

DOCUMENT RESUME

ED 318 167

EC 230 569

AUTHOR Chadsey-Rusch, Janis  
 TITLE Project Directors' Annual Meeting (4th, Washington, D.C., December 1-2, 1988).  
 INSTITUTION Illinois Univ., Champaign. Secondary Transition Intervention Effectiveness Inst.  
 SPONS AGENCY Special Education Programs (ED/OSERS), Washington, DC.  
 PUB DATE 89  
 CONTRACT 300-85-0160  
 NOTE 101p.  
 PUB TYPE Collected Works - Conference Proceedings (021)

EDRS PRICE MF01/PC05 Plus Postage.  
 DESCRIPTORS \*Demonstration Programs; \*Disabilities; \*Education Work Relationship; Federal Government; Intervention; Longitudinal Studies; Outcomes of Education; Program Development; \*Program Effectiveness; Program Implementation; Secondary Education; Student Characteristics; \*Transitional Programs  
 IDENTIFIERS \*Office of Special Educ Rehabilitative Services

ABSTRACT

The document contains materials relating to the annual meeting of the project directors working with the Secondary Transition Intervention Effectiveness Institute, held December 1-2, 1988. The document includes an agenda, summaries of 10 featured project presentations, summaries of 32 poster sessions, a list of meeting participants, and a synthesis of meeting evaluation results. A paper by Frank Rusch and Lizanne DeStefano titled "Secondary Special Education and Transition Services: Model Program Overview and Recommendations" describes a study of the demographic characteristics, purposes, activities, outcomes, and barriers associated with transition model programs funded by the Office of Special Education and Rehabilitative Services (OSERS), and offers recommendations to guide the relationships that form between OSERS and model program personnel. "Youth with Disabilities during Transition: An Overview of Descriptive Findings from the National Longitudinal Transition Study," by Mary Wagner, presents selected findings concerning individual and family characteristics of youth with disabilities served under the Education of the Handicapped Act, and the achievements of youth with disabilities in the areas of independence, education, and employment. (JDD)

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

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it  
 Minor changes have been made to improve reproduction quality

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

ED318167

# Project Directors' Fourth Annual Meeting

Janis Chadsey-Rusch

EC 230569

TRANSITION  
INSTITUTE  
AT ILLINOIS

BEST COPY AVAILABLE

The following principles guide our research related to the education and employment of youth and adults with specialized education, training, employment, and adjustment needs.

- Individuals have a basic right to be educated and to work in the environment that least restricts their right to learn and interact with other students and persons who are not handicapped.
- Individuals with varied abilities, social backgrounds, aptitudes, and learning styles must have equal access and opportunity to engage in education and work, and life-long learning.
- Educational experiences must be planned, delivered, and evaluated based upon the unique abilities, social backgrounds, and learning styles of the individual.
- Agencies, organizations, and individuals from a broad array of disciplines and professional fields must effectively and systematically coordinate their efforts to meet individual education and employment needs.
- Individuals grow and mature throughout their lives requiring varying levels and types of educational and employment support.
- The capability of an individual to obtain and hold meaningful and productive employment is important to the individual's quality of life.
- Parents, advocates, and friends form a vitally important social network that is an instrumental aspect of education, transition to employment, and continuing employment.

---

The Secondary Transition Intervention Effectiveness Institute is funded through the Office of Special Education Programs, Office of Special Education and Rehabilitative Services, U.S. Department of Education (contract number 300-85-0160).

**Project Officer: William Halloran**

*For more information on the Transition Institute at Illinois, please contact:*

Dr. Frank R. Rusch, *Director*  
College of Education  
University of Illinois  
110 Education Building  
1310 South Sixth Street  
Champaign, Illinois 61820  
(217) 333-2325

Merle L. Levy, Publications Editor

The Secondary Transition Intervention Effectiveness Institute is funded through the Office of Special Education Programs, Office of Special Education and Rehabilitative Services, U.S. Department of Education (contract number 300-85-0160). Contractors undertaking such projects under government sponsorship are encouraged to express their opinions in professional and technical matters. These opinions do not necessarily represent official Department of Education policy.

Project Officer: William Halloran, Ph.D.

©1989 by the Board of Trustees of the University of Illinois.

**WELCOME**  
to the  
**PROJECT DIRECTORS' FOURTH ANNUAL MEETING**

The Secondary Transition Intervention Effectiveness Institute welcomes you to the Project Directors' Fourth Annual Meeting. During the next two days, you will have an opportunity to meet with other project directors to hear about their projects, receive updated information on Transition Institute activities, and participate in working sessions with staff from the Office of Special Education and Rehabilitative Services.

In response to your suggestions, we have designed the Project Directors' Fourth Annual Meeting to focus on you--the project directors--and your activities. As in past years, the meeting will feature a variety of project presentations on different topics and an informal exchange/dissemination poster session at which more than 25 project directors will share information about their projects. In addition, a session has been scheduled for roundtable discussions, during which project directors can join informal discussions about issues, concerns, and solutions to specific problems. All project directors are invited to attend the discussion group that reflects their particular interests.

The Transition Institute is pleased to host this Fourth Annual Meeting. We hope we have designed a meeting that will encourage the exchange of information, the sharing of expertise, and the building of collegiality.

Frank R. Rusch, Director

Lizanne DeStefano, Associate Director

Janis Chadsey-Rusch, Meeting Coordinator

## **THE TRANSITION INSTITUTE AT ILLINOIS**

The Secondary Transition Intervention Effectiveness Institute was founded in 1985 to address both the theoretical and practical problems of transition. The purpose of the Institute is to operationalize a research model that will have an optimal influence upon students in transition, the supporting social systems, the community, and the societal, economic, and governmental systems that influence policy and its implementation, which ultimately affect the lives of students with handicaps.

The goal of the Transition Institute is to seek solutions through intervention, evaluation, and technical assistance. The Intervention Research Program is designed to formulate intervention at varying levels--individual, small group, community, societal--and to devise short- and long- term investigations in accordance with the results of a national research needs study.

The objective of the Evaluation Research Program is to collect and analyze data measuring the effectiveness of various models of secondary transitional services for youths with handicaps.

The Technical Assistance Program provides technical assistance on evaluation methodology to secondary and transition model demonstration projects funded by the Office of Special Education and Rehabilitative Services, U.S. Department of Education.

In addition to these research programs, the mission of the Institute includes providing services to the professional community, such as an annual review and synthesis of the literature; annual meetings; opportunities for information exchange; research, evaluation, and technical assistance experiences for graduate students; dissemination of current information through INTERCHANGE, a quarterly newsletter sent to 3,000 professionals in the field; and the PUBLICATIONS LIST, which describes technical and research reports produced by the Transition Institute, including policy papers, resource guides, and guidebooks. Copies of available back issues of INTERCHANGE and the current PUBLICATIONS LIST are available without charge.

## CONTENTS

Agenda.....	4
Secondary Special Education and Transition Services: Model Program Overview and Recommendations Frank R. Rusch and Lizanne DeStefano.....	8
Youth with Disabilities during Transition: An Overview of Descriptive Findings from the National Longitudinal Transition Study Mary Wagner.....	24
Featured Project Presentations (Thursday).....	61
Exchange/Dissemination Poster Presentations.....	64
Featured Project Presentations (Friday).....	75
Synthesis of Evaluation Results.....	79
Registered Participants.....	85
Project Director's Fifth Annual Meeting.....	91

**Secondary Transition Intervention Effectiveness Institute  
Presents**

**The Project Directors' Fourth Annual Meeting**

December 1-2, 1988

Washington, DC

**AGENDA**

**Wednesday, November 30**

4:30 p.m. - 6:00 p.m.                      Welcome/Registration/No-host Cocktails (Monet III)

**Thursday, December 1**

7:30 a.m. - 9:00 a.m.                      Registration and coffee (Monet I & II)

9:00 a.m. - 9:15 a.m.                      Welcome (Monet I & II)  
Michael Ward, Branch Chief of Secondary  
Education and Services Branch, Office of  
Special Education Programs  
Frank R. Rusch, Director, Transition Institute

9:15 a.m. - 10:00 a.m.                      Keynote Presentation (Monet I & II)  
Report on the National Longitudinal Study of  
Secondary Students with Handicaps  
Kathleen Hebbeler, Division of Innovation  
and Development, Office of Special  
Education Programs  
Mary Wagner, Stanford Research Institute

10:00 a.m. - 10:30 a.m.                      Reactions/Discussion Panel  
Lizanne DeStefano, Chair  
Transition Institute  
Dianne Berkell, Long Island University  
Dennis Mithaug, University of Colorado

10:30 a.m. - 10:45 a.m.                      Break

10:45 a.m. - 12:00 p.m.                      Roundtable Discussions

1. Cooperative Models for Planning and Development -  
(Monet I & II)
2. Postsecondary Employment Projects Involving Persons with  
Mild Disabilities (Marquette)



3. Postsecondary Education Projects Involving Persons with Mild Disabilities (Lafayette)
  4. Employment Projects Involving Persons with Severe Disabilities (Montcalm)
  5. Longitudinal Tracking Projects (La Salle)
- 12:00 p.m. - 1:30 p.m. Lunch
- 1:30 p.m. - 2:30 p.m. Update/Discussion on Institute Activities (Monet I & II)  
Frank R. Rusch, Director  
Transition Institute
- 2:30 p.m. - 2:45 p.m. Break
- 2:45 p.m. - 3:45 p.m. Featured Projects and Institute Presentation (Five concurrent sessions by Project Directors and Institute Staff)
1. Postsecondary University Project Involving Persons with Mild Disabilities (Monet III)  
Comprehensive Learning Program  
Rosa Hagin, Elizabeth Lorenzi, and  
John Kugler
  2. Employment Project Involving Persons with Mild Disabilities (Marquette)  
Serving Job Skills from the Workplace: A Job Acquisition and Retention Curriculum for Learning Disabled Students  
John Emerson
  3. Interagency Collaboration Project for Persons with Severe Disabilities (Lafayette)  
Secondary Education Transition Model  
Karen Spencer and Pat Sample
  4. Statewide Systems Change Project (La Salle)  
Idaho Transition Project  
Sharon Pond
  5. Parents of Young Persons with Handicaps in Transition (Montcalm)  
Transition Institute  
Francesca Lundstrom
- 4:00 p.m. - 5:00 p.m. Break
- 5:00 p.m. - 6:30 p.m. Exchange/Dissemination Poster Session and Cash Bar (Monet I, II & III)

## Presenters

- |                                  |   |
|----------------------------------|---|
| 1. Patricia Patton               | 17. Marshall Mitchell                     |
| 2. Susan Sinkewiz                | 18. Pat Hackett-Waters and Catese Chaffee |
| 3. Charles C Coker               | 19. Sandra Copman                         |
| 4. Greg R. Weisenstein           | 20. Sandra Thompson                       |
| 5. Loring Brinckerhoff           | 21. Judith A. Cook                        |
| 6. Juliana Corn                  | 22. Shephard Siegel                       |
| 7. Marjorie T. Goldstein         | 23. Margo Vroeberg Izzo                   |
| 8. Chris Primus                  | 24. Arlene C. Stewart                     |
| 9. Sally Vernon                  | 25. Elinor Elfner                         |
| 10. William Richards             | 26. Robert Stodden                        |
| 11. Jane Rochester               | 27. Sonja Burnham                         |
| 12. Ernest Rose                  | 28. Stephen White                         |
| 13. Gladys Tucker                | 29. Bonita Penniro                        |
| 14. Jan Krabbe and Paula Grigsby | 30. Jan Benet and Vince Perez             |
| 15. Patricia J. Kercher          | 31. Patricia Catapano                     |
| 16. Catherine W. McCarty         | 32. James Brown and David Johnson         |

### Friday, December 2

9:00 a.m. - 10:00 a.m.

#### Keynote Presentation (Monet I & II)

Future Directions in Secondary Transition Services:  
Emerging Priorities and Initiatives

Nancy Safer, Director

Division of Educational Services

Office of Special Education Programs

10:00 a.m. - 10:15 a.m.

#### Break

10:15 a.m. - 11:15 a.m.

#### Featured Projects and Institute Presentation

(Five concurrent sessions by Project Directors and Institute Staff)

1. Postsecondary University Project Involving Persons with Mild Disabilities (Monet I & II)  
Project Happer  
Connie Dalke and Deborah White
2. Postsecondary Community College Project (Monet III)  
Transition Assistance for Postsecondary Students (TAPS)  
Marshall Mitchell
3. Employment Project for Persons with Severe Disabilities (Degas)  
Project Origins  
James Gittings, Paul R. Fish, and Marguerite D. Harmon
4. Interagency Collaboration Project (Quorum)  
Continuous Comprehensive Training Model  
Betsy Bounds

5. A Pilot Study of a Management Protocol: The Project Director (Caucus)  
Transition Institute  
Robert Stake

11:15 a.m. - 12:15 p.m.

Discussion Session with OSERS Staff (Monet I & II)

12:15 p.m. - 12:45 p.m.

Written Evaluation of Meeting  
Closing Remarks  
Frank R. Rusch, Director  
Transition Institute

## **Secondary Special Education and Transition Services: Model Program Overview and Recommendations<sup>1</sup>**

Prepared by Frank R. Rusch and Lizanne DeStefano  
University of Illinois at Urbana-Champaign

We examined 15 federally funded secondary special education and transition services model programs activities and outcomes in response to a request from the Office of Special Education and Rehabilitative Services (OSERS) for grant applications to "enhance (our) understanding of the needs of secondary students" in relation to education and employment objectives. We found modest relations between OSERS' directives and model program activities and outcomes. Additionally, we offer several recommendations to guide the relationships that form between OSERS and model program personnel, including implementation and reporting considerations.

Any examination of the explanations offered for the poor post-school adjustment of youth with handicaps will show that a number of economic, educational, vocational, societal, and personal characteristics predominate. Emerging theories emphasize the personal and social inadequacies of these youth and the inadequacies of the schools as the reasons for their poor adjustment. Until recently, however, there has been no systematic attempt to understand why youth with handicaps fail to participate fully in American society and why they fail to adjust successfully in adult life. Our attempts over the past 10 years to integrate persons with handicaps into the mainstream of education have had little influence. In fact, research findings suggest that secondary special education students face almost certain underemployment or unemployment.

In 1984, the Office of Special Education and Rehabilitative Services (OSERS) recognized the need to understand the period between the time when a student is expected to learn educationally relevant lessons and when he or she must adjust to the demands of young adulthood. A Request for Proposals was issued by OSERS for grant applications to "enhance (our) understanding of the needs of secondary students in the continuing educational and occupational areas." OSERS envisioned model programs that would develop effective techniques and methods

to help youth with handicaps to make the transition from public schools to postsecondary education or to employment. The grantees were charged with the responsibility of developing model programs that would provide a base for an "effective adult life in the community." The closing date for receipt of grant applications was July 6, 1984. This competition was the first to be announced as a result of prior legislation that resulted in the formation of a priority in the area of secondary special education and transitional services (cf. Rusch & Phelps, 1987). Approximately \$1,000,000 was expected to be available for support of model programs that would be funded for as long as three years.

OSERS expected applicants to identify research questions in the area of transition from high school to postsecondary education and from high school to the world of work. The grant application packet (CFDA #84.158C) contained several statements designed to assist applicants to explore the research possibilities of the transition needs of young adults with handicaps. These statements included potential research questions in the areas of curriculum development/modification, social skills acquisition and maintenance, long-term support and follow up, independent living skills acquisition and maintenance, and counseling and long-term planning.

This paper describes the demographic characteristics, purposes, activities, outcomes, and barriers associated with the transition model programs that were funded under Competition 84.158C in an effort to determine the extent to which they addressed postsecondary education and employment expectations set forth by OSERS. Additionally, we considered the possibility that model programs as promised may evolve into entirely different programs once they began actual implementation in a community.

### Method

#### Data Sources

The sources of data for the study were:

1. the original Request for Proposal (RFP) for the competition<sup>2</sup>
2. the original grant application for each funded model program in the competition;

3. the information reported by the model program in the Project Characteristics Questionnaire developed by the Transition Institute;<sup>2</sup> and
4. the final evaluation report submitted by the model program to OSERS.

### Instrumentation

Tables were constructed for each of five categories of analysis: demographics, purpose, activities, outcomes, and barriers. Table 1 presents demographic information about the model programs, including region of the country, primary grantee, funding level, duration, cooperating agencies, and population served. Tables 2 through 4 present model program purposes, activities, and outcomes that were made explicit in the original grant application and subsequent continuation reports. The information about barriers in Table 5 was taken from a review of the final reports.

### Procedure

The authors reviewed the request for proposal that was disseminated nationally to identify the purpose(s), activities, and outcomes expected by OSERS and constructed the five tables from their consensus on these items. The tables also included space to code new categories that were mentioned in the original grant application of the Project Characteristics Questionnaires.

The primary review documents were the model program's final reports. In addition, secondary sources such as the Project Characteristics Questionnaire (Dowling & Hartwell, 1988) and the original grant application were used. When data sources conflicted (e.g., if the goals in the original proposal and the final report were different), the discrepancy was noted and the information from the final report was used. The tables include numerous annotations and pertinent data from the final reports.

## Results and Discussion

### Model Program Overview

Location. In the 1984 competition of 84.158C, 16 model programs were funded; three focused upon educational outcomes, 11 upon employment outcomes, and two programs were aimed at state or national planning which included both education and employment outcomes.

Table 1 overviews the demographic characteristics of each of these model programs. Three of the model programs were in the Midwest, six programs were in the Southeast, two were in the Southwest, two in the South, one in the Northeast, one in the Northwest, and one in the West.

**Funding level.** Twelve of the model programs were funded between \$60,000 and \$80,000 per year; four programs were funded at between \$80,000 and \$100,000 per year. These funding levels differ from those projected in the original RFP, which stated that this competition sought to fund approximately 10 model programs for up to 36 months at approximately \$100,000 per year. In actuality, 16 programs were funded and 12 of these received less than \$80,000 per year. The funding period also was less than the three years projected in the RFP. All the programs except one were funded for 24 months; the Genesis Learning Center, located in Nashville, Tennessee, was funded for 12 months.

**Primary agency.** Six of the programs were funded through private not-for-profit organizations, four were funded through local education agencies, two programs were funded through universities, two programs were funded through state education agencies, one program was funded through a state department for rehabilitation services, and one program was funded through a state department of mental retardation and developmental disabilities.

**Cooperating agencies.** Although interagency involvement was not mentioned in the RFP, several agencies cooperated with the model programs, including local education agencies, vocational rehabilitation agencies, and community colleges. Other cooperating agencies included state education agencies, mental health agencies, and businesses. In addition, several model programs noted collaborations with an Association for Retarded Citizens, local sheltered workshops, parent groups, local Social Security Administration offices, State Governor's Planning Council on Developmental Disabilities, and vocational education.

