Assistive Technology Planning for Transition-Aged Youth

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NEBRASKA DEPARTMENT OF EDUCATION

ATP ASSISTIVE TECHNOLOGY PARTNERSHIP



Welcome and Introductions

Photo Credit: https://www.perkinselearning.org/transition/ecc/assistive-technology

Brian Wojcik, Ed.D., ATP

- ATP Education Program Supervisor/ AT Specialist
- Worked in AT for over 30 years as a teacher, specialists, consultant, coach, and professor.
- Rehabilitation Engineering and Assistive Technology Society of North America (RESNA) Assistive Technology Professional (ATP) Certified
- Member of the Quality Indicators for Assistive Technology (QIAT) Leadership Team, State Leaders of Assistive Technology in Education (SLATE), CEC – ISET & CASE, Learning Forward, ISTE/NETA, CITES Community of Practice, and founding Board Member of the Universal Design for Learning Implementation Research Network and LearningDesigned.org.





Understanding AT and AT Services

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Activity 1



Elevator Pitch

What is Assistive Technology?



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Assistive Technology

Assistive technology device means 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 a child with a disability.… (Authority: 20 U.S.C. 1401(1))

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In Summary – Assistive Technology Is

- Anything* But It Depends on the Purpose for which It is Used
- A Compensatory Intervention
- A Tool or System of Tools
- Allows a Student to Do a Task he/she could not otherwise do
- Used by a Student with a Disability
- Determined to be Necessary for a Student to Achieve FAPE

* Not Surgically Implanted

Examples of Assistive Technology

181354: Double Spatula Turner and Kitchen Tongs ($10.95 value) Loan

https://independentliving.com/double-spatula-turner-and-kitchen-tongs/

This nylon coated Double Spatula makes gripping and flipping your food a breeze. Just slip one side under your hamburger, s



181420: 1 Cup OXO Good Grips Angled Measuring Cup ($15.99 value) Loan

https://rehabsupplyshoppe.com/products/oxo-good-grips-angled-measuring-cups?_pos=1&_sid=2aef6c751&_ss=r

This angled measuring cup allows the user to read the measurements from above, eliminating the user from having to bend o



180999: 1-Switch Single-Appliance Unit ($149.95 value) Loan

https://enablingdevices.com/product/1-switch-single-appliance-unit/

This switch-adapted remote activates most devices from up to 20 feet away. To use, simply plug the appliance into the unit's r



181421: 2 Cup OXO Good Grips Angled Measuring Cup ($15.99 value) Loan

https://rehabsupplyshoppe.com/products/oxo-good-grips-angled-measuring-cups?_pos=1&_sid=2aef6c751&_ss=r

This angled measuring cup allows the user to read the measurements from above, eliminating the user from having to bend o



180254: 32" reacher grabber ($24.95 value) Loan

https://www.maxiaids.com/rainbow-reacher-blue-32-inches

The Rainbow Reacher is the lightest weight and has the smallest handle grip and widest jaw opening. This reacher was desig



51845: 3M Ergonomic Renaissance Mouse E1036 ($83.99 value) Loan

https://www.ergodirectusa.com

The unique, ergonomic vertical grip design has been clinically proven to reduce muscle strain and discomfort associated with



164204: Abiligrips Foam Grip Holders ($5.00 value) Loan

http://www.adaptivation.com

Our very own set of AbiliGrips that enable those with a weakened grip to hold just about any object. Not only are the soft foam



181369: Able-T Adaptive Kitchen Knife ($14.99 value) Loan



EDUCATION.
AT4ALL.COM

[Link to Example AT Tools]

Is there a discrepancy between what the student can do and what the student needs to do in order to:

- make progress on his/her IEP goals and/or objectives?
- access and participate in learning activities associated with the curriculum??
- participate within school events?
- engage in extracurricular activities?

If ‘yes’ to one or more of these questions…

The student is a potential candidate for assistive technology.

