Assistive Technology Service Delivery in Rural School Districts

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University of Kentucky

ACRES
American Council on Rural Special Education
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Overview

- Overview of the NATRI
- Definitions of AT & Rural
- AT Discussions by IEP Teams
- Strengths and Barriers to AT Service Delivery
- AT Funding Sources
- AT Service Delivery Models
- AT Devices
- AT Lending Libraries
- Solutions
Introduction

What is NATRI?

National Assistive Technology Research Institute
NATRI

Background

- Funded by the U.S. Department of Education, Office of Special Education Programs
- Cooperative Agreement
- Funded October 1, 2000
- 4 year project-extended for 18 months
- $2.8 million award
NATRI

Project Goals

- To examine factors related to the planning, development, implementation, and evaluation of AT services in schools
- To disseminate the findings of the research in ways that will assist school personnel to develop or improve AT policies and practices for students with disabilities
7 Proposed Research Areas

1- Status of AT use in schools and the role it provides in education

2- Policies & procedures in the development and delivery of AT services

3- AT decision-making by IEP teams

4- Integration of AT use in learning environments (facilitate instruction, access to curriculum)

5- Effects of AT use on academic, social, functional performance of students

6- Training and technical support needed by persons implementing AT

7- Extent to which IHEs are developing AT knowledge and skills
State Case Studies

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State Case Studies in AT

Participants

States:
CA, FL, KY, OR, TX, VA, WI, KS, MA, MT

Subjects:
State Department of Education Personnel, Local Education Agency Personnel, School Personnel, Classroom Teachers, Parents, and Students
NATRI

Research Methodologies

- **On-site Data Collection**
  - Train team of local AT data collectors (219)
  - Select target students using AT (322)
  - Conduct classroom observations (305)
  - Attend IEP meetings (274)
  - Audiotaped interviews
    - Teachers (260)
    - Families (268)
    - Students (145)
State Case Studies in AT

14 Categories of Interview Questions

- Overall Service Delivery Plan
- Policies/Guidelines
- State Initiatives
- Personnel
- Training
- IEP Meeting
- Documentation in IEP

- Consideration of AT
- Assessment of AT Needs
- AT Implementation
- Evaluation of Effectiveness
- Family/Consumer Responsiveness
- Evaluation of AT Services
- Funding
Definitions
What is an AT Device?

Assistive Technology Device is “any item, piece of equipment or product system, whether acquired commercially off the shelf, modified or customized, that is used to increase, maintain or improve the functional capabilities of children with disabilities.” (§300.5 of IDEA Regulations)
What is an AT Service?

Assistive Technology Service is “any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device.”

§300.6 of IDEA Regulations.

• Evaluation
• Coordination of services
• Selecting, designing, fitting
• Training or technical assistance
“Rural” Definition

- No single definition for “rural” school district
- Rural-Urban Continuum Codes from the U.S. Department of Agriculture
- Continuum ranges from 1-9 with 9 being the most rural
- Measures population, degree of urbanization, and adjacency to a metro area
<table>
<thead>
<tr>
<th>Population Size</th>
<th>Number of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 2,500 (near metro)</td>
<td>9 students</td>
</tr>
<tr>
<td>2,500 - 19,000</td>
<td>8 students</td>
</tr>
<tr>
<td>2,500 - 19,000 (near metro)</td>
<td>6 students</td>
</tr>
</tbody>
</table>
Ten Rural Service Districts

CA (6 students)
Siskiyou

KS (2 students)
Northwest Kansas Educational Service District

KY (13 students)
Bell
Breckinridge
Ohio

MT (3 students)
Ennis

OR (13 students)
Crook
La Grande

WI (9 students)
Hayward
Park Falls
AT Discussions by IEP Teams
Who initiates AT discussion?

- Data gathered from IEP meeting checklist

![Bar chart showing percent of persons initiating AT discussion.]

N = 56

Persons Initiating AT Discussion

- AT Specialist
- Other
- Special Ed
- SLP
- PT
- OT
- Parent
- Instructional Asst
- General Ed
- Student
Who actively discusses AT?

- Data gathered from IEP meeting checklist

![Bar Chart]

N = 56

- AT Specialist
- Sp Ed Teacher
- OT
- SLP
- Other
- PT
- Parent
- Instructional Asst
- General Ed
- Administrator
- Student

Percent

Persons Actively Discussing AT
AT Expertise Ratings in IEP Meetings

1. General Educator
2. Parent
3. Spec Ed & Instructional Asst
4. SLP
5. PT
6. OT
7. AT Specialist
Who attends IEP meetings?

