislatures  
444 North Capitol Street, N.W.  
Washington, D.C. 20001

APRIL 12-14—Human Services Financing, San Francisco, CA (Michele Magri\*)  
MAY 9-11—State-Federal Assembly, Washington, D.C. (Melissa Upton\*\*)  
JULY 23-27—Annual Meeting, Boston, MA (Bonnie Kulaas\*)

\*Denver. 303/292-6600

\*\*Washington. 202/737-7004

Bloom (IL), chair; Assy. James Tallon (NY), vice chair; and Sen. Hugh Farley (NY)—participated in the recent National Governors' Association plenary session in Washington, D.C. on state efforts to control health care costs.

## INSIDE NCSL

Three new issues briefs on education for the handicapped will be published soon by the Special Education Dissemination Project, a project of NCSL's Education Program.

The briefs explore three important and timely issues for policymakers:

1) evaluating effective special education programs (How can states help local districts assess and improve the quality of education programs for handicapped children?);

2) placing handicapped children "to the maximum extent appropriate" in an environment with non-handicapped children (How are policymakers and administrators addressing the "least restrictive environment" mandate of PL 94-142?); and

3) educating handicapped children at the preschool level (How well are states currently meeting the needs of these children? How are these services delivered?).

These briefs are part of an ongoing series produced by the Special Education Dissemination Project and are funded by the U.S. Department of Education. The project is run by the National Association of State Boards of Education.

NCSL contact: Didi Massell, Washington, to order publications.

NON PROFIT  
ORGANIZATION  
U.S. POSTAGE  
PAID  
Permit #5029  
Silver Spring, Md.

# The Small School District ADMINISTRATOR

Special Summer  
Conference Report Edition

PUBLISHED BY THE AMERICAN ASSOCIATION  
OF SCHOOL ADMINISTRATORS

FALL, 1983

VOL. 1, ISSUE 3

## Technology For Special Education *What Small School Leaders Should Know*

Small and/or rural schools are looking to technology for help heretofore unavailable—to bolster curriculum resources, improve staff development and provide special services. One of these, of course, is special education.

Delivering special education services to low-incidence children in far-flung schools burdens small/rural schools far greater than the mandate affects the country as a whole. It is just more difficult—and more expensive. One child needing expensive residential care, for example, can create serious budget problems for a small school district. So, it is with more than usual interest that small school administrators are examining how to apply technology—especially computers—to special education services.

Some homework has been done for them by the National Association of State Boards of Education (NASBE) in a series of issue briefs on special education, particularly one on instructional applications of computer technology (others in the series include legal considerations of related services and financing of special education). The issue briefs are being disseminated with the help of the American Association of School Administrators.

Computer-assisted instruction, says the paper on technology, can include drill and practice, tutorial dialogue, simulation and games and computer literacy programming. Computers may be very mo-

tivating for special education students who have academic and/or self-concept problems: "Computers can address students by name; positive reinforcement in the forms of flashing colors, words of praise and cartoons can be built into software programs; difficult items can be color-coded or programmed to flash a message if students hesitate on answering . . ." Also, it points out, students with learning problems sometimes respond either very quickly or slowly to verbal or written questions. A computer can pace the students according to their needs, as well as provide immediate performance feedback, which is very important to special education students.

When using computers for instructional purposes, however, teachers need to keep printed commands simple and consistent; expect a slower response rate because students may have to "hunt and peck" on the keyboard; adapt programs to handicapped students by reducing the amount of extraneous words or commands; and recognize that students with learning problems may not be able to take what is learned in one context and apply it to another. "The computer is only one of the variety of teaching materials and situations needed," it says.

Another recommendation is that teachers be careful not to peg handicapped students as incapable of more sophisticated uses of the computer. The level of instruction by

computers "must be determined on the basis of individual ability and interest, not on the basis of a 'handicapped' label," it says.

For administrators, computers also will be valuable in small schools for the administration of special education programs. They can, for example, help:

- Make counts of students screened, assessed, placed and reviewed
- Compute reimbursements according to state and federal formulas
- Generalize standard local, state and federal reports
- Keep reports of students' due process and compliance status
- Cross-reference child counts by class, teachers, school and handicap
- Keep reports on student placement and evaluation status
- Maintain detailed records and summaries of diagnostic testing
- Personalize mailings to parents regarding IEP meetings and review
- Keep audit trails for program placement and review
- Provide interactive access to related service information, such as transportation
- Provide reminders when notices are due or should be sent.

For copies of the full text of the issue brief on computer technology, or the other briefs, contact Nancy Miller at AASA, 1801 N. Moore Street, Arlington, VA 22209; (703) 528-0700.

**Appendix C**  
**Research Abstracts I-XV**

# RESEARCH & RESOURCES ON SPECIAL EDUCATION

ABSTRACT I  
JULY 1983

## TECHNOLOGY

A series of four reports on the application of technology to special education will be available soon through ERIC. Developed by Education TURNKEY Systems, Inc. with funding from Special Education Programs, U.S. Department of Education, the reports focus on four areas of technology: 1) microcomputers, 2) telecommunications, 3) videodiscs, and 4) communication aids. Each report assesses the current state of the emerging technology, reviews the current uses of the technology in special and general education, and projects the manner in which the technology will affect special education during the next five years. For example, Microcomputers in Special Education describes the hardware and software technology which comprises the microcomputer and summarizes the extent and types of use of microcomputer technology in LEAs. It also discusses the perceived needs of LEAs in initial states of microcomputer adoption. The section on special education use details benefits of microcomputer application in instruction and administration, as well as software trends in these two basic categories. The report concludes with a discussion of key factors influencing microcomputer application in special education: advances in hardware technology, software development, improved commercial marketing and distribution, and enhanced LEA capabilities.

Education TURNKEY Systems. Microcomputers in Special Education, Telecommunications in Special Education, Videodiscs in Special Education, and Communication Aids in Special Education. Fairfax Church, VA: Education TURNKEY Systems, Inc. April, 1983. The reports will be available in November through the ERIC Document Reproduction Service, 3030 N. Fairfax Dr., Suite 200, Arlington, VA 22201 (703)841-1212.

## LEGAL CONSIDERATIONS

The Rights of Handicapped Students, a recent publication available from the Education Commission of the States, is a comprehensive resource on the education rights of handicapped children. Specific substantive rights (e.g., least restrictive environment, related services) and procedural rights (e.g., dispute resolution, evaluation procedures) are each discussed within the framework of the federal constitution, state constitutions, and federal and state statutes. Administrative and judicial remedies available to the individual for enforcing these rights are also presented. Extensive tables quote education clauses as well as the provisions for equal treatment and the right to an appropriate education in state constitutions and statutes, and provide a state-by-state

comparison of three controversial issues: related services, private school placement, and least restrictive environment.

Citron, Christiane. The Rights of Handicapped Students. Denver, Colorado: Education Commission of the States. September, 1982. Available for \$6 from the Distribution Center, ECS, 1860 Lincoln Street, Suite 300, Denver, CO 80295.

**FINANCE**

The Report from the Commission on the Financing of a Free and Appropriate Education for Special Needs Children provides practical assistance to local, state and federal policymakers in the formulation of effective policies and administrative strategies to aid in the better use of existing resources. Comprised of 20 individuals from a variety of professional groups and state and local agencies serving the interests of public education, the Commission was established over a year ago to examine current financing problems and to make appropriate recommendations to education policymakers. The report focuses on financing problems as well as options available to improve the administration and management of special education requirements.

The Commission presents nine recommendations and outlines strategies to stimulate action in connection with those recommendations. Of these, six key recommendations are directed toward improved administration and management of special education. These focus on such issues as the development of standards which define the financial responsibility of LEAs for related services; interagency agreements; and, residential programs.

The Report from the Commission on the Financing of a Free and Appropriate Education for Special Needs Children. Philadelphia, PA: Research for Better Schools, March, 1983. Available for \$6.75 from RBS, 444 North Third Street, Philadelphia, PA 19123.

\*\*\*\*\*  
This material is provided through NASBE's Special Education Dissemination Project. The project is designed to provide policymakers with information in four areas which have implications for special education: technology, finance, legal considerations, and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U. S. Department of Education.  
\*\*\*\*\*

**RESEARCH & RESOURCES OF SPECIAL EDUCATION**

**NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION**

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000

ABSTRACT II  
AUGUST 1983

## FINANCE

Making Programmatic Decisions During a Time of Fiscal Retrenchment: The Case of Related Services for Handicapped Youth is a Rand Corporation study based on interviews conducted in 16 states. This research documented the difficulty states often have in delivering the required services, primarily because of lack of resources, but also because of a variety of institutional and political constraints such as inadequate coordination.

Strategies used by states to solve these problems include written interagency agreements on both state and local levels. The most successful are those forged through open, multi-group processes that promote commitment from all agencies. Some states have created an interagency liaison position to coordinate the development of agreements and services. Other strategies described are interagency councils, cost-sharing arrangements, technical assistance to LEAs, and revision of state legislation.

Thomas, Margaret A. and Susan J. Reese. Making Programmatic Decisions During a Time of Fiscal Retrenchment: The Case of Related Services for Handicapped Youth (ED Contract No. 300-79-0522). Santa Monica, California: Rand Corporation, 1982, 52 pp. Available for \$7.50 prepaid from Publications Department, Rand Corporation, 1700 Main Street, Santa Monica, CA 90406.

## TECHNOLOGY

A Guide to the Use of Technology in Basic Skills Education is a practical report on instructional uses of computers, videodisks, television, film and other audiovisual media, calculators and other electronic learning devices. Though not written expressly about students with exceptional education needs, the guide is applicable to both general and special education policymaking and administration. Basic skills are defined as organizing thoughts, understanding others' thoughts, using symbolic concepts, and using common technologies.

The report guides decision-makers through the organizational, budgetary and instructional implications of using educational technologies to teach basic skills. It discusses the impact of technology on students, faculty, staff, parents, and the community. The authors summarize research relating media-based instruction to, for example, student achievement and attendance. Step-by-step procedures are outlined for assuring that hardware and software are not acquired prior to full preparation for its use.

Engstrom, Kristina. A Guide to the Use of Technology in Basic Skills Education (ED Contract No. 300-80-0795) Belmont, Massachusetts: CRC Education and Human Development, Inc., August 1981, 69 pp. Available free of charge by writing to NASBE's Special Education Project, 701 N. Fairfax Street, Alexandria, VA 22314, Attention: Roberta M. Felker.

**LEGAL  
CONSIDERATIONS**

Educational Policymaking Through the Civil Justice System analyzes the use of the civil justice system to determine the distribution of public services. The authors use PL 94-142 as a prism through which to examine the concept of entitlement to individualized services. The information was obtained from interviews conducted in eight school districts.

The report found that the effects of P.L. 94-142 on courts are slight. Few judges had heard cases brought under P.L. 94-142 and those who had heard cases found them neither difficult nor time-consuming. The vast majority of the disputes about special education services are resolved informally or in the administrative due process system. The report concluded that due to the introduction of civil justice methods, P.L. 94-142 is applied with far more rigorous attention to the rights and duties of school personnel and beneficiaries than are other federal education programs. It is also run with a smaller regulatory apparatus and with less direct contact between federal officials and local educators than other federal programs of comparable size.

Hill, Paul T. and Doren L. Madey. Educational Policymaking Through the Civil Justice System. California: Rand Corporation, The Institute for Civil Justice, 1982, 34 pp. Available for \$8.00 prepaid from Publications Department, Rand Corporation, 1700 Main Street, Santa Monica, CA 90406.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

**RESEARCH & RESOURCES ON SPECIAL EDUCATION**

**NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION**

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000



# RESEARCH & RESOURCES ON SPECIAL EDUCATION

ABSTRACT III  
SEPTEMBER 1983

## PRESCHOOL

Effectiveness of Early Special Education for Handicapped Children responds to the question of whether preschool special education programs are a sound investment both developmentally and economically. The booklet reports a study, conducted by the Colorado State Department of Education, of national research findings as well as of evaluation and follow-up studies on preschool special education in Colorado. The authors find that "the positive impact of early intervention...for children with a variety of handicapping conditions...has been demonstrated repeatedly."

The literature review reveals that preschool special education produces long-term developmental benefits, sometimes reduces the effects of a handicapping condition, and can result in higher scholastic achievement. Similarly, lack of preschool early special education may compound the effects of a handicap and produce the need for more intensive services. Programs in Colorado were found to be cost effective, saving local districts about \$1500 per handicapped pupil over three years. Surveys of parents, teachers and administrators indicate very positive attitudes toward preschool special education on the part of all these interested adults.

McNulty, B.A., Smith, B. and Soper, E.W. Effectiveness of Early Special Education for Handicapped Children, 32 pp. Available free of charge by contacting Brian McNulty, Colorado Department of Education, 303 W. Colfax, Denver, CO 80204; (303) 534-8871, ext. 210.

## FINANCE

Tuning Special Education Finance: A Guide for Policy Makers describes different state funding approaches and brings together available research and legal information. To develop the guide, interviews were conducted with state-level education personnel, legislators, and education policymakers. The guide has been organized around a common set of policy issues identified during that process. These include 1) defining student eligibility, 2) establishing the range of appropriate services, 3) determining the costs, 4) developing funding sources, and 5) instituting formulas for distributing special education funds. Charts and appendices supply statistics and other data.

Avoiding simplistic solutions, the authors emphasize the trade-offs existing within alternative funding schemes. The more simple a formula, for example, the less likely it will be to distinguish among district needs. The more predictable a formula for ensuring the stability of state budgets, the more districts will bear unpredictable costs. The more it serves to contain costs, the less it will accommodate the full range of different district costs. Policymakers must weigh these trade-offs against the particular needs of their state.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

Moore, M.T., Walker, L.J. and Holland, R.P. Finetuning Special Education Finance: A Guide for State Policymakers. Washington, DC: Educational Testing Service (ED Contract No. 400-80-0041), 1982, 122 pp. Available for \$3.50 from Educational Testing Center, 1825 Eye Street, N.W., Suite 475, Washington, DC 20096.

**LEGAL  
CONSIDERATIONS**

Legal Aspects of the Education of the Handicapped, produced by the Ohio School Boards Association and aptly subtitled "a primer," offers a brief, basic introduction to legal issues regarding special education. The sources of statutory rights for the education of handicapped children are summarized. Legal issues are explained succinctly in the context of statutory rights and court interpretations. Issues covered include least restrictive environment, related services, discipline, residential placement, and special education in excess of the normal school year.

The author also outlines important court decisions regarding compensation for damages and attorney's fees. Each section covers related court decisions in the state of Ohio. Thus the booklet may serve as a model for other states wishing to relate national legal issues to judicial activity within the state.

Sheeran, T.J. Legal Aspects of the Education of the Handicapped: A Primer for Members of Boards of Education. Westerville, Ohio: Ohio School Boards Association, 1983, 47 pp. Available for \$5.00 prepaid from the O.S.B.A., P. O. Box 231, Westerville, OH 43081.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

**RESEARCH & RESOURCES ON SPECIAL EDUCATION**

**NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION**

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000

## PROGRAM EVALUATION

Special Education Program Evaluation: A Management Tool is a practical evaluation handbook written from a state agency perspective. The developers assume that evaluation really does make a difference if the activities are well-designed, systematically implemented and carefully reported to decision-makers. A literature review promotes an understanding of the "how and why" of evaluation. The handbook user is then provided with program goals and objectives, evaluation questions, data collection strategies for each evaluation question, actual evaluation instruments ready for photocopying and use, instructions for data analysis along with a reporting format for the instruments, and finally, instructions on formulating report recommendations. In an era of program accountability, the authors stress the use of program evaluation as an efficient district management tool. The goals and objectives are based primarily upon State Board of Education goals concerned with general student progress and achievement; in some cases, program directors may wish to develop additional goals which reflect specific local program emphasis.

Associates in Professional Technologies, Inc. Special Education Program Evaluation: A Management Tool. Massachusetts Department of Education, 1981, 114 pp. Single copies available free by contacting Donna Toto at the Division of Special Education, Massachusetts Department of Education, 1385 Hancock Street, Quincy, MA 01269.

## TECHNOLOGY

Evaluation of Educational Software: A Guide to Guides begins with an article urging local decision-makers to become their own best experts. "Software is constantly undergoing improvements, based upon user reactions and review in publications. . . In a new field, where the greatest need is for everyone to become much more literate, it is probably not a good idea to have people looking to any sole source of authority. . . The real need is for educators to become better informed so they can trust their own instinct and judgments." Educators should immerse themselves in the software review literature, says the author, both because "the information will lead to better software choices," and also because "one gradually develops a critical capacity of one's own." General standards for quality software are outlined, as is a descriptive framework for categorizing software. Subsequent sections contain brief summaries of ten major models for software evaluation, sample software reviews, and resource lists focusing on various aspects of software availability and evaluation.

Jones, N.B. and Vaughn, L. (Eds.) Evaluation of Educational Software: A Guide to Guides (NIE G-82-0017 and NIE 400-80-0107). Chelmsford, Massachusetts: Northeast Regional Exchange, 1983, 96 pp. Available for \$6.50 prepaid from NEREX, 101 Mill Road, Chelmsford, MA 01824.

## **POLICY**

Special Education Policies: Their History, Implementation and Finance is an interdisciplinary collection of nine essays written from the perspectives of finance, politics, organization, law and history. One essay addresses problems of interagency coordination through a description of an implementation activity that has demonstrated efficient use of local provider resources through information, coordination, referral and follow-up. Another article reports on a study of due process hearings in California: few special education students were involved, and the frequency of hearings decreased over time. Those hearings that were held were time-consuming, and costly to the district in terms of both the process and the awards made by the hearing decisions. An article on the "resource-cost" approach to special education program funding describes a model that systematically incorporates local district realities, and can also be used as a planning tool. In other essays, authors review the origins of special education as well as its legal history, compare our system to that of Great Britain, analyze organizational barriers to implementation, and project nationwide special education costs based on the resource cost model approach.

Chambers, J.G. and Hartman, W.T. (Eds.) Special Education Policies: Their History, Implementation, and Finance. Philadelphia: Temple University Press, Broad and Oxford Streets, USB 306, Philadelphia, PA 19122.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

## **RESEARCH & RESOURCES ON SPECIAL EDUCATION**

**NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION**

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000

**PROGRAM  
EVALUATION**

Policy Studies Review has published a special issue on the proceedings of the "Symposium on Public Policy and Educating Handicapped Persons" held in September, 1981. Seventeen papers address the policy implications of questions such as, "How can public policy contribute to the quality of special education teaching?" and "What do we know about the effectiveness of current practice?" The paper which addresses this second question is entitled, "Effectiveness of Special Education," by Gene V. Glass, the designer of meta-analysis techniques (comprehensive statistical integration of the findings of primary statistical analyses) in social research. He reviews meta-analyses of the effectiveness of both perceptual-motor and psycholinguistic training—the two foundations of a dominant mode of teaching in special education—and the effectiveness of special education vs. regular education placement. In his final section entitled, "What Works in Special Education and Why?," Glass concludes, "...the success of any educational model is enormously variable. What works in one place does not work someplace else....The social policy that is needed...is policy for programs that produce generally small and highly unpredictable benefits." Other papers address topics such as "Guides for Future Special Education Policy," and "How Can Special Education Be Coordinated With Other Service Systems?"

Center for Public Affairs, University of Kansas. Policy Studies Review, 2, Special No. 1, 1983, 263 pp. Available for \$3 to individuals, \$5 to institutions from the Policy Studies Organization, 361 Lincoln Hall, 702 South Wright, University of Illinois, Urbana, IL 61801.

**FINANCE**

State and Federal Programs for Special Student Populations is a 1982 booklet reviewing the scope of federal and state involvement in and the state funding structure for compensatory education, bilingual education and special education programs. The report emphasizes the post-1965 expansion of state influence over policy and practice at the local level. This greater fiscal and programmatic role has occurred because of state administration of federal categorical grants, state school finance reform activities and state mandates for programs for special student populations. Each of these three programs is examined with regard to topics such as categorical eligibility criteria and funding approaches. Tables provide state-by-state comparisons of pertinent data from the year 1981. In the last chapter on trends, the author finds that growth in both general and categorical state aid to schools has slowed considerably in recent years, due to economic downturns and fiscal limitations. Yet, generally, special education has fared better than compensatory or bilingual education. It is most likely, he states, that "priority will be given to program areas where the state responsibility is most clearly defined—basic education and aid for special education programs."

McGuire, C.K. State and Federal Programs for Special Student Populations. Denver, CO: Education Commission of the States. Report No. F82-2, April 1982, 72 pp. Available for \$4.00 from the ECS Distribution Center, Suite 300, 1860 Lincoln Street, Denver, CO 80295; (303) 861-3600.

## LEGAL CONSIDERATIONS

Special Education Law: A Guide for Parents, Advocates and Educators offers a lawyer's view of the court cases and federal law and regulations that affect special education practice. Writing for educators and health professionals as well as their students and clients, the author analyzes the major provisions and explains controversies arising from the language of the laws and the sweeping reforms they mandate. A section on the special education hearing takes the reader through a step-by-step description of what to expect and how to prepare. A final chapter on major legal issues covers the following: 1) special education beyond the normal school year, discussed in the context of Armstrong v. Kline, the landmark case that prohibited restriction of special education to an arbitrary 180-day limit; 2) discipline, and the need for appropriate due process to protect a child threatened with suspension or expulsion; 3) non-discriminatory testing and evaluation; 4) special education malpractice, a legal theory which to date has not been upheld by higher courts; and 5) a comparison of two different state legal approaches (those of Pennsylvania and New Jersey) to education for gifted and talented children.

Goldberg, S.S. Special Education Law: A Guide for Parents, Advocates, and Educators. New York: Plenum Press, 1982, 229 pp. Available for \$24.50 from Plenum Publishing Corp., 233 Spring Street, New York, NY 10013; (212) 620-8000.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

## RESEARCH & RESOURCES ON SPECIAL EDUCATION

NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000

**PRESCHOOL** Mainstreaming in Early Education summarizes issues discussed by a group of 26 participants in a workshop organized by the federally-sponsored Technical Assistance Development System (TADS). Participants represented the perspectives of state and local education agencies, public and private day care providers, universities, and parents of handicapped children. Chapter One covers four fundamental programmatic issues: understanding the purposes of mainstreaming, evaluating its feasibility for a preschool program, determining an appropriate setting for a child, and finding and creating opportunities to mainstream preschoolers. The second chapter addresses the issue of personnel training, which the author calls "the bottom line for success." She describes idiosyncracies in early childhood mainstreaming that affect training—primarily the diversity of settings, of prior training teachers have received, of responsible administering agencies, and of groupings of children. Training needs are then specified from the perspectives of teachers, administrators and parents. The next chapter examines handicapped children's characteristics, and the implications of those characteristics for instructional decisions and for success in a mainstream program. The final chapter explores family concerns, noting that mainstreaming can sometimes be beneficial to the child and yet difficult for the parents. Strategies are delineated for preparing parents and for providing ongoing support.

Anderson, J. and T. Black (eds.) Mainstreaming in Early Education. (ED Contract No. 300-82-0369). Chapel Hill, North Carolina: Technical Assistance Development System, March 1983, 83 pp. Available for \$7.50 from TADS, 500 NCNB Plaza, Chapel Hill, NC 27514; (919) 962-2001.

**FINANCE** Policy Effects of Special Education Funding Formulas focuses on programmatic and management considerations of the principal approaches to funding special education programs. Four main topics are discussed: 1) relationships between special education programs and their costs; 2) primary funding formulas used for special education; 3) policy issues affected by the funding formulas; and 4) the potential incentives and disincentives of the various funding formulas. Within this context, the impact of the funding approach utilized by P.L. 94-142 is addressed. The authors note that although federal funds available for the support of special education represent a small share of the total cost, such dollars can be important, and how to maximize their impact is a critical issue for policymakers. The report concludes that the regulations and guidelines associated with the formulas—which require certain actions and constrain others, offer incentives and disincentives for various activities, encourage state or federal priorities, and prevent fiscal abuses—are often more important in determining district responses than the specific formula itself.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

Hartman, W.T. Political Aspects of Special Education Funding Formulas (Program Report No. 10). Institute for Research on Educational Finance and Governance, Stanford University, January 1980. Available for \$2.00 from IFG, Stanford University, Stanford, CA 94305.

## LEGAL CONSIDERATIONS

Minimal Competency Testing and Special Education Students: A Technical Assistance Guide was developed by SRI International as part of its longitudinal study of Public Law 94-142. Designed to aid education policymakers and administrators in addressing the issue of minimal competency testing for special education students, the guide discusses conceptual, legal and budgetary considerations in establishing such programs for these students. Specifically, the guide addresses the following questions which need to be considered by state and local policymakers: Who should set test standards? Who should be included in competency test programs? What kinds of competency tests should be used with handicapped students? When should competency tests be administered? What should be the graduation criteria for handicapped students? The discussion of this last question explores various differential standards which can be used with handicapped students for whom regular minimal competency tests are inappropriate. These include passing the regular test with modified testing procedures, passing a special competency test, or achieving individually determined graduation standards which are specified in the child's individualized education program (IEP).

Cressey, J. and C. Padilla. Minimal Competency Testing and Special Education Students: A Technical Assistance Guide (ED Contract No. 300-78-0030). Menlo Park, California: SRI International, November 1981, 17 pp. Available for \$2.15 plus shipping from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 841-1212. Refer to publication order #ED217685.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

## RESEARCH & RESOURCES ON SPECIAL EDUCATION

NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000

### TECHNOLOGY

Microcomputers in Special Education: Organizational Issues is the first of twelve information products produced by SRA Technologies and COSMOS Corporation, with funding from Special Education Programs, U.S. Department of Education. The monograph summarizes the major findings of twelve case studies of microcomputer organization and implementation in LEA special education programs. Study findings are organized around several key issues, such as: Does special education need its own system of microcomputers or can special education applications be integrated with other microcomputer applications in a school district? What patterns of decision-making (e.g., district level; top-down; building and teacher level; bottom-up) characterize microcomputer implementation and how do the various roles affect the acceptance of technology into the school system? Other organizational issues addressed in this report include balancing administrative and instructional applications; emerging roles for special educators with microcomputers and training. Overall, the findings reflect "rapidly developing and expanding systems of use and demonstrated collaboration and satisfaction among (regular and special) educators." However, special education administrators are urged to take a more active role in the planning and management of microcomputer systems to encourage more specialized, IEP-relevant use of this technology in programs for handicapped students.

Hanley, T.V. Microcomputers in Special Education. Arlington, Virginia: SRA Technologies, 1983, 17 pp. Limited copies available from SRA, 901 S. Highland St., Arlington, VA 22204; (703) 486-0600. Available May, 1984 for \$3.00 from ERIC Document Reproduction Service, 3030 N. Fairfax Dr., Suite 200, Arlington, VA 22201; (703) 841-1212.

### PROGRAM EFFECTIVENESS

Observation Guidelines for Day Care Centers provides a comprehensive document for structuring the evaluation process at the preschool level. The monograph organizes observation of a day care setting into three broad categories: the physical setting (i.e., use of space, materials, and time); the interactional setting (i.e., teacher-child, child-child, staff, and teacher-parent); and the programmatic setting (i.e., curriculum content, teaching strategies, and socio-emotional climate). Within each broad category, eight to ten issues are identified, such as manifested awareness of individual differences among children; a series of 20 to 40 questions are provided to assist the observer in thinking about and evaluating various aspects of the preschool program. While not specifically geared to preschool handicapped programs, these guidelines provide important quality indicators which are especially critical for programs whose goal is the effective integration of handicapped preschoolers into the mainstream.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

Mattick, I. and F.J. Perkins. Observation Guidelines for Day Care Centers. Washington, D.C.: The Day Care and Child Development Council of America, 1974, 28 pp. Available for \$4.00 from the National Association of State Boards of Education, 701 N. Fairfax St., Alexandria, VA 22314; (703) 684-4000.

#### FINANCE

State Support for Education: 1982-83 is designed to provide a single source of data on the efforts of the 50 states to support elementary/secondary and higher education. Extensive data are organized into five chapters: 1) regional trends; 2) demographic characteristics of the states; 3) state support for elementary/secondary education; 4) state support for higher education; and 5) the relationship between state support for elementary/secondary and higher education. The introduction suggests at least four valuable policy-oriented uses of these comparative data: 1) comparison of state funding decisions; 2) rough analysis of "how well we're doing;" 3) stimulation of specific questions; and 4) reexamination of fundamental policy issues. Policymakers are encouraged to maximize the effective use of the data by knowing the questions they want answered, looking for patterns, being satisfied with rough judgments, and being wary of simple answers. Overall, this document provides a valuable source of state education data with which analyses of state special education funding can be made more efficiently.

Augenblick, J. and G. Van de Water. State Support for Education: 1982-83. Denver, Colorado: AVA, Inc., 1983, 40 pp. Available for \$15.00 (\$13.50 for orders of 5 or more) from AVA, Inc., P.O. Box 20276, Denver, CO 80220; (303) 832-3444.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

## RESEARCH & RESOURCES ON SPECIAL EDUCATION

NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000

### LEAST RESTRICTIVE ENVIRONMENT

Integrating America's Mildly Handicapped Students: Administrative Strategies documents successful, field-based strategies for serving handicapped students in the least restrictive environment. To identify these strategies, five states were selected from nominations made by persons with a national perspective of special education; within these states, 30 local education agencies were identified as having developed innovative techniques. Site visits and interviews with agency personnel provided the descriptive information presented. The methods described focus on the school system as an organizational entity. Although aimed primarily at practicing local school administrators, the strategies described may also be useful to a variety of administrative, support and instructional staff. The report organizes the strategies within five areas: administrative systems for service delivery, community involvement, communication, personnel utilization, and staff development. Each section stimulates thinking about which strategies are appropriate for use in the reader's district as well as ways they might be adapted for use.

JWK International Corporation. Administrator's Handbook on Integrating America's Mildly Handicapped Students. Reston, Virginia: Council for Exceptional Children, 1982, 155 pp. Available for \$15.50 from CEC, 1920 Association Drive, Reston, VA 22091.

### FINANCE

A Cost-Based Approach to the Funding of Educational Programs: An Application to Special Education proposes a conceptual framework for improving school finance equity and distributing funds for the education of handicapped children. The model is a cost-based funding approach to providing equal access to educational resources across local districts serving similar student populations, and to coping with differences in access to resources across districts serving students with varied needs. The model has three components: assessment of student needs and program assignment; specification of (a) instructional programs and program units, (b) instructional administration and operation of programs, and (c) general administration and operations; and determination of resource prices and total district costs. The paper also includes a review of the literature on education cost differences.

The proposed funding model takes into account cost differences for special education based on variations both in student needs and in the price of comparable education services among school districts. The authors claim that the model elicits from policymakers, at least at the state level, systematic thinking about what an adequate educational program should look like for different kinds of children,

as well as systematic thinking about distribution of resources according to pupil needs across districts serving various combinations of pupils. It is suggested also that the model can serve as a planning device and as a tool for analyzing current policy trade-offs.

Chambers, J.G. and W.T. Hartman. A Cost-Based Approach to the Funding of Educational Programs: An Application to Special Education. Stanford, California: Institute for Research on Educational Finance and Governance, Stanford, University, April, 1981, 74 pp. Available for \$3.00 from IFG, CERAS Bldg., Stanford, CA 94305.

#### TECHNOLOGY

Learning-Disabled Students and Computers: A Teacher's Guidebook is designed to "de-mystify microcomputers and present them as powerful, dependable and efficient aids in meeting the needs of those children legally identified as learning disabled." Included in the booklet are chapters which briefly explore theory, concerns and misconceptions, as well as software and hardware. The booklet dispels such myths as 1) "computers are a passing fad, a currently fashionable piece of A.V. equipment that will soon end up sitting unused in a closet," and 2) "encouraging the use of computers in schools may cost me my job." Within the chapter on software, the computer is explored in the role of tutor, tool, and tutee. The final chapter contains a list of references which includes magazines, books, organizations, networks, and research.

Metzger, M., D. Ojellette, and J. Thormann. Learning Disabled Students and Computers: A Teacher's Guidebook. Eugene, Oregon: International Council for Computers in Education, January 1983, 48 pp. Available for \$2.50 from ICCE, 135 Education, University of Oregon, Eugene, OR 97403.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

#### RESEARCH & RESOURCES ON SPECIAL EDUCATION

NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000



A new four-volume report on effective special education policies offers detailed descriptions of specific state and local activities regarding 1) interagency collaboration, 2) related services, 3) least restrictive placements, and 4) monitoring. The authors analyze and synthesize the diverse activities they have identified, and provide names of individuals to contact for further information. This abstract provides a brief introduction to each of the four volumes, followed by information on how to order them.

### **INTERAGENCY COLLABORATION**

Volume I: Effective State Policies to Promote Interagency Collaboration describes successful agreements in a dozen states. These policies have grown, says the report, "out of a realistic appreciation of the difficulties of interagency efforts." Different states are pursuing different goals. One group of SEAs has clarified responsibilities for handicapped students in state-operated residential programs. Other states are promoting local interagency collaboration for specific populations such as seriously emotionally disturbed children. In Utah, officials are tackling the problem of information-sharing among state agencies. Finally, the authors describe three SEA efforts to establish general state policy for service delivery and financial responsibility among agencies. Despite the different goals, common factors are identified that contribute to the effectiveness of these efforts.