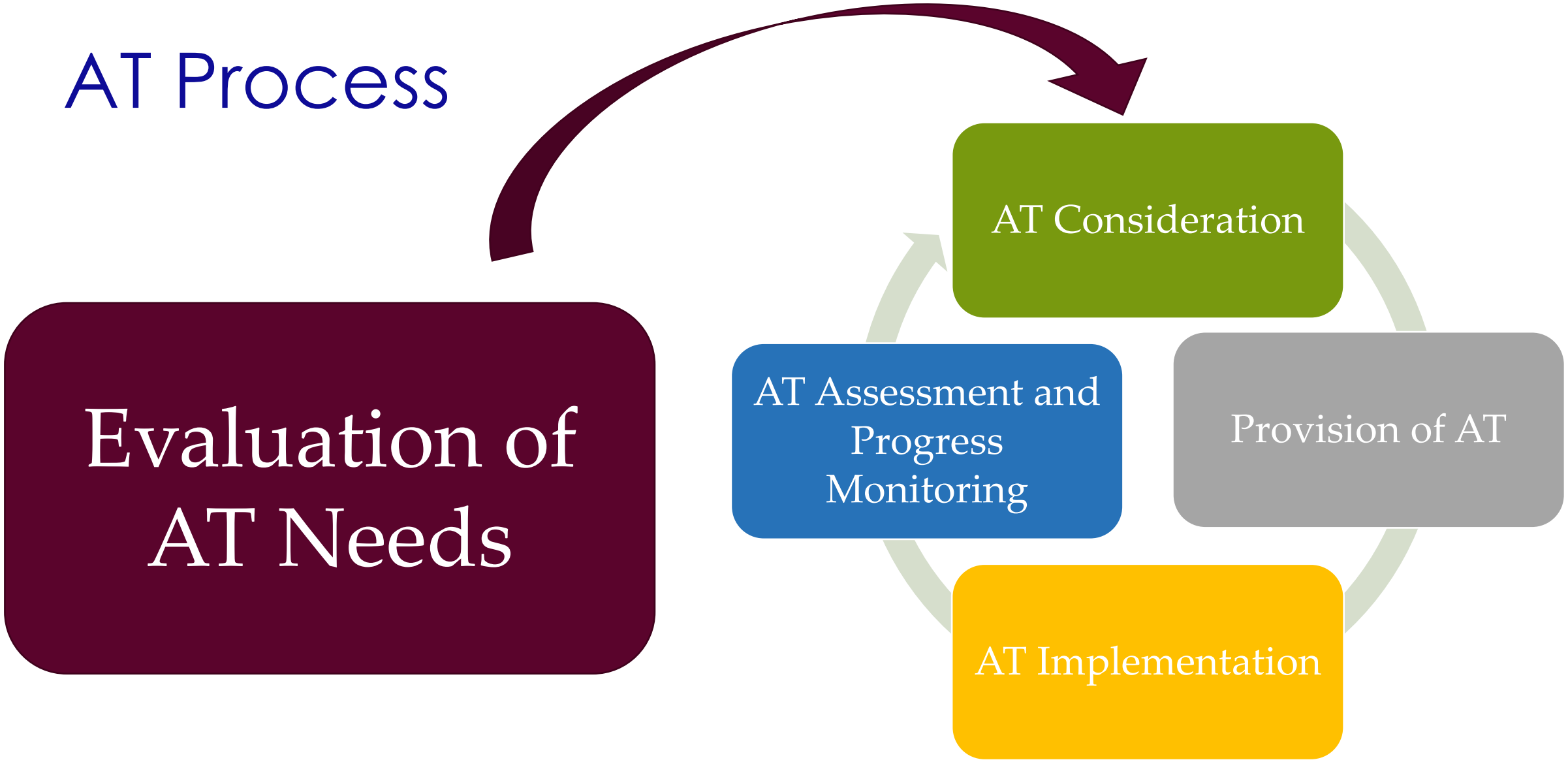
Is there a discrepancy between what the student can do and what the student needs to do in order to:

- Engage in community-based experiences
- Engage in employment experiences?
- Engage in independent living tasks?

If ‘yes’ to one or more of these questions…

The student is a potential candidate for assistive technology.

AT Process


Evaluation of AT Needs
AT Consideration
Provision of AT
AT Implementation
AT Assessment and Progress Monitoring

AT Services

- Assistive technology service means any service that directly assists a child with a disability in the selection, acquisition, and use of an assistive technology device. The term includes—
  - (a) The **evaluation of the needs of a child** with a disability, including a functional evaluation of the child in the child's customary environment;
  - (b)**Purchasing, leasing, or otherwise providing** for the acquisition of assistive technology devices by children with disabilities;
  - (c)**Selecting, designing, fitting, customizing, adapting, applying, retaining, repairing, or replacing** assistive technology devices;
  - (d)**Coordinating and using other therapies, interventions, or services with assistive technology devices**, such as those associated with existing education and rehabilitation plans and programs;
  - (e)**Training or technical assistance for a child** with a disability or, if appropriate, that child's **family**; and
  - (f) Training or technical assistance for **professionals** (including individuals providing education or rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of that child. (Authority: 20 U.S.C. 1401(2))



Reviewing Nebraska's Transition Planning Process

Photo Credit: https://www.perkinselearning.org/transition/ecc/assistive-technology

Activity 2



Transition in Nebraska – Order These

A. Write Course of Study

B. Exit Secondary and Special Education

C. Conduct Age-Appropriate Transition Assessments

D. Identify Transition Services

E. Coordinate Services with Adult Agencies

F. Write Measurable Postsecondary Goals

G. Write the Annual IEP Goals

Transition in Nebraska – Order These

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D. Identify Transition Services

A. Write Course of Study

G. Write the Annual IEP Goals

E. Coordinate Services with Adult Agencies

B. Exit Secondary and Special Education



Role of AT in Transition Planning

Photo Credit: https://www.perkinselearning.org/transition/ecc/assistive-technology