**Population served.** The students served by the model programs ranged in age from 14 to 25 years. The most representative age group was 18 through 21 years of age. Eight of the 16 funded model programs reported serving students with mental retardation; six projects reported serving students with learning disabilities. There were a small number of students

Table 1.		Demographic	State/Region	Agency	Annual Funding Level	Duration (in months)	Cooperating Agencies	Population Served	Age Range Served	Comments
Characteristics of the Competition		#15HC								
		1984	N S H N S E E W W W S	I U S N E N F F V E A I A P R R	0 000,000 60-90,000 90-100,000	12 24 30	L S R E E V M U C E A A R H S C R	M I / E M P M L D H H R D	O T H E R 5-14 15-16 17-18 19-21 22-25 26	
E D U C A T I O N A L	#44	Crippled Children's Hospital (Richmond, VA)	X	X	X	X	X X	X	X X	
	#46	NY Dept. of Public Instruction (Albany, NY)	X	X	X	X X X	X	X	X	
	#45	VA Department for Visually HP (Richmond, VA)	X	X	X	X X X	X <sup>a</sup>	X X X	X X X	<sup>a</sup> Visual impairments was changed to multiple handicaps. 46 individuals actually served by the project.
	#41	Univ. of North Carolina (Charlotte, NC)	X	X	X	X X X	X JTPA, ARC	X X X	X X	
	#47	Employment Opportunities (Durham, NC)	X	X	X	X X	MR-DD, ARC	X X	X X	
	#40	Stockton Unified S.D. (Stockton, CA)	X X	X	X		none reported	X X	X X	
	#42	School District of Independence (Independence, MO)	X X	X	X	X X X	workshop, Juvenile Justice, University	X <sup>b</sup> X X X	X X	<sup>b</sup> These categories were proposed, actual population served was BD/LD.
	#51	Research and Dev. Training (Phoenix, AZ)	X	X	X	X X X	university, parents	X	X	
	#38	Genesis Learning Center (Nashville, TN)	X	X	X	X	university	X	X <sup>c</sup> X X	<sup>c</sup> Intergenerational team of volunteers to assist in work experience.
	#37	Ed. Services Unit #9 (Hastings, NE)	X X	X	X	X X X X	SSA	All HP conditions served indirectly via ITPs	X X	
O T H E R	#39	Utah State Dept. of Social Services (Salt Lake)	X	ST MR DD	X	X X	university	X <sup>d</sup>	X	<sup>d</sup> 30 students with severe handicaps were targeted as well as 100 "others."
	#48	Univ. of KY and KY Dept. of Education (Lexington)	X X X	X	X	X X X X	X GPC	No direc. services provided <sup>e</sup>	X X	<sup>e</sup> Estimate of 400 students indirectly served.
	#50	Organizational Architects (Aberdeen, WA)	X	X	X	X	X	X X X <sup>f</sup>	X X X X	<sup>f</sup> Speech impaired.
	#36	EDGE, Inc. (Brashear, MO)	X	X	X	X X X	SSA, university, parents	X <sup>g</sup>	X	<sup>g</sup> Serves graduates of local LEAs who are not employed.
#52	Council of Chief St. School Off. (Washington, DC)	X	X	X	X	X <sup>h</sup>			<sup>h</sup> No direct services delivered.	
#43	NC Dept. of Public Instruction (Raleigh, NC)	X	X	X	X X X X X	Voc ed, JTPA, parents	X X X <sup>i</sup>	X X X	<sup>i</sup> Projected total of 500 students served.	

KEY

LEA - local education agency  
UNI - university  
SEA - state education agency  
PNFP - private not for profit

VR - vocational rehabilitation  
MH - mental health  
BUS - business  
CC - community college

TBI - traumatic brain injury  
MI/ED - mentally ill/emotionally disturbed  
MH - multiply handicapped

PH - physically handicapped  
MR - mentally retarded  
LD - learning disabled  
BD - behavior disorder



with mental illness, physical disabilities, and sensory impairments served by the projects. About half of the model programs served students in more than one category of disability. Two model programs reported that no students were served directly.

#### Model Program Purpose(s)

Table 2 presents an overview of the primary purposes of the funded model programs. The first three columns list OSERS three specified purposes of this grant competition: (1) educational needs assessment, (2) occupational needs assessment, and (3) the development of techniques and methods to facilitate transition. Interestingly, the primary purposes reported by the 16 model programs did not correspond closely with the three primary purposes specified by the competition announcement. The purpose specified most frequently by the model programs was development of a cooperative model of service delivery (n=13) and second, the provision of work experience (n=8). Only five model programs described the purpose of their programs as assessment of educational needs, occupational needs, or development of new techniques and methods. In addition, several model programs sought to develop a transition planning process or linkages with vocational education.

Columns 1-11 in Table 3 describe the activities that OSERS suggested that model programs should consider when preparing their grant applications. Seven model programs proposed that they would develop or modify curricula,<sup>2</sup> five model programs indicated that their activities would include helping participants to acquire and maintain independent living skills and disseminate information. Two of the activities suggested by OSERS were not mentioned by any of the 16 model programs in their applications: identifying school-to-work and school-to-postsecondary education research questions. This oversight may have resulted from some confusion in the way the RFP was written; the RFP referred alternately to the funded programs as research programs and model demonstration programs. Most important, no application indicated efforts would be undertaken to continue a model program after initial funding was completed, and only two projects mentioned activities directed toward replication.

Purposes in OSERS RFP

Purposes Cited by Projects

Table 2.

Project Purpose

84.158C

1984

E  
D  
U  
C  
A  
T  
I  
O  
N  
A  
L

#44 Crippled Children's Hospital

X

#46 NY Dept. of Public Instruction

X

X

X

X

#45 VA Dept. of Visually HP

X

X

X

X

#41 Univ. of North Carolina-Charlotte

X

X

X

#47 Employment Opportunities

X

X

X

#40 Stockton Unified SD

X

X

X

X

#42 SD of Independence

X

X

#51 Research & Dev. Training

X

X

#38 Genesis Learning Ctr.

X

X

X

#37 Ed. Svc Unit #9

X

X

X

#39 Utah St. Dept. of Social Services

X

X

X

#48 Univ. of KY & KY State DOE

X

X

X

#50 Organizational Architects

X

#36 EDGE, Inc.

X

X

O  
T  
H  
E  
R

#52 Council of State School Officials

X

#43 NC Dept. of Public Instruction

X

X

X

X

X

Activities Suggested  
in OSFRS RF?

Non-OSERS activities  
reported by Model Program

Table 3.

Project Activities

84.158C  
1984

	Identify Research Questions	a. School to Postsecondary	b. School to Work	Curriculum Development modification	Social Skill Acquisition	Dissemination	Replication	Continuation	Study Program implementation	Independent Living Skills Acquisition and Maintenance	Counseling	Long Term Planning	Staff Development	Resource Acquisition and Organization	Academic Skill Training	Vocational Skill Training Work Experience	Career Exploration	Assessment	Interagency Coordination	Data Collection and Analysis	Parent/Community Training	Transition Plan Development	Follow-up	Public Relations/Employee Outreach	Leisure Education	Job Development	Medis Development	Creating Local Transition Teams	Adaptive Equipment	Technical Assistance
#44 Crippled Children's Hospital				X	X				X				X		X	X	X	X	X											
#46 NY Dept. of Public Instruction									X						X					X										
#45 VA Dept. of Visually HP				X										X			X	X	X										X	X
#41 Univ. of North Carolina-Charlotte						X			X		X							X			X	X	X							
#47 Employment Opportunities				X	X				X				X		X	X	X	X	X		X			X			X			
#40 Stockton Unified SD				X	X	X			X						X			X												
#42 S.D. of Independence				X								X	X		X					X	X	X						X		
#51 Research & Dev. Training				X					X						X	X		X	X							X				
#38 Genesis Learning Ctr.				X											X					X				X						
#37 Ed. Svc. Unit #9													X										X							
#39 Utah St. Dept. of Social Services						X							X		X			X			X	X								
#48 Univ. of KY & KY State DOE					X							X								X										
#50 Organizational Architects																				X										
#36 EDGE, Inc.					X				X			X			X		X	X	X	X	X	X			X					
#52 Council of State School Officials						X														X										
#43 NC Dept. of Public Instruction													X						X									X		

Table 4.

## Project Outcomes

		Transition from LEA to Postsecondary Education	Transition from LEA to Occupation	Establish a Base for Effective Adult Life in the Community	Developed Curriculum	# Students Served	Developed Individual Transition Plans	Provided Evidence of Cost Effectiveness	Inservice	Developed State Level Transition Plans/Agreement	Continuation	Dissemination	Replication	Changed Current Format for Service Delivery	Case Management System	CEI	Formation of State/Regional/Local IA Task Force	Creation of Local Transition Teams	Creating Parent Advocacy Groups	Developed Local In-agency Agreement	L - local S - state N - national	
E D U C A T I O N A L	#64 Crippled Children's Hospital	CC	UNIV		X	22					X <sup>a</sup>	L/S/N										<sup>a</sup> Vocational assessment component will continue.
	#46 NY Dept. of Public Instruction	i	13			22		X		X <sup>b</sup>		S										<sup>b</sup> Aspects of the model will continue.
	#45 VA Dept. of Visually HP					46			X			S,N								X		<sup>c</sup> Includes SEP, workshop, competitive employment and no wage specification.
E M P L O Y M E N T	#41 Univ. of North Carolina-Charlotte		8/40 <sup>d</sup>			14/80	63	X	X			N	X <sup>e</sup>									<sup>d</sup> No students received work experience due to competition between parent group and project. <sup>e</sup> Transition planning process and job coach services replicated.
	#47 Employment Opportunities		20/49			49						L,S,N							X			
	#40 Stockton Unified SD		9/23	X		23				X		L,S										
	#42 S.D. of Independence		105/135 <sup>f</sup>			135				X		S										<sup>f</sup> At or above minimum wage.
	#51 Research & Dev. Training		23/30 <sup>g</sup>				40 <sup>h</sup>															<sup>g</sup> Average wage was \$4.78/hr. <sup>h</sup> 30 completed program.
	#38 Genesis Learning Ctr.																					No final report filed.
	#37 Ed. Svc Unit #9					124/90	12 <sup>i</sup>					N,S	X <sup>j</sup>		X		X	X	X			<sup>i</sup> Special education staff trained. <sup>j</sup> Unsuccessful.
	#39 Utah St. Dept. of Social Services					96 <sup>k</sup>	84 <sup>l</sup>					S,N	X <sup>m</sup>		X			X		3		<sup>k</sup> 56 from local high school; <sup>l</sup> 40 from supported employment. Analysis of ITPs is presented. Several instruments developed under this grant. <sup>m</sup> 80% of LEAs are using ITP manual.
	#48 Univ. of KY & KY State (NIE)								X			L,S,N										
	#50 Organizational Architects	8	11 <sup>n</sup>	X		25																<sup>n</sup> May be pursuing further education.
#36 EDGE, Inc.		17 <sup>o</sup>			2					X <sup>p</sup>		L,S		X					X		<sup>o</sup> Served in SEP. <sup>p</sup> New funding pattern for continuation of services was established.	
O T H E R	#52 Council of State School Officials							X	X			N										
	#43 NC Dept. of Public Instruction			X		60 <sup>q</sup>	121		400 <sup>r</sup>		X <sup>s</sup>	S						X				<sup>q</sup> 650 served indirectly through local mini-grants. <sup>r</sup> Parents and teachers trained. <sup>s</sup> Div. of Exceptional Children will now employ a transition specialist.

Columns 12-29 of Table 3 list additional activities that were stated by the model programs. Interagency coordination (n=9), student assessment (n=7), and vocational skill development and work experience training (n=7) were mentioned most often. Staff development (n=7), parent and community training (n=5), and transition plan development (n=5) also were mentioned frequently.

### Project Outcomes

Data on project outcomes were obtained solely from analysis of final reports.<sup>2</sup> The OSERS RFP described three outcomes that might be expected from this competition: (a) transition from local education agencies (LEA) to postsecondary education; (b) transition from LEA to employment; and (c) establishment of a base for effective adult life in the community. Two model programs provided evidence that students went on to community or four-year colleges. Eight of the 16 model programs reported that youth had obtained employment as a result of the services provided by the model program. The percentage of students reported by the model programs to be employed as a result of the program ranged from 20% to 78%. Two model programs reported full-time competitive employment at or above the federal minimum hourly wage (average wage: \$4.78 per hour). Other model programs made no distinction between full- and part-time, competitive or supported employment and gave no wage specification. One model program reported persons who attended a local sheltered workshop as "full-time employees."

No model program addressed the goal of "establishing a base for effective adult life in the community." However, several activity and purpose statements related to this outcome.

The most frequently cited outcome was the number of individuals served by the model program (11 of 16). In general, the number of students actually served was lower than the number projected in original applications. The reasons cited in the final reports are discussed in the next section, "Barriers to Service Delivery."

Transition planning was accomplished at state, local, and individual levels under this competition. Three projects reported that state level transition plans were developed. Three

projects reported the development of local interagency agreements. Other outcomes included the creation of state, regional, and local interagency task forces and the establishment of local transition teams.

Six model programs were directly involved in the development of individual transition plans for target students. Of these six programs, three included forms and procedures for developing individual transition plans in their final reports. Inservice and staff training activities directed primarily at parents and special education teachers were reported as outcomes by five agencies. However, the impact of these training sessions was not documented by any model program.

Only five model programs reported that any aspect of their program was continued after OSERS funding expired. This is not surprising, given our finding that continuation activities were not addressed by these model programs. Two model programs continued in entirety in the school district in which they were implemented. One model program continued vocational assessment and one program continued a planning mechanism beyond the funding period. Of the remaining two model programs, one reported that a new funding pattern for continuation of services, established via an interagency agreement, was to be continued and the second model program was to be continued by the state education agency.

Dissemination activities were reported by 13 of the 16 model programs. Local and state dissemination activities included press releases, descriptive brochures, and presentation to community and professional groups. National dissemination consisted of journal articles and presentations at national professional conferences. The Project Directors' Annual Meetings in Washington, D.C. were cited by several model programs as evidence of national dissemination.

Little evidence of replication was reported, and no model program was replicated in its entirety. Two model programs reported that specific components of their programs--job coach services and a transition planning manual--were used by other programs.

### Barriers to Service Delivery

When model program goals were not achieved (e.g., when fewer students were served than expected), project directors tended to cite factors that impeded their progress. We have chosen to call these factors barriers to service delivery. The most frequently cited barrier to service delivery was recruiting and retaining personnel. Model programs reported difficulty in finding direct service and administrative staff with the diverse skills necessary to perform the tasks associated with the implementation of the model programs. A high turnover rate was reported by several model programs, possibly because of a mismatch between skills possessed and responsibilities expected to be assumed.

Funding barriers took two forms: (a) four model programs believed that late notification of award by OSERS and funding (October rather than July) resulted in undue difficulties in recruiting personnel and implementing programs. Four model programs cited difficulties in negotiating state and local funding to establish new funding patterns to pay for transition services.

Resistance to change by administration (n=3) and staff (n=1) took the form of protests of additional meetings and clerical time associated with transition planning, turf disputes, and unclear role distinctions between schools and adult service providers. In one instance, administrative resistance to a curriculum change was attributed to administrative pressure to respond to the excellence movement and to insure that the curriculum would address minimum competency test requirements rather than functional skills or work experience.

It is interesting to note that economic disincentives such as those associated with Supplemental Security Income and Medicare were cited as barriers by only two projects.

### Findings and Conclusions

Although few model programs directly addressed the primary purposes of the competition as stated by OSERS, the widespread attention to cooperative models of service delivery, interagency collaboration, and transition planning in the early years of the transition initiative

Table 5.

Barriers Cited by Projects

	Transportation	Lack of Interagency Collaboration	Administration in Resistance	Funding (State & Local)	Personnel	Lack of Equipment	Funding Delay	Staff Resistance	Economic Dissonance (SSI Medicare)	Problems in Referral and Identification	Liability Insurance	Lack of Employment Opportunities	Political/Economic Factors in Community	
E D U C A T I O N A L	#44		X		X	X								
	#45						X			X				
E M P L O Y M E N T	#41	X	X	X	X									
	#40					X	X							
	#42	X		X <sup>a</sup>				X	X				<sup>a</sup> Curriculum change met with resistance from administration.	
	#51		X		X <sup>b</sup>	X <sup>c</sup>				X	X		<sup>b</sup> Timeline for reimbursement unworkable. <sup>c</sup> Burnout/turnover.	
	#37	X				X <sup>d</sup>	X					X	X	<sup>d</sup> Turnover.
	#39				X <sup>e</sup>					X <sup>e</sup>			X	<sup>e</sup> Restriction of use of Medicaid waiver funds for SEP.
	#48							X						
O T H E R	#36	X		X	X <sup>f</sup>		X							<sup>f</sup> Training position had to be discontinued due to lack of funding.
	#43				X									



is understandable and shows foresight on the part of project directors. It can be argued that these projects laid the foundation for continued and expanded transitional services.

Although the activities associated with the stated purposes of these model programs were varied, a core set of activities including curriculum development, work experience, and interagency coordination were shared by the majority of programs. It is of concern that very little activity was directed toward the dissemination, replication, and continuation of the model programs. Although these are common expectations associated with all model programs, final reports contained no obvious mention of these activities. Of course, it is quite possible that project directors did not report these activities as a result of reporting ambiguities or grant competition expectations.

Although some model programs reported empirical evidence of outcomes achieved in terms of information such as number of individuals served, number of job placements made, wages earned, and number of transition plans developed, other programs chose merely to report that objectives were or were not achieved.

All projects but one submitted a final report in this competition. The 15 reports that were submitted varied widely in terms of completeness, with the body of the reports ranging from 11 to 117 pages (Appendixes ranged from 28 to 232 pages). Most final reports included descriptions of the model program as well as evidence of program effectiveness, including basic benefit-cost analyses. Barriers to implementation also were discussed by many project directors. The most often cited barriers were related to personnel recruitment, funding, and communication.

### Recommendations

The following recommendations are based upon information gathered by reviewing this first in a series of grant competitions sponsoring secondary special education and transition services. These recommendations include administrative and programmatic suggestions. The administrative recommendations refer to the relationships that developed between OSERS and

model program personnel; the programmatic recommendations focus upon implementation and reporting activities related to model program interventions.

1. Anticipated awards should be announced immediately after the winning grant applications have been selected. This early notification would allow project directors the time needed to recruit and train key personnel.
2. OSERS project officers should be required to assess model program activities reported in continuation proposals in an effort to guide the final reporting of model program activities and outcomes.
3. If continuation, replication, and dissemination are indeed key features of model demonstration programs, the grant application packet and reviewers' scoring criteria must emphasize their importance. Model demonstration programs should recognize the importance of continuation, replication, and dissemination activities and outcomes in conducting and reporting about their model programs.
4. Existing guidelines for final report preparation should be reviewed, and an effort should be made to assist project directors in determining the best way to report their efforts to OSERS. This outline should include a clear statement of final reporting purpose, an idea of what information must be included, and perhaps a sample final report.
5. All final reports should be submitted to an ERIC clearinghouse to make them accessible to policy and program developers. Final Reports should be reviewed for completeness by OSERS or other designated personnel (e.g., Transition Institute personnel). If additional information is needed, appropriate model program personnel should be contacted and requested to supply the additional material.
6. Published Requests for Proposals (RFPs) should include minimally acceptable outcomes to be realized by implementation of a model program.
7. The outcomes to be realized by each model demonstration program should reflect not only the extent and impact of student work or postsecondary educational experience, but should

also include a description of the educational experience and a description of the impact on staff, participating agencies, parents, the community, and the service delivery system.