### **RELATED SERVICES**

Volume II: Effective Policies in the Provision of Related Services analyzes efforts undertaken by a number of states and local school districts. Noteworthy, for example, is the Connecticut Department of Education's system of third party financing to help LEAs pay for health-related services. Other SEAs have used education monies as matching funds for other state agencies, thereby increasing federal dollars for handicapped students. Two major local strategies are described: 1) the pooling of neighboring LEA resources to increase the availability of related services, and 2) the development of new comprehensive programs that integrate education and related services for special populations. This volume includes a table comparing the federal definition of related services with the definitions found in state rules, regulations or statutes.

### **LEAST RESTRICTIVE ENVIRONMENT**

Volume III: Policies Which Address Out-of-District Placements and Assure Education in the Least Restrictive Environment describes many specific state and local approaches to educating handicapped children close to home in an environment that affords interaction with non-handicapped children. Some states have developed

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

policies which help SEAs become involved in local placement decisions; others have transferred responsibility back to the LEAs for institutionalized handicapped students. This volume also examines local policies that use the resources of other human service agencies to implement the LRE mandate. The diversity of state and local efforts described is impressive.

#### **MONITORING**

Volume IV: Effective State Monitoring Policies summarizes some of the lessons learned from SEAs' experience with monitoring, such as recognition of the need of many LEAs for technical assistance. The report then focuses on two policy areas which SEA officials identify as needing further work: 1) the need to evaluate the quality of special education programs, and 2) the need to monitor more effectively the education programs administered by other state agencies. The experiences of the eight states described reveal that SEAs' monitoring of state-operated programs is most effective when it is just one aspect of a more encompassing partnership between SEAs and other state agencies.

Farrow, F. and C. Rogers. A Report of The Handicapped Public Policy Analysis Project, Volumes 1-4 (ED Contract #300-82-0829). Washington, D.C.: The Center for the Study of Social Policy, October 1983. Limited copies available free of charge by contacting The Center for the Study of Social Policy, 236 Massachusetts Avenue, N.E., Washington, DC 20002; (202) 546-5062.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

#### **RESEARCH & RESOURCES ON SPECIAL EDUCATION**

**NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION**

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000



#### TECHNOLOGY

Computer Technology for the Handicapped in Special Education and Rehabilitation: A Resource Guide is a well-organized annotated bibliography of almost 200 books and articles. The subject matter covers technological developments that are so recent, according to the authors, "that unfortunately they remain largely unknown to administrators, teachers, service providers, and users." Just a few of the benefits now available include computer-assisted interactive video courseware to teach mentally retarded students, computer programs for the immediate translation of written materials into braille, and computerized classroom management systems that enable teachers to tailor curriculum to individualized education plans. Yet there is little reference to this new technology in current textbooks. As the introduction states, "a literature awareness is one way. . .to become better acquainted with this newly emerging technology" which may benefit special education more than any other field. Author and subject indexes precede the brief annotations.

Nave, G., P. Browning, and J. Carter. Computer Technology for the Handicapped in Special Education and Rehabilitation: A Resource Guide. Eugene, Oregon: International Council for Computers in Education, 1983, 190 pp. Available for \$7.00 prepaid from the I.C.C.E., 135 Education, University of Oregon, Eugene, OR 97403.

#### LEAST RESTRICTIVE ENVIRONMENT

Count Me In is a clear and readable report on mainstreaming students who have mild academic handicaps. The authors focus on the exceptional children who are most often provided with integrated placements, i.e., those often classified as learning disabled, educable mentally retarded or emotionally disturbed. The authors compare research on a variety of placements, concluding that there are few if any advantages to full-time special placement for students with learning problems. Instead, the research strongly favors regular class placement accompanied by high-quality support both for academic achievement and for social acceptance. Two forms of support are highlighted: a resource room program, and interventions within the mainstream classroom itself. Research on effective classroom interventions reveals great promise for strategies such as social skills training, cooperative learning, and individualized instruction. The authors recommend that future research focus on how best to support these children in the regular class, rather than on the special class vs. regular class issue.

Madden, N.A. and R.E. Slavin. Count Me In: Academic Achievement and Social Outcomes of Mainstreaming Students with Mild Academic Handicaps. Baltimore, Maryland: Johns Hopkins University, 1982, 77 pp. Available for \$3.00 from the Center for Social Organization of Schools, Johns Hopkins University, 3505 N. Charles St., Baltimore, MD 21218; (301) 338-7570.

## TECHNOLOGY

Microcomputer Software in Special Education: Selection and Management is second in a series produced by SRA Technologies and Cosmos Corp., sponsored by Special Education Programs, U.S. Dept. of Education. This is a general report based on a study of 12 school districts that use computers to serve handicapped students. The research focused on organizational issues, such as: What software is used for administrative applications? Other questions pertain to instructional applications and selecting and acquiring software. The author advocates formal procedures to inform teachers about educational software, i.e.: 1) centralized repositories of educational software, 2) catalogs or bulletins describing locally available software, 3) formalized use of teachers in the district who are experienced and motivated microcomputer users, and 4) exposure during inservice programs to software already present in the schools.

In the twelve districts studied, computer applications in special education were generally the same as in regular education; rarely were they adapted for use by handicapped students. The report calls upon special education administrators to take a more active role in planning and implementing computer uses, and identifying and acquiring software. The use of two systems in particularly encouraged: authoring systems, that permit teachers to design software for specific lessons and instructions; and computer-managed instruction (CMI) systems, that can be used to diagnose student performance and prescribe needed learning activities. The report's appendices include lists of relevant publications, networks, and software suppliers.

Hanley, T.V. Microcomputer Software in Special Education: Selection and Management (ED Contract No. 300-82-0250). Arlington, Virginia: SRA Technologies, 1984, 16 pp. Limited copies available from SRA, 901 S. Highland St., Arlington, VA 22204; (703) 486-0600. Also available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 841-1212.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

## RESEARCH & RESOURCES ON SPECIAL EDUCATION

NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000



#### **POLICY/ PRACTICE**

**The Sixth Annual Report to Congress on the Implementation of Public Law 94-142: The Education for All Handicapped Children Act** examines the progress being made in implementing the Act and in meeting its goals. The report contains four chapters each of which describes national experiences in achieving one of the four purposes of the Act. Highlights from each chapter are presented in the following sections.

#### **Chapter 1: Students Receiving A Free and Appropriate Public Education**

- A total of 4,298,327 handicapped children were served by the states in 1982-83. This is an increase of 1.5 percent (65,045 children) over the 1981-82 school year, and an increase of 16 percent since 1976-77. This increase is particularly interesting when compared with the Nation's total school age population, which has been steadily decreasing over the past decade.
- Variations continue in the number of children served within handicapping conditions. Since 1976-77, the categories of learning disability and emotionally disturbed have grown while the number of children served in every other category except visually handicapped has decreased, although this is not uniformly true across states.
- States continue to report increases in the number of preschool age handicapped children served, especially those aged three through five. Thirty-eight states now mandate services to at least some portion of the birth through age five preschool handicapped population.
- Twenty-four states have mandates to serve handicapped youths through the age of 21 if they have not graduated from high school. The 1982-83 data indicate an increase of 9 percent over 1981-82 for students aged 18 through 21, and an increase of 70 percent over the number served in 1978-79.
- Over the past decade, many states have adopted policies to keep or return students to their home communities whenever possible, thereby avoiding costly institutional placement.

#### **Chapter 2: An Update on the Implementation of Key Provisions of the Act**

- **Least restrictive environment:** Of the more than 93 percent of all handicapped children who are educated in regular schools, about two thirds are educated in the regular classroom with non-handicapped peers.
- **Procedural safeguards:** The use of mediation to bring about reconciliation between schools and parents before going to a due process hearing is evident in 33 of 38 states surveyed in a 1983 study. However, the extent to which mediation serves to deter the need to go on to the hearing stage is unclear.

- **Protection in evaluation:** Concern over the rising number of students classified as learning disabled has stimulated state efforts to clarify and assure the consistent application of eligibility criteria, and to strengthen the capacity of the regular education program to address learning problems.

### **Chapter 3: Assisting States and Localities in Educating All Handicapped Children**

- States use federal, state and local resources in varying percentages to finance special education and related services. In four selected states studied in 1983, the state share of these costs ranged from 72.7 percent to 41.9 percent; the local share ranged from 1.3 to 48.7 percent.

### **Chapter 4: Effectiveness of Programs Educating Handicapped Children**

- A longitudinal study of selected local education agencies completed in 1983 concluded that the impact of Part B of the Education of the Handicapped Act (EHA-B) has been primarily positive and that the law has been a major factor in effecting change.
- State and local education agencies, in recognition of the need to have solid evaluation information with which to make decisions affecting special education, are supporting numerous studies relating to policies, procedures, cost and effectiveness.

The written report is supplemented by nearly 100 pages of tables which provide specific state data on topics such as child count, personnel, and educational environments.

Division of Educational Services, Special Education Programs. Sixth annual report to Congress on the implementation of Public Law 94-142: The Education for All Handicapped Children Act. Washington, D.C.: U.S. Department of Education and U.S. Office of Special Education and Rehabilitative Services, 1984. Limited copies available free from Research Projects Branch, 3076 Switzer Building, Washington, D.C. 20202; (202) 732-1064.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

## **RESEARCH & RESOURCES ON SPECIAL EDUCATION**

**NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION**

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000



# RESEARCH & RESOURCES ON SPECIAL EDUCATION

ABSTRACT XII

JUNE 1984

## LEGAL CONSIDERATIONS

Judicial Interpretation of the Education for All Handicapped Children Act briefly summarizes the current (emphasizing 1981 - 1983) judicial interpretations of major policy and implementation issues stemming from P.L. 94-142. The analysis is organized according to the law's major principles of handicapped children's educational rights. Generalizations regarding court decisions on each are highlighted in the following sections.

**Zero Reject**—the right of each handicapped child to be included in a free, appropriate, publicly supported educational system.

- **Expulsion and Suspension:** P.L. 94-142 prohibits only expulsion of handicapped students who are disruptive because of their handicaps, a determination that must be made by "a trained and knowledgeable group of persons." A complete cessation of educational services is not permitted.
- **Residential Placement Costs:** If the only appropriate education for a handicapped child is in a residential placement, then, generally, the school district pays the entire cost. Exceptions are made when either the parents or the school district fail to follow established procedures. Currently unresolved is an issue of the ultimate "educability" of some severely handicapped children.
- **Contact Sports:** A handicapped student can be excluded only when participation imposes medical risks or dangers.

**Non-Discriminatory Evaluation**—the child's right to be fairly evaluated so that correct educational programs and placement can be achieved.

- Special education classes have included a disproportionate number of minority students. Both the reasoning and the result of court decisions conflict on the central issue of whether standardized tests used for classification discriminate against students who are from economically deprived backgrounds or are members of racial or ethnic minorities.

**Individualized Appropriate Education**—the child's right to a meaningful education.

- The courts have defined "appropriate education" in three ways: 1) as a properly-developed IEP; 2) as a fair process that includes evaluation, IEP, least restrictive placement, due process, and parent participation; and 3) as an education that is "comparable" to that of nonhandicapped children.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

- **Related Services:** Specific related services have been decided on a case-by-case basis.
- **Extended School Year:** The courts have ordered year-round education when there is sufficient evidence of "irreparable loss" to the student if summer school is not provided.

**Least Restrictive Educational Placement—the right to normalization.**

- The courts have frequently decided in favor of more restrictive placement; concern about "appropriate education" takes precedence over adherence to a hard and fast rule of integration.

**Procedural Due Process—the right to challenge.**

- **Availability:** Due process cannot be invoked unless an official change of placement is involved.
- **Exhaustion of Administrative Remedies:** Premature filing of lawsuits is allowed only when it would be totally futile to continue pursuing available administrative remedies.
- **The "Stay Put" Rule:** Parents who change a child's placement without school consent absolve the district of financial responsibility, unless the district's placement may cause irreparable harm to the child.

The review of court decisions in each area begins with a brief explanation of that particular legal principle. A final section contains four hypothetical court cases which illustrate the real impact these legal issues have on people's lives.

Turnbull, H.R. & Fiedler, C.R. Judicial interpretation of the Education for All Handicapped Children Act. Reston, Va.: The Council for Exceptional Children, 1984, 28 pp. Available for \$6.00 prepaid from CEC, 1920 Association Dr., Reston, VA 22091; (703) 620-3660.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

**RESEARCH & RESOURCES ON SPECIAL EDUCATION**

**NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION**

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000

As part of its series entitled "Special Education In America - Its Legal and Governmental Foundations," the Council for Exceptional Children (CEC) has addressed two issues receiving much attention recently by policymakers at all levels of government: early childhood special education and special education for handicapped children of limited English proficiency. Each of these timely and helpful reports is described below, followed by information on how to order both of them.

#### **PRESCHOOL**

Policy Considerations Related to Early Childhood Special Education explores the issue of providing services to handicapped infants and preschool-age children and their families. The report: 1) reviews the literature relating to the benefits of early intervention, 2) describes the current status of state and federal policy, and 3) discusses considerations that are essential in framing a public policy, along with the fiscal ramifications of these considerations. The review of the literature notes that studies have shown the first three or four years of life to be the fastest period of human learning and development. The report states further that "the evidence clearly substantiates...that intervention during this early period of rapid development will more likely enhance the handicapped child's development than if delayed until the child is five or six years old. In fact, postponing intervention may result in the development of secondary handicapping conditions, such as emotional disturbance."

A number of federal programs provide direct assistance to states and localities that wish to serve the preschool-age handicapped population. The report notes, however, that there is no federal policy that assures comprehensive developmental services to all preschool handicapped children or their families. A 1980 study found that 46 states had some provisions for the education of exceptional children below the age of six. Since that year, at least four states have changed their laws to include younger handicapped children. For example, Texas lowered the age of eligibility to birth; New Jersey, to age three and to birth if funding permits; and Delaware, to age three.

The policy analysis included in this report explores five major factors found to influence the development of public policy governing services to very young handicapped children: 1) defining the population to be served, 2) delineating the scope of services to be provided, 3) designating the service provider, 4) determining whether the policy is to be mandatory or voluntary, and 5) identifying availability of funding and resources.

Smith, B.J. Policy considerations related to early childhood special education. Reston, Va.: The Council for Exceptional Children, 1982, 24 pp.

**LIMITED  
ENGLISH  
PROFICIENCY**

An Appropriate Education for Handicapped Children of Limited English Proficiency explores the issue of educating handicapped children who come from homes where languages other than English are relied upon for communication. Bilingual special education is defined as the use of the home language and culture along with English in a program of special instruction individually designed for the student. The authors review the available research on both regular and bilingual special education and conclude that children involved in learning environments which employ the use of two languages perform at a level equal to or higher than their monolingual counterparts. Included in the publication is an historical and legal overview of the topic, and discussions of significant issues in the provision of bilingual special education and of current requirements and policy options. Based on the historical and legal review, the report establishes that handicapped students who are of limited English proficiency have the right to participate in bilingual education programs. The report discusses a number of factors influencing this participation: accessibility, resources, costs, personnel preparation, parental and community support, and program evaluation.

Baca, L. and J. Bransford. An appropriate education for handicapped children of limited English proficiency. Reston, Va.: The Council for Exceptional Children, 1982, 25 pp.

Each report is available for \$4.00 (\$3.40 CEC members) from the ERIC Clearinghouse on Handicapped and Gifted Children, Council for Exceptional Children, 1920 Association Drive, Reston, VA 22091.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

**RESEARCH & RESOURCES ON SPECIAL EDUCATION  
NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION**

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000



# RESEARCH & RESOURCES ON SPECIAL EDUCATION

ABSTRACT XIV  
AUGUST 1984

## PRESCHOOL

Three short, helpful publications on early childhood special education are available from the Technical Assistance Development System (TADS). The first is a basic primer on information and resources, the second describes the process for state planning, and the third booklet covers methods for affecting state legislation.

All three publications are available from TADS, 500 NCNB Plaza, Chapel Hill, N.C. 27514; (919) 962-2001.

An Early Childhood Special Education Primer provides a condensation of facts, research findings, and comparative data. The information is brief but authoritative, covering rationales for preschool special education, the handicaps for which help is available, federally-funded services, and many resources for further information. The primer uses a question and answer format for concise presentation of the data, discussing questions such as: Does early education work? How are services made available in the states? Who is responsible for seeing that handicapped children receive services? Informative charts provide comparison data on state and federal policies and programs, and the primer also includes resource lists and a bibliography.

Cooper, J.H. An early childhood special education primer (ED Contract No. 300-80-0752). Chapel Hill, N.C.: Technical Assistance Development System, Summer 1981, 23 pp., \$2.50.

A Framework for Statewide Planning is a booklet that describes a step-by-step process for managing the complex provision of comprehensive services to young handicapped children. Such services are multi-phased and arise from multiple sources. The booklet breaks down the complexity into sequential decisions that can lead to accurate plans. The planning process has been tailored to serve early special education goals, but is applicable to thorough planning for other objectives as well. Three interactive phases -- preplanning, plan development, and implementation -- are described in terms of key steps. For example, the key steps described in the preplanning phase are 1) identification of issues, 2) analysis of issues, 3) constraints and resources, 4) administrative commitment, and 5) identification of participants. A graphic chart is included that illustrates the interrelationship of all elements.

TADS, WESTAR, SEP, and NASDSE. A framework for statewide planning (ED Contract No. 300-80-0753). Seattle: Western States Technical Assistance Resources, 1982, 19 pp., \$1.00.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

Affecting State Legislation for Handicapped Preschoolers is a review of the process of influencing state legislation in a given area, and of the content of arguments in favor of public-supported preschool education for handicapped children. Those arguments are built upon documented need as well as evidence of effectiveness of early intervention. The report offers "a recipe for early childhood state legislation." The author emphasizes that personnel at the SEA are in the best position to coordinate an effort to ensure that handicapped children are served from birth. Such legislation now exists in eight states. Other state mandates range from requiring localities to provide services to all handicapped children from a specified age, to mandates for only certain types of handicap. But in states without public policy, there may be no services at all.

The author reviews policy issues such as population definition. She notes, for example, that a clear definition of the target population, addressing both age and condition, can help to assure identification and access to services. A further population issue for policymakers is that of preventive services, e.g., whether or not to include high-risk infants and children. In addition to the obvious implications for scope, cost and feasibility -- the more broadly the population is defined, the more costly the program -- the author urges policymakers to also keep in mind the cost benefit factor. That is, the more children reached at the earliest stage of intervention, the greater the ultimate economic savings. Other policy issues discussed include delineation of services, agency responsibility, and fiscal and personnel resources.

Smith, B.J. Affecting state legislation for handicapped preschoolers (ED Contract No. 300-82-0369). Chapel Hill, N.C.: Technical Assistance Development System, March 1983, 14 pp. - \$2.50.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

## RESEARCH & RESOURCES ON SPECIAL EDUCATION

NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION

701 N. Fairfax Street, Suite 340

Alexandria, VA 22314

(703)684-4000



**TECHNOLOGY** Microcomputers in the Schools -- Implementation in Special Education is the final Case Study Report of a research project sponsored by the U.S. Department of Education, Special Education Programs. The project was designed to investigate salient aspects of microcomputer use in twelve school districts across the country. The document is divided into two major sections: an overview of organizational and administrative issues which were common across the school districts; and a series of twelve individual case study reports. The case studies examine issues on a district-by-district basis. The following summary identifies the four major issues, and highlights broad findings and implications for education policymakers.

**ISSUE 1:** What was the type and extent of the collaboration between regular and special education in the use of microcomputers?

- Collaboration between regular and special educators during the initial planning and adoption of the microcomputer systems was not a requirement for subsequent collaboration in the school districts studied.
- Identical or similar microcomputers were used, with reported success, by both regular and special educators. Microcomputer applications with some special education populations (e.g., severely handicapped) may require some special adaptations, but the majority of students labeled handicapped can benefit from the generally sound instructional procedures (e.g., consistency and individualization) also favored by regular educators for their students.

**ISSUE 2:** What type of decision-making process (e.g., decentralized, or building/classroom control; or centralized, district control) is most advantageous during microcomputer adoption and implementation?

- Neither centralized nor decentralized patterns appear to have clear advantages or disadvantages under all circumstances; rather, other factors may be more important to the growth and utilization of the microcomputers.
- Regardless of the decision-making pattern, successful microcomputer implementation tended to depend on support from two different levels: someone with teaching experience and skill to assure appropriate integration within the classroom; and someone who has some control over administrative resources to rearrange the necessary administrative procedures.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

**ISSUE 3:** Do administrative applications of the microcomputers complement or compete with instructional uses?

- Administrative and instructional applications may be complementary, as districts with only one application have not grown or expanded as rapidly as systems with both uses.

**ISSUE 4:** What training is occurring in the use of microcomputers and what roles are emerging to foster the use of this technology?

- Techniques and knowledge required to use the microcomputers did not differ between regular and special education users. District training which emphasized immediate concerns such as basic orientation to microcomputers and direct applications in the classroom were most popular.
- The level of training provided to district personnel may predict the level of growth of the microcomputer system. Major training opportunities appeared to go hand-in-hand with steadily growing microcomputer systems.

The text is supplemented by extensive tables which provide specific district data on topics such as the content of in-service programs, and the chronologies of microcomputer implementation.

SRA Technologies, Inc., & Cosmos Corporation. Microcomputers in the schools -- Implementation in special education. Case study report (ED Contract No. 300-82-0250). Arlington, Va.: Author, 1983, 256 pp. Available for \$19.65 plus shipping, from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 823-0500; order ED #238222.

---

NASBE's Special Education Dissemination Project is designed to provide policymakers with information about four areas of special education: technology, finance, legal considerations and program evaluation. NASBE welcomes information on special education research and/or practice which has been developed through state and local efforts. The project is funded by Special Education Programs, U.S. Department of Education.

---

**RESEARCH & RESOURCES ON SPECIAL EDUCATION**  
**NATIONAL ASSOCIATION OF STATE BOARDS OF EDUCATION**  
701 N. Fairfax Street, Suite 340  
Alexandria, VA 22314  
(703)684-4000

**Appendix D**

**Policymaker Special Education Bibliography**

**RESEARCH AND RESOURCES ON SPECIAL EDUCATION:  
AN ANNOTATED BIBLIOGRAPHY**

**FINANCE**

Augenblick, J., & Van de Water, G. State Support for Education: 1982-83. Denver: AVA, Inc., 1983, 40 pp., \$15.00. A valuable source of comparisons on state support for elementary/secondary and higher education, with which analyses of state special education funding can be made more efficiently. Available from AVA, Inc., P.O. Box 20276, Denver, CO 80220; (303) 832-3444.

Chambers, J.G., & Hartman, W.T. A Cost-Based Approach to the Funding of Educational Programs: An Application to Special Education. Stanford, Calif.: Institute for Research on Educational Finance and Governance, Stanford University, April 1982, 74 pp., \$3.00. A description of a conceptual framework for improving school finance equity and the distribution of funds for special education. Available from I.F.G., CERAS Bldg., Stanford University, Stanford, CA 94305; (415) 497-0957.

Hartman, W.T. Policy Effects of Special Education Funding Formulas (Program Report No. 80-B1). Stanford, California: Institute for Research on Educational Finance and Governance, Stanford University, 35 pp., \$2.00. An analysis of programmatic and management considerations relating to major approaches to special education funding. Available from I.F.G., CERAS Bldg., Stanford University, Stanford, CA 94305; (415) 497-0957.

McGuire, C.K. State and Federal Programs for Special Student Populations. Denver: Education Commission of the States, Report No. F82-2, April 1982, 72 pp., \$4.00. A booklet reviewing federal and state involvement in compensatory, bilingual and special education programs. Available from the ECS Distribution Center, Suite 300, 1860 Lincoln Street, Denver, CO 80295; (303) 861-3600.

Moore, M.T., Walker, L.J., & Holland, R.P. Finetuning Special Education Finance: A Guide for State Policymakers. Washington, D.C.: Educational Testing Service, 1982, 122 pp., \$3.50. A description of different state funding approaches with a synthesis of available research and legal information. Available from E.T.S., 1825 Eye Street, N.W., Suite 475, Washington, DC 20006; (202) 659-0620.

National Association of State Boards of Education. Financing Free and Appropriate Education for Special Needs Children. Alexandria, Va.: Author, 1984. An issue brief highlighting selected recommendations of The 1983 Report of the Commission on the Financing of a Free and Appropriate Education for Special Needs Children. Available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 823-0500.

National Association of State Boards of Education. Financing Free and Appropriate Public Education for Handicapped Students. Alexandria, Va.: Author, 1983. An issue brief reviewing the cost of special education, how states distribute funds for special education, and the incentives and disincentives of various funding formulas. Available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 823-0500.

Thomas, M.A., & Reese, S.J. Making Programmatic Decisions During a Time of Fiscal Retrenchment: The Case of Related Services for Handicapped Youth. Santa Monica, Calif.: Rand Corporation, 1982, 52 pp., \$7.50. A study based on interviews conducted in 16 states, outlining problems in delivering required special education services, and strategies used by states for solving these problems. Available from Publications Department, Rand Corporation, 1700 Main Street, Santa Monica, CA 90406; (213) 393-0411.

The Report from the Commission on the Financing of a Free and Appropriate Education for Special Needs Children. Philadelphia, Penna.: Research for Better Schools, March, 1983, 39 pp., \$6.75. A practical report offering recommendations and strategies for making better use of existing resources. Available from R.B.S., 444 North Third Street, Philadelphia, PA 19123; (215) 574-9300.

#### LEAST RESTRICTIVE ENVIRONMENT

JWK International Corporation. Administrator's Handbook on Integrating America's Mildly Handicapped Students. Reston, Va.: Council for Exceptional Children, 1982, 155 pp., \$15.50. A description of successful, field-based strategies for serving handicapped students in the least restrictive environment. Available from C.E.C., 1920 Association Drive, Reston, VA 22091; (703) 620-3660.

Madden, N.A., & Slavin, R.E. Count Me In: Academic Achievement and Social Outcomes of Mainstreaming Students with Mild Academic Handicaps. Baltimore: Johns Hopkins University, 1982, 77 pp., \$3.00. A report comparing research on a variety of placements, and on classroom interventions such as social skills training, cooperative learning, and individualized instruction. Available from the Center for Social Organization of Schools, Johns Hopkins University, 3505 N. Charles Street, Baltimore, MD 21218; (301) 338-7570.

National Association of State Boards of Education. Least Restrictive Environment. Alexandria, Va.: Author, 1984. An issue brief exploring the mandate to place handicapped students in classes with non-handicapped to the maximum extent appropriate, addressing what the research has shown, how the LRE is determined, and how school districts have successfully implemented the LRE provision. Available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 823-0500.

## LEGAL CONSIDERATIONS

Citron, C. The Rights of Handicapped Students. Denver: Education Commission of the States, September 1982, 124 pp., \$6.00. A comprehensive resource on the education rights of handicapped children, with tables comparing state statutory provisions. Available from the Distribution Center, E.C.S., 1860 Lincoln Street, Suite 300, Denver, CO 80295; (303) 830-3600.

Cressey, J., & Padilla, C. Minimal Competency Testing and Special Education Students: A Technical Assistance Guide (ED Contract No. 300-78-0030). Menlo Park, Calif.: SRI International, 17 pp., \$2.15 plus shipping. A discussion of conceptual, legal and budgetary considerations in establishing competency testing programs for handicapped students. Available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 841-1212; order ED# 217685.

Goldberg, S.S. Special Education Law: A Guide for Parents, Advocates, and Educators. New York: Plenum Press, 1982, 229 pp., \$24.50. A lawyer's review for the layman of laws, regulations and court cases affecting special education practice, including a chapter on major legal issues. Available from Plenum Publishing Corporation, 233 Spring Street, New York, NY 10013; (212) 620-8000.

Hill, P.T., & Madey, D.L. Educational Policymaking Through the Civil Justice System. Santa Monica, Calif.: Rand Corporation, The Institute for Civil Justice, 1982, 34 pp., \$8.00. An analysis of the use of the civil justice system to determine the distribution of public services, using P.L. 94-142 as the focus. Available from Publications Department, Rand Corporation, 1700 Main Street, Santa Monica, CA 90406; (213) 393-0411.

Sheeran, T.J. Legal Aspects of the Education of the Handicapped: A Primer for Members of Boards of Education. Westerville: Ohio School Boards Association, 1983, 47 pp., \$5.00. An introduction to legal issues regarding special education, relating each to court decisions in the state for which the booklet was developed. Available from the O.S.B.A., P.O. Box 231, Westerville, OH 43081; (614) 891-6466.

Turnbull, H.R., & Fiedler, C.R. Judicial Interpretation of the Education for All Handicapped Children Act. Reston, Va.: The Council for Exceptional Children, 1984, 28 pp., \$6.00. A summary of current judicial interpretations of major policy and implementation issues stemming from P.L. 94-142. Available from CEC, 1920 Association Drive, Reston, VA 22091; (703) 620-3660.

## LIMITED ENGLISH PROFICIENCY

Baca, L., & Bransford, J. An Appropriate Education for Handicapped Children of Limited English Proficiency. Reston, Va.: The Council for Exceptional Children, 1982, 25 pp., \$4.00. A review of available research, a historical and legal overview, and a discussion of issues, requirements, and policy options. Available from C.E.C., 1920 Association Drive, Reston, VA 22091; (703) 620-3660.

## MONITORING

Farrow, F., & Rogers, C. Volume one of the four volume A Report of The Handicapped Public Policy Analysis Project, Volumes 1-4 (ED Contract No. 300-82-0829). Washington, D.C.: The Center for the Study of Social Policy, October 1983, pp., free. A four-volume report on effective policies that describes specific state and local activities regarding interagency collaboration, related services, least restrictive placements, and monitoring. Available from The Center for the Study of Social Policy, 236 Massachusetts Avenue, N.E., Washington, DC 20002; (202) 546-5062.

## POLICY

Chambers, J.G., & Hartman, W.T. (Eds.) Special Education Policies: Their History, Implementation, and Finance. Philadelphia: Temple University Press, 1983, 291 pp., \$34.95. A collection of nine essays on special education written from the perspectives of finance, politics, organization, law and history. Available from Temple University Press, Broad and Oxford Streets, USB 306, Philadelphia, PA 19122; (215) 787-8787.

Division of Educational Services, Special Education Programs. Sixth Annual Report to Congress on the Implementation of Public Law 94-142: The Education for All Handicapped Children Act. Washington, D.C.: U.S. Department of Education and U.S. Office of Special Education and Rehabilitative Services, 232 pp., free. An examination of the progress being made in implementing the Act and in meeting its goals. Available from Research Projects Branch, 3076 Switzer Building, Washington, DC 20202; (202) 732-1064.

## PRE-SCHOOL

Anderson, J., & Black, T. (Eds.) Mainstreaming in Early Education (ED Contract No. 300-82-0369). Chapel Hill, N.C.: Technical Assistance Development System, March 1983, 83 pp., \$7.50. A conference report focusing on issues in programming, personnel training, handicapped children's characteristics, and family concerns. Available from T.A.D.S., 500 NCNB Plaza, Chapel Hill, NC 27514; (919) 962-2001.

Cooper, J.H. An Early Childhood Special Education Primer (ED Contract No. 300-80-0752). Chapel Hill, N.C.: Technical Assistance Development System, Summer 1981, 23 pp., \$2.50. A condensation of facts, research findings and federal and state data, presented in a question-and-answer format. Available from T.A.D.S., 500 NCNB Plaza, Chapel Hill, NC 27514; (919) 962-2001.

McNulty, B.A., Smith, B., & Soper, E.W. Effectiveness of Early Special Education for Handicapped Children. Denver: Colorado Department of Education, 1983, 32 pp., free. A review of national and Colorado SEA research into whether preschool special education programs are a sound investment both developmentally and economically. Available from the Colorado Department of Education, 303 W. Colfax, Denver, CO 80204; (303) 534-8871.

National Association of State Boards of Education. Preschool Special Education. Alexandria, Va.: Author, 1984. An issue brief which addresses the effectiveness of special education for young children, the ways in which states are educating handicapped infants, toddlers and older preschoolers, and key implications for education policymakers. Available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 823-0500.

Smith, B.J. Affecting State Legislation for Handicapped Preschoolers (ED Contract No. 300-82-0369). Chapel Hill, N.C.: Technical Assistance Development System, March 1983, 14 pp., \$2.50. A review of the process of influencing state legislation, and of the arguments in favor of publicly-supported preschool for handicapped children. Available from T.A.D.S., 500 NCNB Plaza, Chapel Hill, NC 27514; (919) 962-2001.

Smith, B.J. Policy Considerations Related to Early Childhood Special Education. Reston, Va.: The Council for Exceptional Children, 1982, 24 pp., \$4.00. A review of the literature, the status of state and federal policy, and the implications of crucial policy decisions. Available from C.E.C., 1920 Association Drive, Reston, VA 22091; (703) 620-3660.

Technical Assistance Development System. A Framework for Statewide Planning (ED Contract No. 300-80-0753). Seattle: Western States Technical Assistance Resources, 1982, 19 pp., \$1.00. A short, step-by-step guide to planning for services to young handicapped children. Available from T.A.D.S., 500 NCNB Plaza, Chapel Hill, NC 27514; (919) 962-2001.

## PROGRAM EVALUATION

Associates in Professional Technologies, Inc. Special Education Program Evaluation: A Management Tool. Quincy: Massachusetts Department of Education, 1981, 114 pp., free. A state level evaluation handbook designed to be photocopied and used by other state agencies. Available from the Division of Special Education, Massachusetts Department of Education, 1385 Hancock Street, Quincy, MA 01269; (617) 770-7500.