AT Within Transition Services



Employment



Independent Living



Recreation and Leisure



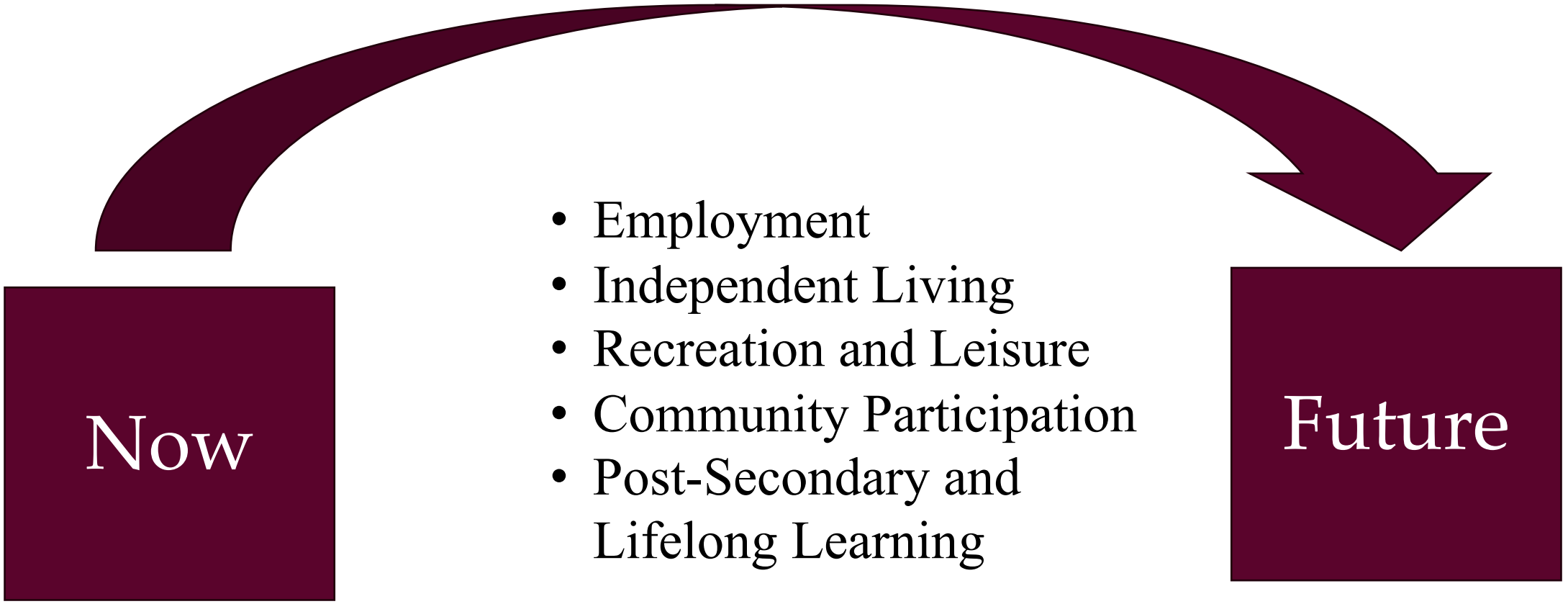
Community Participation



Post-Secondary and Lifelong Learning

AT may provide compensatory supports in each of these activities.

Important Note





So, why are AT Devices and Services within Transition Important?

AT and Post-School Outcomes

Provision of AT	Graduated	Post-School Employment	Postsecondary Attendance
No	79.6	50.8	40.1
Yes	99.8	84.6	80.9

The difference between groups of students who were and were not provided AT was **considered to be statistically significant** in each of these categories.

(Bouck, Maeda, & Flanagan, 2012)