8. Definitions should be standardized for common outcomes such as employment, participation in education programs, and independent living.

#### Authors' Notes

1. This report was supported in part by contract number OE 300-85-0160 awarded to the University of Illinois by the U.S. Department of Education, Office of Special Education and Rehabilitative Services. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgment in professional and technical matters. The opinions expressed herein, therefore, do not necessarily reflect the position or policy of the Department of Education or the Office of Special Education and Rehabilitative Services. Information is available upon request from Frank R. Rusch, Transition Institute at Illinois, College of Education, 1310 South Sixth Street, University of Illinois, Champaign, Illinois 61820.
2. Available upon request.

#### References

- Dowling, J., & Hartwell, C. D. (1988). Compendium of project profiles 1988. Champaign: Secondary Transition Intervention Effectiveness Institute, University of Illinois at Urbana-Champaign.
- Rusch, F. R., & Phelps, L. A. (1987). Secondary special education and transition from school to work: A national priority. Exceptional Children, 53, 487-492.

**Youth with Disabilities during Transition:  
An Overview of Descriptive Findings from the  
National Longitudinal Transition Study<sup>1</sup>**

Prepared by Mary Wagner, Ph.D.  
Director, The National Longitudinal Transition Study  
of Special Education Students  
SRI International

In the 1983 Amendments to the Education of the Handicapped Act (EHA), Congress mandated that the Department of Education commission a longitudinal study to provide comprehensive information about what happens to youth with disabilities nationally in terms of education, employment, and independent living while they are in secondary school and in the first few years afterward. This mandate responded to a serious absence of information about secondary school programming for transition, the experiences and outcomes of youth with disabilities during transition, and the link between programs and outcomes.

The Office of Special Education Programs (OSEP) of the U.S. Department of Education contracted with SRI International to develop a study design and student sample; in 1987, under a second contract, SRI began the National Longitudinal Transition Study of Special Education Students. The study is providing the first information available nationally about disabled youths' secondary school programs, related services, social integration, educational achievements in secondary school and in postsecondary education, and employment experiences. (A further description of the study is contained in the appendix.)

This paper presents selected descriptive findings from the National Longitudinal Transition Study (NLTS) regarding two questions:

- What are the individual and family characteristics of youth with disabilities served under EHA (e.g., their functional ability, socioeconomic background)?
- What are the achievements of youth with disabilities in the areas of independence, education, and employment?

The findings presented here are based on data for more than 8,000 youth collected in 1987 from telephone interviews with parents, a survey of educators in the schools youth attended, and

from their school records. All youth were special education students in secondary school in the 1985-86 school year. At the time of data collection in 1987, about two-thirds of the youth were still in secondary school; about half of the remainder had been out of secondary school up to 1 year; and half had been out of school between 1 and 2 years.

Below, we address the first research question by providing information on the nature and severity of youths' disabilities and their individual and family characteristics. The second research question is addressed in later sections through presentation of findings on the outcome domains of independent living, education, and employment. Throughout the paper, NLTS findings are compared when possible both to other research on youth with disabilities and to data for appropriate groups of youth in the general population.

#### Individual and Family Characteristics of Youth with Disabilities

When discussing youth with disabilities, it is tempting to assume that it is only the presence of a disability that distinguishes them from the general population. However, the data in Table 1 indicate that youth with disabilities differed from students as a whole in several respects other than the presence of a disability.

Youth with disabilities were disproportionately male, largely due to the prevalence of males among youth with learning disabilities and emotional disturbances. Youth with disabilities were also less likely than their nondisabled peers to be attending schools in suburban areas.

Further, special education students were also significantly more likely than students as a whole to come from low income families, from single-parent families, and from families with heads of household with relatively little education. These economic and family structure factors have been long known to present their own obstacles to educational achievement and later outcomes. Lower socioeconomic status also contributes significantly to the likelihood of youth dropping out of school, becoming involved with the criminal justice system, and doing poorly in the competitive job market (see for example, Wetzel, 1987; William T. Grant Foundation,

**Table 1: COMPARISON OF INDIVIDUAL AND FAMILY CHARACTERISTICS OF YOUTH WITH DISABILITIES AND THE GENERAL POPULATION OF YOUTH**

Characteristics	Youth with Disabilities		Percentage of Youth Without Disabilities
	%	S.E.	
<b>Demographic Factors</b>			
<b>Gender</b>			
Male	68.5	1.2	49.7 <sup>1</sup>
Female	31.5	1.2	50.3
(Number of Respondents)	(8398)		
<b>Attending school in area that is:</b>			
Urban	31.6	1.2	22.3 <sup>1</sup>
Suburban	33.7	1.2	47.9
Rural	34.7	1.2	28.7
(Number of Respondents)	(8408)		
<b>Ethnicity</b>			
Black	24.2	1.2	12.2 <sup>1</sup>
White	65.0	1.3	70.0
Hispanic	8.1	.8	12.6
Other	2.7	.4	5.2
(Number of Respondents)	(7142)		
<b>Age</b>			
15 or 16	33.0	1.2	
17 or 18	38.1	1.3	
19 or 20	22.9	1.1	
Over 20	5.9	.6	
(Number of Respondents)	(8398)		
<b>Socioeconomic Factors</b>			
In single-parent family	36.8	1.4	29.7 <sup>2</sup>
(Number of Respondents)	(6651)		
<b>Highest education of household head</b>			
Less than high school	41.0	1.4	31.3 <sup>1</sup>
High school graduate	36.0	1.4	27.8
Some college/2-year degree	14.0	1.0	20.9
College degree or more	8.9	.8	13.6
(Number of Respondents)	(8651)		
<b>Annual household income</b>			
< \$25,000	67.7	1.4	55.0 <sup>3</sup>
≥ \$25,000	32.2	1.4	45.1
(Number of Respondents)	(6172)		
<b>In household receiving:</b>			
Social security disability benefits (SSDI)	9.6	.8	
Social security survivors benefits	8.1	.8	
Supplemental security income (SSI)	14.4	1.0	
Medicaid or similar benefits	21.6	1.2	
Aid to Families with Dependent Children	12.5	1.0	17.4 <sup>4</sup>
Public assistance	10.8	.9	
Food stamps	23.7	1.2	12.9
Unemployment insurance	7.3	.8	
Other benefits	4.3	.6	
None of these benefits	50.1	1.4	
(Number of Respondents)	(6785)		

Source: NLS data are based on parent interviews.

\*S.E. = standard error. To calculate the confidence interval around these estimates, using a two-tailed test with 95% confidence, multiply the standard error of the estimate by 1.96. For example, with 95% confidence, the estimate of the proportion of youth with disabilities who are male is 68.5%, ±2.4% (1.96 \* 1.2).

<sup>1</sup>Center for Education Statistics, 1987b, p. 8.1-2,3 (sophomore cohort, base year).

<sup>2</sup>U.S. Bureau of the Census, 1988, p. 21 (includes youth 15 to 17 years old).

<sup>3</sup>U.S. Bureau of the Census, 1987, p. 3.

<sup>4</sup>U.S. Department of Education, 1988, pp. 32-34.

1988). Hence, not only did the presence of a disability create a challenge for special education students in school and in the transition to adulthood, but they were also more likely than the general population of youth to be battling the often negative effects of poverty. Programs and services designed only to compensate for youths' disabilities, but that do not account for the added problems of poverty, may not provide special education students with the help they need to overcome their dual disadvantages.

### Disability-Related Factors

Table 2 presents information on the categories of disabilities into which special education students were classified. As mentioned earlier, the majority of youth (56%) were categorized by their school or school district as having a learning disability as their primary handicapping condition. Youth with mental retardation accounted for 24% of secondary-age youth with disabilities, and those with emotional disturbances or behavior disorders were about 10% of the population. All other primary disabilities were relatively low-incidence conditions.

Table 2: DISABILITY-RELATED CHARACTERISTICS OF YOUTH WITH DISABILITIES

<u>Characteristics</u>	<u>Percentage</u>	<u>Standard Error</u>
<b>Primary disability</b>		
Learning disabled	55.7	.8
Mentally retarded	23.8	.6
Emotionally disturbed	10.5	.5
Speech impaired	3.4	.3
Deaf/hard of hearing	1.7	.2
Visually impaired	.7	.2
Other health impaired	1.3	.2
Orthopedically impaired	1.2	.2
Deaf/blind, multiply handicapped	1.6	.3
(Number of respondents)	(8414)	
<b>Age when started having trouble with disability</b>		
Birth to 2 years old	21.4	1.2
3 to 5 years old	16.4	1.1
≥ 6 years old	62.2	1.4
(Number of respondents)	(6455)	

Source: Parent interviews.

Most parents reported youth began having difficulty with their disability after reaching school age. However, the age when youth were reported as first having trouble with their disabilities varied widely by disability category. For example, 88% of youth who were deaf were reported as having hearing problems before the age of 3, whereas fewer than 10% of youth in the learning disability category were reported as having trouble with their disabilities at that early age.

Disabilities are often not well defined merely by labels and durations. Having a particular condition is truly a handicap only to the extent that it limits the functioning of those who have it. Understanding the functional levels of youth with disabilities provides an important context for interpreting later findings regarding their transition outcomes. Table 3 describes three aspects of the functioning of youth in each primary disability category.

One aspect of functioning investigated in the NLTS is the ability of youth to take care of their basic needs. Parents reported how well youth performed three self-care skills on their own, without help: dressing oneself, feeding oneself, and getting around to places outside the home, such as a neighbor's house or a nearby park. Parents reported whether youth performed each task "not at all well, not very well, pretty well, or very well." A further aspect of functioning involves skills of a somewhat higher order. Parents reported how well youth did four tasks on their own without help: looking up telephone numbers and using the phone, telling time on a clock with hands, reading common signs, and counting change. Finally, we examined IQ levels reported in school records as a further measure of youth's abilities or potential. Table 3 reports data on these three aspects of functioning of youth with disabilities.

As shown in the first column of Table 3, 86% of youth with disabilities performed the basic self-care skills "very well" on their own. This level of self-care skill varied, as expected, between disability categories. Self-care skills were mastered by most of the mildly impaired youth; more than 90% of youth in the learning disabled, emotionally disturbed, speech impaired, and hard of hearing categories had no difficulty with self-care skills. However,



Table 3: FUNCTIONAL LEVELS OF YOUTH WITH DISABILITIES

<u>Disability Category</u>	<u>% with Parents Reporting Youth Perform Very Well:</u>		<u>Sample Size</u>	<u>Youth's IQ</u>	
	<u>Self-Care Skills</u>	<u>Functional Abilities</u>		<u>Mean</u>	<u>Sample Size</u>
All conditions	86.4 (.9) *	40.4 (1.3)	6586	82	3,773
Learning disabled	95.4 (1.0)	46.0 (2.4)	912	91	748
Emotionally disturbed	94.1 (1.4)	49.7 (2.9)	593	91	427
Mentally retarded	67.4 (2.1)	22.5 (1.9)	860	58	803
Speech impaired	91.8 (1.9)	54.3 (3.5)	452	92	212
Visually impaired	51.6 (3.5)	21.5 (2.9)	695	91	465
Deaf	83.4 (2.3)	34.0 (2.9)	743	93	468
Hard of hearing	92.3 (1.9)	43.3 (3.5)	659	93	338
Orthopedically impaired	42.3 (3.4)	40.2 (3.4)	628	83	355
Other health impaired	65.3 (3.5)	48.4 (3.7)	411	83	143
Multiply handicapped	34.5 (3.8)	8.4 (2.2)	559	56	396
Deaf/blind	21.0 (6.4)	5.3 (3.5)	74	60	28

Source: Functional levels were reported in parent interviews. IQ scores came from students' school records.

\*Standard errors are in parentheses.

fewer than half of youth in the orthopedically impaired, multiply handicapped, and deaf/blind categories were reported by parents as having completely mastered self-care skills.

Higher-order functional skills, however, presented considerably greater problems for youth in all categories. Only 40% of youth with disabilities were reported to perform the functional tasks very well without help. For youth with learning disabilities, emotional

disturbances, or who were hard of hearing, fewer than half were reported as performing functional tasks very well. Only among youth with speech impairments were more than half reported to perform functional tasks very well (54%).

This degree of functional difficulty existed despite the fact that the average IQ was within the normal range for youth in all disability categories except mentally retarded, multiply handicapped, and deaf/blind. The average IQ for youth in all conditions was 82, and the average IQ was above 90 for youth with learning, emotional, speech, hearing, and visual impairments. It was apparently not an intelligence deficit that limited performance of functional tasks for youth in most categories. Whatever the reason for functional limitations, their prevalence should be kept in mind in interpreting both findings regarding transition outcomes and comparisons with the general population of youth.

### Outcomes of Youth with Disabilities

This section examines outcomes of youth with disabilities in the domains of independent living, secondary school achievement, postsecondary education, and employment.

#### Independent Living

Two aspects of independent living are examined here. The first involves several measures of the social integration of youth. Secondly, we examine the residential independence of youth who are no longer in secondary school.

#### Social Integration

The social arena is particularly important in the lives of adolescents. Through interactions with friends and through group membership, youth explore roles and learn social skills that help them make an effective transition to adult roles and responsibilities. Table 4 presents findings regarding the extent of social integration of youth with disabilities. These findings are presented for youth who were still in secondary school, those who had been out of secondary school up to 1 year, and those who had been out of secondary school 1 to 2 years.

Table 4: SOCIAL EXPERIENCES OF YOUTH WITH DISABILITIES

<u>Social Experiences</u>	<u>Secondary School Enrollment Status:</u>		
	<u>In School</u>	<u>Out of School ≤ 1 year</u>	<u>Out of School 1 to 2 years</u>
Percentage of youth getting together with friends:			
Less than once/week	13.6 (1.3)*	11.5 (2.0)	9.3 (1.9)
Once a week	10.9 (1.2)	11.4 (2.0)	11.7 (2.1)
2 to 3 times a week	25.3 (1.6)	28.2 (2.8)	31.0 (3.1)
4 to 5 times a week	16.6 (1.4)	14.3 (2.2)	14.8 (2.4)
More than 5 times a week	33.6 (1.8)	34.6 (3.0)	33.0 (3.1)
Number of respondents	4,190	1,218	1,163
Percentage of youth belonging to a school or community group			
	43.0 (1.8)	29.2 (2.8)	18.7 (2.5)
Number of respondents	4,297	1,281	1,243
Percentage of youth who are:			
Single, never married	- -	29.2 (1.2)	87.6 (2.5)
Engaged	- -	1.1 (.8)	1.8 (.9)
Married	- -	1.3 (.8)	10.4 (2.1)
Divorced/separated	- -	.4 (.5)	.2 (.3)
Number of respondents		871	1,078
Percentage of youth reported to have never been arrested			
	9.0 (1.1)	16.5 (2.3)	21.0 (2.6)
Number of respondents	4,299	1,280	1,245

-----  
Source: Parent interviews.

\*Standard errors are in parentheses.

The first measure of integration is drawn from parents' reports of the frequency with which youth saw friends outside of school. About one-third of youth were reported to get together with friends more than five times per week, with no difference between youth based on their secondary school status. Only about 10% of youth saw friends less often than once per week. Youth with learning disabilities or emotional disturbances were most active with friends and those with orthopedic or multiple impairments got together least often with friends.

Among youth who were still in school, 43% belonged to a school or community group, with sports teams being the most common affiliation. Group participation rates were highest for in-school youth who had speech or visual impairments or who were deaf and lowest for those in the mentally retarded, emotionally disturbed, health impaired, or multiply handicapped categories. Overall, youth with disabilities belonged to groups while in school at a significantly lower rate than youth as a whole (CES, 1987; High School and Beyond sophomore cohort, base year).

Schools are an important context for group affiliation; the rate of affiliation was significantly lower among youth who were out of school. Only 29% of youth out of school up to one year and 19% of youth out of school one to two years belonged to a school or community group ( $p < .01$ ). This pattern of reduced involvement for out-of-school youth holds for youth in all disability categories.

For youth no longer in secondary school, a further measure of social integration is marital status. Among youth out of school up to 1 year, 1% were married or living with someone of the opposite sex, compared to 7% of 18 and 19 year olds nationwide (U.S. Bureau of the Census, 1988). This figure is 10% for youth with disabilities who had been out of school one to two years, with little variation for youth in different disability categories. This compares to 28% of the general population of youth 20 to 24 years old (U.S. Bureau of the Census, 1988). Among youth with disabilities, females were more likely than males to be married ( $p < .01$ ).

A final measure of social integration involves the extent to which youth with disabilities failed to follow social and legal rules and were arrested for their acts. The adolescent years are the time in which a person is most likely to be arrested. Among youth with disabilities who

were still in school, 9% had been arrested. This figure was significantly higher for youth who were out of school: 16% of youth out of school up to one year ( $p < .01$ ) and 21% of youth who had been out of school one to two years. The highest arrest rate was for youth with emotional or behavioral problems; 27% of youth with emotional problems who had been out of school one year or less and 44% who had been out of school one to two years had been arrested. Youth with learning disabilities had an arrest rate generally equivalent to the total sample of youth with disabilities. Arrest rates for youth in other categories who had been out of school one to two years ranged from no arrests to about 14%.

### Residential Independence

It is a common expectation of our society that as youth mature, they eventually will establish households independent of their parents. Although the national trend is for achievement of residential independence to take longer for youth today than in earlier years (Wetzel, 1987), the large majority of youth nationwide eventually fulfill this expectation.

NLTS data indicate that youth with disabilities in secondary school mirrored their nondisabled peers in that almost 95% lived at home with a parent, compared to 94% of nondisabled youth (U.S. Bureau of the Census, 1987). In line with social expectations, youth who had left secondary school were more likely to have left their parents' homes and establish other living arrangements. Among youth who had been out of secondary school one year or less, 82% still lived with parents; this figure was 69% for youth who had been out of school one to two years, a significant decrease from year to year ( $p < .01$ ). These figures are very similar to the 68% rate of living at home among special education graduates in Colorado (Mithaug & Horiuchi, 1983) and is lower than the 82% rate reported for Vermont (Hasa'i, Gordon, & Roe, 1985). However, the rate at which youth with disabilities lived at home is significantly higher than the percentage of youth still living at home after high school among nondisabled youth (50% of High School and Beyond seniors still lived at home two years after leaving high school; CES, 1987).

As shown in Table 5, 17% of youth who had been out of school one to two years had established an independent living situation (lived alone, with a spouse or roommate, in a college dor-

mitory, or in military housing). Independent living was more common for more youth in some disability categories. For example, 22% of youth with learning disabilities and 20% of youth who were deaf lived independently, compared to 9% of youth with mental retardation and about 3% of youth with multiple impairments, including those who were deaf/blind ( $p < .05$ ). For most categories of youth, the percentage living independently one to two years out of secondary school was significantly higher than the percentage among youth who had been out of school a shorter time, suggesting a desired trend over time toward greater independence.