Center for Public Affairs, University of Kansas. Policy Studies Review, 2, Special No. 1, 1983, 263 pp., \$3.00. A special journal issue devoted to a 1981 symposium on special education policy. Available from the Policy Studies Organization, 361 Lincoln Hall, 702 South Wright, University of Illinois, Urbana, IL 61801; (217) 333-1000.

Mattick, I., & Perkins, F.J. Observation Guidelines for Day Care Centers. Washington, D.C.: The Day Care and Child Development Council of America, 1974, 28 pp., \$4.00. A comprehensive checklist for evaluating a preschool (for 2½ to 6 year olds); not specifically geared for special education, but offers valuable indicators. Available from the National Association of State Boards of Education, 701 N. Fairfax Street, Alexandria, VA 22314; (703) 684-4000.

National Association of State Boards of Education. Program Evaluation for Special Education. Alexandria, Va.: Author, 1984. An issue brief exploring the meaning of program evaluation, how states are helping local districts assess and improve the quality of programming for handicapped children, and the essential ingredients of an adequate evaluation. Available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 823-0500.

## TECHNOLOGY

Education TURNKEY Systems. Microcomputers in Special Education, Telecommunications in Special Education, Videodiscs in Special Education, and Communication Aids in Special Education. Falls Church, Va.: Education TURNKEY Systems, Inc. April, 1983. A series of four reports on the application of technology to special education. Available from ERIC Document Reproduction Service, 3030 N. Fairfax Drive, Suite 200, Arlington, VA 22201; (703) 823-0500. For Microcomputers, 28 pp., \$3.90 + shipping, order ED #231175; for Telecommunications, 19 pp., \$2.15 + shipping, order ED #231176; for Videodisks, 20 pp., \$2.15 + shipping, order ED #231177; and for Communication Aids, 21 pp., \$2.15 + shipping, order ED #231178.

Engstrom, K. A Guide to the Use of Technology in Basic Skills Education. Belmont, Mass.: CRC Education and Human Development, Inc., August 1981, 69 pp., free. A "how-to" report on instructional uses of computers, videodiscs, TV, film, calculators and other technologies applicable to both general and special education. Available from Division of Technology Resource Assessment and Development, U.S. Department of Education, 1200 -19th Street, N.W., Room 708C, Washington, DC 20208; (202) 254-5856.

Hanley, T.V. Microcomputer Software in Special Education: Selection and Management (ED Contract No. 300-82-0250). Arlington, Va.: SRA Technologies, 1984, 25 pp., \$2.15 + shipping. A study of 12 school districts that use computers to serve handicapped students, focusing on organizational issues and instructional applications. Available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 823-0500; order ED #242121.

Jones, N.B., & Vaughn, L. (Eds.) Evaluation of Educational Software: A Guide to Guides (NIE G-82-0017 and NIE 400-80-0107). Chelmsford, Mass.: Northeast Regional Exchange, 1983, 96 pp., \$6.50. A guide to judging and categorizing software, including 10 major models for evaluation, sample reviews, and resource lists. Available from NEREX, 101 Mill Road, Chelmsford, MA 01824; (617) 256-3987.

Metzger, M., Ouellette, D., & Thormann, J. Learning Disabled Students and Computers: A Teacher's Guidebook. Eugene, Ore.: International Council for Computers in Education, January 1983, 48 pp., \$2.50. A guide to microcomputers as "powerful, dependable, and efficient aids" to meeting the needs of learning disabled children. Available from I.C.C.E., 135 Education, University of Oregon, Eugene, OR 97403; (503) 686-4414.

National Association of State Boards of Education. What Can Computer Technology Offer Special Education? Alexandria, Va.: Author, 1983. An overview of the uses of computer technology, addressing issues such as the impact computers are having on teaching and administrative processes, and problems to be addressed in accommodating computers in a special education setting. Available from ERIC Document Reproduction Service, P.O. Box 190, Arlington, VA 22210; (703) 823-0500.

Nave, G., Browning, P., & Carter, J. Computer Technology for the Handicapped in Special Education and Rehabilitation: A Resource Guide. Eugene, Ore.: International Council for Computers in Education, 1983, 190 pp., \$7.00. An annotated bibliography of almost 200 books and articles on recent technological developments. Available from the I.C.C.E., 135 Education, University of Oregon, Eugene, OR 97403; (503) 686-4414.

SRA Technologies, & Cosmos Corporation. Microcomputers in the Schools  
-- Implementation in Special Education. Case Study Report (ED Contract No. 300-  
82-0250). Arlington, Va.: SRA Technologies, 1983, 256 pp., \$19.65 + shipping.  
A comprehensive report on research investigating salient aspects of  
microcomputers uses in 12 school districts. Available from ERIC Document  
Reproduction Service, 3030 N. Fairfax Drive, Suite 200, Arlington, VA 22201;  
(703) 823-0500; order ED# 238222.

**Appendix E**  
**Issue Briefs**

## WHAT CAN COMPUTER TECHNOLOGY OFFER SPECIAL EDUCATION?

Over the past ten years, educational services for and related to handicapped children have increased dramatically. These services involve a myriad of federal, state and local laws, regulations, policies and procedures. Computer technology, especially the lower-cost microcomputer, is gaining widespread acceptance as an important tool for delivering instruction and for managing and reporting special education information.

States are thwarted from achieving the full potential of computer technology in special education by an array of organizational, human and technical factors. Foremost among these is the lack of understanding of the possibilities and limitations of computer technology. The role of such information is becoming increasingly important. Policy-makers need to know:

- WHAT BENEFITS CAN WE EXPECT FOR SPECIAL EDUCATION FROM THE USE OF THE COMPUTER?
- WHAT IMPACT ARE COMPUTERS HAVING ON THE TEACHING AND ADMINISTRATIVE PROCESSES IN SPECIAL EDUCATION?
- WHAT ISSUES WILL WE HAVE TO ADDRESS IN ACCOMMODATING THE COMPUTER?

This brief addresses such questions made increasingly urgent by the popularity and complexity of the special education-computer technology interface.

## THE CONTEXT OF THE "COMPUTER REVOLUTION" IN SPECIAL EDUCATION

As the delivery of special education services has become more complex, the management and information needs of educational policymakers have expanded significantly. Increased government funding for and public interest in special education has led to mounting pressure for program accountability.

Computers are gaining widespread acceptance as one of the most cost-efficient ways to meet these needs. Recent statistics reinforce both the opportunity and the need for such applications:

- Since 1976, the cost of educating handicapped students has increased 50 percent — from \$4.6 to \$6.5 billion.
- Expenditures for instructional and related service equipment and materials per handicapped student are 60 percent more than for a nonhandicapped student — \$83 per student versus \$51 per student.
- Administrative/overhead costs of "processing" special education students are approximately 150 percent more than for regular education students — \$500 versus \$200 per pupil per year. Assessment and IEP development costs range from \$200 to \$300 per handicapped child for the approximately four million IEPs prepared yearly.
- Special education teachers perceive the need for new media formats and manipulative approaches which Computer Assisted Instruction (CAI) can meet. A 1978 survey of 30,000 special education teachers found that for every one teacher of students using CAI, five additional teachers perceived the need for CAI.
- Two recent surveys show that 42 percent of the nation's 16,000 school districts have one or more microcomputers. It is predicted that 90 percent of all schools will provide access to computers for instructional use by 1985 (Education TURNKEY, 1982).

Three types of microcomputer applications are emerging in special education:

- (1) Computer-Assisted Instruction (CAI), which includes a range of academic subject areas and computer usages (e.g., drill and practice) in which the student interacts directly with the computer.
- (2) Computer-Managed Instruction (CMI), which includes a variety of applications ranging from diagnosis/prescription and instructional management to record keeping and tracking related to procedural safeguards (e.g., IEPs).
- (3) Computer Support Activities (CSA), which include applications such as test scoring and analysis, report writing and statistical analysis.

What problems and possibilities emerge when the cost and complexity of special education programs are juxtaposed with the expanding capacities of the microcomputer? Read on....

## APPLIED COMPUTER TECHNOLOGY: LEA AND SEA APPLICATIONS IN SPECIAL EDUCATION

The following descriptions of microcomputer systems in special education exemplify a range of current computer capabilities and applications.

### LEA APPLICATIONS

- The Monitor microcomputer system, developed by Utah State University for the Intertribal Indian School provides PL 94-142 compliance monitoring and generates a variety of reports on the school's status in meeting regulatory requirements.

### REFERENCES

Thorkildsen, R. and Williams, J. Handicapped and Special Education. In Computer Education for Elementary and Secondary Schools. Washington, D.C.: SIGCSE and SIGCUE, Association for Computing Machinery, 1981.

Thorkildsen, R., Hofmeister, A. and Erlacher, J.L. ADP Needs Assessment and the Intermountain Intertribal Indian School. Washington, D.C.: Bureau of Indian Affairs, 1980.

- The Micro Planner Administrative Planning System developed by Learning Tools, Inc., Brookline, Massachusetts, can be used on the Apple II and other microcomputers. The System is designed to provide due process child tracking, standardized program and demographic reporting, and a "what if" analysis package to project costs and services. Micro Planner includes a telecommunications capability to directly transfer reports and share curriculum information between computers. It is reported to provide an integrated system for managing and transferring information from the school to the local administrative office, to higher intermediate and state administrative units.

### REFERENCE

Beinashowitz, J. Microplanner System Reference Manual. Brookline, Massachusetts: Learning Tools, Inc., 1980.

- Project Recipe, developed by Sarasota County Schools, Florida, is intended to provide computer-based management of instructional programs for exceptional students. It matches test results with student goals and objectives and provides a variety of IEP and related progress reports. It is accessed from terminals in schools connected to a large computer; the primary users are resource teachers working with students receiving less than 12 hours of special education per week.

### REFERENCE

Wilson, K. Managing the Administrative Morass of Special Needs, Classroom Computer News, 1981 1 (1), 5-8.

\* \* \* \* \*  
FOR AN EXTENDED LISTING OF SPECIAL EDUCATION MANAGEMENT SYSTEMS  
IN OVER 40 STATES, SEND \$2.50 TO LEARNING TOOLS, INC., 4 WASHBURN  
PLACE, BROOKLINE, MASSACHUSETTS 02146  
\* \* \* \* \*

---

## SEA APPLICATIONS

- Colorado's Information System was developed primarily to meet state reporting requirements mandated by the Colorado Handicapped Children's Education Act. The System is composed of five sub-systems that provide information on: (1) cost (e.g., prior year, current and one-year projection); (2) pupils (e.g., individual and aggregate, including numbers of students referred, assessed, placed, and awaiting placement, as well as projected counts of students to be served, by handicapping condition); (3) staff (e.g., estimated and projected staff FTE, and salaries by handicapping condition and current and projected costs for salaries, benefits, and support services); and (5) "consolidated" summaries of the sub-systems. The special education information system is reported to effectively meet all state and almost all federal updating requirements.

### REFERENCE

Peter Fanning, Director of Pupil Services Unit, Colorado State Department of Education, 201 Colfax Avenue, #523, Denver, Colorado 80203

- Florida's centralized education management information system was mandated by state legislation in 1973. There are six major data bases in the total education system: (1) student (e.g., FTE hours by special education program, by grade and school, time spent in program, and by program); (2) staff (e.g., special education roster, personnel projections by type of personnel handicapping area); (3) finance (e.g., financial data by handicapping program category); (4) facility; (5) community; and (6) programs. A detailed cost accounting system makes possible comparisons among districts and between cost and funding allocations to allow better understanding of relative efficiency and funding needs.

### REFERENCE

Ed Allen, Director of Management Information Services, Florida State Department of Education, Capital Building Room PL 116, Tallahassee, Florida 32301.

- New Hampshire's special education information system (SPEDIS) is a result of cooperation of local districts, the Office of Special Education, an outside computer programming consultant and the New Hampshire Central Data Processing Agency. SPEDIS is primarily a child-based system. It defines the child's needs and reports what services the child is receiving. The system includes data in four categories: (1) student (e.g., personal identification data, disability evaluations, consent and discharge statements); (2) personnel (e.g., resume information related to special education pupil placement team members); (3) financial considerations (e.g., funding eligibility status, in-district and out-of-district costs); and (4) buildings and facilities (e.g., facility identification services provided). Information in SPEDIS satisfies requirements of the federal government as well as the needs of the local districts.

## ADMINISTRATIVE APPLICATIONS: WHAT CAN BE DONE?

Tables 1 and 2 on the reverse side provide examples of the range of administrative information capabilities of the microcomputer in regular and special education. The application of such information to the specific organizational and technical requirements of a special education system can:

- provide increased knowledge about a range of special education programs at a time when administrators and policymakers are increasingly removed from daily operations;
- identify problem areas such as due process reporting where technical assistance may be needed;
- communicate problem areas and success stories to districts, state officials, legislatures and to the public;
- assist administrators in complying with new and revised state and federal laws and regulations; and
- meet reporting requirements more efficiently and cost-effectively.

\* \* \* \* \*

### REFERENCES

Joiner, L.M., Sedlak, R.A., Silverstein, B.J. and Vensel, G. Microcomputers: An Available Technology for Special Education. Journal of Special Education Technology, Winter, 1980, 3 (2), 37-42.

Rawitch, D.G. Minnesota's Statewide Push for Computer Literacy. Instructional Innovator, February, 1982, 27 (2), 34-35.

Wilson, K. Computers for Special Education Management: Progress, Potential and Pitfalls. Hot Topics Paper. Reston, Virginia: The ERIC Clearinghouse on Handicapped and Gifted Children, 1981.

\* \* \* \* \*

**TABLE 1**  
**STANDARD APPLICATIONS OF COMPUTER TECHNOLOGY**  
**IN EDUCATIONAL ADMINISTRATION**

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>● Class scheduling</li> <li>● Grade reporting</li> <li>● Test scoring</li> <li>● Attendance</li> <li>● Personnel record-keeping</li> <li>● Accounting for income, expenses, and balance sheet accounts</li> <li>● Accounts payable</li> </ul> | <ul style="list-style-type: none"> <li>● Billing for tuition, therapy and transportation</li> <li>● Payroll</li> <li>● Budget planning and reporting</li> <li>● Inventory</li> <li>● Word processing for correspondence and proposal preparation</li> <li>● Generalized data base management</li> </ul> |
|--|---|
- 

**TABLE 2**  
**SPECIFIC APPLICATIONS OF COMPUTER TECHNOLOGY**  
**IN SPECIAL EDUCATION ADMINISTRATION**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>● Counts of students screened, assessed, placed and reviewed</li> <li>● Reimbursement computation according to state and federal formulas</li> <li>● Generalization of standard local, state and federal reports</li> <li>● Reports of students' due process status and compliance with PL 94-142</li> <li>● Child counts cross-referenced by class, teachers, school and handicap</li> <li>● Reports on student achievement and evaluation status</li> <li>● Detailed records and summaries of diagnostic testing</li> </ul> | <ul style="list-style-type: none"> <li>● Personalized mailings to parents re IEP meetings and review</li> <li>● Audit trails for program placement and review</li> <li>● Interactive creation of IEP goals and objectives from curriculum files</li> <li>● Generation of quarterly student reports</li> <li>● Electronic mail</li> <li>● Reminders when notices are due or should be sent</li> <li>● Interactive access to related service information such as transportation</li> </ul> |
|--|--|
-

**REFERENCE**

Paul Lapesquer, Director of the Special Education Information System, New Hampshire State Department of Education, 410 State House Annex, Concord, New Hampshire 03301

\*\*\*\*\*  
FOR MORE INFORMATION ON STATE AND LOCAL EDUCATION AGENCY USES OF COMPUTER TECHNOLOGY IN SPECIAL EDUCATION, SEE: SPECIAL EDUCATION MANAGEMENT BY INFORMATION: A RESOURCE GUIDE. DISTRIBUTED BY NATIONAL ASSOCIATION OF STATE DIRECTORS OF SPECIAL EDUCATION, 1201 16TH STREET, N.W., WASHINGTON, D.C. 20036 \$4.00 PER COPY.

\*\*\*\*\*

---

**TECHNOLOGY PERIODICALS AND  
SPECIAL EDUCATION PROGRAM (SEP) PROJECTS  
AN ANNOTATED BIBLIOGRAPHY**

**PERIODICALS**

**AEDS Journal**  
1201 16th Street, N.W.  
Washington, D.C. 20036

Published quarterly  
Subscription - \$25.00  
Membership - \$30.00

The journal is a publication of the Association for Educational Data Systems. Articles focus on original research, projects and theoretical or conceptual positions related to the field of educational computing.

**Bulletin on Science & Technology  
for the Handicapped**  
American Association for the  
Advancement of Science  
1515 Massachusetts Avenue, N.W.  
Washington, D.C. 20005

Published quarterly  
Free

The Bulletin reports on workshops; current research supported by federal, state, local and foundation funding; new products; and resource lists.

**Educational Technology**  
140 Sylvan Avenue  
Englewood Cliffs, NJ 07632

Published monthly  
Subscription - \$49.00

Educational Technology is a professional journal for educators. It covers all types of educational technology and includes product and book reviews.

**Electronic Education**  
1311 Executive Center Drive  
Suite 220  
Tallahassee, FL 32304

Published 10 times per year  
Subscription - \$10.00  
\$2.00 per issue

This publication carries articles on computer literacy, technological innovations, and funding opportunities. The audience includes teachers, administrators, and media specialists. One issue each year is a Buyer's Guide to help educators make purchasing decisions.

Journal of Educational Technology  
Systems

Baywood Publishing Co., Inc.  
120 Marine Street  
Farmingdale, NY 11735

Published quarterly  
Subscription - \$51.00

The Journal of Educational Technology Systems is published by the Society for Applied Learning Technology (SALT). It focuses on techniques and approaches for using technology in all types of educational systems.

Journal of Special Education  
Technology

Exceptional Child Center  
Utah State University  
Logan, UT 84322

Published quarterly  
Subscription with  
membership - \$25.00

The Journal is a publication of the Association for Special Education Technology. Membership dues are \$25.00 per year and include the Journal and a newsletter.

T.H.E. Journal

Box 992  
Acton, MA 01720

Published bi-monthly  
Free on a limited basis  
Subscription - \$15.00

Technological Horizons in Education (T.H.E.) is the oldest periodical in the field of computer-assisted education. It covers the whole field of educational technology from computers to video-disc to audiovisual materials.

### PROJECTS FUNDED BY SPECIAL EDUCATION PROGRAMS

PROJECT EDUTECH is a dissemination project which provides technical assistance to state and local education agencies in the appropriate use of technology in special education. The project activities include the preparation of bibliographies, articles, reports, fact sheets and resource guides. For more information contact Susan Elting, Project Director, JWK International, 7617 Little River Turnpike, Annandale, Virginia 22203.

MICROCOMPUTERS IN THE SCHOOLS is a project which uses a case study approach to describe the issues and solutions schools have experienced in the use of microcomputers for special education and related services. Included among its related activities is the development of information packages for assisting LEA administrators. For more information, contact Tom Hanley, Project Director, SRA Corporation, Arlington, Virginia 22210.

Education TURNKEY's SpEd Tech project is intended to assess the potential of high technology applications for improving the quality and cost-effectiveness of special education. For more information, contact Charles Blaschke, Education TURNKEY Systems, Inc., 256 N. Washington Street, Falls Church, Virginia 22046-4549

## COMPUTER TECHNOLOGY: INSTRUCTIONAL APPLICATIONS AND ISSUES IN SPECIAL EDUCATION

### Instructional Applications

Four major categories of technology have instructional applications in special education: (1) microcomputers; (2) videodiscs; (3) telecommunications; and (4) communication aids. The following discussion focuses primarily on microcomputers, since their increasing technical capabilities and cost-effectiveness make them the most widely accessible of the technologies.

### Computer-Assisted Instruction (CAI)

The broad term for the application of microcomputers in instruction is Computer-Assisted Instruction (CAI), which encompasses various subject and computer usages in which the student interacts directly with the computer.

More specifically, CAI usages include:

- Drill and Practice, which reinforces skills already introduced in instruction. The program presents a question or problem; the student responds; the program indicates whether the answer is correct or incorrect; and the student moves on to the next item.
- Tutorial Dialogue, which presents information and concepts and monitors student progress. The program presents information or a question; the student responds; the program compares the response to the right answer and, in simple programs, either (a) branches to a remedial program, or (b) moves on to the next sequential piece of information. In more sophisticated programs called "intelligent" CAI, programs can actually model student understanding of a topic and provide a dialogue based on the assessment.
- Simulation and Games, which present information and concepts through simulated experience. The program presents a model of a "real life" situation and some alternative responses to the situation; the student tries out selected alternatives; the program provides feedback regarding the costs and benefits of the selected options.
- Computer Literacy/Programming, which presents a range of skills, from an awareness of how computers function and their impact on society to the application of basic programming skills. Students are exposed to computer applications and related information skills such as the importance of computer-related skills to different careers and the selection, running and evaluation of a program for a particular task. In addition, students may be taught programming, i.e., the actual writing of computer programs.

### Instructional Issues

- The computer format lends itself well to motivating special education students who may have academic and/or self concept problems. Computers can address students by name; positive reinforcement in the forms of flashing colors, words of praise, and cartoons can be built into software programs; difficult items can be color coded or programmed to flash a message if students hesitate on

answering for a determined amount of time: "This is a tough one! Keep trying, you can get it!"

- Students with learning problems sometimes respond either very quickly or slowly to verbal or written questions. The amount of time spent by students processing a sentence on a computer screen may vary according to word difficulty, type of information presented, size of the print and amount of extraneous material on the screen. Practice on the desired response via a computer that is programmed at first to a slow response rate then progressively increased speed can help slower students improve their response rate. Students who respond too quickly can be prompted, e.g., "Stop and think! Think before you answer," to encourage more reflective thinking.
- Immediate performance feedback is especially important for special education students. The computer program can provide an immediate response to either a correct or incorrect answer, as well as analyzing work patterns to determine the types of problems or applications which need extra review. In addition, the self-correcting format can encourage individual judgement and decision-making in a non-threatening context: e.g., "Do you want to try that one again?" "Do you think you need more practice?"
- Students with reading problems may experience difficulty when instructional commands vary from program to program. Printed commands need to be kept simple and consistent while the skills are being learned.
- Many students, especially handicapped students with fine motor coordination problems, cannot type. Unless they have instructions on the keyboard, they use the "hunt and peck" system which slows down their response rate and ties up computer time.
- Attention and discrimination problems, such as focusing on irrelevant information, are more common in students with learning problems. Many commercial programs exacerbate these problems with formats that use a number of single-spaced printed lines and extra words. For example, a student who is trying to read directions at the beginning of a program may become frustrated and distracted trying to read the name of the author or publisher of a program. Such difficulties can be reduced by careful editing, color-cueing, directive arrows and/or a box which highlights important information.
- Students with learning problems may have difficulty taking what is learned in one context and applying it to a new situation. Teachers cannot assume that students who can perform computer tasks such as filling in the missing letters in a spelling word, or choosing the correctly spelled word among distractor words can also generalize to pencil and paper spelling of the word. The computer is only one of the variety of teaching materials and situations needed to ensure skill acquisition and generalization.
- Students with learning problems may be perceived as less capable of and/or less interested in the more advanced tutorial, simulation and programming applications of the computer. Their access to such applications may thus be limited with negative ramifications for future career choices and societal participation. The level of CAI to which students have access must be determined on the basis of individual ability and interest, not on the basis of a "handicapped" label.

\* \* \* \* \*

REFERENCES:

Becker, B. Microcomputers in the Classroom -- Dreams and Realities. (Report No. 319) Baltimore, Maryland: Center for Social Organization of Schools, Johns Hopkins University, 1982.

Cleary, A., Mayes, T. and Packham, D. Education Technology: Implications for Early and Special Education. New York, New York: John Wiley and Sons, 1976.

Douglas, V.J. Higher Process in Hyperactive Children. In R.M. Knight and D.J. Bakker (eds.) Treatment of Hyperactive and Learning Disordered Children. Baltimore, Maryland: University Park Press, 1980.

Edgstrom, K. A Guide to the Use of Technology in Basic Skills Education. Belmont, Massachusetts: CRC Education and Human Development, Inc., 1981.

Morsund, D. School Administrator's Introduction to Instructional Use of Computers. LeGrande, Oregon: International Council for Computers, 1980.

Ragan A.L. The Miracle Worker: How Computers Help Handicapped Students. Electronic Learning, January/February, 1982, 1 (3), 57-58, 83.

\* \* \* \* \*

## COMPUTER TECHNOLOGY: IMPLEMENTATION ISSUES FOR POLICYMAKERS

The pivotal place of computer technology in today's information age makes a compelling argument for its inclusion in special education's repertoire of instructional and administrative tools. As with any tool, however, the application of computer technology raises issues related to: (1) the technical cost and capacities of the hardware and software; and (2) the human and organizational dynamics of its implementation. These issues are considered separately in the following section. However, it cannot be emphasized too strongly that in reality they are highly interdependent, i.e., the computer must be considered in context.

### Human and Organizational Issues

- The successful implementation of computer technology in special education requires consideration of factors such as:

(1) Resistance to Change.

The system of special education, like any bureaucracy, is difficult to change. For many, computer technology foreshadows radical change — in styles of learning, definitions of basic skills and even in the function of the class room as the locus of learning, and in the role of the teacher and the student. Well-timed, accurate information as well as on-going administrative support are critical to successfully overcoming the natural reluctance of many special educators toward computers in schools.

(2) The Political Context of Change.

Each school in the United States embodies a unique educational environment. Factors such as community support for computer technology, the number and type of handicapped students, computer hardware and software currently in place, access of handicapped students to computer resources and general level of education all shape this context in powerful ways. In addition, most districts are constrained by tight resources, raising questions such as who has access to existing computer technology and whether handicapped students ought to be given time and opportunities equal to other students. Clearly, such questions must be considered in terms of local constraints and resources.

(3) The Role of Participation.

Research on the early implementation of state and federal special education mandates indicates that special educators who were involved in the planning for the new programs and procedures were much more likely to "buy in" to their use and maintenance (Weatherly and Lipsky, 1978). Extrapolating from this research, special education teachers and administrators who have an active role in technology planning — such as the establishment of goals and expectations for computer applications in instruction — will have greater incentive to become informed about and stay on top of these issues. However, to be effective, the opinions and information solicited from participants must be used. Symbolic participation serves only to heighten feelings of antagonism and helplessness that can lead to subversion and non-use of the proposed change.

- Speaking the Language.

People who work with computers speak a technical language of bits and bytes, ram and ROM, CPUs and CRTs. These and other terms make up a technical shorthand commonly indistinguishable to anyone outside the computer field. It is imperative that special educators develop technical communications skills necessary to establish a speaking relationship with the computer professional, the general educators, and, conceivably, their own students. Another "special education-general education jargon gap" ill serves the needs of the students — or the education professionals it sometimes separates.

- Teacher Training.

Teachers who work with special education students must be trained both in the use of computers and in the evaluation and production of curricular programs and materials. Most special education teachers have no experience in applying computer technology to the needs of handicapped students, nor is there evidence that many teacher training institutions are providing such instruction to new teachers. How many teachers still count on their students to run the film projector?

Effective teacher training can occur in a variety of contexts such as the school or district computer center, the inservice or preservice training program, their classrooms and homes. The critical point is that for computers to be accepted by special education teachers as a useful part of the education process, teachers must understand WHEN and HOW computers have an advantage over other teaching devices.

- Role Changes.

As the advent of computer technology alters the nature and content of instruction, it also predicates changes in the roles of teacher and student. New roles are emerging including that of the "student buff." Students who have had academic problems may find in the computer a new format which is motivating and with which they have no history of failure. Further, many of these students may have access to a computer at home, and can be assisted by parents eager to help their child succeed at this new and highly publicized skill.

Special education teachers may find themselves re-shaping the instructional process as their role shifts from primary information provider to those of resource linker, instructional supervisor and software developer. Teachers and students alike will need support and perspective in shaping and responding to shifts in power, information and interactions.

- Applications.

Of the problems that inhibit the effective use of computers in special education, perhaps one of the most difficult to resolve is that involving inappropriate use. Lack of understanding about what computers can and cannot do leads to problems such as:

(1) Unrealistically High Expectations.

For example, without linkages to other systems, microcomputers have limited memories; buyers who are not aware of this limitation unrealistically expect their microcomputers to perform complex and sophisticated tasks. Generally speaking, implementation of any system involves problems and setbacks, and users should be prepared, both psychologically and practically, for the fact that technologies are not panaceas.

(2) Unnecessarily Narrow Applications.

Many educational applications of computers with handicapped students have erroneously mirrored techniques, such as programmed instruction, that are already in the repertoire of many special educators. Using computers for such purposes is not efficient since, for example, much programmed instruction may be learned just as effectively from workbooks.

Such applications mean that the full capabilities of computers are not being realized and their use as a tool for finding new ways to increasing program effectiveness and efficiency are not being creatively explored.

● Equity.

A growing number of educators are espousing the position that access to computers and computer training is further separating education's "haves" from its "have-nots." Already, the lack of involvement and/or low level involvement (e.g., drill and practice) of handicapped and other minority populations is well documented.

Issues such as the use of the computer to cut special education program costs must be balanced with consideration of the type of computer usage. Questions of differential access must be addressed in terms of both the number of computers available to special education students and the way in which they are used.

Technical Issues

● Acquisition of Appropriate Hardware.

Acquisition of computer hardware appropriate for special education instruction and management, and the efficient and effective application of such hardware is an ongoing concern for policymakers. The high estimates of microcomputer purchase indicate that such acquisition is occurring with exponential speed.

Of greater concern are questions such as: Does the hardware being purchased have the capacity to respond to the identified administrative and instructional needs of special education personnel? Is the pattern of acquisition being monitored to assure that special education students are provided access to the hardware?

- Cost.

With the advent of microcomputers and the yearly decline in cost to purchase, hardware is more affordable. However, at least two issues must be considered when calculating overall costs. First, the costs of courseware in general as well as that specifically available for special education populations remains high and is not likely to decrease to the same extent as hardware. Second, a major cost of computer technology is the oft-overlooked "person cost."

These costs become apparent in, for example, training special educators to become computer literate, assisting them in adapting existing curricula to interface effectively with available computer programs, developing standards for the evaluation of computer courseware relative to learner characteristics of handicapped students, and developing courseware keyed to the regular education curricula which can be used to support the mainstreaming process.

- Development and Acquisition of Quality Courseware.

There is a dearth of quality courseware in a range of basic and more advanced skill areas. By mid-1982, only five firms had special education courseware (CAI) applications available (Education TURNKEY, 1982). In contrast, nearly all of the existing software CMI applications were designed specifically for special education.

Clearly, part of the reason for this shortage lies in reasons such as the often unclear education priorities for special education students, and the relatively small educational market that special populations represent. Nonetheless, since publishers and distributors seem to be assuming that special education applications will be adapted from regular education subject courseware, it is incumbent upon special educators to develop the skills necessary to do so.

- Accommodations.

The installation of computer technologies into a school may cause disruption and special educators must plan for these change. Among accommodations that may have to be made are:

- (1) Provisions for changing school buildings in terms of,
  - changed or increased electrical power needs,
  - modification of walls, ceilings or floors to increase a room's capacity to hold heavy equipment or to install air conditioning and
  - installation of some means of discharging static electricity;
- (2) Provision for equipment and material storage;
- (3) Provision for moving equipment;
- (4) Provision for maintenance and repair, including service contracts (e.g., flat rate, per call, prime time, extended time);
- (5) Provision for security; and
- (6) Provision for upgrading.

In addition, accommodations must be made so that scheduling assures equal access to all computer equipment for all handicapped students who can benefit.

As is the case with most print material in the rapidly moving field of computer technology, this Issue Brief will be "out-of-date" soon after it is published. Educational policymakers should read the related journals, stay in touch with hardware manufacturers and software vendors, and follow the developments of the diverse projects and agencies that are addressing technology-related issues in special education.

\* \* \* \* \*

**REFERENCES**

Dede, C.J. Educational Technology: The Next Ten Years. Instructional Innovator, March, 1980.

McLaughlin, M.W. Implementation as Mutual Adaptation: Change in Classroom Organization. In Mann, D. (ed.) Making Change Happen? New York, New York: Columbia University, Teachers College Press, 19-31.

Moursund, D. Microcomputers Will Not Solve the Computers-In-Education Problem. AEDS Journal, Fall, 1979, 13 (1), 31-39.

Pitts, M. (ed.) A Bright Promise But a Dim Future: Researchers Examine the Potential of Educational Technology. Washington, D.C.: Council for Educational Development and Research, 1982.

Robinson, S.P. Questions for Teachers: Micromachines Raise Macroissues of Power and Principle in Education. Today's Education, Elementary Edition, April-May, 1982, 71 (2), 27-28.

Thorkildsen, R. and Williams, J.G. A Brief Review of the Current Status of Computers in Special Education. Logan, Utah: Exceptional Child Center, Utah State University, 1981.

Weatherly, R. and Lipsky, M. Street-level Bureaucrats and Institutional Innovation: Implementing Special Education Reform. In Mann, D. (ed.) Making Change Happen? New York, New York: Columbia University, Teachers College Press, 1978, 49-77.

\* \* \* \* \*

\* \* \* \* \*

### ABOUT THE PROJECT

This material is made available through NASBE's Special Education Dissemination Project. Working in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators, NASBE has undertaken a variety of activities aimed at providing education policymakers with research and practice-based information on special education.

The project is funded by the Division of Educational Services, Special Education Programs, U.S. Department of Education. However, the views expressed herein do not necessarily reflect the position or policies of that Department.

For more information about the project, contact Roberta Felker or Cynthia Chambers at NASBE.