Process for Considering AT and AT Services in Transition

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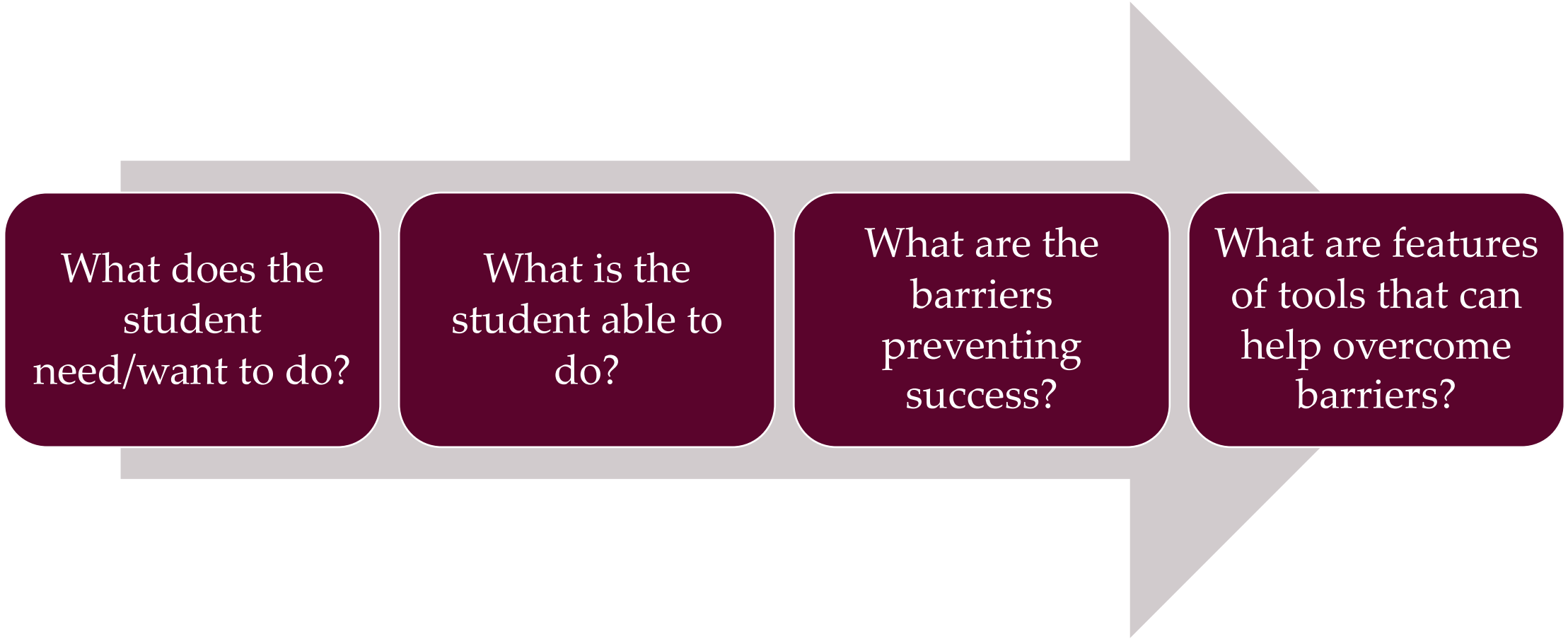
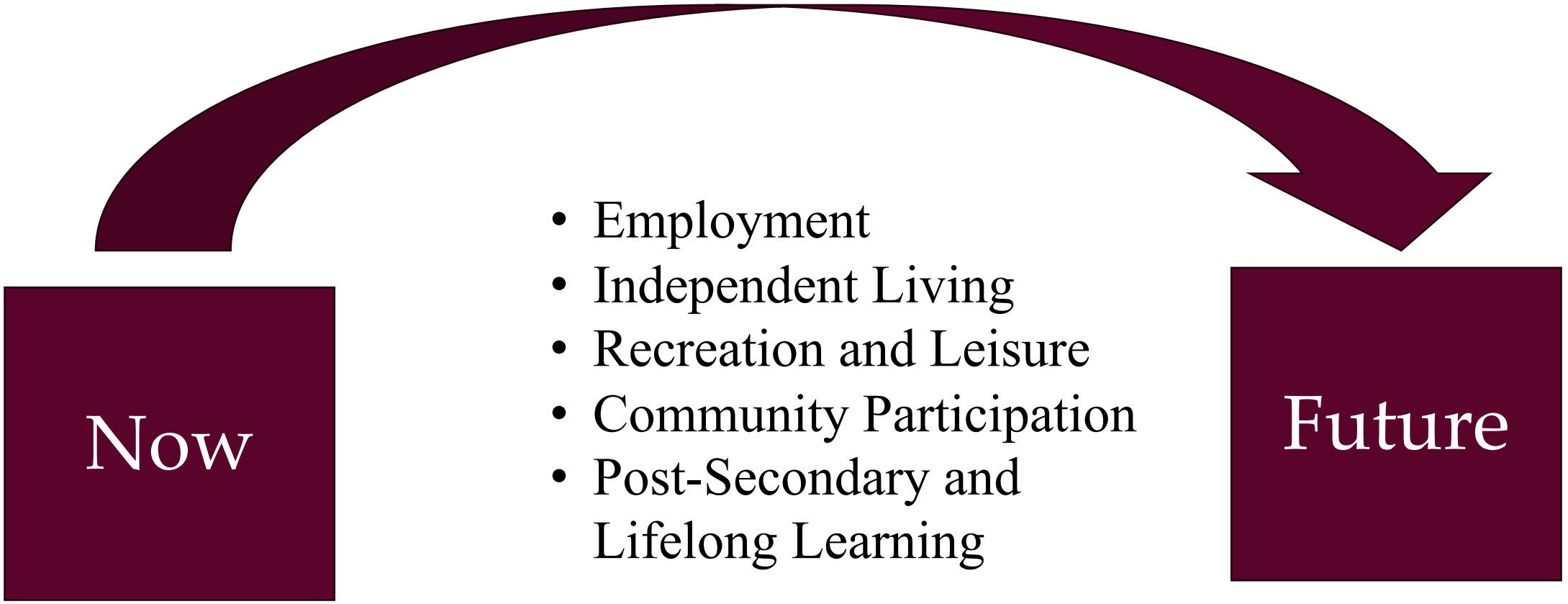
At the end of the day, AT is about improving functional performance.



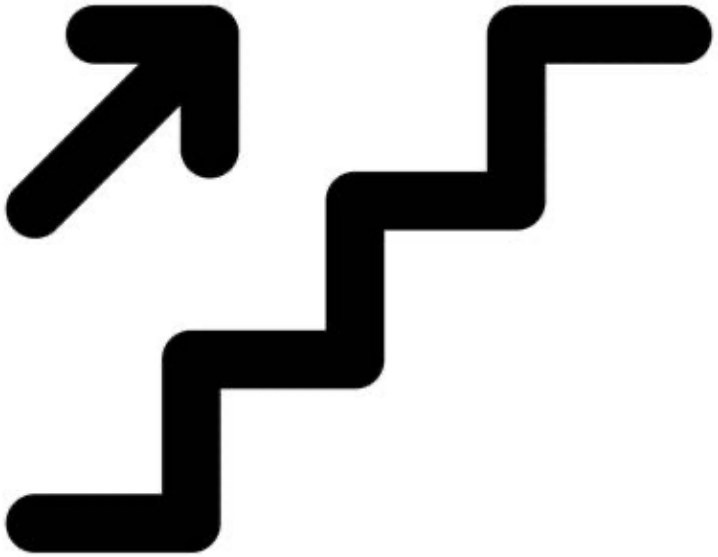
Important Note



An important note…

Avoid the pitfall of starting with the technology solutions first.