- Data gathered from IEP meeting checklist

![Graph showing percentages of different roles attending IEP meetings]

- Parent
- Administrator
- Special Ed
- SLP
- General Ed
- OT
- Student

N = 56

Persons present for IEP Meetings

Percent
Who attends IEP meetings?

- Data gathered from IEP meeting checklist

![Bar chart showing the percent of persons present at IEP meetings. N = 56.

- Instructional Asst: 40%
- PT: 20%
- Psychologist: 15%
- AT specialist: 10%
- Outside agency: 5%
- Vision specialist: 5%
- Nurse: 5%]
Strengths & Barriers to AT Services
Strengths - Teacher Interview

- What does your district or school do well in terms of getting AT devices and services for your students?

- How are AT practices supported by your school or district?
  - What exemplary practices can you name?
  - What makes them exemplary?
  - How does the school or district support you in being able to obtain and use the AT devices and services for your students?
Strengths Identified
Teacher Responses

N = 45

Most Frequently Mentioned Strengths

- Access to Technology
- AT Expertise
- Promptness
- Training
- Administrative Support

Percent of Teachers

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Access to Technology

- “Anytime we need an AT device for any student, we’ve not had any trouble obtaining it from our district coordinator as long as we could show it would be of positive use to the student.” Kentucky teacher
Strengths Identified by Teachers

AT Expert Available

- “...close communication with specialists, specialists being in the classroom, the specialist working with the children in different environments so that they know what the child needs...I think that all of our specialists have a very good background in their specific areas of the equipment and devices, strategies and techniques that can be used and they pass that on...And they also give general workshops to groups of teachers.”

California teacher
Teacher Responses to Strengths

Prompt AT Services

- “...if students need schedules or updates they get them in a timely manner. And devices, switches, people coming out, bringing stuff to try and coming back monitoring if that’s working. And the whole department seems to work quite well getting what’s needed at the beginning of the year in a timely way...”

Oregon teacher
Teacher Responses to Strengths

Training

- “Assistive technology is a subject that is broached quite a bit to get everyone trained in using more assistive technology and veering away from the child being dependent upon anyone else.”

Administrative Support

- “…for instance, allowed us to go to the training, allow for any extra training I need.”
Barriers - Teacher Interview

- What could your school or district do better in terms of getting AT devices and services to students who need them?

- What are the barriers to the delivery of AT practices in your district or school?

  - What prevents you from being able to use AT with your students in the ways that you want to use them?
Barriers Identified

Teacher Responses

Most Frequently Mentioned Barriers

- Need Training
- Need Funding
- Need Technology
- Need Personnel
- Need Time
- Need Prompt Services

Percent of Teachers

N = 45

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Teacher Responses to Barriers

Need Training

- “I think it is just a lack of concrete knowledge about what’s out there and all the changes that are being made with AT…just getting the knowledge to the people and letting the people realize that it is effective.”

  Wisconsin teacher

- “Have access to the technology fairs and the AT fairs and trainings and workshops and manuals and information. That’s sorely lacking…then training on procedures for how to access those things should they be desired once a person even knows about them.”

  Wisconsin teacher
Teacher Responses to Barriers

Increased Access to Technology

- “It would be nice to have a larger number of (AT) items available. We’re rural and to get factory representatives or trial pieces in can take a lot of time.”

  *California teacher*

- “I have to really show this child needs it and really fight for it. I can prove the child needs it and still have to fight for it and I am still fighting to get AT.”

  *Kentucky teacher*
Teacher Responses to Barriers

Additional Funding

- “…I would love to have unlimited funds to be able to purchase for my student everything that I’d like to see HAPPEN in the classroom.”
  
  California teacher

Additional Time

- “I’d have to say there is a weakness in providing me time to go find out about such things myself if they haven’t been recommended by someone.”
  
  California teacher
Teacher Responses to Barriers

Need Prompt Services

- “Mainly not being able to get (AT devices) when I really need them. Taking so long after ordering.”

Kentucky teacher
Funding Sources
Funding Sources - Parent Interview

How did you obtain funds for the device?