\* \* \* \* \*

**RELATED SERVICES FOR HANDICAPPED STUDENTS:  
LEGAL CONSIDERATIONS**

The delivery of "related services" as part of the education of handicapped children under Public Law 94-142 continues to present a challenge for state and local education agencies. "Related services" are defined as transportation, and such developmental corrective, and other supportive services that are required when necessary for a handicapped child to benefit from special education. They are the types of services, such as physical therapy or special transportation assistance, that in the past have usually been provided by health and welfare agencies.

Since passage of comprehensive federal law in 1975, responsibility has shifted to education agencies for providing these services to school-age handicapped youth. So far, implementation of this mandate nationwide has been inconsistent, often confusing, and sometimes problematic.

This issue brief outlines current problems, controversies, legal disputes, and judicial rulings regarding the mandate that schools provide handicapped students with related services.

- HOW DOES CURRENT LEGAL PRECEDENT DEFINE "RELATED SERVICES"?
- HOW ARE STATES MANAGING PUBLIC CONTROVERSY OVER SERVICES TO HANDICAPPED STUDENTS?
- HOW ARE EDUCATION AGENCIES MANAGING THE ADDED FINANCIAL BURDENS?

## BACKGROUND

P.L. 94-142 requires that handicapped children be provided with special education and related services. The services described in the federal law include transportation, psychological services, speech and language or occupational and physical therapy, as well as recreation. This list of services is lengthy but not exhaustive, so that each child's individual needs may be considered. Although there are many services that would undoubtedly help each child, a service is legally mandated only when a child would otherwise fail to benefit from a program of special education and when the service is specified in the child's individualized education program.

Related service requirements involve the schools in novel areas of activity and relationships. Traditionally, school staff have not been trained to deliver such services. Although the costs of providing related services may be borne by health and social service agencies, third party payers or the education agencies themselves, the responsibility for providing services has fallen primarily on state and local education officials.

Most school districts are financially pressed and must seek additional funding to provide even the needed special education, let alone the additional related services. The pressure on local school budgets has only partially been alleviated by federal and state reimbursements or supplements. Yet the law does not allow lack of money to be offered as an excuse for denying services, nor can children be put on waiting lists while a school district locates the financing. Officials are not permitted to deny a service merely because the service is not presently provided to any other student or because its provision would necessitate the hiring of additional personnel.

Naturally, disputes arise over the type and nature of the related services to be offered. For some school officials, a program meets the legal standard if a child is permitted to attend school and is provided with services a local board of education can afford. Some parents, on the other hand, have argued that every service that will aid a child should be provided to the fullest extent possible.

Legally speaking, a student need not be offered the best or most expensive educational techniques, materials, and services available, but public schools must design and develop an individualized education program for the exceptional person so that learning can be attained. As a result of the flexibility built into the wording of the law, educators and parents must allow for related services that may be somewhat esoteric but that are necessary to help a child to learn.

Because "related services" have received definition by the courts, the topic is usually discussed in the context of adversarial disputes, lawsuits, and judicial coercion. It would appear that the courts are overflowing with these cases and that all parties are anxious to sue, but nothing could be further from the truth. In fact, both school officials and parents are highly reluctant to litigate, and judges generally and traditionally do not like to interfere in education matters. According to a Rand Corporation study, "the vast majority of the disputes about special education services are resolved informally or in the administrative due process system."

## STATUTORY REQUIREMENTS

- P.L.94-142 requires that handicapped children be provided with special education and related services, defined as:

... transportation, and such developmental, corrective, and other supportive services ... as may be required to assist a handicapped child to benefit from special education.<sup>1</sup>

- Further definition is provided in the regulations, which list the following specific services:

... speech pathology and audiology, psychological services, physical and occupational therapy, recreation, early identification and assessment of disabilities in children, counseling services, and medical services for diagnostic or evaluation purposes ... school health services, social work services in schools, and parent counseling and training.<sup>2</sup>

- The federal government makes it clear that these are not the only necessary services which states may be required to provide:

The list of related services is not exhaustive and may include other developmental, corrective or supportive services ... if they are required to assist a handicapped child to benefit from special education.<sup>3</sup>

- As indicated in the chart at the end of this section, related services are also required by statutes in 42 states, either by definition (26 states) or by implication (16 states).<sup>4</sup> There are still disparities among state special education statutes, and some remain flawed by obsolete provisions that are incompatible with federal law. Since passage of P.L. 94-142, however, state laws have become more similar than they are different, at least along broad dimensions.<sup>5</sup>

- Discussion

As lawmakers readily admit, the related services requirement is a general one: What service does the child need to benefit from a program of special education? The answer must be decided on a case-by-case basis.

It is not surprising that educators have tried to protect their limited resources by searching for appropriate limits upon related services. In court, educators have asserted that a particular service or services are not related to education, but are instead "medical" or "health" related, involve "life supports," or arise from "emotional," "family," or "social" needs. So far, attempts to limit the types of services that must be provided by the schools have generally not been supported by the courts.

\*\*\*\*\*  
REFERENCES

<sup>1</sup>P.L. 94-142, Section 602 (17).

<sup>2</sup>P.L. 94-142 Regulations, 34 C.F.R. 300.13.

<sup>3</sup>P.L. 94-142 Regulations, 34 C.F.R. 300.13, Comment.

<sup>4</sup>Citron, Christiane H. The Rights of Handicapped Students. Denver, Colorado: Education Commission of the States Report No. LEC-2, September 1982.

<sup>5</sup>Winslow, Harold R. and Susan M. Peterson. State Initiatives for Special Needs Students. In Sherman, Joel D., Mark A. Kutner and Kimberly J. Small. New Dimensions of the Federal-State Partnership in Education. Washington, DC: Institute for Educational Leadership, 1982, 46-62.

\*\*\*\*\*

A COMPARISON OF STATE STATUTORY PROVISIONS  
FOR RELATED SERVICES

<u>STATE</u>	<u>RELATED SERVICES ARE DEFINED</u>	<u>RELATED SERVICES ARE IMPLIED</u>	<u>SPECIAL EDUCATION STATUTORY REFERENCE</u>
Alabama	X		Ala. Code sec. 16-39-1 et seq. (1975 & Cum. Supp. 1981)
Alaska	X		Alaska Stat. sec. 14.30.180 et seq. (1975 and Supp. 1981)
American Samoa		X	A.S. Code tit. X, sec. 16.1601 et seq. (1981)
Arizona		X	Ariz. Rev. Stat. Ann. sec. 15-761 et seq. (1981 Spec. Pamphlet)
Arkansas		X	Ark. Stat. Ann. sec. 80-2101 et seq. (1980 & Cum. Supp. 1981)
California	X		Cal. Educ. Code sec. 56000 et seq. (West Supp. 1982)
Colorado			Colo. Rev. Stat. sec. 22-20-101 et seq. (1973 and Supp. 1981)
Connecticut	X		Conn. Gen. Stat. Ann. sec. 10-76a et seq. (West 1958 & Supp. 1981)
Delaware	X		Del. Code Ann. Tit. 14 sec. 3101 et seq. (1981)
District of Columbia			The special education law is found in Rules of the Board of Education Chapter 4, secs. 450-457 (September 21, 1977)
Florida	X		Fla. Stat. Ann. sec. 230.23 (4)(m)(West Supp. 1981)
Georgia			Ga. Code Ann. sec. 32-605a (1980)
Guam			Guam Gov't Code sec. 11980 et seq. (1976)
Hawaii	X		Hawaii Rev. Stat. sec. 301-21 et seq. (1976 & Supp. 1981)
Idaho	X		Idaho Code sec. 33-2001 et seq. (1981)
Illinois	X		Ill. Ann. Stat. ch. 122 sec. 14-1.01 et seq. (Smith-Hurd Supp. 1981)
Indiana		X	Ind. Code Ann. sec. 20-1-6-1 et seq. (Burns Supp. 1981)
Iowa		X	Iowa Code secs. 273.1, 281.1 et seq. (1981)
Kansas	X		Kan. Stat. Ann. sec. 72-961 et seq. (1981)
Kentucky	X		Ky. Rev. Stat. Ann. sec. 157.200 et seq. (1980 & Cum. Supp. 1980)
Louisiana	X		La. Rev. Stat. Ann. sec. 17:1941 et seq. (West Supp. 1982)
Maine		X	Me. Rev. Stat. Ann. tit. 20, sec. 3121 et seq. (1964 & Supp. 1981)
Maryland	X	X	Md. Educ. Code Ann. sec. 8-401 et seq. (1978 & Cum. Supp. 1981)
Massachusetts	X		Mass. Gen. Laws Ann. ch. 71B (West Supp. 1981)
Michigan			Mich. Comp. Laws Ann. sec. 380.1701 et seq. (Supp. 1981)
Minnesota			Minn. Stat. sec. 120.17 (1980 & Supp. 1981)
Mississippi			Miss. Code Ann. sec. 37-23-1 et seq. (1972 & Cum. Supp. 1981)
Missouri		X	Mo. Ann. Stat. sec. 262.670 et seq. (Vernon Supp. 1982)
Montana		X	Mont. Code Ann. sec. 20-7-401 et seq. (1981)
Nebraska	X		Neb. Rev. Stat. sec. 43-601 et seq. (1979 & Supp. 1980 & 1981)

<u>STATE</u>	<u>RELATED SERVICES ARE DEFINED</u>	<u>RELATED SERVICES ARE IMPLIED</u>	<u>SPECIAL EDUCATION STATUTORY REFERENCE</u>
New Jersey			Nev. Rev. Stat. secs. 388.440 et seq. 395.001 et seq. (1979 & Supp. 1981)
New Hampshire	X		N.H. Rev. Stat. Ann. 186-C:1 et seq. (Supp. 1981)
New Jersey			N.J. Stat. Ann. sec. 18A:46-1 et seq. (Supp. 1981)
New Mexico			N.M. Stat. Ann. sec. 22-13-5 et seq. (Supp. 1981)
New York	X		N.Y. Educ. Law sec. 4401 et seq. (McKinney 1981 & Supp. 1981)
North Carolina	X		N.C. Gen. Stat. sec. 115C-111 (Cum. Supp. 1981)
North Dakota	X		N.D. Cent. Code sec. 15-59-01 et seq. (1981)
Ohio	X		Ohio Rev. Code Ann. sec. 3323.02 et seq. (Page Supp. 1981)
Oklahoma		X	Okla. Stat. Ann. tit. 70, sec. 13-101 et seq. (West 1972 & Supp. 1981)
Oregon	X		Or. Rev. Stat. sec. 343.035 et seq. (1981)
Pennsylvania		X	Pa. Stat. Ann. tit. 24, sec. 13-1371 et seq. (Purdon 1962 & Supp. 1981)
Puerto Rico		X	P.R. Laws Ann. tit. 18, sec 1331 et seq. (Supp. 1980)
Rhode Island		X	R.I. Gen. Laws sec. 16-24-1 et seq. (1981)
South Carolina	X		S.C. Code sec. 59-33-10 et seq. (1976 & Cum. Supp. 1981)
South Dakota		X	S.D. Comp. Laws Ann. sec. 13-37-1 et seq. (1975 & Supp. 1981)
Tennessee	X		Tenn. Code Ann. sec. 49-2902 et seq. (1977 & Cum. Supp. 1981)
Texas	X		Tex. Educ. Code Ann. tit. II, sec. 16.104 (Vernon Supp. 1981)
Utah		X	Utah Code Ann. sec. 53-18-1 et seq. (1983 & Supp. 1981)
Vermont			Vt. Stat. Ann. tit. 16, sec. 2941 et seq. (1968 & Supp. 1981)
Virginia		X	Va. Code sec. 22.1-213 et seq. (1980 & Supp 1981)
Virgin Islands	X	X	V.I. Code Ann. tit. 17, sec. 281 et seq. (1982)
Washington			Wash. Rev. code sec. 28A.13.005 et seq. (1981)
West Virginia	X		W.Va. Code sec. 18-20-1 et seq. (1977 & Supp. 1981)
Wisconsin			Wis. Stat. Ann. sec. 115.76 et seq. (West Supp. 1981)
Wyoming		X	Wyo. Stat. sec. 21-14-101 et seq. (1977)

**NOTES:** Where the term "special services" is defined, that is treated as synonymous with "related services" for purposes of this tabulation.

It should be noted that even when this table shows a particular provision is not in the statute, handicapped children may nonetheless be entitled to it on the basis of existing administrative regulations or judicial interpretation.

**REFERENCE:** Citron, Christiane H. The Rights of Handicapped Students. Denver, Colorado: Education Commission of the States Law and Education Center Report No. LEC-2, 1982, pp. 120-124.

## LEGAL DISPUTES OVER SPECIFIC SERVICES

The following specific services have been the subject of legal disputes between educators and parents. In every case, school officials have been ordered to provide the service; when lower courts have ruled in favor of the schools, these rulings have been overturned on appeal.

- Catheterization

In Texas<sup>1</sup>, Pennsylvania<sup>2</sup> and West Virginia<sup>3</sup>, school officials have contended unsuccessfully in court that a procedure called Clean Intermittent Catheterization (CIC), required by persons who have spina bifida, is not a service related to education but is instead a medical and life support service.

In designating catheterization as a related service which schools must provide, a federal court of appeals stated that "without the provision of ... (catheterization, the child) ... cannot be present in the classroom at all." Failure to provide the service amounts to the illegal exclusion of the child from school. The court reasoned that this, plus the fact that catheterization is a simple procedure and one with which children need no assistance by the time they reach third or fourth grade, takes precedence over technical contentions about the definition of "medical" services.

- Tracheotomy Tube Assistance

In Hawaii<sup>4</sup>, a child who has tracheomalacia, a condition requiring a tracheotomy tube so she can breathe and expel secretion from her lungs, would be in danger of dying if the tube became dislodged, necessitating prompt assistance. The court determined that "this service can be provided by a nurse or other trained person who need not be a physician." The teachers, however, resisted and filed a grievance, leading the court to order a private school placement at public expense.

- Psychotherapy

In Connecticut<sup>5</sup> and Montana<sup>6</sup>, schools were ordered to provide psychotherapy or counseling for emotionally disturbed students as part of the required "psychological services." The courts reasoned that emotional problems will inevitably affect the educational progress of a child, and that in this sense, psychological services are related to education. On the basis of P.L. 94-142, the court overrode the Montana state law that specifically excludes psychotherapy from educational functions.

• Occupational and Physical Therapy

In Maryland<sup>7</sup>, provision of these therapies was challenged despite their specific mention in the P.L. 94-142 regulations.<sup>8</sup> The U.S. District Court upheld their status as related services which schools must provide.

In sum, these lawsuits have resulted in an expanded definition of related services. The broader issues argued in court will be summarized in the next section.

The chart on the following page depicts the degree of consensus that existed among states regarding specific services at the time of a survey conducted in 1980-81. The judicial rulings handed down since that date have probably resulted in a higher rate of consensus regarding medical services, occupational and physical therapy, and psychotherapy.

\*\*\*\*\*

REFERENCES

- <sup>1</sup>Tatro v. State of Texas, 625 F 2d. 557, 5 Cir. (1980).
- <sup>2</sup>Tokarcik v. Forest Hills School District, 665 F 2d. 443 (3d. Cir., 1981).
- <sup>3</sup>Hairston v. Drosick, 423 F. Supp. 180. S.D. WV (1976).
- <sup>4</sup>Hawaii Department of Education v. Katherine D., 531 F Supp. 517 (D Hawaii 1982).
- <sup>5</sup>Papacoda v. Connecticut, 528 F. Supp. 68 (D. CT. 1981).
- <sup>6</sup>In re "A" Family, 602 P. 2d. 157. S. Ct., Montana. (1979).

\*\*\*\*\*

**Degree of State Consensus Regarding Related Services  
That May Be Required By 94-142**

<u>Related Services</u>	<u>Consensus</u>
Audiology	High
Counseling services	High
Medical services:	
• diagnostic or evaluative purposes	High
• medical/health treatment	Low: many states contend these services constitute medical exclusions, especially catheterization
Occupational therapy	Moderate: some states contend this is a medical or noneducational exception under the law
Parent counseling and/or training	Moderate
Physical therapy	Moderate: some states contend this is a medical or noneducational exception
Psychotherapy	Low: several states view psychotherapy and other such psychological services as a medical or noneducational exception under the law
Recreation	High
School health services	High
Social work services	Moderate
Speech pathology	High
Transportation	High

---

Source: Responses of 34 states to a survey conducted by the National Association of State Directors of Special Education, Fall-Winter 1980-81, and anecdotal reports.

**REFERENCE:** Education Policy Research Institute. Finetuning Special Education Finance: A Guide for State Policymakers (ED Contract No. 400-80-0041). Washington, DC: Educational Testing Service, July 1982, 29.

## LEGAL DISPUTES OVER THE INTENT OF THE LAW

- Are Related Services Limited by Ties to Special Education?

Because the wording of P.L. 94-142 states that education agencies must provide "special education and related services," educators have questioned whether they must provide these services when they are related to regular education, rather than to special education. In a dispute over provision of catheterization, the child in question did not need special instruction; she was able to participate fully in the normal classroom as long as she had help with her catheter. Educators argued that they were not required to provide this service because it was not related to special education.

Judicial rulings to date have maintained that this argument runs counter to the more fundamental principles of the law. That is, that first and foremost, handicapped children must be afforded the opportunity to attend school, and to suffer no exclusion from school solely because of their handicap. Secondly, handicapped children should be educated in the "least restrictive environment," that is, with nonhandicapped children to the maximum extent appropriate and in the regular classroom whenever possible.<sup>1,2</sup>

- Are Related Services Limited by Ties to Academic Achievement?

If the services required must be related to education, whether regular or special, then how is "education" defined? In court, educators have argued that physical therapy, for example, promotes a student's developmental, not educational achievement; that catheterization meets a child's life support needs, not educational needs; that psychotherapy assists a student's emotional progress, not educational progress. In this context the word "education" is used very precisely, to mean progress in academic subjects.

The courts have used a greatly expanded definition of "education" when the rights of handicapped children are at stake. The rationale is based on the recognition that many of the basic skills which come easily to nonhandicapped children -- walking, talking, minimal self-care -- may represent a high level of achievement for some handicapped students. Thus, one court ruled that the aim of education for handicapped children might be defined as "self-sufficiency" or even "some degree of self-care."<sup>3</sup>

Another court ruled that education may include any program which has the capacity "to equip a child with the tools needed in life,"<sup>4</sup> and still another stated that a service is related when it might be seen as a "prerequisite to learning."<sup>5</sup>

- Are Related Services Limited to Non-Medical Services?

According to P.L. 94-142, schools need not provide "medical" services except for diagnostic or evaluative purposes. This appears to limit the definition of related services, and education officials have argued that physical therapy, administering medications, clinic treatment for learning disabilities, psychotherapy and others are medical services which schools should not have to provide.

The regulations governing 94-142 specify, however, that the only services which schools need not provide are those that must be performed by a licensed physician.<sup>6</sup> Thus schools may be required to provide any services performed by therapists, nurses, counselors, psychologists, audiologists and others.

Most handicapping conditions can be described as "medical" in their origin, but the effect, and their amelioration, is often educational, particularly so under a broad concept of education. The cause generating the need for such a service may be medical, i.e., bladder problems (catheterization) or motor difficulties (physical therapy). But if that need for a service can be met by nonphysicians, the service (if "educational") will generally be related under the law.<sup>7</sup>

According to one writer, determination of a line between a "health" service (which a school is capable of providing) and a "medical" service (which only a doctor can provide) may be a source of dispute in the future, complicated by variances from state to state because of differences in state laws regarding what treatment must be provided or supervised by a physician.<sup>8</sup>

- Are Related Services Limited At All?

A 1982 U.S. Supreme Court decision<sup>9</sup> could influence future courts toward more restrictive rulings on related services. In Rowley, a hard-of-hearing child was already functioning well in a second-grade classroom and sought a wider level of interpreter services to realize a fuller potential. In ruling against her, the court decided that the "appropriate" education which P.L. 94-142 requires schools to provide "did not mean a potential-maximizing education."

This requirement is satisfied, the court wrote, "... by providing personalized instruction with sufficient support services to permit the child to benefit educationally from that instruction." In the future, courts could be less willing to order costly "related services" if an educational placement appears more or less adequate without the service.<sup>10</sup>

\*\*\*\*\*

REFERENCES

- <sup>1</sup>Tatro v. State of Texas, 481 F. Supp. 1224. N.D. Texas, (1980).
- <sup>2</sup>Hairston v. Drosick, 423 F. Supp. 180. S.D. WV (1976).
- <sup>3</sup>Pennsylvania Association for Retarded Children (PARC) v. Commonwealth of Pennsylvania, 343 F. Supp. 279. E.D. PA. (1972).
- <sup>4</sup>Fialkowski v. Shapp, 405 F. Supp. 946 E.D. PA. (1975).
- <sup>5</sup>Gary B. v. Cronin, No. 79-C5383, N.D. Illinois (1980).
- <sup>6</sup>P.L. 94-142 Regulations, 300.13 (b)(4).
- <sup>7</sup>Tatro v. Texas, Tokarcik v. Forest Hills School District.
- <sup>8</sup>Citron, Christiane H. The Rights of Handicapped Students. Denver, CO: Education Commission of the States, Sept., 1982, 20-21.
- <sup>9</sup>Board of Education of Hudson Central School District v. Rowley, 102 S. Ct. 3034 (1982).
- <sup>10</sup>Citron, op. cit.

\*\*\*\*\*

## ADDITIONAL POLICY IMPLICATIONS

- Current Legal Precedent

The most common areas of dispute have already been considered in the courts, and the concept of related services has not been limited in any significant way. The federal laws, expanded by federal court decisions, have adopted broad definitions of both "education" and "relatedness." At this point in time, related services may be defined as those services inevitably associated with helping handicapped children to become adequately prepared for life.<sup>1</sup>

- Influence of the Judiciary

Though the influence of P.L. 94-142 is always emphasized, judicial interpretations have exerted a major impact on the status quo in this area both before and after passage of a comprehensive federal law. Before enactment of 94-142, a series of landmark court cases established the right to an education for all handicapped children and, further, solidified an expanded notion of "education" and the inevitable supplemental services.<sup>2</sup>

Education litigation has come to be regarded as the antidote to a political process that is sometimes unresponsive to minority needs. According to one author, the threat of a court order is a natural part of our constitutional system and should be regarded as a standard expense for all large organizations. Nonetheless, solutions arising from local consensus are more likely to succeed than those imposed from outside.<sup>3</sup>

- Sensitivity of the Issue

Related services are especially controversial because of the threat of scarce resources being taken from the nonhandicapped in order to serve the handicapped. In addition, various attempts to define, fund and implement the related services provisions have sometimes generated controversy, contributing to some "backlash" sentiment against special education in general.<sup>4</sup>

If school services or extracurricular activities are provided to typical children in a particular age group, handicapped children of the same age must be provided with similar services. This dictate raises an important policy matter. If school officials are providing services and activities to other than exceptional children and advocates demand similar consideration for their clients, it is possible that the benefit granted typical children will be withdrawn. Equal treatment may well be defined as no service for every student. This fact underlines the need for parents of all children to work together when making demands of educational authorities.<sup>5</sup>

States that have developed well defined policies through a process that involves all interested groups from the earliest stages on, have not experienced significant public opinion problems. For the future, states can probably expect even more pressure on limited resources to provide expanded services to diverse groups. States can insist that people articulate their demands with specificity and within the context of a coherent program.

- Variations by State

The levels of related services that are provided are largely influenced by state variables such as levels of state appropriations. Given these differences among states, it is probably unrealistic to expect uniform implementation of interpretive court rulings.<sup>6</sup>

- Spreading Costs Around

Expanded obligations on the schools inevitably tax existing resources. Nevertheless, there are many agencies in most communities which might cooperate in providing related services -- under contract and frequently at low cost. These include agencies for health, public welfare, mental health, mental retardation, social services, youth authority, corrections, vocational rehabilitation, and vocational education. Unfortunately, coordination of diverse service agencies, which often have conflicting priorities, has often been frustrating. In Virginia, an outside facilitator was used successfully to help different agencies become committed to working together.<sup>7</sup>

The State of Maryland, through its State Coordination Council (SCC), has established one model for other states seeking to achieve these ends.<sup>8,9</sup> Agencies are pursuing strategies like the following:

- 1) developing written interagency agreements for providing related services. The most successful agreements are those forged through open, multigroup processes with the commitment and involvement of all agencies.
- 2) adjusting the organization, by creating an interagency liaison position, and/or creating a special school district to provide services to students in state institutions, and/or incorporating personnel from other agencies into the special education program.
- 3) forming an interagency council or task force, vested with real authority, to identify problems, propose solutions, and act as a watchdog agency.
- 4) arranging for costs to be shared by other provider agencies along more or less traditional divisions of responsibility, or by third party insurers and Medicaid payments.
- 5) providing technical assistance to local districts in the form of detailed resource information, start-up funds to help implement services, demonstration projects, and staff training.<sup>10</sup>

At present, it is up to state policymakers to answer the following questions: (1) what services fall within the statutory requirements, (2) what services should education agencies provide, and (3) what services should other agencies provide?<sup>11</sup>

● State Statutory Solutions

Although P.L. 94-142 commands most of the attention, the potential of state statutes to be both part of the problem of related services and part of its solution should not be overlooked. If federal requirements were weakened, handicapped students would be likely to assert more claims under state statutes.<sup>12</sup> States can reduce their vulnerability to litigation by eliminating conflicts between federal and state provisions, by repealing outdated and impractical aspects of state law, and by ensuring that policies and definitions are clear.<sup>13</sup> A number of the states are attempting to legislate a solution to the problems of providing related services by writing in mandates to develop interagency agreements, form interagency committees and/or delineate agency responsibility and authority.<sup>14</sup>

The Commission on the Financing of a Free and Appropriate Education for Special Needs Children<sup>15</sup> has developed one approach for school officials to use when determining whether a service needed by a handicapped child is mandated under P.L. 94-142. Specifically, the Commission recommends that three questions be addressed:

1. Is the service itself an integral part of an educational objective?

For example, speech therapy is an integral part of an educational objective in most states (i.e., oral English proficiency and clarity).

2. If the child left school and did not continue educational activity (e.g., reading instruction), would the child cease to need the service with the same frequency and intensity?

For example, in many instances a child receiving occupational therapy might not continue to need that service at the same intensity or focused on the same skill areas if he or she left school and did not continue educational activities.

3. In order to be effective, must the service be provided to the child during school hours or within school facilities?

For example, if a child needs catheterization every four or five hours, the service must be provided during school hours in order to be effective.

If any of these questions is answered affirmatively, then the service should be considered to have an educational purpose, and considered a

related service within the meaning of P.L. 94-142. If the answer to these questions is negative, then the service should not be considered one to which a handicapped child is legally entitled as part of a free, appropriate public education, because it is not related to an educational purpose.

Each state must decide whether this or some other approach would best define the range of related services they will be obliged to provide. In choosing a specific approach, the Commission concluded that sufficient flexibility exists within current law and regulations to permit state education agencies to differentiate more clearly between mandated and non-mandated expenditures.

- Eligibility

Developing an accurate identification process and subsequently defining the services a child should receive is a key task for policymakers. To date, the states have adopted diverse definitions of which populations are to be served.

- Personnel Preparation

Personnel preparation is a key to fulfilling this expanded responsibility of the schools, and must include if not focus on awareness building and attitudinal training. Catheterization, for example, is an easy process, but the idea that it is part of one's job description is not so easy for school staff to accept. Yet an expanded definition of education brings with it an expanded role for all personnel associated with educating handicapped children.

As the foregoing discussion reveals, there are a number of considerations which policymakers must address, and actions which must be taken, if related services are to be adequately provided. It is clear that policymakers and administrators should be taking a proactive stance to meet the educational needs of handicapped students, initiating solutions and preventing problems before they occur. In summary, education agencies should focus on clarifying their own statutes, regulations and policies, optimizing interagency cooperation, developing more efficient systems, reallocating existing funds and resources, and generating additional resources whenever possible.

\*\*\*\*\*

#### REFERENCES

<sup>1</sup>Boston University Center for Law and Health Sciences. Related Services, and Medical Services Requirements Under Current Legal Standards. Focus on Special Education Legal Practices (Ed Contract No. 300-80-0860). Washington, D.C.: Closer Look, March 1981, 16-17.

- <sup>2</sup>Pennsylvania Association for Retarded Children v. Pennsylvania, 343 F. Supp. 279 (E.D. Pa. 1972) and Mills v. Board of Education, 348 F. Supp. 866 (D.D.C. 1972).
- <sup>3</sup>Roos, Peter D. Litigation: A Necessary Tool for Educational Reform. Phi Delta Kappan, February, 1983, 64 (6), 417-419.
- <sup>4</sup>Education TURNKEY Systems, Inc. P.L. 94-142: A Study of the Implementation and Impact at the State Level, (ED Contract No. 300-80-0658). Falls Church, Virginia: Author, Vol. I, August, 1981, 6.
- <sup>5</sup>Goldberg, Steven S. Special Education Law: A Guide for Parents, Advocates, and Educators. New Ycrk, New York: Plenum Press, 1982, 26.
- <sup>6</sup>Education TURNKEY Systems, op. cit., 9.
- <sup>7</sup>Mid-Atlantic Regional Resource Center. Interagency Collaboration: Sharing A Commitment. Special Ideas for Educating Handicapped Children, III-1 (ED Contract No. 300-80-9721). Minneapolis, Minnesota: Upper Midwest Regional Resource Center.
- <sup>8</sup>State of Maryland Executive Department. Services to Handicapped Children (Executive Order 01.01.1978.07) August 6, 1979.
- <sup>9</sup>Education TURNKEY Systems: Program Policy and Financial Analysis for Improved Services to Handicapped Children, Vol. I. A study conducted for the Maryland State Coordinating Committee on Services to Handicapped Children). Falls Church, Virginia: Author, September 16, 1981.
- <sup>10</sup>Thomas, Margaret A. and Susan J: Reese. Making Programmatic Decisions During a Time of Fiscal Retrenchment: The Case of Related Services for Handicapped Youth (ED Contract No. 300-79-0522). Santa Monica, California: Rand Corporation, 1982.
- <sup>11</sup>National Association of State Boards of Education. NASBE's Response to the Proposed Regulatory Revisions to Part B of the Education of the Handicapped Act, As Amended (submitted to the U.S. Department of Education). Washington, DC: Author, November 29, 1982, 5.
- <sup>12</sup>Citron, op cit., 3.
- <sup>13</sup>Gerry, Martin. "Reducing the Legal Vulnerability of an SEA." Speech delivered at the Annual Meeting of the State Directors of Special Education, Louisville, Kentucky, November 1981.
- <sup>14</sup>Thomas and Reese, op cit., 29.
- <sup>15</sup>The Commission on the Financing of a Free and Appropriate Education for Special Needs Children. The Report from the Commission on the Financing of a Free and Appropriate Education for Special Needs Children. Philadelphia, Pennsylvania: Research for Better Schools, March, 1983.

\*\*\*\*\*

\*\*\*\*\*

REFERENCES FOR BACKGROUND:

Goldberg, Steven S. Special Education Law: A Guide for Parents, Advocates, and Educators. New York, New York: Plenum Press, 1982.

Boston University Center for Law and Health Sciences. Related Services, and Medical Services Requirements Under Current Legal Standards. Focus on Special Education Legal Practices (ED Contract No. 300-80-0860). Washington, DC: Closer Look, March 1981.

Hill, Paul T. and Doren L. Madey. Educational Policymaking Through the Civil Justice System. Santa Monica, California: Rand Corporation, 1982.

\*\*\*\*\*

\*\*\*\*\*

COMING SOON. . .

. . . from the Special Education Dissemination Project:

Closely tied to the "related services" issue, is the controversy over the provision of private/residential and extended school year placements. The next Legal Issue Briefs will present a discussion of these issues.

\*\*\*\*\*

\*\*\*\*\*

**ABOUT THE PROJECT**

This material is made available through NASBE's Special Education Dissemination Project. Working in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators, NASBE has undertaken a variety of activities aimed at providing education policymakers with research and practice-based information on special education.

The project is funded by the Division of Educational Services, Special Education Programs, U.S. Department of Education. However, the views expressed herein do not necessarily reflect the position or policies of that Department. This material may be reproduced.

For more information about the project, contact Roberta Felker, Dinah Wiley or Cynthia Chambers at NASBE.

\*\*\*\*\*

**FINANCING FREE AND APPROPRIATE PUBLIC EDUCATION**  
**FOR HANDICAPPED STUDENTS**

During the past twenty years, and particularly since the passage of Public Law 94-142, The Education For All Handicapped Children Act of 1975, state and local education agencies have dramatically increased their programmatic commitment to the education of handicapped students. This commitment has necessitated large-scale growth in funds to develop and support special education programs and services. As the growth in special education programs continues, education policymakers must consider a number of issues and options as they endeavor to ensure effective programming during times of fiscal retrenchment and competing priorities. This is the first in a series of issue briefs examining the findings and conclusions of recent research on special education finance. In particular, this brief reviews the following questions and their implications for state and local education policymakers:

- WHAT DOES SPECIAL EDUCATION COST?
- HOW DO THE STATES DISTRIBUTE FUNDS FOR SPECIAL EDUCATION?
- WHAT ARE THE INCENTIVES AND DISINCENTIVES OF VARIOUS FUNDING FORMULAS?