Step 1 – Establish Current AT Needs

Good AT Decisions are Important

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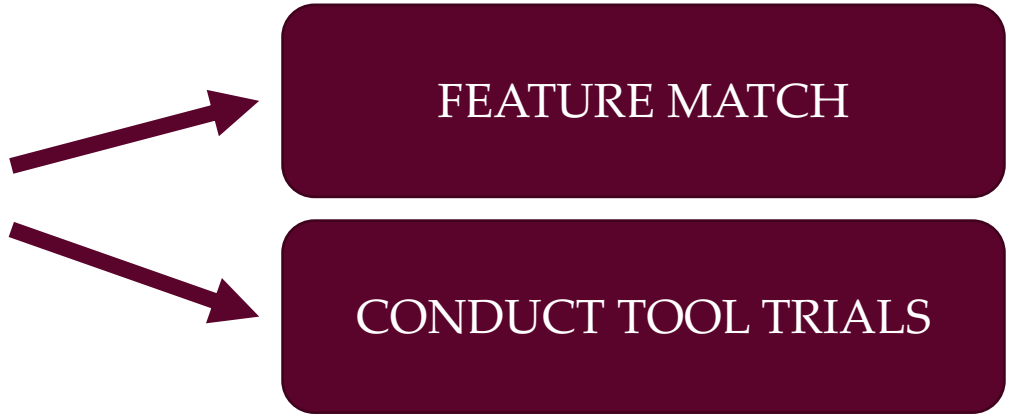
Gather and Analyze

Try



Decide, Acquire, and Implement

Bowser & Reed, 2002; Scherer, 2018; Zabala, 1995

Gather and Analyze

Student History

- What do we know about the student?
  - What are the student's strengths?
  - What areas of difficulty does the student face?
- What other questions do we have about the student and how will we answer them?

Motor

Cognition

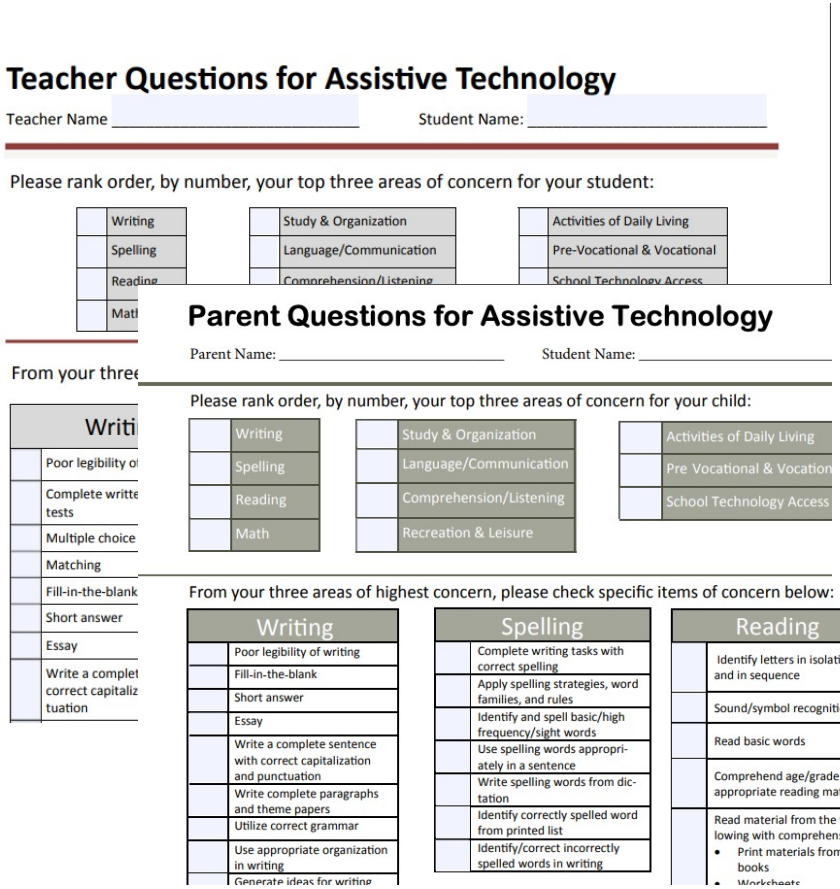
Language and Communication

Sensory

Other

Gather and Analyze

Student Information



Teacher Questions for Assistive Technology

Teacher Name _____ Student Name: _____

Please rank order, by number, your top three areas of concern for your student:

	Writing		Study & Organization		Activities of Daily Living
	Spelling		Language/Communication		Pre-Vocational & Vocational
	Reading		Comprehension/Listening		School Technology Access
	Math				

From your three areas of highest concern, please check specific items of concern below:

Writing	Spelling	Reading
Poor legibility of writing	Complete writing tasks with correct spelling	Identify letters in isolation and in sequence
Fill-in-the-blank	Apply spelling strategies, word families, and rules	Sound/symbol recognition
Short answer	Identify and spell basic/high frequency/sight words	Read basic words
Essay	Use spelling words appropri-ately in a sentence	Comprehend age/grade appropriate reading materials
Write a complete sentence with correct capitalization and punctuation	Write spelling words from dic-tation	Read material from the fol-lowing with comprehension: • Print materials from text-books
Write complete paragraphs and theme papers	Identify correctly spelled word from printed list	
Utilize correct grammar	Identify/correct incorrectly spelled words in writing	
Use appropriate organization in writing		
Generate ideas for writing		