Although the majority of youth, regardless of whether they were in school, continued to live with parents, parents of youth still living at home expected that most youth would eventually live away from home, on their own, without supervision. The second column in Table 5 indicates that 78% of parents believed that youth who were not then living independently "definitely" or "probably" would in the future. Expectations were significantly lower for categories of youth whose skill levels were lower, including youth with multiple handicaps, mental retardation, and orthopedic and health impairments ( $p < .01$ ). However, even among youth with learning disabilities, speech impairments, and who were hard of hearing, between 10% and 15% of parents doubted that the youth would be able to live independently, without supervision. If these expectations accurately reflect the youths' futures, they contribute to the growing concern as to whether there will be supervised living arrangements for these youth as they and their parents age, and youth no longer are able to live at home. In light of the poverty experienced by many of these families, it is a further question whether the youth or their parents will be able to afford residential programs that are available, without financial support.

### Educational Outcomes

The transition years span the educational experiences of youth both as they complete secondary school and in the postsecondary education domain. Both aspects of educational outcomes are discussed here.

Table 5: INDEPENDENT LIVING CHARACTERISTICS OF YOUTH WITH DISABILITIES

<u>Disability Category</u>	<u>Youth Out of School 1 to 2 Years Living Independently</u>		<u>Parents Report Youth Would Eventually Live Independently</u>	
	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>
All Conditions	17.3 (2.4) *	1,378	78.4 (1.6)	3,875
Learning disabled	22.0 (3.8)	255	90.0 (2.9)	477
Emotionally disturbed	15.1 (4.3)	139	84.3 (2.9)	307
Mentally retarded	9.2 (2.9)	183	72.1 (3.1)	481
Speech impaired	13.2 (5.3)	89	82.4 (3.6)	249
Visually impaired	26.0 (7.4)	118	71.2 (3.9)	463
Deaf	20.2 (5.2)	163	82.4 (3.0)	431
Hard of hearing	16.6 (6.6)	104	85.0 (3.2)	404
Orthopedically impaired	11.8 (5.1)	118	52.4 (4.4)	376
Other health impaired	15.8 (6.6)	69	58.3 (4.6)	262
Multiply handicapped	3.1 (3.2)	109	21.5 (4.0)	384
Deaf/blind	3.4 (4.4)	31	18.6 (8.2)	41

Source: Parent interviews.

\*Standard errors are in parentheses.

### Secondary School Completion

As part of the school reform movement at the secondary level, considerable attention is being paid, both in the schools and in the public policy arena, to dropout prevention as a way to increase the percentage of youth who leave high school with a diploma. Table 6 indicates the percentage of secondary school special education exiters in a two-year period who left secondary

Table 6: SECONDARY SCHOOL COMPLETION STATUS OF  
SPECIAL EDUCATION EXITERS IN TWO YEARS

<u>Disability Category</u>	<u>Percentage of Exiters in 2 Years Who:</u>			<u>Sample Size</u>
	<u>Graduated</u>	<u>Dropped Out</u>	<u>Aged Out</u>	
All conditions	56.2 (2.1)	36.4 (2.1)	7.5 (1.1)	3,045
Learning disabled	61.0 (3.1)	36.1 (3.0)	2.9 (1.1)	533
Emotional disturbed	41.8 (3.8)	54.7 (3.8)	3.6 (1.4)	334
Mentally retarded	49.9 (3.1)	33.6 (3.0)	16.5 (2.3)	459
Speech impaired	62.7 (4.8)	32.5 (4.7)	4.8 (2.1)	222
Visually impaired	69.5 (5.0)	16.8 (4.1)	13.7 (3.8)	279
Deaf	71.8 (3.9)	11.8 (2.8)	16.4 (3.2)	354
Hard of hearing	72.3 (4.7)	15.5 (4.1)	12.2 (3.7)	249
Orthopedically impaired	76.5 (4.6)	15.6 (4.0)	7.9 (3.0)	246
Other health impaired	65.4 (6.0)	25.9 (5.5)	8.7 (3.5)	142
Multiply handicapped	32.2 (6.6)	17.6 (5.4)	50.2 (7.0)	182
Deaf/blind	43.1 (10.0)	7.8 (5.4)	49.2 (10.1)	45

Source: Parent interviews and students' school records.

school by graduating, dropping out, or exceeding the age limit for school attendance (i.e., "aging out").

Overall, 56% of special education exiters left secondary school by graduating. This figure is significantly lower than the graduation rate for students as a whole. For example, the U.S. Department of Education "Wallchart" estimates the graduation rate for students as a whole to be 71%, a rate similar to the 75% rate reported by the U.S. Bureau of the Census and the U.S. Center for Educational Statistics (CES, 1986; figures are for 1985). Differences were even



more pronounced for youth in some disability groups. Although the graduation rates for youth with orthopedic, visual, or hearing impairments approached the rate for nondisabled students, the graduation rates for youth with emotional disturbances, mental retardation, or multiple handicaps were below 50% ( $p < .01$ ).

Table 6 further demonstrates that about 8% of special education exiters left school because they exceeded the school age limit. Youth with multiple handicaps, including those who were deaf and blind, were most likely to age out of school (about 50%); about 16% of deaf and mentally retarded youth aged out, and fewer than 5% of youth with learning, speech, or emotional impairments aged out ( $p < .01$ ).

More than 1 in 3 exiters from the secondary special education system dropped out of school (36%). This figure masks considerable variation between disability categories. The dropout rate for youth with emotional disturbances, for example, was almost 55%, compared to significantly lower rates for youth with sensory or orthopedic impairments (between 12% and 17%;  $p < .01$ ).

Earlier research on dropouts from special education in single states or small samples of districts reports dropout rates in a similar range. For example, state studies have reported dropout rates that range from 31% for mildly impaired youth in several districts in Florida (Fardig, Algozzine, Schwartz, Hensel, & Westling, 1985) and 34% in Vermont (Hasazi, Gordon, & Roe, 1985), to 40% for special education students overall in New Hampshire (Lichtenstein, 1988). In urban districts, the rates appear to be higher. Prior research has reported dropout rates for youth with learning disabilities in urban areas that are as high as 42% (Cobb & Crump, 1984), 47% (Levin, Zigmond, & Birch, 1985), 50% (Edgar, 1987), and 53% (Zigmond & Thornton, 1985).

Although special education students appear to have dropped out of school at a higher rate than youth in general, their reasons for dropping out were largely the same. Among the student population as a whole, the major reasons cited for students dropping out include poor academic performance, and type of handicap or limiting condition, not liking school, and disciplinary

problems (e.g., Barro & Kolstad, 1986; CES, 1986; Rumberger, 1983). NLTS data confirms this picture for special education students. The reasons most commonly cited by parents for youth dropping out of school were that they did not like school (30%) or were not doing well in school (28%). These findings are consistent with recent studies of special education dropouts in California and Florida (Jay & Padilla, 1987; Project Transition, 1987). In the California study, educators described special education dropouts as students who were failing in school, were not well integrated socially, had poor attendance, and did not see school as relevant to their lives. The NLTS reports other reasons specific to youth with particular disabilities. Among youth with emotional disturbances, for example, behavior problems were cited as the reason for 27% of youth dropping out of school. Health or disability-related problems were cited by parents of about half of health impaired youth and about 40% of youth with multiple handicaps.

In addition to the stated reasons for dropping out of school, research has demonstrated several characteristics of youth and their families that relate to the propensity to drop out. For the general population of youth, research has documented significantly higher dropout rates for males, youth from low-income families, minorities, and youth in urban areas (e.g., U.S. Bureau of the Census, 1987; CES, 1987; GAO, 1986; Rumberger, 1983). However, for special education students, gender does not appear to relate to dropping out; there are no significant differences between males and females in their dropout rate (38% vs. 34%). Neither is there a significant difference based on ethnicity. Although the dropout rate for Hispanic youth (44%) was higher than for either white or black youth (34% and 36%), the difference is not significant.

Socioeconomic status, as measured by household income and head of household education, is strongly related to the dropout rate for youth with disabilities, as for students in general. For example, the dropout rate was 42% among youth from families with an income of under \$12,000 per year but only 20% for those whose families had an income of more than \$25,000 per year ( $p < .01$ ). Similarly 44% of youth from households whose head was not a high school

graduate dropped out, compared to 18% of youth from households whose head completed four or more years of college ( $p < .01$ ). Youth in urban areas dropped out at a significantly higher rate than those in suburban areas (40% vs. 29%;  $p < .05$ ); there is no significant difference between dropout rates for rural youth and others.

### Postsecondary Education Participation

Furthering one's education or training after high school is a common way for youth to increase their skills, employability, and eventual earnings. However, fewer than 15% of special education exiters who had been out of secondary school one to two years participated in postsecondary education or training in the previous year, as presented in Table 7. There is no significant difference in participation between youth out of secondary school less than one year and those out of school one to two years. Vocational or trade schools were the most commonly attended postsecondary institutions, with 8% of exiters reportedly enrolled in the year before the interview. Almost 6% attended a two-year or community college, and 2% attended a four-year college or university.

These figures are significantly below the postsecondary education participation rates for the general population of youth. Two years after leaving high school, 56% of the sophomore cohort of the High School and Beyond study were involved in postsecondary education or training (Jones et al., 1986). The institutions most commonly attended by students as a whole were four-year colleges (28%) and two-year colleges (18%). Only for vocational or trade schools did the rate of participation by youth with disabilities approach the rate of other students (10%). Because participation rates in postsecondary education were significantly higher for high school graduates than for dropouts (21% vs. 5%;  $p < .01$ ), the relatively higher dropout rate for special education students may help explain the relatively lower postsecondary education participation.

Table 7: POSTSECONDARY EDUCATION PARTICIPATION OF SPECIAL EDUCATION EXITERS

<u>Disability Category</u>	<u>% of 1985-86 Exiters Taking Courses From:</u>				<u>Sample Size</u>
	<u>Any Postsecondary Institution</u>	<u>Voc/Trade School</u>	<u>2-Year College</u>	<u>4-Year College</u>	
A. All conditions	14.6 (2.4) *	8.1 (1.8)	5.9 (1.6)	2.1 (1.0)	1,265
Learning disabled	16.7 (3.5)	9.6 (2.7)	6.9 (2.3)	1.8 (1.2)	245
Emotionally disturbed	11.7 (4.0)	8.8 (3.5)	4.1 (2.4)	1.3 (1.4)	131
Mentally retarded	5.8 (2.4)	4.3 (2.1)	1.2 (1.1)	.6 (.8)	164
Speech impaired	29.3 (7.4)	7.0 (4.1)	19.3 (6.4)	8.3 (4.5)	83
Visually impaired	42.1 (8.6)	2.9 (2.9)	15.2 (6.3)	27.5 (7.8)	110
Deaf	38.5 (6.5)	7.0 (3.4)	19.0 (5.2)	15.2 (4.8)	154
Hard of hearing	30.1 (8.2)	11.6 (5.7)	12.7 (6.0)	7.0 (4.6)	101
Orthopedically impaired	28.0 (7.4)	9.0 (4.7)	10.4 (5.1)	9.5 (4.9)	108
Health impaired	30.7 (8.6)	13.2 (6.3)	12.1 (6.1)	7.6 (4.9)	65
Multiply handicapped	3.8 (4.1)	.9 (2.0)	4.0 (4.2)	.2 (1.0)	77
Deaf/blind	8.3 (7.2)	8.8 (7.4)	0.0 (0.0)	0.0 (0.0)	27

Source: Parent interviews.

\*Standard errors are in parentheses.

### Employment Outcomes

Paid competitive employment, as a major vehicle for economic self-sufficiency, is a desirable eventual outcome for youth, whether or not they have a disability. Prior research has demonstrated that having paid employment during secondary school has a strong relationship to the probability of youth with disabilities having a paid job when they leave school (Hasazi, Gordon, & Roe, 1985). This section examines findings from the NLTS related to employment of

youth with disabilities while they were in school and during the first years after leaving secondary school.

Paid employment was a common experience for youth while they were still in secondary school. Among in-school youth with disabilities, 7% had paid workstudy jobs, 1% had paid sheltered workshop employment, 27% had part-time competitive employment, and 8% of youth worked full time in competitive employment. This rate of 42% paid employment for youth with disabilities compares to 44% of nondisabled in-school youth who were employed for pay in a one-month period (October, 1985; Bureau of Labor Statistics, 1986). NLTS figures report summer employment; if fall employment had been measured, lower employment rates may have been found for youth with disabilities. Youth with orthopedic or multiple impairments were significantly less likely to have paid employment while in secondary school than youth with other disabilities ( $p < .01$ ).

Among employed in-school youth, 23% worked fewer than 10 hours per week and 25% worked 35 or more hours per week (note that data refer to employment during the summer). Employed in-school youth were most likely to work at lawn work or odd jobs (18%); as waiters, busboys, or cooks (17%); at babysitting or child care (12%); or at other manual labor, including sheltered workshop activities (30%). Their average pay was \$3.48 per hour, just above minimum wage at the time of the interview; 25% earned less than \$3.00 per hour. On average, the longest job they had held lasted 10 months.

When youth leave secondary school, employment often takes a more central role for a greater proportion of youth. NLTS data reveal that, as expected, out-of-school youth were significantly more likely than those still in secondary school to be working for pay ( $p < .01$ ). However, even after leaving secondary school, fewer than half of youth with disabilities held competitive paid jobs (this did not include paid work-study jobs or paid sheltered employment). Overall, 23% of youth with disabilities who had been out of school less than one year worked part time for pay and 22% worked full time. Employment rates were not

significantly different for youth who had been out of secondary school one to two years; 17% had part-time paid jobs and 29% worked full time for pay, as shown in Table 8.

Table 8: EMPLOYMENT CHARACTERISTICS OF YOUTH WITH DISABILITIES WHO WERE OUT OF SECONDARY SCHOOL 1 TO 2 YEARS

<u>Disability Category</u>	<u>% Part Time</u>	<u>Working for Pay</u>		<u>Average Hourly Wage</u>	
		<u>% Full Time</u>	<u>Sample Size</u>	<u>Dollars Per Hour</u>	<u>Sample Size</u>
All conditions	17.2 (2.5) *	29.2 (3.0)	1,326	\$4.35	473
Learning disabled	19.3 (3.6)	37.9 (4.5)	249	4.63	142
Emotionally disturbed	21.5 (5.0)	18.5 (4.7)	136	3.94	50
Mentally retarded	11.6 (3.3)	19.8 (4.0)	174	3.68	55
Speech impaired	21.2 (6.5)	28.8 (7.2)	86	4.09	40
Visually impaired	14.3 (6.1)	10.0 (5.2)	112	3.12	31
Deaf	14.7 (4.7)	23.6 (5.6)	156	4.08	50
Hard of hearing	22.6 (7.5)	22.9 (7.6)	100	4.08	46
Orthopedically impaired	12.6 (5.3)	1.3 (1.8)	114	3.30	21
Other health impaired	14.9 (6.6)	13.9 (6.4)	65	3.54	22
Multiply handicapped	4.4 (3.8)	1.3 (2.1)	104	--	--
Deaf/blind	9.5 (7.2)	0.0 (0.0)	30	--	--

-----  
Source: Parent interviews.

\*Standard errors are in parentheses.

-- Too few cases to report

The finding of the NLTS that only about half of youth out of secondary school one to two years were working for pay in competitive employment is similar to an employment rate of 50% reported in an early study of special education exiters in Washington (Gill, 1984) and to rates approaching 60% reported in studies in Colorado and in Washington (Edgar, Levine, & Maddox, 1986; Mithaug & Horiuchi, 1983). It is lower than rates reported for special education exiters in one community in Minnesota (Bruininks, Lewis, & Thurlow, 1988). The rate of full-time employment found in the NLTS (29%) is similar to rates in studies of special education exiters in Colorado (32%; Mithaug & Horiuchi, 1983), and marginally lower than reported by studies in Vermont (37%; Hasazi, Gordon, & Roe, 1985) and Virginia (42%; Wehman, Kregel, & Seyfarth, 1985).

Employment levels for youth with disabilities nationally were markedly below employment rates for youth as a whole. In the general population of youth 16 to 21 years of age and not in secondary school, 62% were employed for pay (Borus, 1984), compared to 50% of youth with disabilities. Only among youth with learning disabilities did the employment rate (58% employed for pay) approach the level for other youth. Even when youth with disabilities are compared only to noncollege youth as a whole, special education exiters had lower rates of employment. About 49% of noncollege high school graduates were working full time one to two years after high school, compared to 36% of special education graduates one to two years out of high school (William T. Grant Foundation, 1988).

Several factors appear to relate to the propensity to find full-time paid competitive employment among disabled youth who have been out of secondary school one to two years. Males were significantly more likely than females to be working full time for pay (34% vs. 16%;  $p < .01$ ),\* as were youth in suburban areas compared to those in urban communities (40% vs. 28%;  $p < .05$ ). Youth who were white and youth from families with higher incomes were also

---

\*These findings are consistent with a study in Vermont of mildly impaired youth (Hasazi, Gordon, & Roe, 1985, p. 466).

more likely to be employed full time. For example, 18% of youth in households with annual incomes of less than \$12,000 were working full time, compared to 37% of youth from households with incomes of \$25,000 or more ( $p < .01$ ). However, there is no significant relationship between head of household educational level and youths' full-time employment, perhaps because youth from households with more highly educated heads are more likely to be pursuing postsecondary education, which inhibits full-time work. High school graduates had a significantly higher rate of full-time employment compared to those who aged out or dropped out ( $p < .05$ ).<sup>\*</sup> Hence, the fact that the dropout rate for youth with disabilities was higher than for youth in general may have resulted in a reduced ability to compete for full-time employment when disabled youth left school.

Out-of-school youth earned wages that were about \$1.00 per hour more than wages earned by in-school youths; the average wage for youth who had been out of school one to two years was \$4.35 as shown in Table 8. About 12% of youth with disabilities earned less than \$3.00 per hour one to two years after leaving high school, and about 21% earned more than \$5.00 per hour. These wage levels nationally in 1987 were very similar to wages reported in Vermont for 1984; there, 75% of special education exiters in Vermont earned less than \$5.00 per hour (Hasazi, Gordon, & Roe, 1985), compared to 79% for youth nationally in 1987. NLTS wages are generally lower than those reported in a recent study of special education exiters in Minnesota; for example, employed youth with learning disabilities in that study averaged \$7.67 per hour, compared to \$4.63 for such youth nationally (Bruininks, Lewis, & Thurlow, 1988).

There was not a large difference in average hourly wage (about \$1.00 per hour) between youth with different disabilities. For example, youth with learning disabilities averaged \$4.63 per hour one to two years out of high school, compared to \$3.68 for youth with mental retardation and \$3.39 for those with multiple impairments.

---

<sup>\*</sup>These findings are consistent with a study in Vermont of mildly impaired youth (Hasazi, Gordon, & Roe, 1985, p. 466).



