Family, Teacher, & Student Perspectives of AT Implementation

Margaret E. Bausch
Melinda Jones Ault
Irene Villarreal-Stewart
John Lowdermilk
University of Kentucky

Jaine Gasparich
Larita McCoy
Lake Oswego School District, Lake Oswego, OR

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Introduction

- Overview of the National Assistive Technology Research Institute
- Overview of the State Case Study
  - Interview Data
    - Family Perspectives
    - Student Perspectives
    - Teacher Perspectives
- Summaries
Introduction

What is NATRI?

National Assistive Technology Research Institute
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
NATRI

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
State Case Studies

Research Questions

- What is the state-of-the-practice of AT service delivery in 10 states in the nation?
  - How do school districts plan and implement AT programs?
  - What policies and practices support the use of AT in the learning environment?
  - How do school districts plan and implement AT programs?
  - What AT training is needed by personnel providing AT services?
  - How are AT decisions made in IEP meetings?
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
State Case Studies in AT

What is the State-of-the-Practice of AT Service Delivery?

- Studying 10 states
- Six districts in each state
- Ten students in each district
- 3-5 data collectors
- $10 \times 6 \times 10 = 600$ students
State Case Studies in AT

Procedures

- On-Site Data Collection
  - Train team of local AT data collectors
  - Select target students using AT
  - Distribute and gather permission letters and consent forms
  - Conduct classroom observations
  - Attend IEP meetings
  - Interview teachers, parents, and students
  - Conduct follow-up interviews
State Case Studies in AT

Procedures - Interviews

- **Participants**
  - Teacher
  - Family
  - Student

- **Teacher/Family format**
  - Structured to open-ended
  - Must ask certain questions
  - Probe additional topics that interviewee addresses

- **Student format**
  - Ask all questions
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
State Case Studies in AT

Experience of Local Data Collectors

- Description of Lake Oswego
- Data collection process
- Lessons learned
Teacher Perspectives

- AT Organization at the State Level
- Training and AT Certification Opportunities
- Personnel with AT Expertise
- Time Factors
- Access to Appropriate AT
- Home Use
- Impact on Students’ Lives
Teacher Perspectives

Unaware of Organization of AT at the State Level

Tell me what you know about the overall organization of assistive technology at the state department of education level.

“… I do not know that anybody oversees that AT (sic) at a state level.”

“Just that when a student meets the requirements to have assistive technology in the classroom, the state provides that.”

“I really don’t know much about it.”
Teacher Perspectives

Lack of Adequate Training and Certification Opportunities

Q What can you tell me about AT certification?

A “I am not exactly sure on the length of time that you have to go through a program and I know it is not readily available anywhere close around here. I think you have to go out of state possibly to get that.”
Teacher Perspectives

Lack of Adequate Training and Certification Opportunities

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

A: “Lack of knowledge of what is available and of course always money.”
Teacher Perspectives

Lack of Adequate Training and Certification Opportunities

Tell me about the professional development activities related to AT that are provided in your state or district.

“As far as what’s provided, there’s nothing specifically given to us as in, ‘Look here, there’s a great conference.’”
Teacher Perspectives

Access to AT Expertise is Valued

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

“To have a person designated as an assessment coordinator to come around and assess when we have questions or when we have a student who needs more or goes beyond my expertise and have that person come in and evaluate and be able to carry through.”
Teacher Perspectives
Access to AT Expertise is Valued

Q
What personnel issues, if any, does your school need to address in order to provide quality AT services to your students?

A
“It is adequate at this time. However, I feel that there is always room for improvement and growth...So, continual awareness is necessary at all times.”
Teacher Perspectives

Use of AT is Time-Consuming

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

“Time is the biggest factor not even the money. We got the new Boardmaker update and I have got to fool with it some and I got my assistant importing pictures because you can import pictures so we are getting things geared up for next year but still time is always a factor.”
Teacher Perspectives

Lack of Appropriate AT

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

“For my students it is the lack of motor ability and extreme emotions and behavior issues, finding out how to use the system. In a classroom setting it is difficult to always have the consistency and availability of the AT there for the students for the lower level students.”
Teacher Perspectives

Students Have Access to AT at Home

For what purpose do your students take their devices home at night?

“Communication throughout their life.”
Teacher Perspectives

Students Have Access to AT at Home

Do your students take the device home during summer or winter holidays?

“Yes, some of them. Not all the devices go home, but like this communication device, yes they would take it home. If it’s something like a keyboard or touch screen it would depend.”
Teacher Perspectives

Students Have Access to AT at Home

For what purpose do your students take their devices home at night?

“None of them do on a regular basis. I have several families where I give the same pictures to use at home for basic food items and basic needs. Those are given to the parents. Other devices they do not take home at night. I have one student that when he got home from the hospital took the device with him but that would be the only case.”
Teacher Perspectives

AT Use Has a Positive Impact

What effect does the use of AT have on the academic, social, and functional performance of the students who use them?

“Well obviously it restricts the requirement of the student to be dependent upon a teacher or a special education environment.”

“It allows them to function within the general core content. Also with the population of students it does not restrict them and pull them apart. It makes them part of the community.”
Teacher Perspectives

AT Use Has a Positive Impact

Q: How has the use of AT effected your students’ ability to function in their natural environment?

A: “It makes all the difference in the world.”
Family Perspectives

- Access to AT
- Current/ Most Advanced AT
- Involvement and Partnership with School
- Awareness of Funding
- Training Issues
- Helpfulness of AT for Students
Family Perspectives

Varying Reports of Access to AT

Q When does your child use the device?

A “All day-long.”

A “Both in the classroom and at home.”
Family Perspectives

Varying Reports of Access to AT

Tell me how your child uses his AT outside of school.