Parent Questions for Assistive Technology

Parent Name: _____ Student Name: _____

Please rank order, by number, your top three areas of concern for your child:

	Writing		Study & Organization		Activities of Daily Living
	Spelling		Language/Communication		Pre Vocational & Vocation
	Reading		Comprehension/Listening		School Technology Access
	Math		Recreation & Leisure		

From your three areas of highest concern, please check specific items of concern below:

Writing	Spelling	Reading
Poor legibility of writing	Complete writing tasks with correct spelling	Identify letters in isolation and in sequence
Fill-in-the-blank	Apply spelling strategies, word families, and rules	Sound/symbol recognition
Short answer	Identify and spell basic/high frequency/sight words	Read basic words
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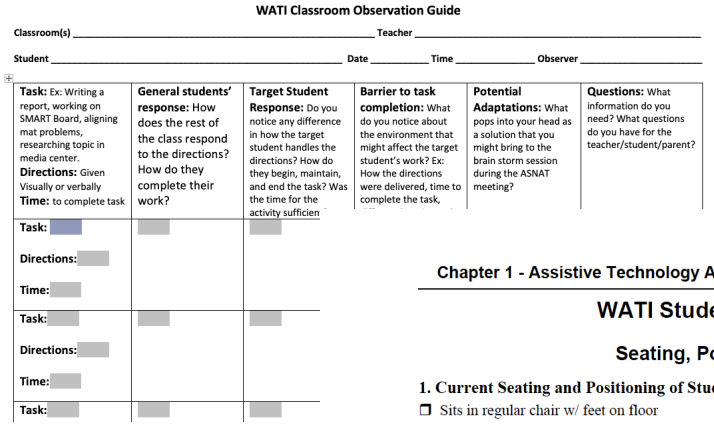
Write a complet correct capitaliz tuation	Write spelling words from dic-tation	Read material from the fol-lowing with comprehension: • Print materials from text-books • Worksheets
	Identify correctly spelled word from printed list	
	Identify/correct incorrectly spelled words in writing	

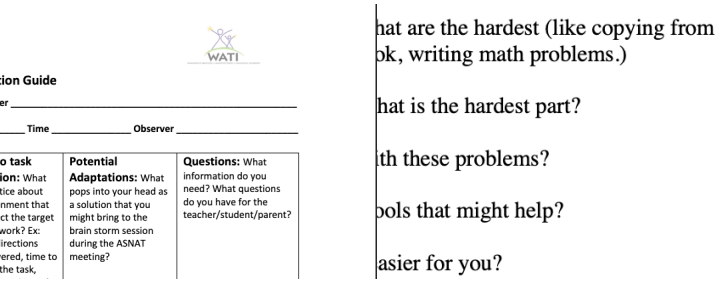


WATI Classroom Observation Guide

Classroom(s) _____ Teacher _____

Student _____ Date _____ Time _____ Observer _____

Task: Ex: Writing a report, working on SMART Board, aligning mat problems, researching topic in media center. Directions: Given Visually or verbally Time: to complete task	General students' response: How does the rest of the class respond to the directions? How do they complete their work?	Target Student Response: Do you notice any difference in how the target student handles the directions? How do they begin, maintain, and end the task? Was the time for the activity sufficien	Barrier to task completion: What do you notice about the environment that might affect the target student's work? Ex: How the directions were delivered, time to complete the task,	Potential Adaptations: What pops into your head as a solution that you might bring to the brain storm session during the ASNAT meeting?	Questions: What information do you need? What questions do you have for the teacher/student/parent?
Task: Directions: Time:					
Task: Directions: Time:					
Task:					



Assistive Technology Student Interview

Student's Name:_____Date:_____

Interviewed by: _____

1. What classes are more difficult for you?

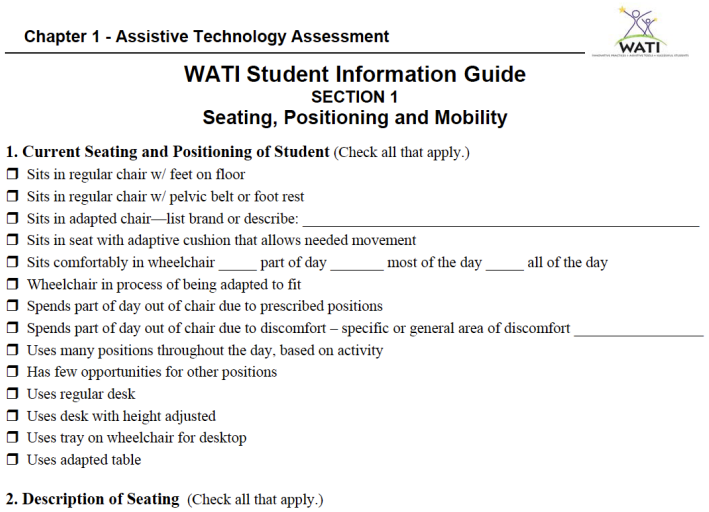
hat are the hardest (like copying from
ok, writing math problems.)

hat is the hardest part?

th these problems?

ools that might help?

asier for you?