Being out of high school is not associated with a large increase in wages for youth with disabilities, despite the fact that out-of-school youth were less likely to be doing low-paying lawn work, odd jobs, or babysitting, and were significantly more likely to be employed in a skilled trade (8% vs. 16%;  $p < .05$ ). Employed youth who were out of school were also significantly more likely than in-school youth to be working 35 or more hours per week (65% vs. 25%;  $p < .01$ ).

### A More Comprehensive Look at Outcomes

Thus far, we have examined outcome domains separately. Such analyses add important information to our understanding of the varied transition experiences of youth with disabilities. They show that some out-of-secondary-school youth were employed for pay, others were taking postsecondary education or training courses, and still others were married or involved in home and child care. However, what these analyses do not show is how many youth with disabilities were not engaged in any of these various productive post-high-school experiences.

To address this issue, we have examined the extent to which youth with disabilities were failing to achieve any one of several productive outcomes. In this analysis, noninstitutionalized youth who had been out of secondary school one to two years are considered to have been engaged in productive activity during the previous year if they:

- Took courses from any postsecondary educational institution (trade or vocational school or two-year or four-year college)
- Were working for pay, either competitively or in a sheltered environment
- Were engaged in a volunteer job or unpaid work
- Received job skills training from a source other than a family member
- Were a female who was married or reported to be involved in child-raising.

Table 9 indicates that 69% of noninstitutionalized youth with disabilities who had been out of secondary school one to two years had been engaged in productive activity during the previous year, as defined above. Even among youth with learning disabilities or speech or hearing impairments, only between 81% and 84% of youth had been engaged in productive activity in

**Table 9: PERCENTAGE OF NONINSTITUTIONALIZED YOUTH OUT OF SECONDARY SCHOOL ONE TO TWO YEARS WHO WERE ENGAGED IN PRODUCTIVE ACTIVITY IN THE PREVIOUS YEAR**

<u>Disability Category</u>	<u>Youth Out of School 1 to 2 Years Engaged in Productive Activity in Previous Year</u>		<u>Sample Size</u>
	<u>%</u>	<u>S.E.</u>	
All conditions	69.4	3.9	797
Learning disabled	81.0	5.5	108
Emotionally disturbed	63.4	7.7	78
Mentally retarded	47.8	7.0	92
Speech impaired	81.4	5.6	53
Visually impaired	75.5	8.6	83
Deaf	84.3	5.6	116
Hard of hearing	81.2	8.5	68
Orthopedically impaired	59.4	9.0	89
Health impaired	72.1	9.5	50
Multiply handicapped	41.4	14.4	42
Deaf/blind	32.7	14.9	18

the previous year. Among those with visual impairments, one in four were not engaged in the activities described above. The rate of engagement dropped below 50% for youth with mental retardation and multiple handicaps.

Experience demonstrates that having a disability limits many youth in pursuing particular outcome areas; having mental retardation, for example, clearly presents obstacles to college attendance. However, the range of activities considered as productive transition experiences provides opportunities to include the vast majority of youth with disabilities. Recent research contends that even severely handicapped youth can usefully be involved in vocational programs and supervised employment, for example (Brown et al., 1983; Wehman & Hill, 1981). However, from the figures in Table 9, we can conclude that there were many youth with all types and levels of severity of disability who had not been engaged in productive experiences in the year since leaving high school.

What were the reasons for lack of engagement in productive activities? Were job training programs or postsecondary education opportunities limited in the communities in which youth

lived? Did functional limitations prevent youth from getting or keeping jobs? Did parents not encourage youth to become involved in volunteer work, for example, that might increase their skills or social interactions? We do know that males were significantly more likely to be productively engaged than females (70% vs. 53%;  $p < .01$ ), as were youth who lived in suburban areas, compared to those in urban or rural areas (75% vs. 58%;  $p < .05$ ). Socioeconomic status also had a significant relationship less likely to be productively engaged than others ( $p < .01$ ). Ethnic background does not relate significantly to being engaged productively after high school.

### A Summing Up

This paper has presented a broad overview of many aspects of the individual and family characteristics of youth with disabilities and of their transition outcomes. The findings presented paint a picture of youth with disabilities that is, at the same time, disparate, consistent, and equivocal.

Disparate--Findings regarding the individual family characteristics of youth with disabilities demonstrate that they differ from the general population of youth in ways other than the presence of a disability. They were more likely to be male and less likely to be living in a suburban community than were youth without disabilities. They were also more likely to be living in a household that was low income and in a household that had a poorly educated head.

Not only do youth with disabilities differ from the general population of youth, but they differ radically from each other, depending on the nature and severity of their disability. When we examine functional abilities or any of the outcome measures of interest, we find that youth in different disability categories had very different experiences. Self-care skills, for example, presented little problem for youth with learning disabilities, yet only about one in three youth with multiple handicaps could perform basic self-care skills very well without help. Dropping out of secondary school was a serious transition problem affecting more than half of youth with emotional disturbances, but was much less common to youth with sensory or orthopedic impairments. More than half of youth with learning disabilities were successful in finding paid

employment after high school, but paid employment was achieved by only about one third of youth with mental retardation.

These variations in transition experiences between youth with different kinds and levels of disability calls into question the notion that there is or should be a unified policy or program regarding "the handicapped." A single policy or program is unlikely to be effective in addressing the range of experience and needs of this extremely diverse population of youth. Dropout prevention, for example, may be an appropriate and needed policy initiative for youth with emotional disturbances, but would be largely irrelevant for youth with sensory impairments. An aggressive vocational orientation to secondary education may be beneficial to youth with mild mental retardation, but inappropriate for many youth with visual impairments, who, among youth with disabilities, are most likely to be college-bound. Individualization should continue to be the hallmark of special education and transition programs if they are to be effective.

Consistent--The findings presented here describing the transition outcomes of youth nationally are largely consistent with earlier transition studies in individual states and communities. Measures of dropout rate and extent of employment, for example, are similar for a given category of youth across national, state, and local studies. This consistency should give confidence to those setting policy and program directions; we have described the problem from several angles, in several areas, on large and small scales. Consistent findings emerge. The problems facing youth with disabilities and their successes and failures in meeting them are well-documented. Attention can now focus on identifying ways of promoting the successes and minimizing the failures.

Equivocal--The findings presented here are a mixed bag, with both good news and bad news regarding the transition outcomes of youth with disabilities. Whether the glass seems half empty or half full depends largely on the expectations we hold for these youth. If the basis of comparison is youth as a whole, many youth with disabilities were clearly not faring well. Youth in many categories of disability were significantly less likely to graduate from high

school, get any postsecondary education, find employment, or become engaged in any productive activity after high school than are youth in the general population. Yet, are the outcomes of most youth the appropriate comparison? For many categories of disability, the fact that even a small percentage of youth had achieved employment is a triumph for them, their families, the educators that served them, and the public policy that mandated and supported their education. The transition outcomes documented here involve many success stories. However, when fewer than 70% of youth with disabilities who had been out of high school one to two years had engaged in any productive activity in that year, the findings reported here also contain stories of wasted potential, of youth not having or not taking advantage of opportunities for productive contributions to society.

What can be done to improve the transition outcomes of youth with disabilities? What helps? What hurts? These questions are the focus of continuing analyses within the National Longitudinal Transition Study. Upcoming reports will focus on identifying factors that contribute to successful transition experiences for youth with disabilities in the areas of independent living, education, and employment.

### Author's Note

1. This research was supported by contract number 300-87-054 from the Office of Special Education Programs, U.S. Department of Education. The findings presented in this paper do not necessarily reflect the views or policies of the U.S. Department of Education.

## REFERENCES

- Barro, S. M., & Kolstad, A. (1986). Who drops out of high school: Findings from High School and Beyond. Washington, DC: SMB Economic Research.
- Borus, M. (1984). A description of employed and unemployed youth in 1981. In M. Borus (Ed.), Youth and the labor market (pp. 13-55). Kalamazoo, MI: The Upjohn Institute.
- Brown, L., et al. (1983). Teaching severely handicapped students to perform meaningful work in nonsheltered vocational environments. Paper supported by U.S. Department of Education Grant No. G008102099. Madison: University of Wisconsin.
- Bruininks, R. H., Lewis, D. R., & Thurlow, M. L. (1988). Assessing outcomes, costs, and benefits of special education programs. Minneapolis: Minnesota University Affiliated Program on Developmental Disabilities.
- Center for Education Statistics. (1986). The condition of education. Washington, DC: U.S. Government Printing Office.
- Center for Education Statistics. (1987). High School and Beyond 1980 sophomore cohort third follow-up (1985). Volume 1. Washington, DC: U.S. Government Printing Office.
- Cobb, R., & Crump, W. (1984). Postschool status of young adults identified as learning disabled while enrolled in learning disabilities programs. Final report, USDE Grant No. G008302185. University: University of Alabama.
- Edgar, E. (1987). Secondary programs in special education: Are many of them justifiable? Exceptional Children, 53, 555-561.
- Edgar, E., Levine, P., & Maddox, M. (1986). Statewide follow-up studies of secondary special education students in transition. Working paper of the Networking and Evaluation Team. Seattle: CDMiRC, University of Washington.
- Fardig, D. B., Algozzine, R. F., Schwartz, S. E., Hensel, J. W., & Westling, D. L. (1985). Postsecondary vocational adjustment of rural, mildly handicapped students. Exceptional Children, 52, 111-121.
- Gill, H. (1984). An employment-related followup of former special education students in Pierce County, Washington. Tacoma, WA: Vocational/Special Education Cooperative.
- Hasazi, S. B., Gordon, L. R., & Roe, C. A. (1985). Factors associated with the employment status of handicapped youth exiting high school from 1979-1983. Exceptional Children, 51, 455-469.
- Hasazi et al. (1985). A statewide followup of post-high school employment and residential status of students labeled mentally retarded. Education and Training of the Mentally Handicapped, 22, 222-234.
- Jay, E. D., & Padilla, C. L. (1987). Special education dropouts: The incidence and reasons for dropping out of school education in California. Menlo Park, CA: SRI International.

- Jones et al. (1986). High School and Beyond 1980 sophomore cohort second followup. Washington, DC: U.S. Government Printing Office.
- Lavin, E., Zigmond, N., & Birch, J. (1985). A followup study of 52 learning disabled students. Journal of Learning Disabilities, 18(1), 2-7.
- Lichtenstein, S. (1988). Dropouts: A secondary special education perspective. Counterpoint, 8(3), 13.
- Mithaug, D. E., & Horiuchi, C. N. (1983). Colorado statewide followup survey of special education students. Denver: Colorado Department of Education.
- Project Transition. (1986). Profiles of exceptional students in transition. Preliminary report to the 1986 Florida Legislature.
- Rumberger, R. W. (1983). Dropping out of high school: The influence of race, sex and family background. American Educational Research Journal, 20, 199-220.
- U.S. Bureau of the Census. (1987). School enrollment--Social and economic characteristics of students: October 1983. Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1987). Current population survey, October 1985. Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of the Census. (1988). Marital status and living arrangements: March 1987. Washington, DC: U.S. Government Printing Office.
- U.S. Bureau of Labor Statistics. (1986). Employment and earnings, November 1986. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education. (1987). State education statistics wallchart. Washington, DC: U.S. Government Printing Office.
- U.S. Department of Education. (1988). Youth indicators 1988. Washington, DC: Office of Education Research and Improvement.
- U.S. Government Accounting Office. (1986). School dropouts: The extent and nature of the problem. Briefing Report of Congressional Requesters. Washington, DC.
- Wehman, P., & Hill, J. (1981). Competitive employment for moderately and severely handicapped individuals. Exceptional Children, 47(5), 338-345.
- Wehman, P., Kregel, J., & Seyfarth, J. (1985). Employment outlook for young adults with mental retardation. Rehabilitation Counseling Bulletin, 90-99.
- Wetzel, J. R. (1987). American youth: A statistical snapshot. Washington, DC: William T. Grant Foundation Commission on Work, Family and Citizenship.
- William T. Grant Foundation Commission on Work, Family, and Citizenship. (1988). The forgotten half: Non-college youth in America. Washington, DC: William T. Grant Foundation Commission on Work, Family and Citizenship.

Zigmond, N., & Thornton, H. (1985). Learning disabled graduates and dropouts. Learning Disabilities Research, 1(1), 50-55.



## Appendix

**OVERVIEW OF THE NATIONAL LONGITUDINAL TRANSITION STUDY  
OF SPECIAL EDUCATION STUDENTS**

As part of the 1983 amendments to the Education of All Handicapped Children Act (EHA), the Congress requested that the U.S. Department of Education conduct a national longitudinal study of the transition of secondary special education students to determine how they fare in terms of education, employment, and independent living. A five-year study was planned, which was to include youth from ages 13 to 21 who were in special education at the time they were selected and who represented all 11 federal disability categories.

In 1984, the Office of Special Education Programs (OSEP) of the U.S. Department of Education contracted with SRI International to determine a design, develop and field test data collection instruments, and select a sample for the National Transition Study. In April 1987, under a separate contract, SRI began the actual study.

**Study Components**

The National Transition Study has four major components:

- **The Parent/Youth Survey.** In 1987, parents were interviewed by telephone to determine information on family background and expectations for the youth in the sample, characteristics of the youth, experiences with special services, the youth's educational attainment (including postsecondary education), employment experiences, and measures of social integration. This survey is expected to be repeated in 1990, when the youth will be interviewed if he/she is able to respond.
- **School Record Abstracts.** Information has been abstracted from the school records of sample youth for their most recent year in secondary school (either the 1985-86 or 1986-87 school years). Information abstracted from school records relates to courses taken, grades achieved (if in a graded program), placement, related services received from the school, status at the end of the year, attendance, IQ, and experiences with

minimum competency testing. Records will be abstracted again in 1989 for youth still in secondary school in the 1988-89 school year.

- School Program Survey. Schools attended by sample youth in the 1986-87 school year were surveyed in 1987 for information on student enrollment, staffing, programs and related services offered secondary special education students, policies affecting special education programs and students, and community resources for the disabled.
- Explanatory Substudies. More in-depth studies involving subsamples of the main sample will be conducted in 1989 and 1990 to examine the pattern of transition outcomes achieved by youth who are out of secondary school and the relationship between school experiences and transition outcomes.

### Sampling

Youth were selected for the sample through a two-stage sampling procedure. A sample of 450 school districts was randomly selected from the universe of approximately 14,000 school districts serving secondary (grade 7 or above) special education students, which had been stratified by region of the country, a measure of district wealth involving the proportion of students in poverty (Orshansky percentile), and district size (student enrollment).<sup>\*</sup> Because of a low rate of agreement to participate from these districts, a replacement sample of 176 additional districts was selected. In addition, participation in the study was invited from the approximately 80 special schools serving secondary-age deaf, blind, and deaf-blind students. A total of approximately 300 school districts and 25 special schools agreed to have youth selected for the study.

Analysis of the potential bias of the district sample indicates no systematic bias that is likely to have an impact on study results when responding districts were compared to

---

<sup>\*</sup>The 1983 Quality Education Data, Inc. (QED) data base was used to construct the sampling frame. QED is a private nonprofit firm located in Denver, Colorado.

nonrespondents on the types of disabilities served, special education enrollment, participations in vocational rehabilitation agency programs, the extent of school-based resources for special education, community resources for the disabled, the configuration of other education agencies serving district students, metropolitan status, percent minority enrollment, grades served, and the age limit for service (see Javitz, 1987 for more information on the LEA bias analysis).

The sample of students was selected from rosters of all special education students ages 13 to 21 who were in grades 7 through 12 or whose birthdays were in 1972 or before. The roster of such students was stratified into three age groups (13 to 15, 16 to 18, over 18) for each of the 11 federal handicap categories and youth were randomly selected from each age/condition group so that at least 1,000 students would be selected in each handicap category (with the exception of deaf-blind, a low-incidence condition).

Exhibit A indicates the number of youth sampled in each condition, the proportion for which different combinations of data were obtained, and the reasons for nonresponse for youth for whom data could not be obtained.

#### Weighting Procedures and Population to Which Data Generalize

Youth with disabilities for whom data could be gathered were weighted to represent the U.S. population of such youth. In performing this weighting, three mutually exclusive groups of sample members were distinguished:

- A. Youth whose parents responded to the telephone-administered Parent Interview.
- B. Youth whose parents did not respond to the telephone-administered Parent Interview, but were interviewed in the in-person nonrespondent study.
- C. Youth whose parents did not respond to either the telephone or in-person Parent Interview, but for whom the school provided a record abstract.

All Sample members belong to one of these three groups.

## Exhibit A

### Student Sample by Handicapping Condition

<u>Status</u>	<u>LD</u>	<u>SED</u>	<u>MR</u>	<u>Speech</u>	<u>Ortho</u>	<u>Deaf</u>	<u>H.of.H</u>	<u>Blind</u>	<u>D/B</u>	<u>Health</u>	<u>Multi</u>	<u>Total</u>
Number of contacts	1650	1321	1642	933	1060	1050	1372	1318	165	1005	1132	12648
<b>No Further Contact Possible</b>												
Unable to locate	59	59	84	50	49	41	70	63	5	33	45	558
Names not provided by LEA	206	271	55	92	18	99	197	120	0	362	212	1632
Deceased	2	0	4	0	11	0	3	2	3	5	2	32
Language barrier/non-Spanish	5	4	5	9	6	12	13	3	0	5	2	64
No respondent exists	23	21	28	18	9	20	11	20	2	9	16	177
Other	3	3	7	5	1	14	6	2	3	5	6	55
Nonworking number	233	178	341	157	146	149	180	193	29	115	94	1815
<b>TOTAL</b>	<b>531</b>	<b>536</b>	<b>524</b>	<b>331</b>	<b>240</b>	<b>335</b>	<b>480</b>	<b>403</b>	<b>42</b>	<b>534</b>	<b>377</b>	<b>4333</b>
(% of total contacts)	32	41	32	35	23	32	35	31	25	53	33	34
<b>Responses</b>												
Completed interview-have consent form	506	326	533	232	388	402	470	475	73	246	362	4013
Completed interview no consent form	385	258	314	217	216	259	231	255	35	131	159	2460
<b>Total completed interviews</b>	<b>891</b>	<b>584</b>	<b>847</b>	<b>449</b>	<b>604</b>	<b>661</b>	<b>701</b>	<b>730</b>	<b>108</b>	<b>377</b>	<b>521</b>	<b>6473</b>
(% of total contacts)	54	44	52	48	57	63	51	55	65	38	46	51
(% of those to be interviewed)	64	59	57	57	62	73	64	64	69	62	60	62
Have partial data (other sources)	37	43	42	18	35	15	15	20	2	11	24	262
Have partial interview (phone)	39	25	27	25	16	26	17	17	4	19	22	237
Have partial interview (mail)	20	21	49	15	25	23	17	20	4	10	30	234
<b>Total participation</b>	<b>987</b>	<b>673</b>	<b>965</b>	<b>507</b>	<b>680</b>	<b>725</b>	<b>750</b>	<b>787</b>	<b>119</b>	<b>417</b>	<b>597</b>	<b>7206</b>
(% of total contacts)	60	51	59	54	64	69	55	60	72	41	53	57
(% of those to be interviewed)	71	68	64	64	69	80	68	69	75	69	68	69
Refused interview	56	41	40	11	30	19	24	22	3	18	18	282
Refused in earlier contacts	11	3	6	2	20	0	1	3	1	3	9	59
<b>Total refusals</b>	<b>67</b>	<b>44</b>	<b>46</b>	<b>13</b>	<b>50</b>	<b>19</b>	<b>25</b>	<b>25</b>	<b>4</b>	<b>21</b>	<b>27</b>	<b>341</b>
(% of total contacts)	4	3	3	1	5	2	2	2	2	2	2	3
(% of those to be interviewed)	5	4	3	2	5	2	2	2	3	3	3	3
Other	29	20	19	22	8	64	18	18	4	14	22	238

*630095*

A primary concern in performing the weighting was to determine whether there was a nonresponse bias and to calculate the weights in such a way as to minimize that bias. Nonresponse bias was primarily of three types:\*

1. Bias attributable to the inability to locate respondents because they had moved or had nonworking telephone numbers.
2. Bias attributable to refusal to complete a parent interview.
3. Bias attributable to circumstances that made it infeasible for the record abstractors to locate or process a student's record.