*project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

BACKGROUND

Public education has undergone significant change during recent years with the enactment of state and federal law designed to guarantee the right of all handicapped children to equal educational opportunity. Particularly with the passage of The Education for All Handicapped Children Act of 1975 (Public Law 94-142), as well as a growing body of court decisions, all school-age handicapped children are guaranteed the right to a free appropriate public education. This includes a right to an individualized education program, related services, and the right to be educated in the least restrictive environment to the maximum extent appropriate.

As a result of public education's increased responsibility for the education of handicapped children, the number of children receiving special education services continues to grow. Accomplishments across states have been considerable:

- From 1976-77 to 1980-81, children served by special education programs increased from 7.25% to 8.6% of the school-aged population;
- From 1976-77 to 1980-81, the states served nearly 41,000 more handicapped students and nearly 43,000 18-21 year-old handicapped students than in 1976-77; and
- From 1975-76 to 1981-82, special education revenues increased by 84% from approximately \$2.1 billion to \$3.7 billion.

The enactment of comprehensive state and federal law has affected not only the number of students receiving special education and related services; it has dramatically affected the nature and extent of the services provided to these students. It is widely recognized that the costs of educating these students are greater than the costs of educating their nonhandicapped peers. Indeed, this is the very reason for categorical special education funding. However, this generalization should not cloud the fact that there are specific programmatic justifications for increased costs. Greater costs for special education are caused by the greater educational needs and requirements of handicapped children. There are a variety of fiscal choices and decisions which can greatly influence the impact of funding for special education. These choices must be based on an understanding of the close relationships between programmatic decisions and the financial implications of these decisions.

\*\*\*\*\*

This brief provides a general review of special education finance. The next finance brief will examine specifically the issue of interagency coordination and how states have used that option to help alleviate the problems associated with financing programs for handicapped students.

\*\*\*\*\*

## THE COST OF SPECIAL EDUCATION

Accurate estimates of the costs of special education and related services help policymakers to make objective, informed decisions when allocating funds. However, estimating the costs of special education programs is a difficult and uncertain process. One difficulty is determining exactly what costs are being sought -- overall costs, added costs, related services, instructional or administrative costs or some combination of these. Experts can develop estimates of the cost of special education, but these costs are neither fixed nor totally impervious to the decisions of state and local policymakers.

### National Estimates

National cost estimates usually have been based on averages derived from local districts' expenditures. Since state special education policies and practices vary along with location and economic conditions, national estimates may not be sufficient for answering state policymakers' questions, but are nonetheless somewhat useful as a benchmark.

In response to the weaknesses in past research, as well as to the rapid expansion of special education programs in recent years, The Rand Corporation completed a study in 1981 of the costs of special education. Supported by the U.S. Department of Education, the study was designed to assist in the formulation of policies and allocation of resources. In general, Rand found that:

- The added cost of direct instructional services is proportionate to the severity of the handicap.
  - The average instructional cost for a blind student was reported to be \$2,516 and for a deaf student \$2,336, as compared to \$813 for a learning disabled student and \$897 for a mentally retarded student.
- The more restrictive the environment, the more costly the instructional service.
  - On the average, instructional costs for a full-time placement in a special class were found to be higher per handicapped student (\$1,578) than for a regular class placement with a part-time special class (\$794).

Specifically, the study used data collected from a nationally representative sample of localities of various sizes during the 1977-78 school year. For that period, the study concluded that the total nationwide expenditure for the added cost of special education was over \$7 billion.

The study also estimated per-child costs nationwide. As noted above, the range of costs for specific handicapped children varies greatly with the nature and severity of the handicap and the location in which services are provided.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

Thus, the estimated per-child costs are average figures and cannot be assumed to apply evenly throughout the country. With these caveats in mind, in 1977-78:

- The total cost of special education and related services per handicapped child was an estimated \$3,577, approximately 2.17 times greater than the cost of regular education per non-handicapped child.
- The added cost of special education and related services above the cost of regular education was estimated as \$1,927 per handicapped child.

While barriers to accurate cost information exist, the data that are available coupled with local and state agency experience and expertise can be of assistance to policymakers. In developing fiscal policies that match the unique circumstances of a state, policymakers must determine when national estimates or those based on expert opinion will suffice and when district cost reports and surveys are most useful. Their conclusions will vary according to the political culture, traditions and policy needs of their state.

\*\*\*\*\*

REFERENCE

Kakalik, J.S., Furry, W.S., Thomas, M.A. and Carney, M.F. The Cost of Special Education. Santa Monica, California: Rand Corporation, November, 1981.

\*\*\*\*\*

## FEDERAL AND STATE SUPPORT OF SPECIAL EDUCATION

### Federal Support

Federal legislation has had a major impact on the way in which the states educate handicapped children. Yet the federal government's financial role has been secondary to that of the states and local districts. While the states anticipated federal revenues to match the P.L. 94-142 authorization levels, the actual appropriations have remained at a far lower level:

- As the authorized level has reached the full 40% of average per-pupil expenditure specified in the statute, actual appropriations have risen only modestly.
- Even with the increases in federal support since 1976, it is unlikely that the current federal share exceeds 15% of the total costs of special education.
- In contrast to the original \$1.2 billion authorization, Congress appropriated only \$804 million in 1980.

The discrepancy between federal authorization and appropriation levels, though common across many federal programs, has caused considerable friction between federal policymakers and those at the state and local level. From the perspective of those who view the guarantees of P.L. 94-142 as essential, the law is a civil rights mandate which incorporates the states' own statutes and which needs to be implemented regardless of the level of federal funding. Although federal funding has never reached the levels originally authorized in terms of percentage growth, such funds have increased appreciably.

### State Support

All fifty states provide funds to local school systems to help defray the costs associated with educating handicapped children. However, estimating the average state support for special education and related services has been problematic for policymakers and researchers alike. Many states report state legislative budget marks rather than actual expenditures. Further, the states vary in the categories of support they report; for example, some state estimates include special education transportation revenues while others do not. State estimates may exclude funds contributed from general education programs as well as revenues available from other state and federal sources such as mental health, medicaid and social security. Although state estimates are imprecise, estimates that have been calculated in recent years are impressive:

- The total state contribution to special education in 1979-80 has been estimated at \$3.4 billion and the number of children served at 4.1 million.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

From 1975-76 to 1978-79:

- 34 states reported an increase in special education's share of the total state revenue.
- 41 states reported a positive annual growth rate in revenues allocated to special education.

Among states reporting for 1978-79:

- State support for special education varied from a high of 98% in Montana to a low of 17% in Oklahoma.
- At least 22 states contributed 50% or more of the total fiscal resources for special education.

State support for special education programs is influenced by a number of factors -- size, wealth, political climate, structures used to provide basic financial support to local school systems, and relative prominence of the state contribution to the total funds available for public schools. As local and state officials are confronted with declining fiscal resources and increasing fiscal demands, it becomes important to examine not only current levels of local, state and federal revenues for special education but also revenues beyond those budgeted for special education. These include general education aid, and support from other public agencies and private sources. Consideration of these many variables should help clarify the wide range of issues and choices currently facing policymakers. These and related issues will be discussed in forthcoming issue briefs.

\*\*\*\*\*  
REFERENCE:

Moore, Mary T., Walker, Lisa J., and Holland, Richard P. Finetuning Special Education Finance: A Guide for State Policymakers (ED Contract No. 400-80-0041). Washington, DC: Education Policy Research Institute, Educational Testing Service, July, 1982.

\*\*\*\*\*

## HOW ARE SPECIAL EDUCATION FUNDS DISTRIBUTED?

Increased services for handicapped students has meant an increase in the levels of local, state and federal expenditures for special education programs. As this trend continues, it becomes increasingly important to understand the way in which these funds are distributed.

### Funding Approaches

Although there was considerable diversity from state to state in special education legislation prior to the passage of P.L. 94-142, many states have found it necessary to revise their legislation to ensure consistency with federal requirements. Consequently, special education laws across states are now more similar than different. The states' basic approach to funding, however, can and does vary.

Special education funding formulas have been described simply as mechanisms for transferring dollars earmarked for educating handicapped students from one governmental level to another (i.e., state or federal to school district). However, they are more than a technical computation of state aid:

A funding formula encompasses the mandated procedures, prorating provisions, administrative guidelines, and exceptions or exclusions that determine and regulate the allocation of state (and federal) funds to districts. The actual impact of a particular procedure cannot be determined without reference to all the other factors -- legal, political, social, educational -- that interact with its operation. (Bernstein, et. al., 1976)

In general, states use one of three basic approaches to fund special education programs:

- Pupil-based
- Resource-based
- Cost-based

**Pupil-Based:** All states which currently employ a pupil-based approach use a weighting scheme to allocate special education funds. The amount of money provided for each handicapped child is based on the dollar amount provided per pupil in regular school programs. This base amount is multiplied by a factor or "weight" that usually varies according to handicapping condition or the type of service provided. Thirteen states use pupil-weighting approaches. Another option which states might pursue under the pupil-based approach is to allocate a flat grant or straight sum, whereby a fixed amount of money is provided for each handicapped child. However, flat grant per pupil formulas currently are not used by any state for allocating special education funds.

**Resource-Based:** In a resource-based formula, the main factor used to determine the state aid allocation is the level of resources (e.g., teaching staff, auxiliary personnel, equipment) required to provide the desired level of services. A dollar amount is provided per special education teacher or classroom devoted to special education instruction. Fourteen states use the teacher unit or classroom unit for allocating funds. Allocations per unit may be tied to specific requirements for class size and/or minimum schedules for teacher salaries.

**Cost-Based:** Under this approach, states reimburse local districts for special education on either a percentage or excess cost basis. Districts are reimbursed for all or a portion of the total costs of providing special education services, or are reimbursed for all or a portion of the excess cost incurred beyond those costs associated with regular education programs. Fifteen states provide aid for special education on either a percentage or excess cost basis.

It is important to note that these funding approaches are not mutually exclusive. Many states have modified a given formula, combined various portions of different formulas, or used different formulas for different programs, thus creating some mix of these approaches. For example:

- **Kansas:** Districts receive a dollar amount for each teacher unit and are reimbursed for 80 percent of the transportation costs for special education programs -- a combination of resource-based and cost-based formulas.
- **Ohio:** Combining resource-based and pupil-based approaches, Ohio allocates a specific dollar amount per classroom unit and awards per pupil grants for transportation, home instruction, teacher training and other specialized instructional services.
- **Virginia:** Using both cost-based and student-based funding, Virginia provides per student allocations based on its determination of the excess costs for programs serving different handicapping conditions.

Mixed approaches attempt to accommodate variations in the number and handicapping conditions of students needing services, the programs prescribed for these students, and the cost of services and staff resources. The impact of each of the principal funding approaches on significant policy issues is discussed in subsequent sections of this brief.

\*\*\*\*\*

REFERENCES:

Bernstein, Charles, et.al. Financing Educational Services for the Handicapped: An Analysis of Current Research and Practices. Reston, Virginia: Council for Exceptional Children, 1976.

Hartman, William T. Policy Effects of Special Education Funding Formulas. Stanford, California: Institute for Research on Educational Finance and Governance, Stanford University, January, 1980.

McGuire, C. Kent. State and Federal Programs for Special Student Populations (Report No. F82-2), Denver, Colorado: Education Finance Center, Education Commission of the States, April, 1982.

\*\*\*\*\*

STATES USING DIFFERENT FUNDING FORMULAS

Flat Grant Per Pupil	Pupil Weighting	Flat Grant Per Teacher or Classroom Unit	Percentage of Teacher/ Personnel Salaries	Weighted Teacher Classroom Units	Percentage Cost or Excess Cost
	Arizona	Alabama	Idaho <sup>4</sup>	Alaska	Arkansas
	Florida	Illinois	Minnesota	California <sup>6</sup>	Colorado
	Hawaii	Kansas	Ohio	Delaware	Connecticut
	Indiana	Mississippi	Vermont <sup>5</sup>	Georgia	Maine
	Iowa	Nevada		Kentucky	Maryland
	Massachusetts	No.Carolina		Louisiana	Michigan
	New Jersey			Missouri	Montana
	New Mexico			Texas	Nebraska
	New York <sup>2</sup>			Washington <sup>7</sup>	N.Hampshire
	Oklahoma			Wyoming	North Dakota
	So.Carolina				Oregon
	So.Dakota				Pennsylvania
	Tennessee				Rhode Island
	Utah				Virginia
	W.Virginia <sup>3</sup>				Wisconsin

<sup>1</sup>Hawaii centrally funds all education in the state; Hawaii's Education Department negotiates special education funds using a number of considerations, especially the number of full-time equivalent students enrolled in special education.

<sup>2</sup>New York calls its funding formula excess cost because the weightings and district cost factors are designed to approximate the average costs of educating a handicapped child.

<sup>3</sup>West Virginia weights handicapped students in the foundation formula as well as provides some salary support for special education.

<sup>4</sup>Idaho also provides for an additional weighting for exceptional students in its foundation support program.

<sup>5</sup>Vermont also pays costs of special education that exceed the average per pupil cost of a district.

<sup>6</sup>California employs a hybrid formula that takes 10% of a district's ADM to determine maximum teacher units available to a district. Teacher units are then distributed across program placements and adjusted for district cost factors.

<sup>7</sup>Washington designs its formula to cover the base costs and the excess costs of special education.

Sources: Developed from descriptions of finance formulas used by individual states in Tron, Esther (ed.). Public School Finance Formulas 1978-79. Washington, D.C.: Government Printing Office, 1980; McGuire, K., Augenblick, J., and Hammond, J. School Finance at a Fifth Glance. Denver, CO: Education Commission of the States; Winslow, H.R. and Peterson, S.M. State Initiatives for Special Needs Populations. Palo Alto, CA: Bay Area Research Group, September 1981; and select individual state documents.

Reference: Moore, Mary T., Walker, Lisa J., and Holland, D. Finetuning Special Education Finance: A Guide for State Policymakers. (ED Contract No. 400-80-0081). Washington, D.C.: Education Policy Research Institute, Educational Testing Service, July, 1982.

**SUMMARY OF INCENTIVES AND DISINCENTIVES OF SPECIAL EDUCATION FUNDING FORMULAS**

Program and Management Issues	Type of Funding Formula		
	Resource-Based	Pupil/Child-Based	Cost-Based
Classification of handi-capped children	Less direct incentive for overclassification  Straight sum encourages more mildly and fewer severely handicapped children	Encourage more children to be served, may lead to over-classification.	Least effect on over-classification
Choice of appropriate program	Personnel formula may bias toward greater use of personnel	Encourage placement in higher reimbursement or lower cost programs	Depends upon district share of costs
Change of educational program	Less direct incentive for keeping children in special education	Encourage keeping children in special education and in higher reimbursement programs	Depends upon district share of costs
Class size or caseload	Encourages maximum class size to reduce costs  Full funding can encourage minimum class sizes	Encourage maximum class size	Encourage maximum class size (except fully funded excess costs)
Labeling of handicapped children	Labeling not needed by funding formula  Can fund for program and personnel units	Formula generally requires labeling in order to qualify for funding	Labeling not needed by funding formula
Support of mainstreaming costs	Must include mainstreaming units or personnel as acceptable for funding	Funding provided for children in mainstreaming programs	Reimburse approved costs of mainstreaming programs
Ability of small districts to provide programs	Full funding amount with minimum number of students, but no funding below this level	Inadequate funding with minimum number of students, but some funding below this level	Governed by regulations, not the funding formula

Program and Management  
Issues

Type of Funding Formula

	Resource-Based	Pupil/Child-Based	Cost-Based
Record keeping and reporting requirements	Little information needed beyond normal pupil, personnel, and cost records and reports	Need accurate data on number of children, may require great detail to obtain time spent in different programs	Require detailed cost records, submission and approval of expenditure reports, and greater involvement and control by funding agency
Program and fiscal planning	Most fitted to planning sequence; based on student needs with funding an automatic calculation	Less direct process; tends to be based on available dollars, not educational needs	Fits planning sequence, but available dollars are an early planning factor
Control of costs	Done through regulation	Done through regulations	Percentage formula may help hold down costs through requiring district share
Obtaining state and federal priorities	Higher funding levels for certain program units or personnel can encourage these programs	Differential funding amounts can encourage service to certain students	Priority on higher funding for certain items/programs can encourage these programs
Tracking special education funds	Simple to track funding to expenditures	Not as possible to trace individual child funding and expenditures, must be done on an aggregate basis	Most direct connections between funding and expenditures
Incorporation of future changes	Updating funding amounts is straightforward, changes apparent	Updating of funding amounts more difficult to explain; may become arbitrary	Updating of funding amounts tied to cost changes

Reference:

Hartman, William T., Policy Effects of Special Education Funding Formulas. Stanford, CA: Institute for Research on Educational Finance and Governance, Stanford University, January, 1980.

## CONSIDERATIONS FOR POLICYMAKERS

Although the financing of special education poses many considerations, the issues surrounding various funding formulas emerge as particularly significant.

- Policymakers' decision-making needs

1. Compatibility with other state funding policies and practices: Policymakers generally seek funding arrangements that do not differ significantly from existing state approaches. Such capability allows programs to be interrelated and provides a more comprehensive picture of education aid.

2. Rationality and simplicity: Funding formulas should present relatively logical, straightforward relationships among the policy elements of major importance -- for example, numbers of handicapped children, classrooms needed, and other actual costs of educating handicapped children.

3. Ease of modification: Funding formulas should be capable of being easily modified in response to economic changes or to new knowledge regarding costs and/or needs. The more complex the formula, the more likely it is that any single change will require reworking the whole formula.

- Appropriate education placements

1. Minimized misclassification: Funding formulas should not create financial incentives to place children in particular programs simply because the state reimburses proportionately more for some programs than it does for others. Similarly, formulas should not create incentives to maintain children in particular program placements when these programs are no longer appropriate. Funding formulas must permit adequate support for the most appropriate placement.

2. Reinforcement of least restrictive environment placements: One misclassification concerns the placement of handicapped children in more restrictive settings when less restrictive settings would suffice. Funding formulas can influence such placements because of higher proportionate reimbursements for more restrictive placements.

3. Avoidance of stigmatizing labels: Most funding formulas address the issue of whether students should be specifically labeled by handicapping condition as part of the funding process (as opposed to labeling for purposes of establishing eligibility). Because labels have been found to be more stigmatizing than the special education program in which the student participates, several states have chosen to categorize by placement (e.g., resource room, self-contained) rather than by handicapping condition. Other states have adopted more generalized, less descriptive categories for handicapping conditions which help eliminate the stigma associated with more traditional labels.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

- **Equitable treatment of districts**

1. Accommodation of varying student needs across district: Districts differ in the numbers and characteristics of students that require special education. Formulas that base funds on an equal percentage of students qualifying as handicapped, or on total student enrollment are often viewed as inequitable because they do not target funds to districts where students are located. However, some argue that such formulas are more equitable because they provide all districts with an equal capacity to serve the same proportion of students.

2. Accommodations of cost variations: Several factors can cause district costs to vary for the same type of student or program -- e.g. price variations, economies of scale and different conceptions of best practice. Policymakers may place a high priority on formulas that accommodate all or some of these variables.

3. Adjustments for fiscal capacity: When states support the total cost of special education, equalizing for district fiscal capacity is not a significant priority. Because most states do not support total costs, however, variations in district fiscal capacity often constitutes a source of inequity.

- **Efficient administrative and cost-containment practices**

1. Funding predictability: Predictability fosters planning and public confidence. It permits policymakers to estimate and obtain appropriate levels of support from taxpayers and other revenue sources without losing credibility. Because many special education costs are unpredictable (e.g., children identified in the middle of the year), districts prefer state funding formulas that accommodate variability and ensure their own budget predictability. Cost-based formulas may offer the greatest predictability for districts and the least for states.

2. Containment of special education costs: While policies that place some of the cost burden on local districts aid cost containment, formulas can also influence how efficiently districts operate their special education budgets. Funding formula provisions for administrative and direct costs, ceilings, and allowed-cost categories all influence cost-containment situation.

3. Minimized reports, recordkeeping, and state administration: Virtually all formulas require some measure of reporting and state monitoring if districts are to account for state funds. However, the question is one of degree: will the formula be too burdensome?

Obviously there are clear trade-offs with each funding formula or combination of formulas. The more simple a formula, the less likely it will be to distinguish among district needs. The more predictable a formula for ensuring the stability of state budgets, the more districts will bear unpredictable costs. The more it serves to contain costs, the less it will accommodate the full range of different district costs. Policymakers must weigh these trade-offs against the particular needs of their state as they strive to develop funding policies which effectively and efficiently govern special education expenditures.

\*\*\*\*\*  
REFERENCE:

Moore, Mary T., Walker, Lisa J., and Holland, Richard P. Finetuning Special Education Finance: A Guide for State Policymakers (ED Contract No. 400-80-0041). Washington, DC: Education Policy Research Institute, Educational Testing Service, July, 1982.

\*\*\*\*\*

COMPARISON OF FUNDING FORMULA TYPES ACROSS DIMENSIONS  
 IMPLICANT TO STATE POLICYMAKERS

	<u>Pupil-Based</u>	<u>Resource-Based</u>	<u>Cost-Based</u>
<b>I. Policymakers' Decision-Making Needs</b>			
<b>A. Compatibility with other state funding</b>	<u>Flat grants per student formulas</u> frequently are used in state categorical programs for compensatory education.	<u>Resource-based funding formulas</u> form the basis of many states' foundation support programs.	<u>Percentage cost and excess cost formulas</u> are infrequently used to finance other education programs in a state.
<b>B. Rationality and simplicity</b>	<u>Flat grants per student</u> are highly straightforward but are not highly logical because they pay districts the same amount for handicapped children whose programs cost different amounts.	<u>Flat grants per teacher or classroom</u> are simple to comprehend, but they have no logical relation to costs.	<u>Percentage cost and excess cost formulas</u> are logical because they reimburse districts a portion of the costs of educating handicapped children. Their simplicity varies depending on the number of allowed-cost categories, ceilings and whether they include computations that approximate costs.
	<u>Pupil weighting formulas</u> logically relate the costs of special education programs to a base amount. They can be extremely simple or quite complicated -- using many weights and full-time equivalent student counts.	<u>Percentage salary reimbursement formulas</u> are understandable to state policymakers, but they can become complex if many salary categories and additional factors are included.	
<b>C. Ease of modification</b>	<u>Flat grants per student</u> must be modified by legislative action; they do not adjust for cost or inflation changes.	<u>Flat grants per teacher or classroom</u> do not adjust for cost or inflation and must be modified legislatively.	<u>Percentage cost and excess cost formulas</u> automatically adjust for cost changes and inflation when they are based on actual district costs. Cost ceilings can limit this adjustment process. Cost ceilings and formulas that approximate excess cost usually require legislative change to reflect new cost relationships.
	<u>Pupil weighting formulas</u> use a base value and weights that must be adjusted by the legislature if new cost information comes to light. If the base is derived from an element of costs for a regular student, inflation is likely to be automatically accommodated.	<u>Percentage salary reimbursement formulas</u> automatically adjust for cost changes that relate to staff salaries but they do not adjust for other cost changes.	
		<u>Weighted personnel or classroom unit formulas</u> can adjust for inflation through the base but must be legislatively altered to adjust for changed cost configurations among programs.	

170

## II. Appropriate Educational Placements

### A. Minimized misclassification

Flat grants per student formulas, through over funding low-cost placements and under funding high-cost placements, risk a fair degree of misclassification of students into low-cost placements.

Pupil weighting formulas contain incentives to place students in higher reimbursement categories. Activation of these incentives depends on the discretion allowed districts in serving students and the relative costs of different programs to the districts. Pupil weighting formulas also encourage filling classes to maximize class size.

Resource-based formulas indirectly encourage misclassification because they contain incentives to classify children in ways that maximize resources.

Flat grants per teacher or classroom formulas tend to encourage lower cost placement for students.

Percentage personnel and weighted teacher or classroom unit formulas encourage misclassification when they disproportionately reimburse specific special education categories (e.g., 70% of resource room teachers; 50% of special class teachers)

Percentage cost and excess cost formulas are neutral in encouraging misclassification if they reimburse all categories proportionally the same.

### B. Reinforcement of least restrictive placement

Flat grants per student may encourage undesirable mainstreaming approaches such as placing handicapped students in regular classrooms as a low-cost approach.

Pupil weighting formulas reinforce least restrictive placements if they contain appropriate weights for such placements.

Resource-based formulas reinforce least restrictive placements if they include mainstreaming units or personnel as acceptable for funding. Without these adaptations they encourage self-contained classes and resource rooms.

Percentage cost and excess cost formulas usually reinforce least restrictive placements by including such programs in the allowed costs.

### C. Avoidance of stigmatizing labels

Flat grants per student do not necessarily require specific handicapping conditions or placement labels.

Pupil weighting formulas generally require student labelling but may use labels which refer to the type of placement instead of the type of handicapping condition.

Flat grants per teacher or classroom do not necessarily require handicapping conditions or placement labels for students.

Percentage salary reimbursement formulas do not necessarily require individual student labels but may require children to be identified by placement categories or handicapping condition categories.

Percentage cost and excess cost formulas do not necessarily require condition or placement labels but frequently require some student categorization in order to set cost ceilings.

Weighted teacher or classroom unit formulas usually require placement labels for students but not condition labels.

Pupil-Based

Resource-Based

Cost-Based

III. Equitable Treatment of Districts

A. Accommodate varying student needs

Flat grants per student make no accommodation for different types of students but do adjust for different numbers.

Flat grants per teacher or classroom do not accommodate different student needs but may accommodate different numbers of students.

Percentage cost and excess cost formulas accommodate district differences in numbers and types of handicapped pupils.

Pupil weighting formulas accommodate a range of different student programming needs. The more weights used, the more needs are accommodated. They also accommodate handicapped population size difference among districts

Percentage salary reimbursement formulas usually accommodate district differences in numbers and frequently types of handicapped pupils.

Weighted teacher or classroom unit formulas accommodate district differences in numbers and types of handicapped pupils.

B. Accommodate cost variations

Flat grants per student do not provide for cost variations among districts.

Resource-based formulas do not automatically adjust for cost variations among districts but may incorporate additional factors to reflect price differences or to allow small districts to qualify for units with less-than-minimum class sizes.

Percentage cost and excess formulas accommodate cost variations among districts if they reimburse on individual costs. Ceilings may penalize districts facing high costs.

Pupil weighting formulas do not specifically adjust for cost variations because weights are uniform for all districts. Cost-of-living adjustments can be added. Pupil weights limit small districts from offering their own programs for small numbers of handicapped children and encourage interdistrict cooperative programs.

C. Adjust for varying fiscal capacity

Flat grants per student contain no provision for fiscal capacity.

Resource-based formulas do not adjust for district differences in fiscal capacity. Special adjustments must be added.

Percentage costs and excess cost formulas do not adjust for fiscal capacity differences without the inclusion of special equalization factors. Pure cost-based formulas can reward high-wealth districts that choose to spend their revenues on special education.

Pupil weighting formulas usually include an equalization factor to adjust for fiscal capacity.

172

IV. Efficient Administrative and Cost Containment Practices

173

<p>A. Funding predictability</p>	<p><u>Flat grants per student</u> are highly predictable for states but do not cover unpredictable local costs.</p>	<p><u>Flat grants per teacher or classroom</u> are very predictable for states but do not cover unpredictable local costs.</p>	<p><u>Percentage cost and excess cost formulas</u> are less predictable for states but more predictable for districts. The use of cost reimbursement ceilings offers states more predictability and districts less.</p>
	<p><u>Pupil weighting formulas</u> are fairly predictable for states but are less predictable for districts faced with changing costs or need to start entirely new classes because of a few additional students.</p>	<p><u>Percentage salary reimbursement formulas</u> are less predictable for states if no statewide salary exists but are fairly predictable for districts.</p>	
		<p><u>Weighted teacher or classroom formulas</u> are predictable for districts because they accommodate districts' needs to form new classes. They are moderately predictable for states.</p>	
<p>B. Containment of Cost</p>	<p><u>Flat grants per student</u> encourage low-cost programs yet may also encourage the over-enrollment of mildly handicapped pupils.</p>	<p><u>Resource-based formulas</u> are relatively neutral with respect to escalating district costs.</p>	<p><u>Percentage cost and excess cost formulas</u> can encourage an expansion in special education costs if allowable cost categories are broadly defined. Ceilings and monitoring allowable costs improve cost containment.</p>
	<p><u>Pupil weighting formulas</u> if accurately weighted do not encourage cost expansion.</p>		
<p>C. Minimized reports, record keeping and</p>	<p><u>Flat grants per student</u> are fairly unburdensome to administer.</p>	<p><u>Resource-based formulas</u> are generally not perceived as burdensome because they require a planning sequence (e.g., staff assignments, student assignments) that most districts regularly use. Some state oversight may be necessary to verify counts of pupils for generating units.</p>	<p><u>Percentage cost and excess cost formulas</u> usually require individual district cost records, submission and approval of expenditure reports, and fiscal oversight by the state or regional offices.</p>
	<p><u>Pupil weighting formulas</u> require student-level record keeping. Some formulas (but by no means all) require fairly detailed accounting of pupils' time and programs. Some state oversight of district enrollment practices generally accompanies these formulas.</p>		

\*\*\*\*\*  
REFERENCE

Moore, Mary T., Walker, Lisa J., and Alford, Richard P. Finetuning Special Education Finance: A Guide for State Policymakers (Ed Contract No. 400-80-0041). Washington, DC: Education Policy Research Institute, Educational Testing Service, July, 1982.

\*\*\*\*\*  
REFERENCES: SPECIAL EDUCATION FINANCE

Bernstein, Charles, et.al. Financing Educational Services for the Handicapped: An Analysis of Current Research and Practices. Reston, Virginia: Council for Exceptional Children, 1976.

Chambers, Jay G. and Hartman, William T. A Cost-Based Approach to the Funding of Educational Programs: An Application to Special Education. Stanford, California: Institute for Research on Educational Finance and Governance, Stanford University, January, 1980.

Education Finance Center, Education Commission of the States. Special Education Finance: The Interaction Between State and Federal Support Systems (Report No. F79-3). Denver, Colorado: Education Commission of the States, September, 1979.

Hartman, William T. Policy Effects of Special Education Funding Formulas. Stanford, California: Institute for Research on Educational Finance and Governance, Stanford University, January, 1980.

Hartman, William T. Projecting Special Education Costs. Stanford, California: Institute for Research on Educational Finance and Governance, Stanford University, June, 1981.

Hartman, William T. and Haber, Theda R. School Finance Reform and Special Education. Stanford, California: Institute for Research on Educational Finance and Governance, Stanford University, June, 1981.

Kakalik, James S. Issues in the Cost and Finance of Special Education. Santa Monica, California: Rand Corporation, September, 1978.

Kakalik, J. S., Barry, W. S., Thomas, M. A. and Carney, M. F. Cost of Special Education. Santa Monica, California: Rand Corporation, November, 1981.

Leppert, Jack and Routh, Dorothy. A Policy Guide to Weighted Pupil Education Finance Systems: Some Emerging Practical Advice. (NIE Contract 400-76-0151). Washington, D.C.: National Institute of Education, September, 1979.

McGuire, C. Kent. State and Federal Programs for Special Student Populations (Report No. F82-2), Denver, Colorado: Education Finance Center, Education Commission of the States, April, 1982.

Moore, Mary T., Walker, Lisa J., and Holland, Richard P. Finetuning Special Education Finance: A Guide for State Policymakers. (ED Contract No. 400-80-0041). Washington, D.C.: Education Policy Research Institute, Educational Testing Service, July, 1982.

\*\*\*\*\*



\*\*\*\*\*

### ABOUT THE PROJECT

This material is made available through NASBE's Special Education Dissemination Project. Working in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators, NASBE has undertaken a variety of activities aimed at providing education policymakers with research and practice-based information on special education.

The project is funded by the Division of Educational Services, Special Education Programs, U.S. Department of Education. However, the views expressed herein do not necessarily reflect the position or policies of that Department. This material may be reproduced.

For more information about the project, contact Roberta Felker, Dinah Wiley or Cynthia Chambers at NASBE.

\*\*\*\*\*

## PROGRAM EVALUATION FOR EFFECTIVE SPECIAL EDUCATION

Special education programs in the United States have expanded from state special schools for the deaf and blind founded in the late 1800s, to well over 15,000 state-authorized public school programs in 1983. These programs serve over three million pupils annually at a cost of millions of dollars of federal, state and local monies.

Over the last hundred years, evaluation of these programs has also expanded, from no evaluation of special education programs to intensive evaluations for both local and state use. Improvement of the quality of educational programming for students is the single most desirable outcome of evaluation. Program evaluation also helps assure accountability, and assists planning for budgetary, personnel, facility and materials needs. It provides local, state and federal decisionmakers with critical information; it fosters communication among diverse audiences; it clarifies program objectives and accomplishments.

Although there are many journal articles and monographs about evaluation theory and practice, there are few resources available to help policymakers be more thoughtful and effective "consumers" of the special education program evaluations they receive. This issue brief addresses this need through a focus on the following questions and their implications for state and local education policymakers:

- WHAT DOES SPECIAL EDUCATION PROGRAM EVALUATION MEAN?
- HOW ARE SOME STATES HELPING LOCAL DISTRICTS TO ASSESS AND IMPROVE THE QUALITY OF EDUCATIONAL PROGRAMMING FOR HANDICAPPED CHILDREN?
- WHAT ARE THE ESSENTIALS OF AN ADEQUATE EVALUATION?