Chapter 1 - Assistive Technology Assessment

WATI Student Information Guide
SECTION 1
Seating, Positioning and Mobility

1. Current Seating and Positioning of Student (Check all that apply.)

- ❒ Sits in regular chair w/ feet on floor
- ❒ Sits in regular chair w/ pelvic belt or foot rest
- ❒ Sits in adapted chair—list brand or describe: _____
- ❒ Sits in seat with adaptive cushion that allows needed movement
- ❒ Sits comfortably in wheelchair _____ part of day _____ most of the day _____ all of the day
- ❒ Wheelchair in process of being adapted to fit
- ❒ Spends part of day out of chair due to prescribed positions
- ❒ Spends part of day out of chair due to discomfort – specific or general area of discomfort _____
- ❒ Uses many positions throughout the day, based on activity
- ❒ Has few opportunities for other positions
- ❒ Uses regular desk
- ❒ Uses desk with height adjusted
- ❒ Uses tray on wheelchair for desktop
- ❒ Uses adapted table

2. Description of Seating (Check all that apply.)

Link to Forms and Resources

Gather and Analyze

Barrier Analysis – Analyze the Barriers

- Role of Instruction
  - Will any of the barriers resolve if only instruction is provided?
  - If so, what is the anticipated timeline for resolution?
  - Will the timeline for resolution prevent the student from advancing in other areas?
- Role of Modifications
  - Can the environment and/or task be modified to help the student meet the demands of the task?
  - Will the alteration create long-term success with the task?

SETT Framework

http://joyzabala.com/

The Student

1. What does the Student need to do?
2. What are the Student's special needs?
3. What are the Student's current abilities?

Environment

1. What materials and equipment are currently available in the environment'?
2. What is the physical arrangement? Are there special concerns?
3. What is the instructional arrangement? Are there likely to be changes?
4. What supports are available to the student?
5. What resources are available to the people supporting the student?

The Tasks

1. What activities take place in the environment?
2. What activities support the student's curriculum?
3. What are the critical elements of the activities?
4. How might the activities be modified to accommodate the student's special needs?
5. How might technology support the student's active participation in those activities?