Of these three types of nonresponse, the first was believed to be the most important, both in terms of frequency and influence on the descriptive and explanatory analysis. Type 1 bias was also the only type of nonresponse that we could estimate and correct.

We estimate the magnitude of type 1 nonresponse bias by comparing responses on identical (or very similar) items in the three groups of respondents (after adjusting for differences in the frequency with which different handicaps were selected and differences in the size of the LEAs selected). Group A respondents were wealthier, more highly educated, and more likely to be Caucasian than group B respondents. In addition, group A respondents were much more likely to have youth who graduate from high school than group B or C respondents (who had similar dropout rates). On all other measurable items, the youth described by the three groups were similar, including sex, employment status, pay, self-care skills scale, household-care activities scale, functional mental skills scale, association with a social group, and length of time since leaving school. SRI determined that adjusting the weights to eliminate bias in the income distribution would effectively eliminate bias in parental educational attainment and

---

\*In addition, there was a large group of nonrespondents who could not be located because their LEAs would not provide student names. Presumably, had these student names been available, many of those nonrespondents would have chosen to participate at about the same rate as parents in districts in which youth could be identified. The remaining nonrespondents would presumably have been distributed between the three types of nonresponse mentioned above.

racial composition, but would have a negligible effect on dropout rates. It was also determined that group B and C respondents were present in sufficient numbers that if they were treated as no different from the group A respondents in the weighting process, the resultant dropout distribution would be approximately correct.

Weighting was accomplished using the following sequence of steps:

1. Data from all three groups were used to estimate the income distribution for each handicapping condition that would have been obtained in the absence of type 1 nonresponse bias.
2. Respondents from all three groups were combined and weighted up to the universe by handicapping condition. Weights were computed within strata used to select the sample (i.e., LEA size and wealth, and student age).
3. Weights from four rare handicapping conditions (deaf/blind, deaf, orthopedically impaired, and visually impaired) were adjusted to increase the effective sample size. These adjustments primarily consisted of slightly increasing the weights of students in larger LEAs and decreasing the weights of students in smaller LEAs. Responses before and after these weighting adjustments were nearly identical, except for the deaf/blind. The adjustment for the deaf/blind consisted of removing a single respondent from a medium-sized LEA, who was being weighted up to represent two-thirds of all deaf/blind students. Hence, survey results do not represent deaf/blind students in medium or smaller-sized LEAs.
4. The resultant weights were adjusted so that each handicapping condition exhibited the appropriate income distribution estimated in step 1 above. These adjustments were of modest magnitude (relative to the range of weights within handicapping condition)--the weights of the poorest respondents were multiplied by a factor of approximately 1.6 and the weights of the wealthiest respondents were multiplied by a factor of approximately 0.7.

### Statistical Tests

A statistical procedure was used to compute the approximate standard errors of proportions and to test the difference between two proportions. We first computed the weighted percent of "yes" respondents to a survey item and then computed the effective sample size (i.e., the sum of the weights squared, divided by the sum of the squared weights). These two quantities were then used in the usual formula for the variance of a binomially distributed variable (i.e.,  $pq/n$  where  $p$  is the weighted proportion of "yes" responses,  $q$  is the complement of  $p$ , and  $n$  is the effective sample size). To test the difference of two weighted proportions, we computed the difference between the weighted proportions and divided this quantity by the square root of the sum of the variances of the two proportions.

This procedure is only approximately correct because it adjusts only for the difference in weights, but not for cluster-sampling induced covariance among respondents. We are currently in the process of using pseudo-replication to compute more accurate variance estimates. We expect that the true variances are larger than calculated by the effective sample size method, and therefore that stated significance levels (e.g.,  $p < .01$ ) will be somewhat too small. Consequently, we have tended to be very conservative and, for the most part, highlight results that are significant at the .005 level.

### Analysis

The first stage of the analysis study involves producing descriptive findings related to individual and family characteristics of youth, their experiences with services, their secondary school program, and their outcomes in terms of education, employment, and independent living. Descriptive questions include the following:

- What are the individual and family characteristics of handicapped youth served under EHA?
- What educational experiences and related services are handicapped youth provided under EHA? How do these vary for youth with different handicapping conditions and of

different ages? What is the content, duration, intensity, coordination, and provider of these services?

- What are the characteristics of the schools serving youth with disabilities (e.g. with respect to grade levels served, programs and staff available, policies and practices regarding students with disabilities)?
- What are the achievements of youth with disabilities related to their education (secondary school and postsecondary), employment, and independence? How do these vary for youth with different kinds of disabilities?
- What combinations of services, experiences, and outcomes form transitional life paths

The second analysis stage will involve multivariate analyses to determine the relationships among the variables depicted in the conceptual model. Explanatory questions include:

- What factors combine to explain the patterns of services that youth receive?
- What factors explain the educational, employment, and independence outcomes of handicapped youth?
- What explains the paths youth take through secondary school and beyond with respect to

### **Reporting**

Findings of the study will be presented on several forms through several channels. Statistical almanacs will present all the descriptive information available from the study for the total handicapped youth population and for each individual handicapping condition. Dissemination activities will entail conference presentations, journal articles, and mailings of key findings to participants in the study and others interested in its findings. A series of special topic reports will present findings from analyses addressing specific policy or research questions. Four methodology reports will detail the sampling, data collection, and analysis procedures used for the project and the reliability/validity of findings. A final report to OSEP will provide comprehensive documentation of findings.



## FEATURED PROJECT PRESENTATIONS

Thursday, December 1, 1988

2:45 to 3:45 p.m.

### **1. Comprehensive Learning Program (Monet I)**

Rosa A. Hagen, Elizabeth Lorenzi, and John Kugler, Fordham University, New York, NY

The purpose of this program is to develop, operate, and test a comprehensive program for adults whose learning disabilities result in a substantial handicap to employment. Program components include: screening and psychological diagnosis, tutoring, vocational counseling, and social work services. These services are provided by doctoral students in school psychology in Fordham University's Graduate School of Education, social work field students in the School of Social Services, and tutors from the College at 60. The service delivery model includes direct services to 30 learning disabled adults each year, indirect services through training of clinicians and tutors, and evaluation of the differential contributions of each of the program elements.

The project has completed one year in which program elements were implemented and the evaluation plan designed. During the second year of operation, the contributions of program elements will be evaluated in order to determine essential components of services to adults with learning disabilities. The differential contributions of one-to-one tutoring and support groups, computer-assisted instruction and vocational counseling, and computer assisted instruction and individual counseling will be compared and contrasted in the evaluation design. In the third year we will test the efficacy of the results of the second-year evaluation. Differential contributions of program components will be assessed in terms of their impact, replicability, and cost effectiveness.

### **2. Deriving Job Skills from the Workplace: A Job Acquisition and Retention Curriculum for Students with Learning Disabilities (Marquette)**

John Emerson, University of Washington, Seattle, WA

This project addresses the school's role in preparing students with learning disabilities (LD) for post-school employment. The four major goals of this project are: (1) to determine how employers find and select employees for entry level jobs; (2) to determine the specific employee characteristics and skills sought by employers for hiring, maintaining, and promoting workers; (3) to develop and field test a job acquisition and retention curriculum; and (4) to determine the effects of the curriculum on LD students' post-school job acquisition and retention rates.

The presentation will review the Seattle follow-along data that provided the impetus for this demonstration project. In-depth interviews of former students who have been successfully employed since graduation have demonstrated the importance of social supports and networking skills in finding employment. Summaries of these interviews will be offered along with their implications for curriculum development. The development of the employer interview questionnaire will be presented, followed by an analysis of survey results. Curriculum implications and the initial draft of the job acquisition and retention curricula will be presented. The importance of developing a curriculum based on locally referenced employer and labor information will be reviewed.

### **3. Secondary Education Transition Model (SETM) (Lafayette)**

Karen Spencer and Pat Sample, Colorado State University, Fort Collins, CO

The purpose of this project is to plan and implement comprehensive transition services for severely handicapped students beginning at the secondary level. The SETM project is a collaborative effort involving state and local human service agencies, parents and families, and three local school districts (suburban and urban).

The presentation will focus on: (1) a strategic planning process designed to encourage "buy-in" and cooperation among interagency advisory council members and agencies; this process involves analysis of environmental trends and future scenarios, development of a philosophically based mission statement, and implementation of strategic and operational plans; (2) an overview of the team building activities and progress of the core transition teams within

the targeted school districts; and (3) evaluation information and data collection activities to determine the overall effectiveness of the project. Examples of formalized transition planning documents, administrative journals and vignettes, and questionnaires will be presented.

#### **4. Idaho Transition Project (La Salle)**

Sharon Pond, Idaho Department of Education, Boise, ID

The Idaho Transition Project has developed a sound basis for implementing school-based transition services which feature individual transition planning. A system of service delivery is in place at near statewide levels. Interagency collaboration and linkages have been established, and parents are actively involved in the transition process. Cooperative exchange of publications, reports, and information continues to result in an effective, extensive network of communication between education and other state service agencies.

Major components of the Idaho model include: (1) strengthening statewide networking and linkages with adult services; (2) implementing service training at local, regional, and state workshops and conferences directed toward parents, students, school personnel, agency representatives, and employers; (3) providing stipends to a limited number of LEAs to stabilize and improve current transition programs and offerings; (4) focusing major emphasis on continued development of school-based transition services in local agencies by training additional LEAs as pilot sites of the Idaho Transition Project (ITP); and (5) assessing current site efforts and assisting stabilization of transition planning as a formal district education policy procedure.

#### **5. Parents of Young Persons with Handicaps in Transition (Montcalm)**

Francesca Lundstrom, Transition Institute

This research focuses on parents of young persons with such primary handicaps as learning disabilities and mental retardation. It is designed to discover (a) whether transition from school to work is perceived differently by parents of different socioeconomic or racial backgrounds; (b) the education, rehabilitation, and transition services that families perceive are required to meet their specific needs; (c) the services that families need but that are not

readily available either now or in the foreseeable future; and (d) the elements that facilitate or inhibit the involvement of families in the transition process.

The first phase of this study has been completed: 31 parents have been interviewed and the resulting data have been analyzed. The presentation includes the results from this phase of the research and a pilot questionnaire for administration to parents in the next phase of the research.

Participants are encouraged to discuss and critique the questionnaire; comments and suggestions will be greatly appreciated.

### **EXCHANGE/DISSEMINATION POSTER SESSION**

Thursday, December 1, 1988

5:00 to 6:30 p.m.

#### **Youth Employment Projects**

##### **1. Project Work**

Patricia Patton, Project Work, San Diego, CA

Project Work includes an employability skills and job placement laboratory for students with severe learning disabilities. The project is located at Lincoln High School, San Diego, which uses the employability skills lab as a major fieldwork site. Examples of curriculum materials used in the lab, materials used for parent training, information related to employer involvement, and graduate training curriculum materials will be available at the dissemination session. The project also includes participation in a graduate level certification program in supported employment and transition at San Diego State University.

##### **2. Project Placement**

Susan Sinkewiz, Project PLACEMENT, Richmond, VA

Project PLACEMENT is a cooperative placement model for competitive employment for youth and young adults with disabilities exiting the public schools. The unique feature to be

presented at the exchange/dissemination sessions is the job readiness assessment tool used to certify job readiness and to develop jobs for the program's population.

### **Secondary Education with Job-Related Training for Youth with Mild Handicaps**

#### **3. Community Transition Center**

Charles C. Coker, Community Transition Center, Menomonie, WI

The purpose of this project is to establish a Community Transition Center to: (a) act as a bridge between secondary and postsecondary settings; (b) be a direct provider of employment training and employment services; and (c) tailor "13th year" or alternative education employment programs. The model is founded on a number of successful principles in other projects and on those identified in Project ADAPT, which increased the capability of secondary schools to provide transitioning programs for youth with mild handicaps. The goals of the model are to: (a) increase the capacity of secondary schools to provide employment preparation skills to students with handicaps, (b) increase the ability of postsecondary settings to educate or employ these youth, and (c) provide direct services to these youth to assist in the transition process.

#### **4. Vocational Education to Work**

Greg R. Weisenstein, Seattle, WA

In cooperation with the University of Washington, the Highline School District of Seattle is developing an educational program that will help students with special needs to participate successfully in vocational education classes. The project gives teachers and staff the opportunity to develop practical strategies that will facilitate the success of handicapped students in vocational education classes; it will also create a national model program. The program is divided into four basic components: Active recruitment, which will develop strategies that will match the aptitudes and abilities of students with the recommended prerequisite skills for vocational education classes and will make students, teachers, and parents aware of vocational education opportunities; Guided placement, which will develop strategies to ensure that students have the skills they need for successful placement in classes;

Continuing support, which will provide assistance to students so that they can successfully complete vocational education classes; and Job placement and follow-up, which will provide support to students as they move into community jobs.

### **Postsecondary Projects for Individuals with Mild Handicaps**

#### **5. Northeast Technical Assistance Center for Learning Disability College Programming**

Loring Brinckerhoff, University of Connecticut, Storrs, CT

NETAC was established through a federal grant from OSERS to develop and enhance learning disability college programming throughout New York, New Jersey, and New England. The focus of the NETAC project at the University of Connecticut is to develop a responsive regional technical assistance center. The center staff will implement a variety of innovative technical assistance activities including workshops, on-site consultations, model programs, and dissemination of resource materials designed to improve both the quality and quantity of LD college programming efforts in the northeast region.

#### **6. Teaching Remedial Mathematics to Students with Learning Disabilities**

Juliana Corn, Bayside, NY

This 36-month project serves as a model for other postsecondary remedial mathematics programs for learning disabled children. The techniques and strategies developed will enable other educational institutions to improve their current approaches to the problem of teaching mathematics to students with learning disabilities. Project activities include: curriculum modification, production of instructional video tapes, research and development of appropriate CAI materials, and the compilation of a faculty handbook. Project findings will be disseminated through presentations at national conferences and professional meetings.

#### **7. Project LINK: A College-Based Program for Youth with Mild Handicaps**

Marjorie T. Goldstein, Paterson College, Wayne, NJ

Project LINK is a college-based transition project for noncollege bound postsecondary youth with mild handicaps. Using William Paterson College campus as a "sheltered community,"

participants (members) engage in work experience, social and recreational activities, and instruction. Undergraduate students (mentors) majoring in special education and related fields serve as role models as they coordinate the activities for and with members. Project LINK offers members the chance to expand upon the skills they have mastered and to develop new skills to allow them to become independent and functioning adults.

#### **8. Computer Assistance Model for Students with Learning Disabilities**

Chris Primus, University of Wyoming, Laramie, WY

The Computer Assistance Model for Learning Disabled at the University of Wyoming hypothesizes that academic success and retention of college students with learning disabilities and the eventual transition to employment will be enhanced through the use of microcomputers and user-friendly software. The project has developed a software evaluation instrument to determine specifically whether selected software meets the special needs of students with learning disabilities. Software for word processing, spell checking, career exploration, spelling skill development, typing skill development, and general study skills have been evaluated, and selected software has been purchased and is being introduced to eligible students with LD at the University of Wyoming.

#### **9. Model Orientation Program for Students with Learning Disabilities**

Sally Vernon, Center for Disabled Student Services, Chicago, IL

The purpose of this project is to demonstrate, evaluate, and disseminate a model orientation program for individuals with specific learning disabilities. The project will prepare participants to devise strategies to offset the functional limitations associated with their disabilities, thereby facilitating their ability to complete successfully their postsecondary educational and vocational programs.

#### **10. Model Demonstration Project for College Students with LD**

William Richards, Denver, CO

This project will develop a model program to refer and track students with LD among three institutions of higher learning at the Auraria Higher Education Center. Faculty from all three

colleges will receive training and curriculum modification techniques for identifying, referring for special assistance, and mainstreaming adult students with LD. Systems will also be developed to do specialized vocational assessment and career development for these students.

#### **11. Learning Disabilities Consortium**

Jane Rochester, Charlotte, NC

The Learning Disabilities Consortium is a joint effort of York Technical College (SC), University of North Carolina at Charlotte, and Central Piedmont Community College, which is designed to facilitate transition from high school to a two-year college and on to a four-year college or employment. The participants are students with LD from the schools systems serving York Technical College and Central Piedmont Community College.

#### **12. Project TAPE: Technical Assistance for Postsecondary Education**

Ernest Rose, DeKalb, IL

Project TAPE is a statewide technical assistance project to work with community colleges on providing quality services to students with learning disabilities. Technical assistance is provided through a series of five 2- day workshops covering assessment, learning strategies, academic skills, counseling, and service networking. The target audience includes rehabilitation counselors as well as service providers on community college campuses.

#### **13. University Bound Learning Disabled Student Transition**

Gladys Tucker, Salt Lake City, UT

The goals of this model project are (a) to help identify university bound students who have learning disabilities; (b) to provide these students with the appropriate skills to qualify for university admissions; (c) to help them make the successful transition from high school to college; and (d) to ensure that university education support services track these students to graduation.

#### **14. Handicapped Access to Vocational Programs and Job Placement**

Jan Krabbe and Paula Grigsby, Linn-Benton Community College, Albany, OR



This project is designed to provide support services to students with mild and moderately severe handicaps who are attending vocational classes in a community college. These services include community job placement.

**15. Comprehensive Model for Postsecondary Educational Support Programs for Persons with Handicaps**

Patricia J. Kercher, Postsecondary Education Support, Great Falls, MT

This project is concerned with the development and implementation of (a) supportive services to help individuals with handicaps to maximize their learning potential; (b) competency-based curriculum that identifies potential barriers that limit individuals with handicaps; (c) comprehensive in-service for faculty and staff that promotes successful integration of students with handicaps; and (d) model outreach communications to increase awareness and encourage adults to seek postsecondary training.