Parents Responding  42

Multiple Responses from Parents  54
## Sources of Funding

<table>
<thead>
<tr>
<th>Source</th>
<th>Number</th>
<th>Percent</th>
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<tbody>
<tr>
<td>Service Districts</td>
<td>18</td>
<td>33%</td>
</tr>
<tr>
<td>Service Centers</td>
<td>8</td>
<td>15%</td>
</tr>
<tr>
<td>Private Insurance</td>
<td>7</td>
<td>13%</td>
</tr>
<tr>
<td>Medicaid</td>
<td>7</td>
<td>13%</td>
</tr>
<tr>
<td>Parent’s Purchased</td>
<td>6</td>
<td>11%</td>
</tr>
<tr>
<td>Part C IDEA</td>
<td>2</td>
<td>4%</td>
</tr>
<tr>
<td>Other (e.g., Borrowed, State, County)</td>
<td>6</td>
<td>11%</td>
</tr>
<tr>
<td>Total</td>
<td>54</td>
<td>100%</td>
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Service Delivery Models
Service Delivery Models  Teacher Interviews

- Regional Service Delivery
- In-House Delivery

![Bar chart showing service delivery models]

Number of Districts

Service Delivery Models

N = 10
Regional Service Delivery

Regional Service Center

Campus
AT Specialist
Mobility
SLP
OT
Campus
Campus
Campus

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Regional Service Delivery

What are the job responsibilities of the AT personnel?

◆ “Our district person comes around and keeps our equipment up to date and sees if we need anything. They instruct us on how to use the equipment and do assessments to see what is working and what is not working to help the students. We may need to improve or change things.”

Kentucky teacher
In-House Service Delivery

Special Education Teachers and Related Service Providers provide AT Services.
In-House Service Delivery

Who are the people who you work with who have AT experience or expertise?

◆ “I would think that the special ed teachers. I don’t know a whole lot more about what’s available than they do and they would use it more with the students. I just leave it up to them.”

Oregon teacher
AT Devices Used
# AT Use by Functional Area

<table>
<thead>
<tr>
<th>Functional Area</th>
<th>All</th>
<th>Rural</th>
<th>Difference</th>
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<tbody>
<tr>
<td>Existence</td>
<td>8%</td>
<td>4%</td>
<td>-4</td>
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<tr>
<td>Communication</td>
<td>30%</td>
<td>30%</td>
<td>0</td>
</tr>
<tr>
<td>Body Support, Protection, &amp; Positioning</td>
<td>7%</td>
<td>8%</td>
<td>1</td>
</tr>
<tr>
<td>Travel &amp; Mobility</td>
<td>6%</td>
<td>16%</td>
<td>10</td>
</tr>
<tr>
<td>Environmental Interaction</td>
<td>15%</td>
<td>14%</td>
<td>-1</td>
</tr>
<tr>
<td>Education and Transition</td>
<td>26%</td>
<td>24%</td>
<td>-2</td>
</tr>
<tr>
<td>Sports, Fitness, &amp; Recreation</td>
<td>6%</td>
<td>3%</td>
<td>-3</td>
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</table>

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# AT Devices/Student

<table>
<thead>
<tr>
<th></th>
<th>All</th>
<th>Rural</th>
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<tbody>
<tr>
<td><strong>Number Students</strong></td>
<td>700</td>
<td>54</td>
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<tr>
<td><strong>Total Number Devices</strong></td>
<td>5058</td>
<td>173</td>
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<tr>
<td><strong>Devices Per Student</strong></td>
<td>7.2</td>
<td>3.2</td>
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AT Lending Libraries
## AT Lending Libraries

<table>
<thead>
<tr>
<th>Library</th>
<th>Yes</th>
<th>No</th>
<th>Don’t Know</th>
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<tbody>
<tr>
<td></td>
<td>20</td>
<td>10</td>
<td>2</td>
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<table>
<thead>
<tr>
<th>Policies</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td></td>
<td>10</td>
<td>10</td>
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</table>

<table>
<thead>
<tr>
<th>Used</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>11</td>
</tr>
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Solutions for Rural Districts

- Funding Sources
- AT “Experts”
- AT Lending Libraries
- IEP Team Planning for AT Implementation
AT Implementation Plans

Coming Soon

ASSISTIVE TECHNOLOGY PLANNER
FROM IEP CONSIDERATION TO CLASSROOM IMPLEMENTATION

for TEACHERS