## WHAT DOES SPECIAL EDUCATION PROGRAM EVALUATION MEAN?

### The Mandate for State Monitoring Under P.L. 94-142

The intent of the monitoring provisions in P.L. 94-142 is to assure a single line of accountability for the education of all handicapped children within a state. The federal statute thus provides a broad mandate for state education agencies (SEAs), requiring that they:

"...provide for procedures for evaluation at least annually of the effectiveness of programs in meeting the educational needs of handicapped children (including evaluation of individualized educational programs), in accordance with such criteria that the Commissioner shall prescribe...." (Section 613.(a)(11))

This mandate is made more specific in the federal regulations:

"A general application must include assurances, satisfactory to the Commissioner...

(3) That the state will adopt and use proper methods of administering each program, including:

- i) Monitoring of agencies, institutions, and organizations responsible for carrying out each program, and the enforcement of any obligations imposed on those agencies, institutions, and organizations under law;
- ii) Providing technical assistance, if necessary, to those agencies, institutions, and organizations;
- iii) Encouraging the adoption of promising or innovative educational techniques by those agencies, institutions, and organizations;
- iv) The dissemination throughout the state of information on program requirements and successful practices; and
- v) The correction of deficiencies in program operations that are identified through monitoring or evaluation." (Education Division General Administrative Regulations, Section 100b. 101 (3) (3))

Since P.L. 94-142's passage, SEAs have implemented monitoring systems designed to generate the information required by federal law and regulation. Underlying this approach is an assumption that compliance with P.L. 94-142's specific requirements will assure quality programming.

### Assessing the Quality of Special Education Programs

Recently, state monitoring experiences have led many SEA officials to argue that "compliance monitoring efforts, at least as they have been conducted in the past, have missed some fundamental, qualitative aspects of educational programs for handicapped children" (Farrow, 1983,8). For example, it is relatively easy  
(Continued on inside back cover)

to observe whether the necessary procedures are in place to develop an individualized education program (IEP) and make a placement decision. It is comparatively simple to note whether timelines are observed, whether parents are duly notified, and whether all written documents are in the student's file. However, a local education agency (LEA) can meet all these requirements and still be placing students in inappropriate settings or failing to develop the resources necessary to assure education in the least restrictive environment.

A growing number of state and local education agencies are ready to move beyond simply looking at procedural measures of program performance and are seeking to prove that their programs are not just "working"--but are effective and of high quality. This has led to a series of state and local efforts to develop evaluation procedures which measure the quality of special education programs.

### Issues in Quality Evaluation

Although the issue of quality evaluation has become more important in response to both local program needs and national pressures on education, a number of factors make quality evaluation difficult (Farrow, 1983).

First, there is no consensus within either regular or special education about the meaning of education quality. Similarly, the approaches to evaluating quality are as varied as the goals by which different people attempt to define it. For example, should quality be judged solely in terms of program outcomes such as student achievement? Are cost factors relevant to assessing quality, or should evaluative judgments be made free of resource considerations?

Second, attempts to measure program quality are complicated by the need to define their relationship to compliance monitoring. Should these efforts be integrated into one system, or can they exist independently? Since resources are limited, would an emphasis on quality evaluation necessarily involve less intensive compliance monitoring?

Third, there is a paucity of materials designed to assess the quality of special education programs. Thus, the decision to measure program quality usually includes a commitment to develop appropriate evaluation materials as well.

Fourth, any attempt to assess program quality may encounter resistance from those whose work is being evaluated. While everyone endorses the concept of quality evaluation, the risk that results may be unfavorable rather than favorable can be intimidating.

In addition, research suggests that other factors such as the nature of SEA leadership, and the involvement of local "users" of the evaluation need to be considered and resolved to assure maximum success of any program quality assessment.

\*\*\*\*\*

### REFERENCE

Farrow, F. Effective state monitoring policies (Quality monitoring and monitoring of state operated programs). Washington, D.C.: The Center for the Study of Social Policy, 1983.

\*\*\*\*\*

## SEA EFFORTS TO EVALUATE THE QUALITY OF SPECIAL EDUCATION PROGRAMS

Despite the formidable challenges involved in assessing program quality, a number of SEAs have committed themselves to "program quality evaluation," efforts which include a wide variety of methods, and which represent a multiplicity of views about the purpose of quality monitoring. Three such efforts are summarized in the following section. For a more detailed analysis of these and other state evaluation efforts, see Farrow (1983), and NASDE (1984).

### Nebraska Department of Education's System of Program Effectiveness Evaluation

The Nebraska Department of Education (NDE), partly in response to state statute (Nebraska Statute No. 43650), is developing a system of program quality evaluation (PQE) which is designed to meet both the SEAs' and LEAs' needs for evaluative information. In 1981, a 20-member Program Effectiveness Development Committee developed a set of six standards or what they termed "service goals" based on their perceptions of the characteristics of an effective special education program. The six major topic areas are:

1. administration, relating to the internal operation of the district;
2. service delivery, relating to the identification of students and the provision of services;
3. curriculum/materials and facilities;
4. communication with consumers;
5. fiscal aspects; and
6. system aspects, relating to the relationship between the special education programs and other programs or agencies which may be affected by handicapped students.

The Program Quality Evaluation model was field tested in 20 districts during the 1983-84 school year. Eventually, NDE plans to implement the system statewide.

For more information, contact: Mr. Don Anderson, Compliance Director, Special Education, Box 94987, 301 Centennial Mall South, Lincoln, NE 68509-4987; (402) 471-2471.

\* \* \* \* \*

### Missouri Department of Elementary and Secondary Education's System for Program Evaluation

The Missouri Department of Elementary and Secondary Education is developing a Special Education Evaluation (SEE) model to be used on a voluntary basis by LEAs as a way to document the effectiveness of their programs. The SEE model identifies six major components that address the quality of local special education programs:

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

1. identification of handicapped children;
2. evaluation/diagnosis or reevaluation;
3. development of individualized education programs (IEPs);
4. placement;
5. implementation of IEPs; and
6. annual program review.

For each component, the SEE model looks at resources, services, outcomes and feedback in order to view the program as a whole. The SEE was field tested during the 1983-84 academic year. The system will be implemented separately from the state's compliance monitoring system.

For more information, contact: Mr. Ted Nickell, State of Missouri, Department of Elementary and Secondary Education, P.O. Box 480, Jefferson City, MO 65102; (314) 751-2965.

\* \* \* \* \*

#### North Carolina Department of Public Instruction's Program Quality Evaluation

North Carolina's Program Quality Evaluation (PQE) system is designed to provide LEAs with a mechanism for determining program quality. PQE includes goals in three main areas:

1. determining learner gains/outcomes;
2. locating and evaluating learners; and
3. placing learners appropriately.

For each of these areas, PQE establishes program objectives and specific evaluation questions. LEAs can set the numerical standard for satisfactory performance at different levels, reflecting varying expectations for local programs.

The PQE was field tested in 16 LEAs during the 1983-84 academic year. LEAs were competitively selected through an incentive grant program which provided up to \$10,000 to assist with implementation of the evaluation. Eventually, North Carolina plans to combine these evaluation activities with the on-going compliance monitoring procedures.

For more information contact: The Division for Exceptional Children, North Carolina Department of Public Instruction, Education Building, Raleigh, NC 27601; (919) 733-3921.

The chart on the following page highlights some major characteristics of the three state examples described in this section. Perhaps the most striking observation that can be made about these and other efforts to develop and implement program quality evaluation is that "the methods used by SEAs to measure quality are varied and represent divergent views about the goals of quality monitoring" (Farrow, 1983, 30). In special education, as in many other fields, quality means different things to different people.

\*\*\*\*\*

**REFERENCES**

Farrow, F. Effective state monitoring policies (Quality monitoring and monitoring of state operated programs). Washington, D.C.: The Center for the Study of Social Policy, 1983.

National Association of State Directors of Special Education (NASDSE). State responses to the "Annual Evaluation" requirements for state plans. Washington, D.C.: Author, 1984.

\*\*\*\*\*

CHARACTERISTICS OF STATE PROGRAM QUALITY EVALUATION EFFORTS

	SEA ROLE	LEA ROLE	BASIS FOR EVALUATION	PRODUCTS	OTHER CHARACTERISTICS	CURRENT STATE OF DEVELOPMENT	RELATIONSHIP TO COMPLIANCE MONITORING
Missouri	Coordinated development of materials.  Convened LEA representatives to review materials.	Jointly developed evaluation materials with SEA.  Will self-administer evaluation methodology.	A systems analysis of educational programs, with questions that address program resources and policies.	Information for local school districts.	Discretion given to LEAs on which program areas to assess.	Field tested in 30 school districts in school year 1983-84.	None.
Nebraska	Coordinated development of materials and evaluation standards.  Convened advisory committee.  Will administer evaluation.	Reviewed and revised a draft of the proposed standards.	Standards and service goals which define the characteristics of a quality program.	Information for local school districts.	Use of evaluation is voluntary for LEAs at this point in time.	Field tested in four districts in school year 1983-84.	SEA wants to coordinate but not combine quality evaluation with compliance monitoring.
North Carolina	Developed materials.  Will administer evaluation.  Will aggregate data statewide.	Reviewed materials.  Have option to compete for incentive grants.	Program goals, specific objectives, and evaluation questions which focus on program operations.  Numerical standards for program accomplishments.	Information for LEAs.  Information for SEA planning and budgeting system.	SEA will award incentive grants to participating LEAs.	Field tested in 1982-83.  Implementation in 16 districts in 1983-84.	LEAs pilot-testing the system are exempt from compliance monitoring procedures.  Eventual integration of quality evaluation and compliance monitoring.

Adapted from: Farrow, P. Effective state monitoring policies (Quality monitoring and monitoring of state operated programs). Washington, D.C.: The Center for the Study of Social Policy, 1983.

**QUALITY EVALUATION:  
A CONSUMER'S GUIDE FOR POLICYMAKERS**

Education policymakers' increasing concern with program quality is likely to lead to an increased demand for--and receipt of--systematic evaluation information. Many states have produced manuals detailing the process for obtaining this information, such as North Carolina's Special Education Program Quality Manual (North Carolina Department of Public Instruction, 1983); Maryland's Evaluation Resource Manual (Maryland State Department of Education, 1980); and Massachusetts' Special Education Program Manual: A Management Tool (Massachusetts Department of Education, 1981).

However, there are few resources available to assist policymakers in making sense of the often extensive reports which result from such processes. The following "checklist" is intended to help policymakers be more thoughtful and effective consumers of the evaluation reports they read by facilitating a clearer understanding of the components of an evaluation, and of the credibility of the reported results. The checklist outlines a series of steps which are arranged roughly in the order in which they appear in most evaluation reports. Each step includes representative activities, and provides "checkpoints"--questions to help policymakers assess each step's activities.

**STEP 1: Read the complete evaluation report.**

In order to assess the quality and programmatic implications of an evaluation report, it is necessary first to become familiar with the program itself, and the way in which it is evaluated. This is accomplished most readily through an overview reading of the report.

**Checkpoints for Policymakers**

- Is it clear exactly what program or program components the evaluation report is assessing?
- Can you describe the types of information contained in the report and in the appendices?
- Can you readily locate specific sections of the report?

**STEP 2: Review the evaluation model.**

Every evaluation has an implicit or explicit "model," an approach which defines the focus of the evaluation, including which questions are asked. Different models or approaches ask different questions, use data in different ways and require different levels of time, personnel, and resource commitment. Thus, the selection of an evaluation model defines the scope of the evaluation, frames the interpretation of the data, and helps everyone understand what types of information they can and cannot expect to receive.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

### Checkpoints for Policymakers

- Can you identify the particular evaluation model or approach which is used as the basis for the evaluation?
- Is a rationale included for its selection which clearly relates the assumptions, procedures and resource demands of the model to the assumptions, procedures and available resources of the special education program?
- Is it clear how the evaluation model guides the program evaluation procedures?

### **STEP 3: Review the evaluation's goals and objectives.**

The purpose of the evaluation goals and objectives is to provide a framework for describing program results. Usually, the objective is to determine how well a program is succeeding in reaching its goals. Goal statements are generally broad in scope and reflect long-term aims of the program. The evaluator may narrow the goal statements to define one purpose or objective of the program, specify the objective in measurable terms, and define the timeframe within which the objective is to be accomplished.

The goals and objectives of the evaluation provide the focus for specific evaluation questions. For example, the CIPP Model (Stufflebeam et. al., 1971) delineates four broad goal areas from which evaluation questions are derived.

#### 1) Context Evaluation

- What are the unmet needs of the special education student?
- What program obstacles or constraints exist that impede meeting these needs?
- What program goals or objectives are necessary to meet these needs?

#### 2) Input Evaluation

- Does the special education program have the necessary prerequisite resources to deliver the needed services?
- What strategies will be employed to meet the program goals?
- How will these strategies be implemented?

### 3) Process Evaluation

- To what extent has the program implemented activities which were designed to meet program goals?
- What do existing program activities look like?

### 4) Product Evaluation

- To what extent have program goals been accomplished?
- How confident can we be that observed changes are a result of the special education program?

### Checkpoints for Policymakers

- Do the evaluation goals, objectives and questions relate to the evaluation model selected?
- Are the goals and objectives of the evaluation clearly linked to the goals and objectives of the education program?
- Are the evaluation objectives stated in such a way that you can tell if they have been accomplished?
- Are the goals and objectives which you feel are important to investigate included? Do you have the data you want and need?

### **STEP 4: Review the evaluation criteria.**

For a particular aspect of a program to be considered successful, it must meet certain expectations. These expectations are the evaluation criteria. Criteria or standards can be of two general types: 1) qualitative or descriptive standards, such as "commensurate with the student's abilities;" and 2) quantitative or numerical standards, such as "75 percent satisfactory." Standards can be established through the use of specialists, through a review of past performance to determine reasonable expectations, through reliance on measures of improvement, or through reliance on established norms and practices. Sometimes, the standards are stated in the policy under which the program was adopted.

Whatever standards are chosen, it is essential that they be agreed to by everyone involved in the evaluation, including the audience(s) for the evaluation report. If the standards for judging the program are not seen as credible and valued, the evaluation itself will not be taken seriously.

### Checkpoints for Policymakers

- Is the type of standard to be used as the criterion for success clear for each objective?

- Is the way in which the standard was selected clear?
- Do you agree with the standard selected, i.e., do you feel the results as measured by this standard are believable and valued?

**STEP 5: Review the population and the sample selection.**

The population is the group about whom the evaluator is interested in gathering information and drawing conclusions. For example, a population might include "all students eligible for special education programs." When it is not feasible to include the total population in an evaluation, a sample must be drawn by specifying who will be included in or excluded from the population being studied. There are many commonly used sampling procedures (e.g., simple random sampling, stratified random sampling), all of which help to assure that the sample selected accurately represents the population being studied.

Frequently, including the entire population in an evaluation study involves a substantial commitment of time, personnel and money. The critical concern is to include enough individuals to produce a believable estimate of program effectiveness.

**Checkpoints for Policymakers**

- Is the population and/or sample for the evaluation clearly specified?
- If a sample is used, is the sampling procedure clearly delineated and a rationale provided?
- Are all groups which are affected by the program and which you believe are important included in the population and/or sample?

**STEP 6: Review the evaluation design.**

The purpose of evaluation is to provide a means of making valid decisions and judgments about a program's effect on the "real world." Viewed broadly, evaluation studies are either quantitative, based on the principles of experimental design (cf. Campbell and Stanley, 1963); or qualitative, drawn from social science field methods (cf. Patton, 1978).

Quantitative approaches assume the necessity, desirability and possibility of applying empirical standards to programs and problems involving human beings; they include experimental and quasi-experimental designs. Qualitative approaches, on the other hand, assume that human interactions are not all amenable to numerical and statistical reduction; they include case studies and other naturalistic methods which try to capture the meaning and successes of the program in descriptive terms. These two approaches to evaluation design are not discrete; it is not

necessary to choose between the two. Rather, both offer useful alternatives since different kinds of problems and questions require different approaches.

Ultimately, consideration must also be given to what the evaluation audiences believe constitutes valid and reliable findings or results. Measurement and design decisions are usually made within an explicitly political context; they are not simply a matter of expertly selecting the "best" techniques. As Patton observed, "Design and data collection decisions are a far cry from being neutral, objective, or rational; such decisions are political, subjective and satisficing" (Patton, 1978, 202).

#### Checkpoints for Policymakers

- Is the selection of an evaluation design clear and justified by the aims of the program, the types of information needed, and the timeframe and data collection burden involved?
- Do you believe that the types of information provided (e.g., statistical, descriptive) are valid and reliable data upon which you would be willing to take action?

#### **STEP 7: Review the data collection and analyses processes.**

It is possible to collect evaluation information in a variety of ways, such as questionnaires, observations, interviews, rating scales, document review, and performance tests. Care should be taken so that the method or methods chosen enhance the reliability and validity of both the data collected and the total evaluation design.

Once evaluation information has been collected, data analysis can be conducted. Most LEA and SEA procedures rely primarily on descriptive statistics such as frequencies, percentages and means. Quotations, illustrations and descriptions may be included to add to the readability and believability of the statistical data. One of the most important standards for data analysis is, "Is the evaluation information presented in the most clear and useful way possible?"

#### Checkpoints for Policymakers

- Does the evaluation address the extent to which the instruments measure what they are supposed to measure (i.e., are they valid)?
- Does the instrument design give you confidence that if the instruments were administered more than once to similar groups (or to the same group) they would yield consistent results (i.e., are they reliable)?
- Do the ways in which the data are analyzed and presented reflect the program objectives and make sense to you? Are the types of data provided (e.g., percent correct, percentile rank, grade equivalents) of use to you?

## STEP 8: Review the overall evaluation report.

The evaluation report should be easy to understand, and should communicate what was done, how it was accomplished, and why, in a way which is credible to you as a primary evaluation audience. In addition, the evaluation report ought to be timely for your purposes and should focus at least in part, on your identified information needs. The question, "does evaluation make a difference?" is too often answered in the negative because of a failure to gear the evaluation report toward action by decisionmakers.

### Checkpoints for Policymakers

#### Format Considerations:

- Is there an Executive Summary which provides a clear description of the evaluation procedures and results?
- Is the report arranged in such a way (e.g., with appropriate tables and section headings) that you can identify what information is of interest to you and find it easily?

#### Content Considerations:

- Does the report provide believable evidence that the positive results reported occurred as the result of the special education program or are other explanations, such as normal growth of the students, just as plausible? Are things better than what would be predicted without a special education program?
- Are alternative interpretations of the data presented, and the reasons for their rejection made clear?
- Are the reported results educationally significant, that is, are they "of nontrivial magnitude, in a content area generally accepted as important, which can be achieved at a reasonable cost" (Tallmadge, 1977, 34)?
- Are the data presented consistent, e.g., do the numbers in the text and tables agree? Are the inferences drawn from the data consistent with the evidence, e.g., does the evaluation claim educational significance only when the data support it? Are claims of causality substantiated by the evidence?
- Are there any "unanticipated consequences" of the program? Are they documented and explained in a way that makes their impact clear?

## **STEP 9: Design a program improvement management plan.**

The value of an evaluation, especially one which addresses issues of program quality, rests in the usefulness of its recommendations. Recommendations cover two broad areas: 1) remediation of deficit areas; and 2) improvement of activities determined to be of primary importance. These require both an objective analysis of evaluation data and a subjective analysis of participant concerns. From such analyses, priorities for action can be selected, and a management plan for accomplishing these priorities can be generated.

### **Checkpoints for Policymakers**

- Are the recommendations clearly based on the evaluation information presented? Do you believe these recommendations effectively address the appropriate program strengths and weaknesses? Is it clear who has responsibility for taking action on the recommendations?
- Do the policy implications and recommendations follow directly from the data? Does the report provide the rationale and information you need to act on these recommendations?

### **Conclusion**

The preceding summary of program evaluation procedures illustrates representative components of a technically adequate evaluation. While these components can be easily delineated, in real life many factors limit their implementation. These include diversity in program objectives, heterogeneity of program staff, and swings in resource allocation as well as timelines, and politics.

Policymakers need to consider both the standards for a quality evaluation, and the constraints involved in operationalizing such standards. The key is to be involved and informed at all steps during the evaluation process!

\*\*\*\*\*

**REFERENCES**

Alkin, M.C. Evaluation theory development. Evaluation Comment, 1969, 2, 27.

California State Department of Education. Guide to special education program evaluation. Sacramento: California Evaluation Improvement Program of the Office of Program Evaluation and Research, 1982.

Campbell, D.T. & Stanley, J.C. Experimental and quasi-experimental designs for research on teaching. In N.L. Gage (Ed.), Handbook of research on teaching. Chicago: Rand McNally, 1963.

Maryland State Department of Education. Program evaluation resource manual. Baltimore: Division of Special Education, 1980.

Massachusetts Department of Education. Special education program evaluation: A management tool. Quincy: Division of Special Education, 1981.

North Carolina Department of Public Instruction. Special education program quality evaluation. Raleigh: Division of Exceptional Children, 1983.

Patton, M.Q. Utilization-focused evaluation. Beverley Hills, Calif.: Sage, 1978.

Provus, M.N. Discrepancy evaluation. Berkeley: McCutcheon, 1971.

Stufflebeam, D.L., Foley, W.J., Gephart, W.J., Guba, E.G., Hammond, R.L., Merriman, H.O., & Provus, M. Educational evaluation and decision-making in education. Ithica, Ill.: Peacock, 1971.

Weiss, C.H. Evaluation research: Methods for assessing program effectiveness. Englewood Cliffs, N.J.: Prentice Hall, 1972.

**SAMPLE STATE EVALUATION GUIDES**

Massachusetts Department of Education. Special education program evaluation: A management tool. Quincy: Division of Special Education, 1981. Publication #12356. Limited copies available free of charge from Donna Toto, 1385 Hancock Street, Quincy, MA 02169; (617) 770-7490.

North Carolina Department of Public Instruction. Special education program quality evaluation manual. Raleigh: Division of Exceptional Children, 1983. Limited copies available free of charge from Valencia Woodward, Division of Exceptional Children, State Department of Public Instruction, Education Building, Raleigh, NC 27611; (919) 733-6081.

\*\*\*\*\*



## PROGRAM EVALUATION CHECKLIST

### Step 1: Read the complete evaluation report.

- Is it clear exactly what program or program components the evaluation report is assessing?
- Can you describe the types of information contained in the report and in the appendices?
- Can you readily locate specific sections of the report?

### Step 2: Review the evaluation model.

- Can you identify the particular evaluation model or approach which is used as the basis for the evaluation?
- Is a rationale included for its selection which clearly relates the assumptions and procedures of the model to the assumptions and procedures of the special education program?
- Is it clear how the evaluation model guides the program evaluation procedures?

### Step 3: Review the evaluation's goals and objectives.

- Do the evaluation goals, objectives and questions relate to the evaluation model selected?
- Are the goals and objectives of the evaluation clearly linked to the goals and objectives of the special education program?
- Are the evaluation objectives stated in such a way that you can tell if they have been accomplished?
- Are the goals and objectives which you feel are important to investigate included? Do you have the data you want and need?

### Step 4: Review the evaluation criteria.

- Is the type of standard to be used as the criterion for success clear for each objective?
- Is the way in which the standard was selected clear?
- Do you agree with the standard selected, i.e., do you feel the results as measured by this standard are believable and valued?

### Step 5: Review the population and sample selection.

- Is the population and/or sample for the evaluation clearly specified?
- If a sample is used, is the sampling procedure clearly delineated and a rationale provided?
- Are all groups which are affected by the program and which you believe are important included in the population and/or sample?

### Step 6: Review the evaluation design.

- Is the selection of an evaluation design clear and justified by the aims of the program, types of data needed and the timeframe and data collection burden involved?
- Do you believe that the types of information provided (e.g., statistical, descriptive) are valid and reliable data upon which you would be willing to take action?

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

Step 7: Review the data collection and analyses processes.

- Does the evaluation address the extent to which the instruments measure what they are supposed to measure (i.e., are they valid)?
- Does the instrument design give you confidence that if the instruments were administered more than once to similar groups (or to the same group) they would yield consistent results (i.e., are they reliable)?
- Do the ways in which the data are analyzed and presented reflect the program objectives and make sense to you? Are the types of data provided (e.g., percent correct, percentile rank, grade equivalents) of use to you?

Step 8: Review the overall evaluation report.

Format Considerations

- Is there an Executive Summary which provides a clear description of the evaluation procedures and results?
- Is the report arranged in such a way (e.g., with appropriate tables and section headings) that you can identify what information is of interest to you and find it easily?

Content Considerations

- Does the report provide believable evidence that the positive results reported occurred as the result of the special education program or are other explanations, such as normal growth of the students, just as plausible? Are things better than what would be predicted without a special education program?
- Are alternative interpretations of the data presented, and the reasons for their rejection made clear?
- Are the reported results educationally significant, i.e., are they "of nontrivial magnitude, in a content area generally accepted as important, which can be achieved at a reasonable cost"?
- Are the data presented consistent, e.g., do the numbers in the text and tables agree? Are the inferences drawn from the data consistent with the evidence, e.g., does the evaluation claim educational significance only when the data support it? Are claims of causality substantiated by the evidence?
- Are there any "unanticipated consequences" of the program? Are they documented and explained in a way that makes their impact clear?

Step 9: Design a program improvement management plan.

- Are the recommendations clearly based on the evaluation information presented? Do you believe these recommendations effectively address the appropriate program strengths and weakness? Is it clear who has responsibility for taking action on the recommendations?
- Do the policy implications and recommendations follow directly from the data? Does the report provide the rationale and information you need to act on these recommendations?

## A POLICYMAKER'S EVALUATION GLOSSARY

Evaluation, like many other fields, has a language which describes its processes and products in a specialized manner. The following glossary is provided to clarify some of the basic evaluation research terminology. (Katzner et.al., 1982).

Action research: Research in which the decisionmaker using the results of the research takes part in the research.

Applied research: Research carried out to discover new knowledge that has immediate applicability.

Average: A measure of central tendency (the middle) of a set of scores. Usually, it is synonymous with the mean.

Case study: An analysis and explication of a single situation or single case (unit of analysis; subject), often using qualitative methods.

Before and after design: An experimental design in which subjects are measured on a given variable before and after the independent variable (or treatment) is administered.

Causality: The concept that some phenomena cause other phenomena.

Control group: In a study made up of several different treatment groups, the control group is the one against which the others are compared. Often, the control group does not receive any treatment. (Also known as the comparison group.)

Correlation: In informal usage, correlation is often used as a synonym for "association," although there is a technical distinction between these terms. Correlation is also used to stand for a particular measure of association, Pearson's  $r$ .

Demographic variable: An attribute variable of a person; usually a variable that classifies a person into social groupings. Common demographic variables are age, sex, social class, ethnicity and marital status.

Dependent variable: The variable that is thought to be affected by an independent variable (Also known as the criterion, outcome, predicted or response variable.)

Descriptive statistics: Statistics that summarize a set of data; inferences from the data to a larger population are not made.

Empirical: Subject to critical evaluation through observation or experiment rather than through speculation or theorizing.

Experimental group: A treatment group that receives a level of the independent variable (or treatment) which is of substantive interest, as contrasted with the control group.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

External validity: The generality of research results.

Experimental research: Research in which the subjects have been subjected to a treatment and the purpose of the study is to assess the effect of that treatment or event.

Field experiment study: Non-experimental research conducted in a non-laboratory setting, usually the natural environment of the phenomenon under study.

Formative evaluation: Evaluation which is conducted during a program or process, usually for the purpose of pinpointing progress/problems and altering the process, if necessary, while it goes on.

Independence: No association or relationship.

Independent variable: The variable thought to produce a result on the dependent variable.

Internal validity: A consideration of whether the independent variable produced variation in the dependent variable. Thus, internal validity is a type of factual accuracy.

Longitudinal study: A study conducted over a period of time, although sometimes only at a few discreet points in time during that period.

Model: A simplified description of a phenomenon, often in words, pictures or symbols.

Naturalistic observation: A method of gathering data that involves making a detailed record of events as they occur in their natural setting while having as little effect as possible on those events.

Non-experimental design: A research design in which it is impossible to control all biases and protect internal validity.

Paradigm: A complex theoretical model that is used to explain phenomenon.

Policy research: Research conducted to help formulate or evaluate policy.

Population: All possible observations or units which could be used in a study.

Post-test: Measurement of experimental subjects on a given variable after a treatment is given.

Pre-test: Measurement of subjects on a given variable before the independent variable/treatment is administered.

Qualitative research: Research methods that attempt to describe and understand people or social entities from their own point of view.

Quantitative research: Research methods that attempt to categorize and summarize observations numerically.

Quasi-experimental research: An experiment in which some, but not all, sources of potential bias are under the control of the experimenter; at least random assignment of subjects is usually missing.

Reliability: Extent to which a measuring instrument would give the same value if used over and over providing the attribute measured did not change.

Research design: The strategy or plan of an experiment, often focusing on the control of possible biases and the scheduling of treatments and measurements.

Sample: The subset of the population actually used in the research.

Statistical significance: The outcome of significance tests in which the results are shown to have a low probability of being due to chance alone, thereby eliminating chance as a viable cause of the results.

Summative evaluation: Evaluation which is concerned with determining overall effectiveness of a completed program or process, usually for the purpose of deciding whether or not to repeat it, or what changes, if any, need to be made before repeating.

Validity: How well an instrument measures the phenomenon under investigation.

\*\*\*\*\*

#### REFERENCE

Katzer, J., Cook, K., & Crouch, W. Evaluating information: A guide for users of social science research (2nd ed.). Massachusetts: Addison-Wesley, 1982.

\*\*\*\*\*

\*\*\*\*\*

### ABOUT THE PROJECT

This material is made available through NASBE's Special Education Dissemination Project. Working in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators, NASBE has undertaken a variety of activities aimed at providing education policymakers with research and practice-based information on special education.

The project is funded by the Division of Educational Services, Special Education Programs, U.S. Department of Education. However, the views expressed herein do not necessarily reflect the position or policies of that Department. This material may be reproduced.

For more information about the project, contact Roberta Felker, Dinah Wiley or Cynthia Chambers at NASBE.

\*\*\*\*\*

## PRESCHOOL SPECIAL EDUCATION

Once it is discovered that a child has a handicapping condition, research and common sense both dictate that the best available intervention should be applied as early as possible. For many of these children, the necessary intervention will include special education and related services designed to enhance the development of certain skills and behaviors.

Much is known about how to help very young handicapped children. Yet to deliver the services they need, public agencies must overcome obstacles such as inadequate information, commitment, financing and coordination. Despite these barriers, public officials are beginning to take steps to ensure that early intervention services are provided to the preschoolers who need them.

To help decisionmakers fill the information gap regarding preschool special education, this issue brief addresses questions like the following:

- WHY ARE SPECIAL EDUCATION PROGRAMS FOR PRESCHOOL HANDICAPPED CHILDREN A SOUND INVESTMENT?
- HOW ARE STATES CURRENTLY MEETING THE NEEDS OF HANDICAPPED INFANTS, TODDLERS AND OLDER PRESCHOOLERS?
- WHAT ARE SOME KEY ISSUES AND IMPLICATIONS FOR EDUCATION POLICYMAKERS?

## BACKGROUND

Child development researchers have established that human learning and development occur at their fastest rates in the years prior to any child's entrance into school. For the handicapped child, these early years are even more crucial. A child with a problem in only one developmental area may begin, as a result, to have problems in other developmental areas. Much empirical evidence indicates that early intervention can ameliorate many handicaps, and may prevent the compounding of a child's handicapping condition. The national trend toward providing education programs for young people who have traditionally been underserved has expanded in recent years to include high-risk preschool children.

There was little interest in the importance of early childhood education until the 1960s. Public awareness became heightened partly as a result of Head Start and similar preschool programs that drew attention to the needs of children who were economically disadvantaged and/or physically handicapped. In the fifties and sixties, these programs had a pragmatic base; it just seemed to "make sense" to start earlier to educate blind or deaf children. Whether a child might be able to gain intellectually or socially from the preschool curriculum was seldom considered. Programs were often designed on the assumption that they could borrow curriculum materials, methodologies, and theories of learning that were currently successful and being implemented in traditional non-handicapped preschool programs. Yet after programs were funded, it was realized that frequently there was no basic core of curricular information on which to draw. Finally, most programs lacked an evaluation component measuring whether the curriculum was meeting the needs of the students.

A new rationale for early education emerged during the late sixties and the seventies. The belief that patterns of learning and personality development are fairly well solidified by the end of a child's early years became stronger. This led to broadened support for the hypothesis that educability could be enhanced through properly planned early experiences, and that such experiences should be of particular benefit to disadvantaged and handicapped children. Demonstration preschool programs were established, grounded in the rationale that effective teaching could overcome barriers to learning that environmental factors often imposed. By the mid-seventies, this rationale was supported by strong evidence, including Head Start evaluations (Hubbell, 1983).

A recent general surge of interest in infancy and the early childhood years holds high promise for improving the lives of exceptional children. According to Bender and Bender (1979), most professionals agree that the period from birth to 36 months is especially crucial and receptive to interventions because it coincides with the rapid development of language and related cognitive abilities. The purposes generally cited for early intervention by parents and specialists with infants and toddlers are: 1) helping babies and their families to live fuller and happier lives together from the outset; 2) preventing or minimizing the development of problems that are rooted in the first three or four years of life; and 3) increasing the chances for satisfactory future schooling and wholesome life patterns.