**16. University Student Transition Enhancement Program**

Catherine W. McCarty, U.S.T.E.P., Milwaukee, WI

Cooperative learning is currently being applied at the University of Wisconsin-Milwaukee with university students with learning disabilities. Support services have been structured to promote cooperation as the students master content, learn study skills, and improve social skills. This structure aims to affect positively those grant goals directed toward retention, academic success, and improved self-concept.

**17. Transitional Assistance for Postsecondary Students**

Marshall Mitchell, TAPS, Amarillo, TX

TAPS is a program that assists learning disabled students to obtain study and social skills to transition successfully into work or college. The program consists of three stages; each stage is progressively mainstreamed and individualized and less structured. A combination of courses, counseling, tutoring, and group counseling is used to assist the students to enter a college program or work successfully.

### **18. Computer Assisted Design for the Disabled**

Pat Hackett-Waters and Catese Chaffee, CADD, Orlando, FL

Computer Assisted Design for the Disabled (CADD) intends to establish support services to train persons with severe disabilities in a high demand, highly paid occupation--computer programming--and to facilitate an effective and efficient transition from education to employment by offering a parallel curriculum in professional socialization, which includes training in grooming, dressing, how to work with co-workers, time management, and job etiquette. CADD operates in partnership with Valencia Community College, Vocational Rehabilitation, the Private Industry Council, and local employers who hire CAD operators.

### **Transition Skills Training for Persons with Severe Handicaps**

### **19. Transition Skills Development Program for Youth with Severe Multiple Disabilities**

Sandra Copman, ABCD, Inc., Boston, MA

This project is in its third and last year of a demonstration program that addresses the social, recreational, and pre-vocational needs of youth with handicaps who are in transition from school to work and community living. The clients are between 14 and 22 years of age and are primarily physically disabled. Compounding disabilities such as mental retardation are present in most cases. At least 75% of the clients are from low-income, minority backgrounds. The program focuses on the entire family and includes community-based instruction in the social and vocational domains. Family, information and referrals, and job placement services are also provided.

### **20. Transition Planning--School to Adult Life for Students with Disabilities**

Sandra Thompson, N.E. Metro Intermediate School, Roseville, MN

Successful transition to adulthood is the result of planning that focuses on the personal destiny of individuals. When planning for individuals is done effectively, service "systems" will begin to change to meet more closely the goals and dreams of individuals, which is what our project has attempted to demonstrate.

## **21. Thresholds Supported Competitive Employment Program for Mentally Ill Youth**

Judith A. Cook, Thresholds Research Institute, Chicago, IL

The purpose of this project is to provide supported employment to mentally ill youth, enabling them to seek and maintain jobs in integrated work settings and to avoid psychiatric rehospitalization.

### **Secondary Transition: Service Demonstration**

## **22. Career Ladder Program**

Shepherd Siegel, San Francisco State University, San Francisco, CA

The core of this program is semester-long on-the-job training for youths with mild handicaps. Interns "go to work" for three hours a day, four days a week at one of the several host sites (CSAA Insurance, Marriott Food Service, Photo and Sound, Inc.) under the supervision of an on-site program instructor. As interns demonstrate competence and independence, instruction is gradually faded from intensive supervision at the beginning to the point at which the presence of the instructor is no longer necessary. One day a week participants attend an Employment Skills Workshop where they learn entry-level skills, job-keeping skills, social skills, peer counseling techniques, and job search skills. CLP provides ongoing career counseling for graduates of the program, which is a collaborative effort of the Department of Rehabilitation, the San Francisco Unified School District, San Francisco State University, and several local employers.

## **23. A Community-Based NETWORK to Assist Youth with Disabilities in Transition from School to Work**

Margo Vreeburg Izzo, Ohio State University, Columbus, OH

This project provides an overview of the school-to-work transition process, including examples of ITP forms, checklists, and working interagency agreements among schools, rehabilitation agencies, and other adult service providers. Participants gain an understanding of how to implement a smooth transition process that maximizes the abilities of youth with

disabilities. Materials include a 25-minute videotape entitled "A Waiting Work Force: Ready, Willing, and DISABLED"; handouts of ITP forms, vocational profiles, work site profiles, and interagency agreements; case studies of both successful and unsuccessful transitions with analyses; and discussions of implementation strategies that participants can use to overcome barriers.

#### **24. Learning Disabilities Training Project**

Arlene C. Stewart, Western Carolina University, Cullowhee, NC

This project is developing materials for use in postsecondary institutions to facilitate working with students with learning disabilities. The project provides technical assistance and consultation. We are also doing research on the effectiveness of various accommodations.

#### **25. Using a Tracking System to Impact Instructional Programs for Handicapped Youth**

Elinor Elfner, Bureau of Education for Exceptional Students, Tallahassee, FL

The purpose of this project is to provide an interactive model for systems change based on analysis of outcome data. The principal objectives are first to improve and expand the tracking system for youth with handicaps who complete or leave secondary programs, and second, to revise curricular and program options for these students based on continued analysis of outcome data. The tracking system will (a) identify all existing data systems; (b) identify additional elements needed for the tracking system; (c) develop programs for collecting and analyzing data not presently available; (d) collect and analyze school experience and follow-up data; (e) revise the system and integrate where possible with the Florida Individual Student Data System; (f) demonstrate the use of supplementary interview and longitudinal data for instructional revision; and (g) establish an ongoing tracking system to explore appropriate instructional options for handicapped youth.

#### **26. Transition Effectiveness Evaluation Project**

Robert Stodden, University of Hawaii, Honolulu, HI

This project demonstrates a cooperative interagency procedure to assess the effectiveness of transition planning and program activities with youth with handicaps. It includes a cooperative follow-up procedure and provides data to provide feedback to secondary school transition programs about the effectiveness of programming activities as related to postsecondary employment outcomes.

### **Cooperative Models for Planning and Developing Transitional Services**

#### **27. Project HIRED**

Senja Burnham, Mississippi State, MS

Project HIRED uses a transition model composed of eight service areas: functional, interagency individualized service plans; vocational/career assessment (K-adult); functional life skills curriculum for special education; vocational education and training; work experier.ce/work adjustment; job placement and supported employment; community access and alternative living arrangements; and parent support and training. Interagency service providers do transition planning to include the areas of work, home, and community.

#### **28. Great Falls Transition Project**

Stephen White, Great Falls Transition Project, Great Falls, MT

The Great Falls Transition Project is designed to provide necessary additional support services for persons with disabilities in their transition from school to work and adult life. The model is based on the concept of least restrictive employment, which is defined as paid community employment with maximum opportunity for job satisfaction, job security, and advancement for each participant, regardless of disability.

#### **29. Virginia's Approach to Services for Transitioning Youth and Young Adults with Disabilities (VAST)**

Bonita Pennino, Virginia Department of Education, Richmond, VA

Project VAST is designed to develop procedures at the local level for interagency cooperation in transitional planning for students from all disability groups. We are developing an interagency transition model, computer tracking system, and a computer transition resource

information system. We are working toward establishing interagency cooperative agreements for transitional services among 10 state agencies.

### **30. Project Life LAB**

Jan Benet and Vince Perez, School Board of Alachua County, Gainesville, FL

This presentation will discuss the transitional services for students with handicaps provided through a motivational process of reality-based curriculum, community-based training, affective activities, and interagency planning.

### **Training for Employment Specialists and Job Coaches**

#### **31. The Young Adult Institute Employment Initiatives Model**

Patricia M. Catapano, Young Adult Institute, New York, NY

This session will focus on a presentation of YAI's new staff training tape and manual for job coaches and employment training specialists. These materials provide a step-by-step overview of the model's components, including referral and intake, situational assessment, transitional training, counseling, pre-placement case conference, and competitive employment.

#### **32. Secondary Transition Specialist Training Project**

James M. Brown and David R. Johnson, University of Minnesota, St. Paul, MN

The objectives of this project are to recruit and support .5 FTE assistantships for up to five masters level students who will pursue specific programs of study focused on the transitional service needs of adolescents with mild or moderate disabilities. In addition, the project is producing a series of transition-related training modules that will be incorporated into current vocational special needs and special education training programs for educators and will develop unique practicum experiences that enhance teaching, planning, and development procedures related to effective transitional programming. Evaluation, inter-departmental cooperation, and dissemination of newly developed training materials are the other objectives of this project.

## FEATURED PROJECT PRESENTATIONS

Friday, December 2, 1988

10:15 to 11:15 a.m.

### 1. Project HAPPEN (Monet I & II)

Connie Dalke and Deborah White, University of Wisconsin-Whitewater, Whitewater, WI

Project HAPPEN seeks to help high school students with learning disabilities to make a smooth transition from high school to postsecondary settings. Project HAPPEN comprises four key components: administration, demonstration, dissemination, and evaluation. This presentation will summarize the model from the perspective of each of these four components and will describe specific activities completed to date in these areas.

Within two Milwaukee, Wisconsin area high schools, Project HAPPEN is developing and evaluating a transition plan of action which promotes an early and systematic sharing of responsibility among all significant participants in the transition process. An interagency and interpersonnel collaboration is evident throughout the goals and objectives of this model. The project has developed a series of specialized transition programs and training for key participants. The workshops and training sessions offer successful transitioning strategies to the students, parents, counselors, educators, supportive services, and administrators.

This project also features a transition partnership component which utilizes college students with learning disabilities and their families to assist in the implementation of this program.

### 2. Transition Assistance for Postsecondary Students (TAPS) (Monet III)

Marshall Mitchell, Amarillo College, Amarillo, TX

The purpose of the TAPS project is to structure a model program for postsecondary students with learning disabilities that will provide transitional services, remediation of basic skills, institutional and community inservice seminars, and tutor linkage with West Texas State University practicum students. There are six performance objectives: (1) conduct a thorough

in-take which identifies and documents 30 postsecondary students with learning disabilities in the first year, 40 in the second, and 50 in the third year of the project; (2) provide support services needed by the project participants in the form of personal, financial, and career counseling, academic advising, tutoring, and necessary qualifications or accommodations to maximize successful opportunities in mainstream college courses; (3) design instruction in developmental credit courses and the learning laboratory to meet the unique needs of project participants, such as remediation of basic skills, development of study, memory, and organizational skills, coping skills related to dependent life strategies, socialization skills, and realistic career goal refinement; (4) offer an annual faculty development seminar and periodic resource materials for faculty at Amarillo College and other area postsecondary institutions which explain the needs of students with learning disabilities as well as strategies and materials effective in meeting their needs in the mainstream college classroom; (5) provide an annual inservice training seminar and a biannual newsletter for area secondary school faculties and community agency personnel to outline the availability of the TAPS program at Amarillo College, establish an outreach for the program, and develop a community and area network for planning transition services for students with learning disabilities in the 26-county area of the Texas panhandle; and (6) coordinate with West Texas State University Special Education Teacher Preparation Program to arrange for students enrolled in practicum courses to work with identified community college students with learning disabilities.

### **3. Project Origins: A System for Implementing Nontraditional Models of Vocational Training, Transition and Supported Work (Degas)**

James Gittings and Paul R. Fish, University of Arizona, Tucson, AZ

Marguerite D. Harmon, Catholic Community Services, Tucson, AZ

Project Origins, a transitional program that uses archaeology as a matrix for vocational skills training, social integration, and supported work, is presented in a slide lecture format. A brief outline of the presentation is given below.

- Overview of the project



- Presentation of the formal model under which the project operates
- Interactions of the project with federal, state, and private agencies
- Use of outside professionals (e.g., archeologists) as job coaches
- Use of peer tutors and supervisors (job coaches)
- Implications of this model for other programs

#### **4. Continuous Comprehensive Training Model (CCTM) (Quorum)**

Betsy Bounds, Tucson Unified School District, Tucson, AZ

The target population of Project CCTM is a group of 350 students with severe handicaps (i.e., students in all categories of handicaps who are in self-contained programs). There are several components to the project: (1) interagency cooperation and collaboration, including an interagency group that meets monthly and a formal agreement between the Division of Vocational Rehabilitation and school districts in Pima County; (2) vocational screening and assessment, including development and implementation of a recommended procedure for screening and assessing students in the target population; (3) summer pre-vocational and vocational training programs, which included an employability and social skills class, on-the-job training, and student work exploratory classes; (4) development of special education and vocational curriculum and teaching modules to facilitate mainstreaming into vocational classes; and (5) vocational rehabilitation counseling by three vocational rehabilitation counselors who provide parent support groups and individual and group counseling for students having difficulty in their vocational classes or job training placement.

#### **5. A Pilot Study of a Management Protocol: The Project Director's Diary (Caucus)**

Robert E. Stake, University of Illinois at Urbana-Champaign

Project directors are invited to meet with Robert Stake to discuss participation in a pilot study of diary keeping that will attempt to develop a protocol for documenting the process from the beginning to the end of a transition project. In a 1986 survey, project directors indicated an average of 25% change between their original plans and their operations at the end of their

projects. While maintaining confidentiality, the study will encourage participants to describe significant problems encountered by their projects and how their staff dealt with changes in context, alliance, personnel, and other factors that required shifts in purpose or direction from the original conception of the project. The intended justification for the diary is to acknowledge the reality of changing conditions and to enhance a prompt recognition of the need for remediation as well as to contribute to the long-range documentation of project management so that a more accurate history of the process can be written.

## Synthesis of Evaluation Results

### Scope of the Annual Meeting

The Project Directors' Fourth Annual Meeting, sponsored by the Secondary Transition Intervention Effectiveness Institute, was held December 1-2, 1988 at the Loews L'Enfant Plaza Hotel in Washington, D.C. The focus of the fourth annual meeting was slightly different from the focus of the three prior meetings; there was more emphasis on providing opportunities for project directors to exchange and disseminate information and less emphasis on the activities of the Transition Institute.

Invitations to attend the meeting were sent to the project directors in May, 1988. In addition, invitations were sent to OSERS personnel. Preregistration commitments were received from 104 persons; 151 persons attended the meeting.

The Fourth Annual Meeting was designed around the suggestions from the project directors who attended the Third Annual Meeting. First, more time was scheduled than in previous years for the small, informal discussion groups and the featured project presentations. Second, fewer Institute presentations were scheduled because much of the Institute information is disseminated in written form. Third, many of the other popular agenda items (i.e., the session with OSERS staff, the keynote speakers, and the poster session) were left unchanged.

Evaluation forms were included in a packet of materials that were distributed to all participants on the first day of the meeting. Throughout the one and a half day meeting, announcements were made to encourage the project directors to fill out their evaluation forms. In addition, a special time period was scheduled into the agenda at the end of the meeting so that participants could complete their evaluations. Of the 130 project directors who attended the meeting, 66 or 51% filled out their evaluation forms; this was the best response rate the Institute has ever had. This report presents the data from those evaluation forms and makes recommendations for the next Annual Meeting.

### Participant Demographics

Of the 66 persons who turned in their evaluations, 42% described themselves as project directors and 27% described themselves as project coordinators. The remaining persons were university personnel (14%)\*, administrators (14%), and project staff (6%).

Nearly half of the participants had master's degrees (48%), 35% had their doctoral degrees, and 9% had undergraduate degrees. Several respondents did not indicate the highest level of education they had completed.

The majority of the participants were special educators (56%), followed by other (23%), rehabilitation personnel (18%), and vocational educators (5%). Years of experience in the area of secondary and postsecondary programming for persons with handicaps was generally evenly distributed: 21% had over 16 years of experience, 27% had 11-15 years of experience, 18% had 6-10 years of experience, 23% had 3-5 years of experience, and 11% had 0-2 years of experience. Most of the participants were either in their second year of funding (44%) or in their first year of funding (27%). Fewer individuals were in their third year of funding (15%) and last year of funding (9%); 3% who attended were past project directors who were receiving no federal funds.

In summary, the majority of the respondents to this questionnaire were project staff who were in their second year of funding. Most were special educators with advanced degrees who had many years of experience working with secondary and postsecondary programs for persons with handicaps.

### Evaluation Results

In addition to determining the demographic information from the individual respondents the evaluation instrument was designed to probe respondents' reactions to the organization of the meeting, the content of the meeting, and directions that future meetings should take. The items

---

\*Percentages that do not add up to 100% are due to people selecting more than one category.

on the instrument were rated on a 7-point Likert-type scale (with 1 indicating low satisfaction and 7 indicating high satisfaction), and additional space was provided for comments. Quantitative and qualitative responses to individual items are reported and discussed below.

Planning and organization of the meeting. On a 7-point scale, respondents rated the planning and organization of the meeting a 6.1 (SD=1.04). Although most respondents believed the meeting was well organized, several individuals commented that the timing of the meeting was too close to other professional meetings (e.g., AVA and TASH). (However, the December date for the meeting was chosen so that project directors could receive low room rates.) Even though some respondents did not like the dates for the meeting, the majority of the comments were positive--"Well done," "No problems whatsoever," and "Another great job (even with the plumbers outside of my door)."

Participant expectations. Most respondents indicated that the meeting format and agenda met their expectations--rating of 6.7 (SD=0.84) was given for this item. Some new project directors commented that they did not know what to expect, but several other new project directors stated that the "meeting was more interesting than I had planned" and "as one of the new project directors, it went far beyond my expectations." Although more time had been built into the agenda for informal discussions between project directors, many respondents indicated they wanted more time to share information with one another.

Keynote presentations. The keynote presentations were given an average rating of 5.8 (SD=1.02). The majority of the respondents believed that all three keynote presenters were "excellent." In particular, participants liked being informed about the data from the SRI longitudinal study, and "enjoyed Mike Ward's discussion of self-determination, based on his personal experiences." Several respondents did not like the reaction panel to the keynote presentations.

Institute overview. The presentation regarding the institute activities was rated a 5.2 (SD=1.43). Although some respondents felt the information could have been put in a handout,

other respondents felt it was a "great overview"--better than the individual presentations: and "it is always good to get a refresher."

Featured project presentations. The featured project presentations received an average rating of 5.4 (SD=1.05). Comments revealed that many respondents enjoyed these presentations, but several respondents indicated that there was "restating of what I already knew," "information was general and basic," and "one was informative and one was not."

Exchange/dissemination poster session. As always, the exchange/dissemination poster session received high ratings from respondents (M=5.9, SD=0.94). All of the comments were positive--"always good information," "this session is terrific," "please plan more of this type of activity."

Round-table discussions. The small group discussions were rated a 5.5 (SD=1.2). Although this session was meant to be unstructured, many respondents believed that future sessions should be more organized and structured.

OSERS session. As usual, respondents greatly appreciated the opportunity to interact with OSERS personnel--this session was rated a 5.9 (SD=1.1). As one respondent indicated, "I believe this type of contact is essential." The majority of respondents indicated that the individual meetings with OSERS personnel needed to be in separate rooms.

Amount of information presented. This item was rated a 4.4 (SD=0.8), which suggested the participants believed that just the right amount of information was presented. Examples of comments included "just right," "perfect," and "no wasted time."

Facilitation of information exchange. As one respondent stated, "This appears to be the purpose of the meeting, and it was accomplished." Overall, respondents rated this item at 5.9 (SD=0.97). Other comments regarding the facilitation of information included: "Excellent networking," "Really, the most valuable aspect," and "Good mix of people from government, transition, and grants."