“He does not bring it with him, it stays at school. And at home we just basically use hand gestures or sign motion for things, that type of thing.”
Family Perspectives

Varying Reports of Access to AT

Q

What does the school or district do well in terms of delivering AT services to your child?

“A

“Really they don’t do anything for the kids, none of the kids have devices, the ones that can’t talk. I am just telling you what I know about his class in grade school. None of them had devices and he has always been in this district. There are a few other kids that have always been in this district but they also cannot communicate.””
What improvements or changes related to AT would you like to see the district or school implement?

“I would like to see (my child) be able to use what is the latest in technology which is a tablet PC. You can use it like a word pad, like you are writing and convert it into text. It is portable and it will print. It is small and you can take it to a collaborative classroom and set it up there or you can pull it out and take it with you, look like a regular ed kid.”
Family Perspectives

Desire for Involvement

Did you feel like an equal partner in the decision-making process?

"Yes."
Family Perspectives

Desire for Involvement

What improvements or changes related to AT would you like to see the district or school implement?

“Well the improvements like I said more involvement. I would like to be more involved on knowing these things. A lot of things I don’t know and if I knew maybe I could help him more at home to learn all he can learn.”
Family Perspectives

Lack of Awareness of AT Funding

How did you obtain funds for the device?

“I don’t know.”

“It was through the school district because my child had a high IQ.”

“Through the school. I don’t know.”
Would you have wanted more training?

“Yes.”
Do you know how to help (your child) on the computer?

“His brother and sister help him.”
What improvements or changes related to AT would you like to see the district or school implement?

“Offering it more to more students that need it.”
Family Perspectives

Families Desire More Training

Was the training adequate?

“No, it wasn’t.”

“Yes, and I think I was able to help the trainer with a few sessions because (my child) was so involved in Read and Write Gold.”
Family Perspectives

AT is Helpful for Students

On a scale of 1 to 5 with 1 being not helpful and 5 being very helpful, how helpful do you think AT has been for your child?

“Five, it should be ten. If he had not had technology in his life he would struggle. He gets embarrassed when he has to ask somebody to read over and over to him. So, technology has helped him a lot.”
Family Perspectives

AT is Helpful for Students

What has your child told you about how helpful the Dynamite has been to her?

“She’s great with it. She’s very happy. She’s able to express herself.”
Family Perspectives

AT is Helpful for Students

q Does your child bring the Dynamite home from school?

“Yes, sometimes she asks a question about homework or something that happened at school and I don’t really understand what she’s trying to tell me when she’s talking to me, so she puts it on the computer.”
AT is Helpful for Students

What does the school or district do well in terms of delivery of AT services to your child?

“I see my child very happy.”
Student Perspectives

- Access to AT
- Training
- Involvement in AT Decision-Making
- Awkwardness of AT Use
- Satisfaction with AT
Student Perspectives

Access to AT across Environments

Do you use your AT for all of your classes?

“Every other class except for third period.”
**Student Perspectives**

**Access to AT across Environments**

Do you bring your laptop computer home at night?

“**Yes, I bring it back and forth with me.**”

“**Yes, I do- for homework.**”
Lack of Training

Why aren’t you satisfied with your math software program?

“Because I don’t know how to use it. The problem I have, I know how to use it, but I don’t know what symbol to use.”
Student Perspectives

Involvement in AT Decisions

How involved were you in making decisions about your Dynamite before and during the IEP meeting?

“A lot.”
Involvement in AT Decisions

Did the IEP team members ask you about the Dynamite? Did they ask you if you wanted to get it or try it?

“Yes.”
Student Perspectives

AT can be Awkward to Use

Tell me about using your computer.

“Well, actually, I don’t mean to be rude, but my computer takes too long to turn on and then I have a hard time with that stupid mouse.”
Student Perspectives

AT can be Awkward to Use

Was it too much to carry around?

Nodding his head yes.
Student Perspectives

AT can be Awkward to Use

Is the Dynamite easy to use? Not really easy?

“Not easy.”
Student Perspectives

Satisfaction with AT

Are you happy with your use of your assistive technology in school?

“Yes”
Observer notes- BIG SMILE.
**Student Perspectives**

**Satisfaction with AT**

**Q**
What are some things you can do now that you couldn’t do before you had your laptop computer?

**A**
“Like when I don’t have my laptop before, I would go home and do the work that I had already done in class. I would do it all over again.”
Student Perspectives

Satisfaction with AT

How has your AT been helpful to you at home?

“It helped me get better grades in essays, I think. It’s helped me write faster. It helped me get up to speed with everyone else.”
Summary

What We Are Hearing from Teachers

- Lack of knowledge about state AT policies and products
- Uncertain about AT certification
- Dependent upon personnel with AT expertise
  - 1:1 training- vendors, services
  - Help with individual students
- Able to obtain assistance and apply knowledge to students
  - They do reach out to apply knowledge to students- they do know who to contact
Summary

What We Are Hearing from Teachers

- Lack of adequate time
  - Keep abreast of new technology
  - In-class assistance
- AT has positive impact on student’s lives
Summary

What We Are Hearing from Families

- Lack of knowledge about AT funding
- Involvement of parents in decision-making had wide variety of responses from positive to negative
- Families express desire for more training
- AT has positive impact on their child’s lives
Summary

What We Are Hearing from Students

- AT has positive impact on their lives
- Most quotes positive - some complaints
- AT service delivery could be better
  - Satisfaction levels
  - Involvement in decision-making and evaluation
Summary

Teachers, Families, and Students

- Use of AT results in great deal of good for students
- All agree AT has profound impact on students’ lives
- Impact of AT is described differently by different participants
- All agree some things can be better
Website
http://natri.uky.edu

e-mail
natri@coe.uky.edu