(Continued on back cover)

American commitment to early special education is still precarious. Data submitted to Congress (Sixth Annual Report, 1984) for the school year 1981-82 indicate that the number of children ages three to five served under Public Law 94-142 totaled only 239,250. Most communities that have started preschool programs for handicapped children are continuing to provide them, yet these communities tend to be the exception rather than the rule. Still, the outlook for the future of early education is promising. Many opportunities are appearing for persons prepared as early childhood teachers or administrators. More importantly, perhaps, a substantial body of research indicates that if and when free, public education becomes available to all America's very young children, the following changes might be anticipated:

1. Many more children who need special education will be identified early.
2. Early identification will permit equally early intervention to provide the best start for each child's education and self-concept.
3. Early intervention should result in greater cost-effectiveness, because special education is applied earlier when the situation is more amenable to change. Need for later special education may be eliminated in many cases.
4. Parents will be spared the concerns that mount as they see their exceptional children grow older without adequate attention, and parental commitment to education should be increased (Reynolds & Birch, 1981).

Exactly these kinds of results are being reported in outcome studies of early education programs. Such evidence is reviewed in the "Research" section of this issue brief.

\*\*\*\*\*

#### REFERENCES

- Bender, M. & Bender, R.K. Disadvantaged preschool children: A sourcebook for teachers. Baltimore: Paul H. Brooks Publishers, 1979.
- Division of Educational Services, Special Education Programs. Sixth annual report to Congress on the implementation of Public Law 94-142: The Education for All Handicapped Children Act. Washington, D.C.: U.S. Department of Education, 1984.
- Hubbell, R. A review of head start research since 1970. Washington, D.C.: U.S. Department of Health and Human Services, 1983.
- McNulty, B.A., Smith, D.B., & Soper, E.W. Effectiveness of early special education for handicapped children. Denver: Colorado Department of Education, 1983.
- Reynolds, M.D. & Birch, J.W. Teaching exceptional children in all America's schools. Reston, Va.: The Council for Exceptional Children, 1981.

\*\*\*\*\*

Effectiveness

Efficacy studies of early childhood special education strongly suggest that it is both cost-effective and beneficial to handicapped children. Substantial gains have been documented across diverse handicapping conditions and all degrees (mild, moderate, severe) of impairment. Longitudinal follow-up studies have found that these gains do not disappear over time. Each of these findings will be addressed in this section, which summarizes a research review published by the Colorado Department of Education (McNulty et al, 1983).

Longitudinal Studies: Sustained Performance and Benefits

Longitudinal studies conducted since the 1930s have suggested that early intervention increases intellectual development and that the increases are lasting. McNulty (1983) reports an analysis of the findings of fourteen long-range studies of handicapped and low-income children served by a variety of infant and preschool developmental programs. Compared to children who did not have preschool, the children served by these programs:

1. consistently scored higher on achievement measures,
2. required less special education, and
3. were held back in grade less often.

In 1982, the New York State Department of Education completed a five-year study of 1,348 disadvantaged children enrolled in an experimental pre-kindergarten in the public schools. By the end of third grade, significantly fewer of the pre-kindergarten children, compared to control group children, had repeated grades or been placed in special education. The study's authors suggested that "substantial savings in the cost of special education and remediation might be realized by expanding educational opportunities for preschool children" (McNulty, 1983, 9).

Shorter-Term Empirical Studies

Short-term studies respond to a different set of important research questions, such as:

1. Is early intervention effective for all categories of handicapping conditions?
2. Does the severity of the handicap influence program effectiveness?

McNulty's review highlights research on the effectiveness of preschool programs for several handicapping conditions:

- Mental Retardation. Many researchers have demonstrated that preschool contributes to higher skill acquisition in language, academics, self-help, and motor development; a number of studies specifically support early intervention with Down's Syndrome (Kirk, 1985, 1965; Moore et al, 1981; Hanson et al, 1978; Hayden et al, 1976; Dimitriev et al, 1981).

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

- Sensory Impaired. The research indicates it is particularly valuable for severely hearing-impaired and congenitally blind children to enter preschool programs before the age of three (Horton, 1976; Simmons-Martin, 1981; Clark, 1981; Adelson et al, 1975).
- Emotional Disorders. One study found that early intervention with severely emotionally disturbed preschoolers produced long-term beneficial effects (Strain, 1981).
- Severely/Profoundly Handicapped. Preschool programs have helped these children in a variety of areas such as communication, social, and self-help skills (Bricker et al, 1981; Rosen-Morris et al, 1981).
- Mixed Handicaps. Successes documented for programs that serve children with different handicaps indicate the feasibility of serving a variety of handicaps in one program (Zeitlin, 1981; Bricker et al, 1981; Hayden et al, 1977).

### Third-Party Evaluations

Independent evaluations of demonstration preschool programs established by the federal Handicapped Children's Early Education Program (HCEEP) have found:

1. over half (55%) of all HCEEP graduates are placed in integrated settings that are less expensive than more specialized placement alternatives (Littlejohn, 1982);
2. two-thirds (67%) of the graduates perform in the average and above-average ranges in relation to their peers, according to staff of the regular and special education programs which the graduates attend (Littlejohn, 1982);
3. significant gain in five skill areas among 160 randomly-selected children from 32 randomly-selected early childhood projects (Stock et al, 1976).

### Cost-effectiveness

Early special education can result in a total cost savings of over \$16,000 per handicapped student throughout the years in school, according to data compiled by Mary E. Wood (1981) from individual studies throughout the United States. Wood also found that handicapped students who attend preschool leave special education for regular education at a higher rate and a younger age than those without preschool. The costs of special education increase at each higher educational level; thus, delaying intervention results in more children requiring more special services at higher costs. Because institutionalization is the most expensive form of service, it is particularly cost-effective to provide very early intervention services for severely and profoundly handicapped children.

Based on a 15-year follow-up study of children who had attended a two-year preschool program, Schweinhart and Weikart (1981) projected the following economic benefits:

1. savings of \$3,353 per child as a result of reduced need for special education services; and
2. an increase of \$10,798 per-child lifetime earnings based on achievement of a higher educational level.

The researchers projected a total of 248 percent return on the cost of the original investment in the pre-school program.

In conclusion, the McNulty review states that money spent on the excess costs of early intervention might be paid back to the government through:

- reduced future needs for special education,
- higher projected earnings which result in higher income taxes,
- reductions in income maintenance payments, and
- avoidance of institutionalization.

\*\*\*\*\*

#### REFERENCES

- Adelson, E. & Fraiberg, S. Gross motor development in infants blind from birth. In B.Z. Friedlander, G.M. Sterritt, & E.E. Kirk (Eds.), Exceptional infant: Assessment and intervention, 3. New York: Brunner/Mazel, 1975.
- Bricker, D. & Sheehan, R. Effectiveness of an early intervention program indexed by measures of child change. Journal of the Division for Early Childhood, 1981, 4.
- Clark, T.C. Efficiency of early home intervention for promoting language development in hearing impaired infants and very young children. Paper presented at HCEEP - DEC Conference, Washington, D.C. (from Utah State University, Logan) December, 1981.
- Dimitriev, V., Hayden, A.H., & Haring, N.G. The acceleration and maintenance of developmental gains of school-aged children with Down's Syndrome and other development delays: A longitudinal study, 1974-80. Seattle: Model preschool center for handicapped children, EEU, University of Washington, 1981.
- Hanson, M. & Schwarz, R. Results of a longitudinal intervention program for Down's Syndrome infants and their families. Education and training of the mentally retarded, 1978.
- Hayden, A.H., & Haring, N.G. Early intervention for high-risk infants and young children: Programs for Down's Syndrome children. In T.D. Tjossem (Ed.), Intervention strategies for high-risk infants and young children. Baltimore: University Park Press, 1976.

- Hayden, A.H., Morris, K., and Bailey, D. Final report: Effectiveness of early education for handicapped children. Washington, D.C.: Bureau of Education for the Handicapped, 1977.
- Horton, K.B. Early intervention for hearing-impaired infants and young children. In T.D. Tjossem (Ed.), Intervention strategies for high-risk infants and young children. Baltimore: University Park Press, 1976.
- Kirk, S.A. Diagnostic cultural and remedial factors in mental retardation. In S.F. Osler & R.E. Cooke (Eds.), The biosocial basis of mental retardation. Baltimore: The John Hopkins University Press, 1965.
- Kirk, S.A. Early education of the mentally retarded. Urbana, Ill.: University of Illinois Press, 1958.
- Littlejohn, R. Associates. An analysis of the impact of the handicapped children's early education program (ED Contract #300-81-0661). Washington, D.C.: Author, November 1982.
- McNulty, B.A., Smith, D.B. & Soper, E.W. Effectiveness of early special education for handicapped children. Denver: Colorado Department of Education, 1983.
- Moore, M.G., Fredricks, H.D., & Baldwin, V.L. The long-range effects of early childhood education on a trainable mentally retarded population. Journal for the Division for Early Childhood, 1981, 4.
- Rosen-Morris, D. & Sitkei, G. Strategies for teaching severely/profoundly handicapped infants and young children. Journal of the Division for Early Childhood, 1981, 4.
- Schweinhart, L.J. & Weikart, D.P. Effects of the Perry Preschool Program on youths through age 15. Journal of the Division for Early Childhood, 1980, 4.
- Simmons-Martin, A. Efficacy report: Early education project. Journal of the Division for Early Childhood, 1981, 4.
- Stock, J.R., Newborg, J., Wnek, L.L., Schneck, E.A., Gabel, J.R., Spurgeon, M.S. & Ray, H.W. Evaluation of handicapped children's early education program (HCEEP) final report. Columbus, Oh.: Batelle Center for Improved Education, 1976.
- Strain, P.S. Conceptual and methodological issues in efficacy research with behaviorally disordered children. Journal of the Division for Early Childhood, 1981, 4.
- Wood, M.E. Costs of intervention programs. In Garland, C. et al (Eds.), Early intervention for children with special needs and their families. Seattle: Western States Technical Assistance Resource (WESTAR) of the University of Washington, 1981.
- Zeitlin, S. Learning through coping. Journal of the Division for Early Childhood, 1981, 4.

\*\*\*\*\*

## LEGISLATION

### Review of Federal Initiatives

This section summarizes a review of the progression of federal attention to early childhood education provided by Bender and Bender (1979). During the early 1960s, the federal government began to lay the foundation for serving handicapped children in publicly-funded education programs with enactment of programs serving disadvantaged youth. While many of these programs centered on helping adolescents, the emphasis on public responsibility for the education of underserved, out-of-school youth had implications for preschoolers.

Several important social movements then created an impetus for early education programs. One was the initiation of major intervention programs for young poverty-level children, a focus of the 1965 **Elementary and Secondary Education Act**, which provided for compensatory school programs, and also encouraged program innovation. In addition to federal funding, private foundations began supporting various phases of community education, and allowed local public school districts access to their support.

Of particular importance to an increasing national commitment was the creation of Head Start, funded in 1968 from the Economic Opportunity Act's Community Action Program (CAP). Simultaneously, Congress established the 1968 **Early Childhood Assistance Act**, which emphasized the needs of handicapped preschool children.

During the 1970s, these initiatives were strengthened and refined. In particular, the 1974 **Economic Opportunity and Community Partnership Act** revitalized Head Start and stipulated that ten percent of the children enrolled must be handicapped.

This was followed by what is currently the most significant federal commitment, the 1975 **Education for All Handicapped Children Act** (Public Law 94-142). P.L. 94-142 provided the impetus for state departments of education to provide a "free appropriate public education" (FAPE) to all handicapped children, including the previously underserved preschool population. It provided formula grants to states for funding direct services to handicapped children, and included preschool incentive grants based on the number of handicapped preschool children receiving special education. The following summary of its provisions is taken from Neisworth et al (1980). All indented quotes from P.L. 94-142 are taken from the Federal Register (1977, 42(163), p. 42488).

P.L. 94-142. The Education for All Handicapped Children Act, and the regulations that describe implementation procedures, provide broad guarantees regarding the law's application to preschool children. In general,

Each state shall ensure that free appropriate public education is available to all handicapped children aged three through eighteen within the state...

There are, however, several qualifications that must be considered. With special reference to children in the age ranges of three to five years and 18 to 21 years, the following caveat applies:

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

If state law or a court order requires the state to provide education to handicapped children in any disability category in any of these age groups, the state must make a free appropriate public education available to all handicapped children of the same age who have that disability.

This provision simply says that education cannot be denied to some children and provided for others who have the same disability and are the same age. In addition, the regulations specify that:

If a public agency provides education to nonhandicapped children in any of these age groups, it must make a free appropriate public education available to at least a proportionate number of handicapped children of the same age.

This mandates that whatever is provided for nonhandicapped children must be provided for handicapped children as well. The federal guarantees, however, also allow for deference to state laws and court orders, as noted by the following sections:

A state is not required to make a free appropriate public education available to a handicapped child in one of these groups if:

- (i) State law expressly prohibits, or does not authorize, the expenditure of public funds to provide education to nonhandicapped children in that age group; or
- (ii) The requirement is inconsistent with a court order which governs the provisions of free public education to handicapped children in that state.

These two exceptions allow for the possibility that all handicapped preschoolers may not receive services under the law. In states in which nonhandicapped preschool children are not provided for, there is no mandate to provide for those who are handicapped.

Finally, however, the requirement to identify, locate and evaluate handicapped children (referred to as child-find) does apply from birth through age 21:

Under the statute, the age range for the child-find requirement (0-21) is greater than the mandated age range for providing free appropriate public education (FAPE). One reason for the broader age requirement under "child-find" is to enable states to be aware of and plan for younger children who will require special education and related services... Moreover, while a state is not required to provide FAPE to handicapped children below the age ranges mandated under 121a.300, the state may, at its discretion, extend services to those children, subject to the requirements on priorities...

The final statement is important because it makes clear that states do have the discretion to extend services to preschool handicapped children. And, if they make this choice, the services must be provided in accordance with other

provisions of the law. Thus, in situations where preschool services are being provided, the provisions described earlier apply.

1983 Amendment. Prior to a recent amendment, the P.L. 94-142 preschool incentive grant program applied only to children three to five years of age. With passage of the 1983 Education of the Handicapped Act Amendments (P.L. 98-199), Congress voted to extend the program to handicapped children under the age of three. A new section provides grants to states for planning, developing or implementing state plans for serving handicapped children from birth through five years of age.

**State Legislation**

Presently, about half of the states have mandated legislation for the provision of educational services to some children under five. Few states extend their service mandate to all handicapped children between the ages of birth and five years. The following chart, based on a 1981 survey to which all 50 states responded, outlines the picture of state mandates for early education for the handicapped (O'Connell, 1983).

STATE MANDATES TO SERVE PRESCHOOL HANDICAPPED CHILDREN

<u>Mandate</u>	<u>Number of States</u>	<u>Percentage of States</u>
1. All handicapped children from birth to five years must receive educational services.	8	16%
2. Educational services are required only for children from birth to three years of age who are:	4	8%
a) deaf and blind (Delaware, Texas)		
b) 50% below normal development (Okla.)		
c) "in some specified categories" (Ill.)		
3. All handicapped children from three to five years of age must receive educational services.	12	24%
4. Educational services are required only for some three to five year olds:	7	14%
a) four- and five-year olds (Oklahoma and Minnesota)		
b) four-year old deaf children and all handicapped five-year olds (South Carolina)		
c) five-year olds only (four states)		
5. No mandate	24	38%

In conclusion, federal and state requirements for preschool education have grown slowly but steadily in the last twenty-five years. On the federal level, the 1975 Education for All Handicapped Children Act provided a catalyst for state and local involvement in educating very young handicapped children. Individual states are expanding their mandates in the direction of service to all handicapped preschoolers regardless of their age or handicapping condition. These trends reflect a growing commitment to providing children with the earliest possible intervention at a time when it may have the best chance of ameliorating the effects of a handicapping condition.

\*\*\*\*\*

**REFERENCES**

Bender, M. & Bender, R.K. Disadvantaged preschool children: A sourcebook for teachers. Baltimore: Paul H. Brooks Publishers, 1979.

Federal Register, Vol. 42, No. 163, August 23, 1977.

Neisworth, J.T., Willoughby-Herb, S.J., Bagnato, S.J., Cartwright, C.A. & Laub, K.W. Individualized education for preschool exceptional children. Germantown, Md.: Aspen Systems Corporation, 1980.

O'Connell, J.C. Education of handicapped pre-schoolers: A national survey of services and personnel requirements. Exceptional Children, 1983, 49(6).

U.S. Congress. Public Law 98-199, Sections 9 & 10, December 2, 1983.

\*\*\*\*\*

## EXAMPLES OF PROGRAMS SERVING PRESCHOOL HANDICAPPED CHILDREN

### State Programs

#### Wisconsin: The Portage Project (Home-Based)

This program was originally funded in 1969 by the Education of the Handicapped Act (P.L. 91-239), Title VI, Part C, as an educational model for early childhood intervention for mentally retarded and very young rural children. The funding agency's goal was to develop, implement and demonstrate how a program of early intervention--compared to existing medical approaches--could be effective. The project is a response to needs expressed by large numbers of parents for help and support services for their children.

This home-based model provides screening, educational diagnosis, and planning to link parents with an array of services already existing in the community, yet designed to meet the individual needs of the child. Administrative responsibility rests with a regional education agency. The age range of the population served is birth to six years, and the initial program included only children who demonstrated some degree of handicap.

All instruction takes place in the child's home, taught by the parents or a parent-surrogate. The parents are provided with an individualized curriculum, and with assistance from a home teacher who visits once a week for 1-1/2 hours. To assure some success and to minimize frustration of the child and parents, only three behaviors are taught each week.

Evaluation. The educational advantages of home-based precision teaching models such as the Portage Project have been described by Tjossem (1976):

1. Learning in the natural environment, rather than a classroom setting, alleviates many problems with replication of behaviors learned in school.
2. Direct and continuous access to behavior as it naturally occurs is afforded. Because the parents are largely determining what is to be taught, curriculum planning incorporates the culture and values specific to the family.
3. Generalization and retention of learned behaviors are promoted.
4. Full family participation in the child's education is promoted.
5. A full range of behavior that does not usually occur in a classroom can be affected.
6. Generalization of parent training to new situations is also facilitated.
7. Individualization of instructional goals is increased.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

### Missouri: The Saturday School Program (In-school Intervention)

This is an early childhood education program integrating handicapped children with their non-handicapped peers. Conducted by one Missouri school district, the program is a home-school arrangement that couples high effectiveness with low cost; the yearly per-pupil expense is \$230 (Reynolds and Birch, 1981). The Saturday School's youngest students are four-year olds, and the program serves 700 pupils annually, or 75 percent of the target population.

Both handicapped and non-handicapped children attend school three hours on either Saturday morning or afternoon. Parents have scheduled involvement as parent-teachers, planners and aides, all under professional guidance. On weekdays, preschool teachers meet with three or four children in the home of one; parents and siblings are encouraged to attend these sessions. Fifteen percent of the students receive special education and related services; this includes additional home visits by teachers who show parents how to apply activities specifically designed to match the child's needs.

Evaluation. The original participants in the Saturday School program were evaluated when they reached the fourth grade. At each elementary grade level, these children scored higher on standardized achievement tests than students with other preschool experience, and significantly higher than those with no preschool. The progress of the Saturday School handicapped children was evaluated as follows:

1. The majority were functioning well by the end of the first Saturday School year.
2. Of those with learning problems, 85 percent retested at age level by the end of the first year.
3. Children with emotional problems evidenced marked improvement in behavior and adjustment.
4. Seven out of eight whose test scores were initially in the retarded range moved out of that range.
5. Former Saturday School students with diagnosed learning disabilities improved more each year than did classmates without preschool training.

### Kentucky: Project KIK (Model Mainstreaming)

The Kentucky Department of Education provides "model mainstreaming" services to preschool handicapped five-year olds enrolled in public school kindergartens. Between 1978 and 1982, 24 sites were established throughout the state. Project KIK (Kentucky's Individualized Kindergartens) is funded through P.L. 94-142 preschool incentive grant funds, and is planned and coordinated with other public and private agencies in the state. The program's varied goals include:

1. implementing a statewide procedure for early identification, including training teachers in its use;
2. generating innovative practices using individualized curricula and parent involvement;

3. training (local, regional and statewide), consultation and technical assistance to local school districts.

Evaluation. Effectiveness data are not available, but among other results, the project reports that approximately 35,000 children have been assessed to date (Bright, 1982), over 2,000 professionals have been trained in the KIK model, and over 600 agencies throughout the state have participated in KIK training. In 1982, direct services were provided to 360 handicapped children. The project emphasizes that in Kentucky, regular educators and special educators are working side-by-side for a common goal, and that teachers who were once experiencing frustration have been provided materials, methods and training.

### National Programs

#### Project Home Base

A demonstration project of the U.S. Department of Education, originally conducted under Title III of the ESEA, this program was founded on the belief that parents are a child's first and best continuous teachers. It strives to support and enhance their teaching and parenting abilities and thereby to influence development of the very young child's learning potential. The central feature of the program is a weekly home visit by a paraprofessional parent educator. The parents are given a weekly task selected to meet the child's developmental needs, and provided with information about child development and health care.

Evaluation. Home Base children entering Head Start performed better on a preschool inventory than non-Home Base children. Project participants completed 92.5 percent of the tasks taught to them by parents. Home Base parents increased their use of "desirable teaching behaviors," described by the project as follows:

1. Explain what is going to happen before you start.
2. Give time to look at the materials before starting work.
3. Ask questions that require more than one right answer.
4. Ask questions that require more than one or two words to answer.
5. Get children to talk about their answers.
6. Get children to ask questions.
7. Give time to think about a problem.
8. Get children to back up answers with facts and evidence.
9. Praise children when they do well.
10. Let children know when their answers are wrong.

#### Project Head Start (In-school Intervention)

This federal preschool program for disadvantaged children was designed in the mid-sixties with five major components: 1) health, including a complete medical examination; 2) nutrition, including one hot meal per day; 3) education; 4) parent involvement; and 5) social/psychological information and referral. By law, at least ten percent of the overall Head Start enrollment must be handicapped children, and these children must be mainstreamed into regular activities.

Evaluation. A comprehensive review of Head Start research prepared for the federal government includes findings specific to handicapped children (CSR, 1983). According to this review, eleven percent of the children in Head Start are handicapped; the majority of these are mildly or moderately handicapped. One study reviewed found 90 percent of the Head Start Centers to be well equipped for special needs children. However, 40 percent of the children did not have individualized education programs (IEP), and only 20 percent of the teachers had early childhood or special education training.

Generally, Head Start appears to enhance the cognitive abilities of children with some types of handicapping conditions, notably those with speech, learning, and emotional problems. Experimental tutoring within Head Start has produced significant positive effects on the cognitive development of children with low achievement levels. The research review concludes that Head Start is fairly successful in socially integrating handicapped children into their programs; physically handicapped children show more gains in social development and self-help skills than do children with mental or emotional disabilities. Finally, most research indicates that Head Start children require fewer special education placements in elementary school than non-Head Start children.

\*\*\*\*\*

REFERENCES

Bender, M. & Bender, R.K. Disadvantaged preschool children: A sourcebook for teachers. Baltimore: Paul H. Brooks Publishers, 1979.

Bright, B. Project KIK: Mainstreaming preschool handicapped children on a statewide basis. In J. Anderson & T. Black (Eds.), Mainstreaming handicapped preschoolers (ED Contract No. 363-80-0752). Chapel Hill, N.C.: Technical Assistance Development System, September 1982.

CSR, Incorporated. A review of head start research since 1970 (Contract # HHS 105-81-C-026). Washington, D.C.: U.S. Department of Health and Human Services, September 1983.

Reynolds, M.C. & Birch, J.W. Teaching exceptional children in all America's schools. Reston, Va.: The Council for Exceptional Children, 1981.

Tjossem, T.D. (Ed.). Intervention strategies for high-risk infants and young children. Baltimore: University Park Press, 1976.

\*\*\*\*\*



## ISSUES AND IMPLICATIONS

This section focuses on three key questions regarding preschool special education that are of particular concern to policy makers. These somewhat thorny issues are: 1) defining who is to be served by public preschool special education, 2) certifying teachers of very young handicapped children, and 3) integrating handicapped preschoolers with their non-handicapped peers. Generalizations are difficult, because few data are available across states, and because each of these issues must be considered on a state-by-state basis. The following discussion frames the issues and draws some implications for the decision-making process.

### Defining the Population

Lessen and Rose (1980) conducted a survey of state consultants responsible for preschool handicapped education, to determine the degree of accord that exists with respect to defining the population. Forty-four (88 percent) of the states responded; the results are presented in the chart on the next page. Seven of the responding states have a specific definition for preschool handicapped. Of these, Alabama and Kansas offer a definition that includes age, the use of categorical and ancillary special education services, as well as objectives for preschool handicapped education. New Jersey relies on a deviation from the child's chronological age group, while Michigan uses both the deviation and the categorical criteria. Connecticut, Iowa and Vermont specify preschool special education for those children requiring preventive services in order to preclude possible problems that may occur during the child's school years.

The remaining respondents had adopted no specific definition. Nineteen of these either offer no current guidelines, or they simply state their intention to comply with the requirements of Public Law 94-142. Fourteen states responded that they use existing categorical definitions. Two states, Wisconsin and Pennsylvania, use a demonstrated need for special education as their criterion. Massachusetts' criterion is that the child is perceived as being in need of special education upon entering kindergarten. Virginia describes a preschool handicapped child as "one who deviates significantly from established milestones or norms...."

The next chart in this section, Table 3C2 (Sixth Annual Report to Congress, 1984), documents how different states serve handicapped three- to five-year-olds in different educational environments. As can be noted on this chart, the integration of handicapped children varies dramatically from 1.93 percent served in regular classes in Iowa, to a high of 98.86 percent served in regular classes in Rhode Island.

Implications. The fact that only five of all responding states (CT, IA, MI, NJ, and VT) have adopted definitions that do not rely on traditional categories and are unique for this population points to the apparent difficulties in identifying the preschool handicapped population. These difficulties include variability in normal development and environmental experiences, and questionable identification and diagnostic instruments. To reduce the probability of misdiagnosis, especially of leaving out children who are in need, the requirements for a preschool handicapped population definition must be rigorous. Policymakers should work together with parents, professionals and government representatives to develop specific guidelines for early identification, and recommendations for an agreed-upon definition of the preschool handicapped population.

*A project for policymakers administered by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators. 701 N. Fairfax St., Suite 340 Alexandria, VA 22314 (703)684-4000*

STATE DEFINITIONS OF PRESCHOOL HANDICAPPED POPULATIONS

	Specific Definition	P.L. 94-142	Category Definitions	Demonstrated Need	Deviation from Peers
Alabama	•		•		
Alaska			•		
Arkansas		•			
California		•			
Colorado			•		
Connecticut	•			•	
Delaware			•		
Florida		•			
Georgia		•			
Hawaii			•		
Idaho		•			
Illinois			•		
Indiana		•			
Iowa	•			•	
Kansas	•		•		
Kentucky		•			
Louisiana		•			
Maine			•		
Maryland			•		
Massachusetts				•	
Michigan	•		•		•
Minnesota			•		

	Specific Definition	P.L. 94-142	Category Definitions	Demonstrated Need	Deviation from Peers
Mississippi		•			
Missouri			•		
Nebraska		•			
Nevada		•			
New Jersey	•				•
New York		•			
North Dakota			•		
Ohio		•			
Oklahoma		•			
Oregon		•			
Pennsylvania		•		•	
South Carolina			•		
South Dakota		•			
Tennessee			•		
Texas			•		
Utah		•			
Vermont	•			•	
Virginia					•
Washington			•		
West Virginia		•			
Wisconsin				•	
Wyoming		•			

Source: Messen, E.J. and T.L. Rose, State Definitions of Preschool Handicapped Populations. *Exceptional Children*, 46, 6, March 1980, 467-469.

213

Table 3C2

NUMBER AND PERCENT OF CHILDREN 3 - 5 YEARS OLD SERVED IN DIFFERENT EDUCATIONAL ENVIRONMENTS DURING SCHOOL YEAR 1961-1962

STATE	ALL CONDITIONS NUMBER				ALL CONDITIONS PERCENT			
	REGULAR CLASSES	SEPARATE CLASSES	SEPARATE SCHOOL	OTHER EN- VIRONMENTS	REGULAR CLASSES	SEPARATE CLASSES	SEPARATE SCHOOL	OTHER EN- VIRONMENTS
ALABAMA	1,139	230	22	31	78.99	17.34	1.53	2.15
ALASKA	441	291	113	0	54.76	31.16	14.04	0.00
ARIZONA	2,808	335	102	33	89.89	10.22	3.11	0.98
ARKANSAS	1,714	139	720	0	66.81	5.40	27.98	0.00
CALIFORNIA	10,835	6,359	134	0	62.53	38.70	0.77	0.00
COLORADO	486	549	707	8	27.60	31.41	40.45	0.34
CONNECTICUT	2,433	1,104	131	107	64.11	29.09	3.98	2.82
DELAWARE	241	421	148	0	29.63	52.10	18.07	0.00
DISTRICT OF COLUMBIA	184	19	87	18	61.85	7.14	25.19	6.02
FLORIDA	9,394	1,188	1,785	100	63.72	14.01	21.09	1.18
GEORGIA	6,319	1,133	331	200	79.18	14.19	4.15	2.51
HAWAII	63	323	14	0	16.17	60.33	3.48	0.00
IDAH0	335	151	129	2	54.29	24.47	20.91	0.32
ILLINOIS	2,443	4,097	1,587	46	29.89	50.13	19.42	0.56
INDIANA	4,131	390	1,121	44	72.65	6.88	19.72	0.77
IOWA	95	1,968	0	3,154	1.93	33.92	0.00	84.14
KANSAS	2,180	340	6	21	79.15	19.79	0.29	0.77
KENTUCKY	2,299	494	702	8	63.61	14.10	20.08	0.23
LOUISIANA	3,882	1,830	887	143	61.09	29.78	10.97	3.28
MAINE	1,207	348	103	115	61.24	27.70	5.22	3.83
MARYLAND	3,988	343	1,307	27	68.01	6.50	24.79	1.70
MASSACHUSETTS	2,305	3,478	221	19	38.27	57.75	3.97	0.32
MICHIGAN	3,284	4,209	225	458	52.57	41.20	2.39	3.84
MINNESOTA	3,857	3,238	122	19	53.32	44.73	1.89	0.28
MISSISSIPPI	822	301	243	12	52.80	25.55	20.83	1.02
MISSOURI	5,430	713	113	188	84.23	11.16	1.75	2.89
MONTANA	1,327	135	0	0	90.09	9.91	0.00	0.00
NEBRASKA	1,481	1,225	0	0	54.73	45.27	0.00	0.00
NEVADA	258	80	102	5	60.52	14.18	24.11	1.18
NEW HAMPSHIRE	574	154	49	3	73.59	19.74	6.28	0.38
NEW JERSEY	3,961	1,748	449	107	60.72	29.60	7.88	1.82
NEW MEXICO	-	-	-	-	-	-	-	-
NEW YORK	3,900	1,208	5,808	44	38.25	11.23	52.12	0.41
NORTH CAROLINA	2,708	312	478	94	75.42	8.89	13.28	2.62
NORTH DAKOTA	261	385	39	0	41.26	53.60	5.14	0.00
OHIO	5,958	981	1,288	13	72.31	11.91	15.63	0.18
OKLAHOMA	4,050	844	103	448	78.95	12.24	1.96	6.55
OREGON	1,498	498	82	14	71.55	23.83	3.92	3.87
PENNSYLVANIA	5,713	958	4,343	433	49.73	8.89	37.81	3.77
PUEERTO RICO	0	412	420	0	0.00	48.52	50.48	0.00
RHODE ISLAND	893	1	8	1	98.86	0.14	0.88	0.14
SOUTH CAROLINA	2,958	341	417	39	78.77	9.08	11.11	1.04
SOUTH DAKOTA	815	889	27	1	40.14	98.03	1.76	0.07
TENNESSEE	7,087	781	3	90	88.95	9.66	0.04	1.13
TEXAS	14,891	7,150	1,595	310	60.75	31.53	6.48	1.28
UTAH	1,037	142	258	0	73.28	9.90	17.34	0.00
VERMONT	489	281	82	398	40.09	22.31	7.01	30.60
VIRGINIA	8,300	1,529	24	904	71.94	17.48	0.27	10.32
WASHINGTON	1,839	1,830	570	45	43.19	42.52	13.24	1.05
WEST VIRGINIA	1,743	92	118	242	79.41	4.19	5.38	11.03
WISCONSIN	2,819	4,272	242	4	38.70	59.88	3.39	0.08
WYOMING	339	34	10	0	88.20	9.12	2.88	0.00
AMERICAN SAMOA	0	0	12	1	0.00	0.00	22.31	7.89
GUAM	-	-	-	-	-	-	-	-
NORTHERN MARIANAS	-	-	-	-	-	-	-	-
TRUST TERRITORIES	-	-	-	-	-	-	-	-
VIRGIN ISLANDS	-	-	-	-	-	-	-	-
BUR. OF INDIAN AFFAIRS	381	19	0	0	94.93	5.07	0.00	0.00
U.S. AND TERRITORIES	142,801	81,281	27,238	7,930	59.89	25.81	11.38	3.31

Source: Division of Educational Services, Special Education Programs. Sixth annual report to Congress on the implementation of Public Law 94-142: The Education for All Handicapped Children Act. Washington, D.C.: U.S. Department of Education, 1984.