Overall rating of the Annual Meeting. Overall, the Annual Meeting was rated as a productive and useful experience (M=5.8, SD=0.89). All comments were positive--"It is my favorite

conference of the year. It is one of the few conferences where I hear new information and good data." "It was a good forum. This type of activity should be maintained."

Negative features of the meeting. The most frequently cited comments regarding the negative features of the meeting seemed to center around four areas. First, several respondents felt that the quality of the featured project presentations were too uneven. Although some featured project speakers were rated highly, other speakers were judged as poor. Second, many respondents did not like the timing of the meeting. They believed the meeting was too late in the semester and too close to other professional meetings. Third, several respondents indicated that Institute information could better be disseminated in written form. Finally, several negative comments were made regarding tertiary activities of the meeting--some respondents wanted free time built into the schedule to see the sites of DC, two respondents wanted the Institute to sponsor a dance, and several respondents requested that a continental breakfast be served with the morning coffee.

Positive features of the meeting. The most frequent positive comments about the meeting centered around three areas. Respondents overwhelmingly indicated that the opportunity to interact with other project personnel and exchange information was a positive feature of the meeting. Second, and closely related to the first positive feature, respondents especially valued the opportunity to be able to interact with the OSERS and Transition Institute staff. In regard to the interactions at the Annual Meeting, one respondent seemed to sum it up best: [A positive feature of the meeting was] "associating with such a high-energy, bright, and noncompetitive group." Third, several sessions of the meeting were rated very positive: these included the SRI presentation, the poster session, and the roundtable discussions.

Future directions. Respondents had a variety of suggestions for agenda items that they would like to see included in the Fifth Annual Meeting. First, many respondents indicated that they wanted more time to interact with other project directors who had projects similar to their own. Although respondents indicated a desire for more opportunities for informal (but

structured) interactions, they also suggested that more featured project presentations should be added to the agenda.

A number of topics were suggested for future presentations, such as a continued follow-up of the SRI Longitudinal Study, assessment, a general session on what works in transition, the best practices for secondary curricula, issues in the field, and a parent panel.

In addition, individual respondents made a number of suggestions that would enhance next year's meeting, including (a) having Institute staff members introduce featured project speakers, (b) selecting featured speakers who are in the last year of their funding period so they will have data to present, (c) having two overheads in general sessions so that the audience can more easily see information, and (d) providing a list of inexpensive restaurants to the participants.

### Conclusions

It is apparent from both the quantitative and qualitative data that the Fourth Annual Meeting was perceived as a successful and useful experience. In particular, participants enjoyed the opportunity to interact with other project directors, OSERS personnel, and the Transition Institute staff. The poster and small group sessions continue to be popular, and especially positive feedback was given regarding information from the SRI Longitudinal Study.

Although the meeting was viewed favorably, participants had suggestions for improving next year's meeting. They wanted more small group sessions, but they wanted these sessions to be structured so that there would be a focus to them. In addition, respondents expressed a desire for more featured project presentations; however, they indicated that the quality of these presentations needed to be upgraded, with speakers presenting "new and specific" data from their projects rather than general project descriptions. Finally, respondents listed a variety of topics on which they would like to see future presentations. Efforts will be made by Institute staff to incorporate these suggestions into next year's program.



## Registered Participants

John Aiken  
Southeast Kansas Education Service  
2601 Gabriel  
Parsons, KS 67357

Carolyn Allen  
Valencia Community College  
P.O. Box 3028  
Orlando, FL 32802

Tamarah Ashton  
San Diego State University/Project Work  
6310 Alvarado Ct.  
San Diego, CA 92120

Richard Balsler  
Main Medical Center  
Dept. of Rehabilitation  
22 Bramhall St.  
Portland, ME 04102

John Beard  
Project SCORE, Humboldt Unified School  
P.O. Drawer A  
Dewey, AZ 86327

Jan Benet  
School Board Alachua County  
620 E. University Ave.  
Gainesville, FL 32601

Susan Bert  
Specialized Training Center  
University of Oregon  
135 Education  
Eugene, OR 97403

Larry Bonner  
Richard College  
Special Services  
12800 Abrams Rd.  
Dallas, TX 75243-2199

Betsy Bounds  
Tucson Unified School District  
P.O. Box 40400  
1010 E. Tenth St.  
Tucson, AZ 85717-0400

Mary Brady  
CERC/Shriver Center  
200 Tratello Rd.  
Waltham, MA 02254

Loring Brinkerhoff  
University of Connecticut  
U-64, 249 Glenbrook Rd.  
Storrs, CT 06269

James Brown  
Dept. of Vocational and Technical Education  
University of Minnesota  
Room 460, Voc ational Education Bldg.  
St. Paul, MN 55108

Sonja Burnham  
Project HIRED  
P.O. Drawer GE  
Mississippi State, MS 39762

Lori Canter  
P.O Box 6Q  
Richmond, VA 23216-2060

Patricia Catapano  
Young Adult Institute  
460 W. 34th St.  
New York, NY 10001-2382

Catese Chaffee  
Valencia Community College  
MC 4-11  
P.O. Box 3028  
Orlando, FL 32802

Charles Coker  
Richard and Training Center  
University of Wisconsin - Stout  
511 Human Services Bldg.  
Menomonie, WI 54751

Judith Cook  
Thresholds Research Institute  
561 W. Diversey, Suite 210A  
Chicago, IL 60614

Sandra Copman  
Action for Boston Community  
Community Coordination Dept.  
178 Tremont St.  
Boston, MA 02111

Juliana Corn  
Mathematics Dept.  
Queensborough Community College  
Bayside, NY 11364

Rita Curl  
Utah State University  
Developmental Center for Handicapped Persons  
UMC 6806  
Logan, UT 84322-8606

Keith Curry  
Buffalo State College  
1300 Elmwood Ave., KH210  
Buffalo, NY 14222

Connie Dalke  
University of Wisconsin - Whitewater  
Roseman 2019  
Whitewater, WI 53190

Eugene Edgar  
University of Washington  
EEU, WJ-10  
Seattle, WA 98195

Elinor Elfner  
Florida Dept. of Education  
Knott Bldg.  
Tallahassee, FL 32399-0400

Nancy Elliott  
Georgia State University  
Special Education Department  
University Plaza  
Atlanta, GA 30303

John Emerson  
University of Washington  
EEU-CDMRC WJ-10  
Seattle, WA 98195

Karen Faison  
NIDRR/OSERS/DE  
Room 3060 - MES  
400 Markland Ave., S.E.  
Washington, DC 20202-2702

Paul R. Fish  
Division of Special Education and  
Rehabilitation  
University of Arizona  
Tucson, AZ 85721

Bert Flugman  
Center for Advanced Study in Education  
Cith University Graduate School  
33 West 42nd Street, Room 620NC  
New York, NY 10036

Thomas Flynn  
The University of Iowa  
Room 251  
Division of Developmental Disabilities  
Iowa City, IA 52242

Michael Garlan  
IDEAS  
Magnolia Star Route  
Nederland, CO 80466

James Gittings  
Division of Special Education and  
Rehabilitation  
University of Arizona  
Tucson, AZ 85721

Marjorie T. Goldstein  
Dept. of Special Education  
William Patterson College of New Jersey  
Wayne, NJ 07470

Kenneth Gray  
Pennsylvania State University  
112 Rackley Building  
University Park, PA 16802

Paula Grigsby  
Linn-Benton Community College  
6500 S.W. Pacific Blvd.  
Albany, OR 97321

Pat Hackett-Waters  
Valencia Community College  
MC 4-11  
P.O. Box 3028  
Orlando, FL 32802

Rosa Hagin  
 School Consultation Center  
 Fordham University  
 113 W. 60th St.  
 New York, NY 10023

Marguerite D. Harmon  
 Catholic Community Services  
 Tucson, AZ

Kris Hirschmann  
 P.O. Box 1357  
 Tacoma, WA 98401-1357

Michael Hock  
 University of Vermont  
 Special Education Department  
 405A Waterman Building  
 Burlington, VT 05405

Kay Holjes  
 Employment Opportunities, Inc.  
 3509 Haworth Dr., Suite 402  
 Raleigh, NC 27609

Margo V. Izzo  
 The National Center for Research in  
 Vocational Education  
 The Ohio State University  
 1960 Kenny Rd.  
 Columbus, OH 43210-1090

Carla Jackson  
 Superintendent of Public Instruction  
 Old Capital Bldg., FG-11  
 Olympia, WA 98504

Devi Jameson  
 Richmond Unified School District  
 1108 Bissell Ave.  
 Richmond, VA 94804

David Johnson  
 Dept. of Vocational and Technical Education  
 University of Minnesota  
 Room 460 Vocational Education Bldg.  
 St. Paul, MN 55108

Diane C. Kendrick  
 Bureau of Transitional Planning  
 1 Ashburton Place  
 Boston, MA 02108

Patricia Kercher  
 2100 - 16th Ave., South  
 Great Falls, MT

Debra Kientzy  
 Advent Enterprises, Inc.  
 2116 Nelwood  
 Columbia, MO 65202

Jan Krabbe  
 Linn-Benton Community College  
 6500 S.W. Pacific Blvd.  
 Albany, OR 97321

John Kugler  
 School Consultation Center  
 Fordham University  
 113 W. 60th St.  
 New York, NY 10023

Valerie La Vake  
 Easter Seal Society of Connecticut, Inc.  
 P.O. Box 100  
 Hebron, CT 06248

Jan Leuenberger  
 University of Nebraska - Lincoln  
 204L Barkley Memorial Center  
 Lincoln, NE 68583-0731

Elizabeth Lorenzi  
 School Consultation Center  
 Fordham University  
 113 W. 60th St.  
 New York, NY 10023

Richard Luecking  
 TransGen, Inc.  
 230 N. Washington St., Suite 200  
 Rockville, MD 20850

Brennan Mahoney  
 Albuquerque Public Schools  
 Special Education Dept.  
 725 University Blvd.  
 Albuquerque, NM 87125

Sharin Manion  
 C.O.P.D. AZ Transition Project for  
 21 East Speedway  
 Tucson, AZ 85705

Glen Maxion  
Grossmont Union High School District  
230 Jamacha Rd.  
El Cajon, CA 92019

Catherine McCarty  
c/o Disabled Student Services  
University of Wisconsin - Milwaukee  
P.O. Box 413  
Milwaukee, WI 53201

Lindy McDaniel  
Mississippi State University  
Drawer GE  
Mississippi State, MS 39762

Rebecca McDonald  
ARC Union County  
1225 South Avenue  
Plainfield, NJ 07062

John McDonnell  
University of Utah  
217 MBH  
Salt Lake City, UT 84112

Kathy McKean  
Project IMPACT  
123 E. Broadway  
Cushing, OK 74023

Don McNelly  
University of Tennessee  
419 Claxton  
Knoxville, TN 37996-3400

Carolyn Meredith-Henderson  
Douglas Cooperative, Inc.  
1123 Dolly Parton Highway  
Sevierville, TN 37862

Craig Michaels  
Human Resources Center  
IU Willets Road  
Albertson, NY 11507

Susan Meslang  
CHANCE Program  
School of Education  
Old Dominion University  
Norfolk, VA 23529-0156

Marshall Mitchell  
Amarillo College  
P.O. Box 447  
Amarillo, TX 79178

Mary Morris  
University of Nebraska - Lincoln  
253K Barkley Memorial Center  
Lincoln, NE 68583-0731

Patricia Patton  
Project Work  
San Diego State University  
6310 Alvarado Ct.  
San Diego, CA 92120

Bonita Pennino  
Project VAST  
Virginia Dept. of Education  
P.O. Box 6Q  
Richmond, VA 23216

Dan Perino  
Tucson Unified School District  
P.O. Box 40400  
1010 East Tenth Street  
Tucson, AZ 85717-0400

Vince Perez  
School Board Alachua County  
520 E. University Ave.  
Gainesville, FL 32601

Sharon Pond  
Idaho Dept. of Education  
Len B. Jordan Office Bldg.  
Boise, ID 83720

Lynda Price  
LD Transition Project  
University of Minnesota  
106 Nicholson Hall, General College  
Minneapolis, MN 55455

Chris Primus  
Division of SEO  
University of Wyoming  
Box 3808  
Laramie, WY 82701

Louise Reifman  
Project Work  
San Diego State University  
6310 Alvarado Ct.  
San Diego, CA 92120

William Richards  
Community College of Denver  
1111 W. Colfax Ave., Box 600  
Denver CO 80204

Judy Richesin  
Project Work  
San Diego State University  
6310 Alvarado Ct.  
San Diego, CA 92120

Jane Rochester  
Special Services CPCC  
Central Piedmont Community College  
P.O. Box 35009  
Charlotte, NC 28235

Ernest Rose  
Northern Illinois University  
EPSE/240 Graham Hall  
DeKalb, IL 60115

Irwin Rosenthal  
New York University  
239 Greene St., Room 400  
New York City, NY 10003

Jovita Ross  
Penn State University  
220 Rackley  
University Park, PA 16802

George Salembier  
University of Vermont  
Special Education Department  
405A Waterman Building  
Burlington, VT 05405

Pat Sample  
Dept. of Occupational Therapy  
Colorado State University  
Ft. Collins, CO 80523

B. J. Schenck  
School Board Alachua County  
620 E. University Ave.  
Gainesville, FL 32601

Judith Shapiro  
School of Education Child Study Center  
Old Dominion University  
Norfolk, VA 23529

Shepherd Siegel  
Career Ladder Program  
San Francisco Dept. of Special Education  
1600 Holloway Ave.  
San Francisco, CA 94132

Susan Lee Sinkewiz  
Virginia Dept. of Education  
P.O. Box 6-Q, 23rd Floor  
Richmond, VA 23216-2060

Karen Spencer  
Dept. of Occupational Therapy  
Colorado State University  
Ft. Collins, CO 80523

Arlene Stewart  
Western Carolina University  
8 McKee Bldg.  
Cullowhee, NC 28723

Thomas Stewart  
Smokey Mountain High School  
Sylva, NC 28779

Robert Stodden  
Dept. of Special Education  
University of Hawaii  
1776 University Ave.  
Honolulu, HI 96322

Ann Straley  
Special Services  
Richland College  
12800 Abrams Rd.  
Dallas, TX 75243-2199

David Test  
Special Education Program  
University of North Carolina - Charlotte  
Charlotte, NC 28223

Sandra Thompson  
N.E. Metro Intermediate School District  
1130 W. County Road B  
Roseville, MN 55113

Patricia Tomlan  
CCCLD Project at the Community College  
791 Chambers Rd.  
Aurora, CO 80011

Gladys Tucker  
Disabled Student Services  
University of Utah  
160 Union  
Salt Lake City, UT 84112

Sally Vernon  
Chicago City-Wide College  
226 W. Jackson, 6th Floor  
Chicago, IL 60606

Greg R. Weisenstein  
Vocational Education/Secondary  
Special Education  
University of Washington  
407 Miller Hall, DQ-12  
Seattle, WA 98195

Deborah White  
University of Wisconsin - Whitewater  
Roseman 2019  
Whitewater, WI 53190

Stephen White  
Great Falls Transition Project  
2100 - 16th Ave., South  
Great Falls, MT 59405

William Wiener  
Western Michigan University  
Dept. of Blind Rehabilitation  
3406 Sangren Hall  
Kalamazoo, MI 49008

Richard Zachmeyer  
Kentucky Coalition for Career and Leisure  
366 Waller Ave., Suite 119  
Lexington, KY 40504



12:15 p.m. - 1:30 p.m.	Lunch
1:30 p.m. - 2:30 p.m.	Panel Presentation Consumers of Transition Services
2:30 p.m. - 2:45 p.m.	Break
2:45 p.m. - 3:45 p.m.	Featured Project Presentations
3:45 p.m. - 5:00 p.m.	Break
5:00 p.m. - 6:30 p.m.	Exchange/Dissemination Poster Session

**Wednesday, November 15, 1989**

9:00 a.m. - 10:30 a.m.	Panel on Follow-up/Follow Along Projects
10:30 a.m. - 10:45 a.m.	Break
10:45 a.m. - 12:00 p.m.	Featured Project Presentations
12:00 p.m. - 1:30 p.m.	Lunch
1:30 p.m. - 1:45 p.m.	OSERS and Transition Programs Speakers to be announced
1:45 p.m. - 2:00 p.m.	Secondary Transition Programs: Long-Range Plans Bill Halloran, Ph.D. OSERS
2:00 p.m. - 3:00 p.m.	Individual Discussions with OSERS Staff
3:00 p.m. - 3:30 p.m.	Closing Remarks Written Evaluation of the Meeting



## Research Faculty at the University of Illinois

---

**Janis Chadsey-Rusch**  
Assistant Professor of  
Special Education

**L. Anne DeStefano**  
Assistant Professor of  
Educational Psychology

**Delwyn L. Harnisch**  
Associate Professor of  
Educational Psychology

**Laird W. Heal**  
Professor of Special  
Education

**Francesca Lundström**  
Assistant Professor of  
Special Education

**L. Allen Phelps**  
Professor of Vocational  
Education

**Adelle M. Renzaglia**  
Associate Professor of  
Special Education

**Frank R. Rusch**  
Professor of Special  
Education

**Robert E. Stake**  
Professor of Educational  
Psychology

# **Institute Advisory Committee**

Secondary Transition Intervention Effectiveness Institute  
**University of Illinois at Urbana-Champaign**

---

**Dianne E. Berkell, PhD**  
Department of Special Education  
Long Island University  
C.W. Post Campus

**George Fair, PhD**  
Department of Special Education  
University of Texas at Dallas

**Susan Hasazi, PhD**  
Department of Special Education,  
Social Work, and Social Studies  
University of Vermont

**Dan Hulbert**  
Career Assessment and  
Placement Center  
Whittier (CA) Union High  
School District

**Gary Lambour, PhD**  
Special Education Consultant  
Connecticut State Department  
of Education

**Joel Levy**  
Young Adult Institute  
New York City

**Robert L. Linn, PhD**  
Department of Educational  
Psychology  
University of Colorado-Boulder

**Dennis E. Mithaug, PhD**  
Department of Special Education  
University of Colorado-  
Colorado Springs

**Jeri Nowakowski, PhD**  
Office of Educational Evaluation and Policy  
Northern Illinois University

**Nick L. Smith, PhD**  
School of Education  
Syracuse University

**Carl Suter**  
Department of Rehabilitation Services  
Springfield, Illinois

**Craig Thornton, PhD**  
Mathematica Policy Research  
Princeton, New Jersey

**Ann Turnbull, PhD**  
Bureau of Child Research  
University of Kansas

**Timm Vogelsberg, PhD**  
Developmental Disabilities Center  
Temple University

**Paul Wehman, PhD**  
Rehabilitation Research  
and Training Center  
Virginia Commonwealth University

**Claude Whitehead**  
Employment Related Services  
Washington, D.C.

**Russell Zwoyer**  
Associate Dean for Research  
College of Education  
University of Illinois at Urbana-Champaign



**TRANSITION  
INSTITUTE  
AT ILLINOIS**