## Personnel Preparation

A number of states are moving toward the establishment of standards and regulations for certifying teachers of preschool handicapped children, as evidenced by the following data (O'Connell, 1983):

	<u>Number of States</u>	<u>Percentage of States</u>
"Preschool handicapped" is a separate and recognized category of its own within the overall state certification guidelines.	18	35%
Currently in the process of developing certification standards.	12	24%
No specific standards governing teachers of young handicapped children.	21	41%

Implications. Like the data on defining the population, these data imply difficulties in standardizing the preparation for teaching preschool handicapped children. Early childhood programs are extremely diverse in terms of services and curricula offered, number of staff members and their training backgrounds, the administrative systems or agencies under which programs operate, and the resources available. Teacher training needs, therefore, differ from program to program. Unlike elementary school teachers, preschool teachers have not all passed through a common university-level pre-service training program; not all are certified or even college educated. There is no single agency responsible for providing inservice education; each agency arranges its own training for its own staff. Training must be planned for three distinct target groups: regular preschool teachers, special education teachers, and special services personnel such as therapists.

Peterson (1983) calls prepared personnel "the bottom line for success" in the early education of handicapped children. Important issues for decisionmakers to consider include the following:

1. Given limitations on time and the amount of training that can be provided, upon what training goals should priority be placed?
2. What specific competencies and information should staff members acquire, and when (preservice vs. inservice)?
3. Who should assume responsibility for organizing and delivering training ... for determining needs ... for defining content?
4. How can training be delivered most efficiently to such a varied clientele at preservice and inservice levels?

## Mainstreaming

Goals. The objectives of preschool mainstreaming are identified by Turnbull (1982) as the following:

1. an increased opportunity for handicapped children to learn social and developmental--particularly language--skills, through modeling and imitation;
2. enhancement of the social status of handicapped children;
3. an opportunity for non-handicapped children to develop sensitivity toward handicapping conditions;
4. preparation of handicapped children for mainstreaming at the elementary and secondary level.

All but the last objective could be read as similar to goals for mainstreaming at the elementary/secondary level, yet early intervention is regarded as giving children a "head start" in meeting the other objectives. Further, preschool mainstreaming is generally considered separately because of the differences in curricular goals and developmental processes.

Implementation. Research is mixed regarding the success of mainstreamed programs in fulfilling these goals. It has been demonstrated, however, that the objectives are not achieved simply through integrated placement alone (Bender, 1979). Where success is reported, a most critical factor seems to be the existence of direct interventions designed specifically to produce one or more desired effects (Guralnick, 1983). Turnbull (September 1982) emphasizes that successful integration in any one setting--home, school, or community--is enhanced by success in other settings. She also concludes that success is enhanced by individualization: curriculum, teaching strategies and social opportunities must all be tailored to individual needs.

Implications. As long as there remains a lack of public preschool programs, opportunities for mainstreaming will be limited. Education agencies must form new relationships and modes of collaboration, such as:

1. contracting with agencies or organizations (Head Start, day care centers) that can accommodate handicapped children;
2. developing preschool programs for limited populations of non-handicapped children in order to provide an environment for the handicapped children who need to be served;
3. entering into jointly funded and controlled preschool programs which meet both private preschool obligations and public school special education requirements and objectives;
4. enlisting community and parent support and establishing volunteer efforts to create integrated preschool experiences.

In addition to these concerns, other policy questions should be considered when preschool special education services are initiated or expanded. One is the need to delineate the scope of services, i.e., whether to simply extend a current school-age mandate downward or to tailor new services to the needs of very young children and their families. Other important issues include delineation of the service provider, and determination of the extent to which local services will be mandatory or voluntary. For more information about these and other policy implications, Smith's Policy Considerations Related to Early Childhood Special Education is a helpful resource.

\*\*\*\*\*

#### REFERENCES

- Bender, M. & Bender, R.K. Disadvantaged preschool children: A sourcebook for teachers. Baltimore: Paul H. Brooks Publishers, 1979.
- Cansler, D.P. & Winton, P. Parents and preschool mainstreaming. In J. Anderson & T. Black. Mainstreaming in early education (ED Contract No. 300-82-0369). Chapel Hill, N.C.: Technical Assistance Development System, March 1983.
- Guralnick, M.J. Fundamental issues in preschool mainstreaming. In Anderson & Black, ibid.
- Lessen, E.I. & Rose, L. State definitions of preschool handicapped populations. Exceptional Children, 1980, 46(6).
- O'Connell, J.C. Education of handicapped pre-schoolers: A national survey of services and personnel requirements. Exceptional Children, 1983, 49(6).
- Peterson, N.L. Personnel training for mainstreaming young handicapped children. In Anderson & Black, op. cit.
- Smith, B.J. Policy considerations related to early childhood special education. Reston, Va.: The Council for Exceptional Children, 1982.
- Strain, P.S. & Cordisco, L.K. Child characteristics and outcomes related to mainstreaming. In Anderson & Black, ibid.
- Turnbull, A. Integration of handicapped children in home, school, community. In J. Anderson & T. Black. Mainstreaming handicapped preschoolers (ED Contract No. 300-80-0752). Chapel Hill, N.C.: Technical Assistance Development System, September 1982.
- Turnbull, A. Preschool mainstreaming: A policy and implementation analysis. Educational Evaluation and Policy Analysis, 1982, 4(3).

\*\*\*\*\*



.....

ABOUT THE PROJECT

This material is made available through NASBE's Special Education Dissemination Project. Working in cooperation with the Council of Chief State School Officers, National Conference of State Legislatures, and American Association of School Administrators, NASBE has undertaken a variety of activities aimed at providing education policymakers with research and practice-based information on special education.

The project is funded by the Division of Educational Services, Special Education Programs, U.S. Department of Education. However, the views expressed herein do not necessarily reflect the position or policies of that Department. This material may be reproduced.

For more information about the project, contact Roberta Felker, Dinah Wiley or Cynthia Chambers at NASBE.

.....

**Appendix F**  
**Letter of Transmittal**  
**MASBE**

219

230



**National Association of State Boards of Education**  
701 N. Fairfax St., Suite 340  
Alexandria, VA 22314  
(703) 684-4000

---

**MEMORANDUM**

**TO:** State Board Chairmen  
Special Education Project Contacts

**FROM:** Phyllis L. Blaunstein *PLB*  
Executive Director

**RE:** Project Resources

**Date:** February 1, 1984

As you know, NASBE's Special Education Dissemination Project is designed to provide you and your board with information related to special education research, policy and practice. The enclosed products were completed during the latter half of Year II of the project and will bring you up to date on our efforts. Specifically:

1. Issue Brief - Financing Free and Appropriate Public Education for Handicapped Students - This brief discusses the costs of educating handicapped students, reviews the manner in which special education funds are distributed and examines the policy issues associated with the distribution of these funds.
2. Research Abstracts - These abstracts provide a brief overview of publications available on a variety of issues affecting special education policy and practice. Please note the information provided for ordering the publications which may be of use to you.

These products have also been provided to all Chief State School Officers and State Directors of Special Education. Please let us know if you would like copies for other members of your Board. During the coming months, the abstracts will be provided on a monthly basis and the briefs will be provided bi-monthly. Upcoming topics for the briefs include least restrictive environment (LRE), extended school year, and early childhood programs. We would appreciate your returning the evaluation forms enclosed with the products. Your responses will assist the project staff in addressing your information needs.

We hope these resources will assist you in your efforts. If you would like additional information, please contact a member of the project staff: Roberta Felker, Cynthia Chambers, or Dinah Wiley.

PLB:tls  
cc: Executive Secretaries

---

Phyllis L. Blaunstein  
Executive Director



**National  
Conference  
of State  
Legislatures**

Office of  
State  
Federal  
Relations

444  
North Capitol  
Street, N.W.  
Suite 203  
Washington, D.C.  
20001  
202/737-7004

President  
William F. Passannante,  
Speaker Pro Tempore,  
New York Assembly

Executive Director  
Earl S. Mackey

August 8, 1983

Dear Education Committee Chairperson:

Enclosed is a copy of the first in a series of four issue briefs produced by the Special Education Dissemination Project, What Can Computer Technology Offer Special Education? This brief provides an overview of the instructional and administrative applications for microcomputers in special education, and discusses the issues that policy-makers confront when implementing these applications.

Two more publications in the series, one on special education and the law and another on special education finance, will be mailed to you soon. The final issue brief will explore program effectiveness.

In addition to the technology brief, you will find an evaluation form enclosed. Please return the completed form to me at the address listed on the form. In this way we can shape future publications to best serve your needs.

The Special Education Dissemination Project seeks to provide timely research and practice-based information to policy-makers on the state and local levels. In order to reach a wide and diverse audience, the program is being conducted jointly by the National Association of State Boards of Education in cooperation with the National Conference of State Legislatures, the Council of Chief State School Officers and the American Association of School Administrators. The project is being funded by the U.S. Department of Education.

Please feel free to contact me if you have any questions, or if you want to share information on what your state is doing in the area of special education. I have also attached copy which describes the services of the National Conference of State Legislatures' Education Program and Job Training Program. This will update you on our current activities.

Sincerely,

William A. Harrison, Jr.  
Senior Program Director, Education

Enclosures

See AB  
RECEIVED  
AUG 24 1984  
D. M. S.

Dick PAB Paul

703/528-0700



American Association of Educational Service Agencies / AASA / 1801 North Moore St., Arlington, VA. 22209

August 8, 1984

Mail to

RECEIVED  
AUG 21 1984  
DRM

MEMORANDUM

TO: DR MEEHAN  
AAESA Members  
FROM: Walt Turner  
RE: Special Education Information

I am very pleased to send you some valuable information developed by a special education dissemination program, of which AASA is a part. We hope this material will be useful as a resource to your special education departments as well as administrators in your component districts. Please feel free to reproduce some or all of the materials and distribute them as you see fit.

Enclosed are two evaluation forms. Would you please include them with the materials and encourage users to return them to us. This project has been designed specifically to provide timely research and practice-based information to educators. With funding from Special Education Programs, U.S. Department of Education, the project is being conducted by the National Association of State Boards of Education in cooperation with the Council of Chief State School Officers, the National Conference of State Legislatures, and the American Association of School Administrators.

RECEIVED  
AUG 20 1984  
E. J. H.

**Appendix G**  
**Evaluation Forms**

223

234



SPECIAL EDUCATION DISSEMINATION PROJECT

Position:  State Board of Education Member  Chief State School Officer  
 State Legislator  Local School Administrator

Other (please specify) Associate Supt, Exceptional

Name/Address (optional): LOIS ADAMS 813 CAPITAL PLAZA <sup>Children</sup>  
TOWER, Ky. Dept of Ed. FRANKFORT Ky. 40601

State: \_\_\_\_\_

1. How useful is the content of the abstract for your purpose(s)?

1                      2                      3                      4                      5  
not useful                      useful                      very useful

2. What changes could be made to increase the usefulness of the content?

None - very succinct and helpful as is

3. Do you plan to order any of the publications described?

Yes  No

Which one(s)? all in abstracts 8, 9, 10

How do you anticipate using them?

Personal Information  Background for Policy Decisions  
 Background for Staff Training  Other (please specify) local school references

4. Other comments: This is excellent information and timely in terms of organizational changes here.

THANKS!  
Please return to:

Thanks!

Roberta Felker  
National Association of State Boards of Education  
701 N. Fairfax Street, Suite 340  
Alexandria, VA 22314

EVALUATION FORM

9/15/84

ISSUE BRIEF: PRESCHOOL SPECIAL EDUCATION

SPECIAL EDUCATION DISSEMINATION PROJECT

Position:  State Board of Education Member  Chief State School Officer

State Legislator  Local School Administrator

Other (please specify) State Director of Special Education

Name/Address (optional): Arthur F. Bell 1770 Park Road

Atlanta, Georgia 30334

State: Georgia

1. How do you anticipate using this material?

Personal Information  Background for Policy Decisions

Background for Staff Training  Other (please specify) in a workshop for S.E. directors

2. How useful is the content of the brief for your purpose(s)? Very Useful

1                      2                      3                      4                      5  
not useful                      useful                      very useful

3. What changes could be made to increase the usefulness of the content?

No Recommendations

4. How appropriate is the format for your purpose(s)?

1                      2                      3                      4                      5  
not appropriate                      appropriate                      very appropriate

5. What changes could be made to increase the appropriateness of the format?

\_\_\_\_\_

6. Other comments: Well done

Break it up into smaller segments

THANKS!

Please return to:

Roberta Felker  
National Association of State Boards of Education  
701 N. Fairfax Street, Suite 340  
Alexandria, VA 22314



STATE OF MAINE

Department of  
Educational and Cultural Services

STATE HOUSE STATION 23  
AUGUSTA, MAINE 04333

August 5, 1983

Roberta M. Felker, Ph.D.  
Project Director  
National Association of State Boards  
of Education  
701 N. Fairfax St., Suite 340  
Alexandria, VA 22314

Dear Dr. Felker:

Thank you for your letter and the Research & Resources packet related to computer technology in special education. I am pleased that you were impressed with my colleagues and the FORUM meeting on program evaluation sponsored by NASDSE. FORUM has also been most influential in improving the utilization of technology in special education.

Please continue to forward to us the information you identified as topics of priority concern. Is there a role you would like us to play in the dissemination of this information? Donna Gray-Hanc, Special Education Information Specialist would be the individual to assist with any such efforts.

We will add your name to our mailing list for information disseminated by the Division.

Again, thank you for the information and your interest. We look forward to cooperating with you in the future.

Sincerely,

A handwritten signature in dark ink, appearing to read 'David Noble Stockford'.

David Noble Stockford, Director  
Division of Special Education

DNS/ms

cc: R.Redmond  
G.Scott  
S.Millett,Jr.

THE UNIVERSITY OF THE STATE OF NEW YORK  
THE STATE EDUCATION DEPARTMENT  
ALBANY, NEW YORK 12234

ASSISTANT COMMISSIONER FOR  
EDUCATION OF CHILDREN  
WITH HANDICAPPING CONDITIONS

DIVISION OF PROGRAM DEVELOPMENT  
Room 1066 EBA  
Albany, NY 12234  
(518) 474-2251

December 27, 1983

Ms. Roberta Felker  
National Association of State  
Boards of Education  
701 N. Fairfax Drive, Suite 340  
Alexandria, VA 22314

Dear Ms. Felker:

On behalf of Lawrence Gloeckler, I am enclosing the Evaluation Form on Research Abstract I of the Special Education Dissemination Project. This will be a very useful project. There is a fairly constant stream of materials being published in the field of handicapped education. We learn of some through direct mailings, others by advertisements in journals or announcements in newsletters. There are, no doubt, many we miss altogether. It is frequently difficult to tell from such announcements whether the content is duplicative, or new and useful. It certainly is not possible to purchase them all nor is it fiscally sensible to preview the less expensive items.

A service such as yours will be helpful in keeping up-to-date as well as in selecting resources for purchase. The technological area is especially important at this time.

We will be looking forward to future abstracts.

Sincerely,



Dalene E. Cross  
Assistant in Education of Children  
with Handicapping Conditions

DEC:jt  
Enclosure



DAVID W. HORNBECK  
STATE SUPERINTENDENT

SPECIAL EDUCATION TTY 659-2  
VOC-REHABILITATION TTY 659-1  
FOR DEAF ONLY

MARYLAND STATE DEPARTMENT OF EDUCATION  
200 WEST BALTIMORE STREET  
BALTIMORE, MARYLAND 21201-2595  
(301) 659-2489

December 29, 1983

Ms. Roberta Felker  
National Association of  
State Boards of Education  
701 N. Fairfax Drive  
Suite 340  
Alexandria, VA 22314

Dear Ms. Felker:

Enclosed is Maryland's evaluation of the Special Education Dissemination Project's Research Abstract I. It is felt that the Abstract is concise and of appropriate length for State Boards of Education members. It is also felt that the documents quoted would be very useful for State Directors of Special Education. Maryland plans to order two (2) of these documents quoted in Abstract I.

Sincerely,

Martha J. Irvin  
Assistant State Superintendent  
Division of Special Education

MJI:md  
Enclosure

cc: Dr. James Buford

5/20/84

EVALUATION FORM

Please reproduce this form if you wish to respond to more than one report.

Issue Briefs and Abstracts

Special Education Dissemination Project

Title of Brief or Abstract: Financing Free and Appropriate Public Education

Your Position: Information Manager  
Title

Your Name/Address (optional): EHA Program Rm 208 Div for Ex Children  
Morningside School Tancey + Greenwood Sts. Pittsburgh, PA  
State: Pennsylvania 15206

1. How do you anticipate using this material?

- Personal information
- Background for staff training
- Background for policy decisions
- Other (please specify) \_\_\_\_\_

2. How useful is the content of the material for your purpose(s)?

1                      2                      3                      4                      5

Not Useful                      Useful                      Very Useful

3. What changes could be made to increase the usefulness of the content?

None discernible - very useful to finance departments state level contemplating change in fiscal policies.

4. What special education policy issues would you like to see future issue briefs address?

Interagency Planning

5. Other comments: This research is very commendable and should enlarge the vision of policy makers at both State and local levels.

Please return to:

Roberta Felker  
National Association of State Boards of Education  
701 North Fairfax, Suite 340  
Alexandria, Virginia 22314

THANKS!



5/23/84

EVALUATION FORM

RESEARCH ABSTRACT

SPECIAL EDUCATION DISSEMINATION PROJECT

Position:  State Board of Education Member  Chief State School Officer  
 State Legislator  Local School Administrator  
 Other (please specify) State Director Sp. Ed (acting)

Name/Address (optional): Montpelier, VT 05602 - 2703

State: Vermont

1. How useful is the content of the abstract for your purpose(s)?  
1 not useful                      2                      3 useful                      4 (4)                      5 very useful

2. What changes could be made to increase the usefulness of the content?  
Excellent as is.

3. Do you plan to order any of the publications described?  
(Yes)  Yes  No after reviewing them  
Which one(s)? none thoroughly

How do you anticipate using them?

Personal Information                       Background for Policy Decisions  
 Background for Staff Training                       Other (please specify) \_\_\_\_\_

4. Other comments: This is a most helpful service in our information saturation field. It saves that some documents but otherwise be ordered!  
THANKS! Time & means will be read world news  
Please return to: Roberta Felker  
National Association of State Boards of Education  
701 N. Fairfax Street, Suite 340  
Alexandria, VA 22314

*[Handwritten signature]*

AASA/AEESA  
EVALUATION FORM

Please reproduce this form if you wish to respond to more than one Abstract.

Special Education Dissemination Project

Title of Abstract: Program Evaluation for Effective Special Education and Quality Evaluation A Consumers Guide for Policy Makers

Your Position: Coordinator of Regional Service Network

Title

Your Name/Address (optional): Herb M. Biermann

C.E.S.A. #12, 301 13th Ave. East, Ashland, WI 54806

State: Wisconsin

1. How do you anticipate using this material?

XX Personal information  
XX Background for staff training

XX Background for policy decisions  
XX Other (please specify)

Introduction to program design for Administrators and Coordinators

2. How useful is the content of the material for your purpose(s)?

1  
Not Useful

2

3  
Useful

4

5  
Very Useful

3. What changes could be made to increase the usefulness of the content?

This material is excellent for an introductory level of interest. I have written for additional information from the three sources in the abstract.

4. What special education policy issues would you like to see future issue briefs address?

Inservicing regular educators in the servicing of handicapped children in the mainstream.

5. Other comments: I was most appreciative of the abstract. I look forward to your materials in the future. Thank you.

Please return to:

Roberta Felker  
National Association of State Boards of Education  
701 North Fairfax, Suite 340  
Alexandria, Virginia 22314



**Education Commission  
of the  
States**

**Headquarters Office**  
Suite 300  
1860 Lincoln Street  
Denver, Colorado 80295  
(303) 830-3600

**Washington Office**  
248 Hall of the States  
444 N. Capitol Street NW  
Washington, D.C. 20001  
(202) 624-5838

January 25, 1984

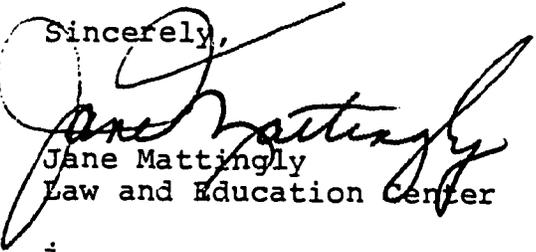
Dr. Roberta M. Felker  
Project Director  
National Assn of State Boards  
of Education  
701 North Fairfax St., Suite 340  
Alexandria, VA 22314

Dear Dr. Felker:

I have enclosed a copy of a report entitled, "The Rights of Handicapped Students," which you may want to include in your Special Education Dissemination Project.

If we can be of further assistance, please do not hesitate to contact us again.

Sincerely,

  
Jane Mattingly  
Law and Education Center

j

Encls.



*Publishers of The Computing Teacher journal.*

20 June 1984

Roberta M. Felker, Ph.D.  
Special Education Dissemination Project  
National Association of State Boards of Education  
701 N. Fairfax St., Suite 340  
Alexandria, VA 22314

Dear Dr. Felker:

Thank you for the February abstract featuring the descriptions of two of our publications.

Please find enclosed another of our publications, "Computer Technology for the Handicapped in Special Education and Rehabilitation: A Resource", which I feel your readers should know about. I've also enclosed our catalog which describes all our publications and current prices. Please note our new address.

Feel free to contact me if there is anything else I can do for you.

Sincerely,

Lynn Grimes  
Editorial Assistant

LG:cw

SPECIAL EDUCATION DISSEMINATION PROJECT

Position:  State Board of Education Member  Chief State School Officer  
 State Legislator  Local School Administrator  
 Other (please specify) State Agency Staff

Name/Address (optional): Carol McIntosh, Texas Education  
Agency Dept. of Special Education, 201 E 11th Street,  
State: Texas Austin, TX 78701

1. How useful is the content of the abstract for your purpose(s)?  
1 not useful                      2                      3 useful                      4                      5 very useful

2. What changes could be made to increase the usefulness of the content?  
Abstracts that are more evaluative would be helpful.

3. Do you plan to order any of the publications described?  
Yes  No   
Which one(s)? Count Me In, Integrating America's Middle H@  
How do you anticipate using them? Students

Personal Information                       Background for Policy Decisions  
 Background for Staff Training                       Other (please specify) Research materials on current issues

4. Other comments: We already have a few of these, otherwise we would probably be ordering the Chamber and Hartman report, for example.

THANKS!  
Please return to:

Roberta Felker  
National Association of State Boards of Education  
701 N. Fairfax Street, Suite 340  
Alexandria, VA 22314

8/16/84

AASA/AAESA  
EVALUATION FORM

Please reproduce this form if you wish to respond to more than one Abstract.

Special Education Dissemination Project

Title of Abstract: Abstract X, April 1984

Your Position: Coord., Inservice Training & Program Review  
Title

Your Name/Address (optional): Kay Jakutis, Educational Service District 112,  
1313 N. E. 134th Street, Vancouver WA 98685

State: WA

1. How do you anticipate using this material?

- Personal information
- Background for staff training
- Background for policy decisions
- Other (please specify) \_\_\_\_\_

2. How useful is the content of the material for your purpose(s)?

1                      2                      3                      (4)                      5  
 Not Useful                      Useful                      Very Useful

3. What changes could be made to increase the usefulness of the content?

Need to add information on whether PO's can be used to order materials; when re-  
porting on research, need to add basic information like number of subjects involved,  
what type of design was used, etc., so we can evaluate validity prior to ordering  
materials.

4. What special education policy issues would you like to see future issue briefs address?

Best practices for special education classroom programming; interface between  
special education/Chapter I/regular education

5. Other comments: Good work!

Please return to:

Roberta Felker  
National Association of State Boards of Education  
701 North Fairfax, Suite 340  
Alexandria, Virginia 22314

THANKS!

236 247





*Hadley School Department*

*Hadley, Massachusetts 01035*

Administrator of Special Needs

Telephone (413) 584-2638

August 14, 1984

Roberta Felker  
National Association of  
State Boards of Education  
701 North Fairfax, Suite 340  
Alexandria, Virginia 22314

Dear Ms. Felker:

I recently received and read monthly reports titled "Research and Resources on Special Education" (5/84, 6/84 and 7/84).

I found them very informative. Is there a way I can receive them on a monthly basis?

Sincerely,

Steven N. Sobel  
Administrator of Special Needs

sns/sm

enclosure

237 248 7

8/20/82

AASA/AJESA  
EVALUATION FORM

Please reproduce this form if you wish to respond to more than one Abstract.

Special Education Dissemination Project

Title of Abstract: Abstract: Review of Special Education

Your Position: Director of Special Education  
Title

Your Name/Address (optional): James M. ...  
...

State: Texas

1. How do you anticipate using this material?

Personal information  
 Background for staff training

Background for policy decisions  
 Other (please specify) ...

2. How useful is the content of the material for your purpose(s)?

1                      2                      3                      4                      5  
Not Useful                      Useful                      Very Useful

3. What changes could be made to increase the usefulness of the content?

More specific methods, actual evaluation  
...

4. What special education policy issues would you like to see future issue briefs address?

...

5. Other comments:

Please return to:

Roberta Felker  
National Association of State Boards of Education  
701 North Fairfax, Suite 340  
Alexandria, Virginia 22314



**Appendix H**  
**The Process of Research Use**

Excerpted from: Felker, R.M. Research and policy: how do they relate? Paper presented at the Annual Meeting of the Council for Exceptional Children, Washington, D.C., 1984.

239 250

## THE PROCESS OF RESEARCH USE

A significant reason for the uncertainty of the research-policy process is that research utilization is an extraordinarily complex phenomenon. In order to better understand the interactions among researchers, research linkers, and policymakers, it is useful to clarify what is meant by "utilization" of research.

Weiss (1979) has proposed seven different models of the use of social science research in policy making. These models describe different ways in which the relationship between the production and utilization of research can be viewed, and highlight the importance of different variables in this process. Descriptions of these models follow.

**Model 1:** The linear model postulates a direct link between an identified problem, research and development, and research application. Although this model has dominated the conception of how research is used in the physical sciences, Weiss points out that it has minimal application in the social sciences where "knowledge does not readily lend itself to conversion into replicable technologies, either material or social" (Weiss, 1979, 427).

**Model 2:** The problem-solving model describes what Husen characterizes as "the classical platonic 'philosopher-king' conception" (Husen and Kogan, 1983, 15) of research utilization. In this model, the researcher is expected to provide the knowledge (guidance, wisdom) from which direct guidelines for solving policy-related problems can be derived. This model is based on the assumption of shared researcher-policymaker goals, and is the most common expectation of how social science research is used in the policy making process.

- Model 3: The interactive model assumes no linearity between research and utilization, but rather proposes a back-and-forth, "disorderly," dialogue between researchers and policymakers.
- Model 4: The political model hypothesizes that research findings are used by policymakers to back up their existing (and often entrenched) positions. In this case, the issues have already been defined, firm positions have been established, and research becomes "ammunition" for the side that finds certain conclusions congenial with its standpoint.
- Model 5: The tactical model refers to the tendency to "bury" a controversial problem in research in order to defend procrastination or unwillingness to take immediate action.
- Model 6: The enlightenment model suggests that research tends to sensitize policymakers to new issues and, by its generalizations and orientations, indirectly shapes the way in which people think about policy problems. Weiss (1979) believes this "percolation" model best describes the way in which research enters the policy arena.
- Model 7: The research-as-part-of-the-intellectual-enterprise-of-society model regards research as a variable similar to philosophy, history, journalism, etc. Research in any field contributes to broadening the horizons of general debate, and to reformulating the problems under consideration.

Husen (Husen & Kogan, 1983) argues that these seven models can be merged into two major ones: the enlightenment or percolation model (which subsumes the interactive model) and the political model (which includes the tactical model). He supports Caplan et al. (1975), Weiss (1980) and others who have shown empirically that the research-policy making relationship is much more diffuse and hard to

pinpoint than previously conceived, and that those models which are most useful are those "which emphasize the existence of a gap between social scientists and policymakers due to differences in values, languages, reward systems and social and professional affiliations" (Caplan et al, 1975, 27).

### OBSTACLES TO RESEARCH USE

While the various models illuminate selected aspects of the research-policy relationship, they do not identify specific factors which can facilitate understanding of the gap between researchers and policymakers. Because there are numerous conditions that can limit the effective application of research to policy, it is helpful to organize these conditions in terms of three systems conceptualized by Weiss and Bucuvalas (1980):

- o The system that produces the research;
- o The system that uses the research; and
- o The system that links the producers and users of research.

The following are examples of specific obstacles to research use attributed to each of these systems (Weiss, 1980, 17-23).

#### Research Production System

Torsten Husen, a noted Swedish education policy researcher, speaks of an academic versus a bureaucratic ethos (Husen and Kogan, 1984). He cites, as an example of the academic tradition, an anecdote from a formal dinner of the Royal Society of the Mathematicians. The chairman raised his glass and proposed a toast to pure mathematics, adding: "And may it be of no use to anybody!" (Husen and Kogan, 1984, 11). Other constraints seen as originating within the research production system are enumerated below:

**1. Academic priorities**

Researchers, in part because of the system of academic incentives and rewards, tend to pursue issues which are based on concerns in their disciplines rather than on issues of relevance to policymakers.

**2. Over-simplification**

Researchers simplify problems to make them amenable to study, often ignoring conditions that are "beyond the realm of their theories, their disciplines, or their interests" Husen and Kogan, 1984, (17). Policy makers must deal with all dimensions of multi-faceted, complex issues (Simon, 1976).

**3. Methodological constraints**

Research methodology embodies many important constraints, including limited and often inaccurate sources of data.

**4. Academic time-frame**

Research takes time, and results may not be available when an issue must be resolved. (Sharpe (1977) quotes Robin H. Jones' remark that sociologists' cry to government is, "Give us the job and we'll spend the next seven years sharpening the tools.")

**5. Academic concepts and language**

The concepts that underpin research are sometimes unfamiliar to policymakers, and often incompatible with their beliefs and assumptions. In addition, poor writing, jargon, and increasingly sophisticated statistical analyses add to comprehension problems (Cohen and Weiss, 1977).

**6. Inconsistency and contradiction**

The conclusions of research studies are often inconsistent, and do not necessarily cumulate. Frequently, they provide divergent and even

contradictory results. Such research offers little direction or guidance for policymaker action.

**7. Limited predictive value**

Research is grounded in past experience. Conditions in the future may vary in dramatic and unpredictable ways. Research results may be of little relevance to the ever-changing contingencies under which policymakers must function.

Research Utilization System

The policy making system (characterized by Husen's "bureaucratic ethos") imposes a different set of constraints on research use. Characteristics of the policy making arena that can interfere with the application of research include the following:

**1. Fragmented decision-making**

Decision-making in the policy arena is often a fragmented process. Decisions are not necessarily the domain of any single individual, or even of a clearly defined group. Various decisionmakers may raise different questions and exercise different standards of judgment. No single set of research results is likely to be relevant or persuasive to the concerns of all groups involved.

**2. Urgency of issues**

Policy makers are often in a hurry. They want research to address issues that are on their current, rather urgent, agenda. These policy issues shift rapidly, and the shifts frequently preclude waiting for the conclusions to a longitudinal research study.

### **3. Lack of relevance to: power, resources, goals**

The findings and recommendations from research often do not "fit" the particular policy making circumstances. This lack of relevance may occur for a variety of reasons, such as: (a) the action implied by the findings may not match the jurisdiction and authority of the policymakers; (b) the action called for by the research may be beyond the resources (funds, staff, skills) of the policymakers; and (c) the research may suggest changes in policy that contradict or do not support the course that the policymaker wants to pursue.

### **4. Pragmatism**

Policy makers place a high priority on reconciling differences and reaching compromises that maintain the stability of the system. This orientation is not always compatible with the "rational" view held by many researchers of using the best research evidence to resolve problems. In the interests of consensus-building, policymakers may be willing to sacrifice the "best solution" proffered by researchers. "Political rationality may eclipse scientific rationality" (Weiss and Bucuvalas, 1980, 21).

### **Research Linkage System**

The system of transferring and translating information from the research producers to the research users is also problematic. The flow of research information is vulnerable to the following possible constrictions.

#### **1. Lack of familiarity with policymaker information needs**

Agency research, planning and evaluation offices which frequently commission research are not always aware of the informational requirements of policymakers. They may be more familiar with the academic perspective, from whose ranks they often come, and less responsive to the decision making environment of the policymaker (Coleman, 1972).

## **2. Imprecise information requests**

Policymakers who call for research information may be unable to specify their research needs appropriately. Frequently, for example, they state their objectives in global terms without clarifying the constraints that limit their choices or the alternatives that would be considered feasible. The uncertain task of appropriately focusing research information is then left to the agency or staff member.

## **3. Irrelevance of academic journals**

Academic journals that publish research are seldom efficient channels for reaching policymakers. They often bypass policymakers' concerns in the selection of topics and in the style of presentation; and, finally, rarely prove an effective forum for relating policymakers' priorities to useable research agendas for academicians.

## **4. Haphazard dissemination**

Once research reports are received in policymakers' offices, staff seldom "perceive their mandate as systematic and effective dissemination to appropriate users" (Weiss & Bucuvalas, 1980, 22). The in-house dissemination process is frequently haphazard, if it occurs at all.

## **5. Vague linker role**

The specific role of the external agency or staff who function as disseminators of research information is frequently vague and ill-defined. Knott & Wildavsky (1980) review a range of possible roles for these individuals: providing, simplifying, and clarifying knowledge; initiating change, and improving programs. They warn of the danger of information overload, and caution that "rules of relevance require that such knowledge as exists be appropriate according to the special circumstance of the time and place." (Knott & Wildavsky, 1980, 538).

There is little help for the research linker in determining what knowledge is relevant for what policymaker audience at what stage in the decision making process.