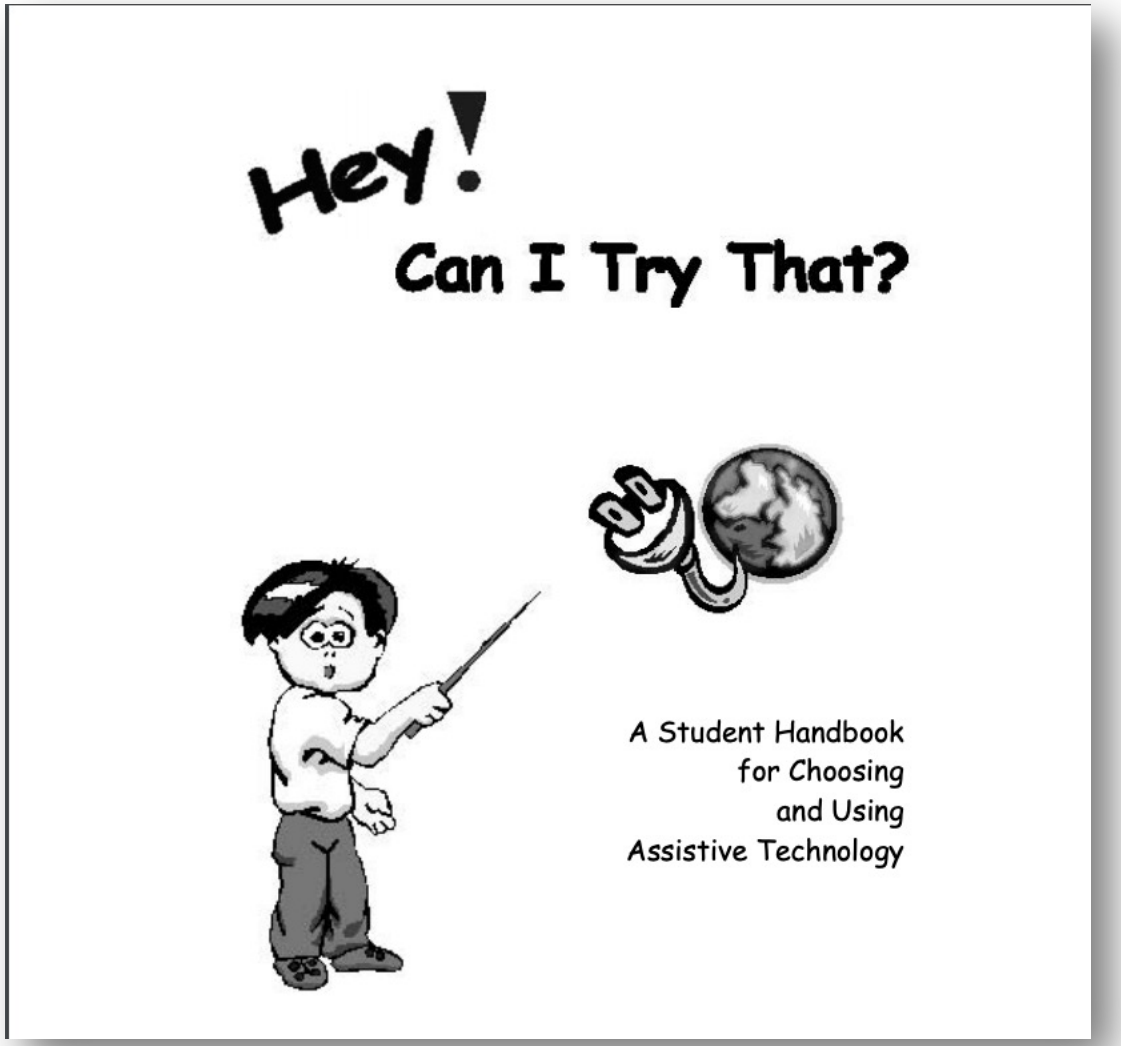
The Tools

1. What strategies might be used to invite increased student performance? What no-tech, low-tech, and high-tech options should be considered when developing a system for a student with these needs and abilities doing these tasks in these environments?
2. How might these tools be tried out with the student in the customary environments in which they will be used?

Hey, Can I Try That?

- Guide for helping a student engage in a decision-making process about assistive technology

- https://www.azed.gov/sites/default/files/2025/05/hey_can_i_try_that%282024%29.pdf



Assistive Tech Tools

Frustrated? Try a tool.

Which activity is hard for you?



Reading



Writing



Math

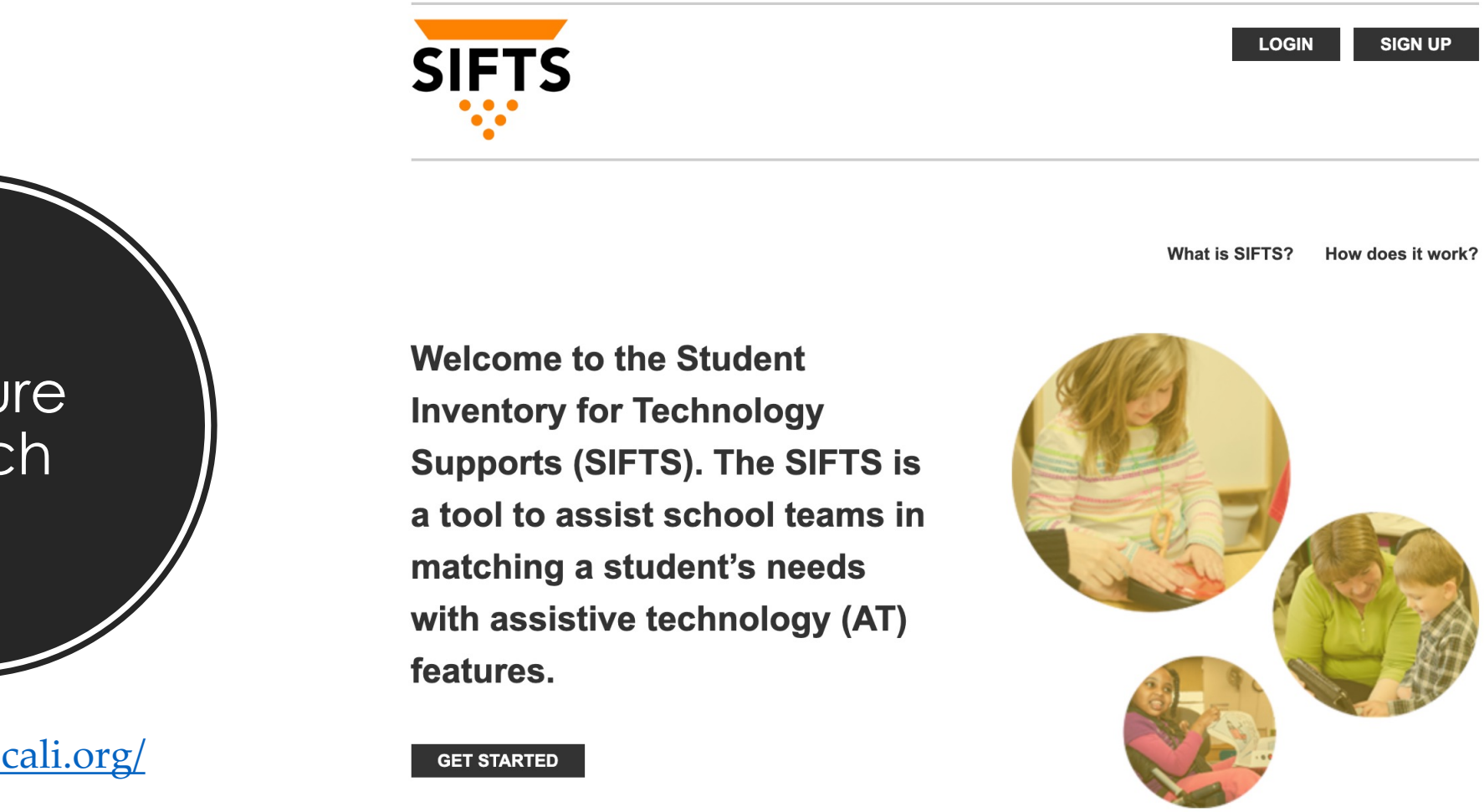


Organization

https://sites.google.com/uic.edu/tools/home

Feature Match

https://sifts.ocali.org/



Try

Feature Match

The process of determining what the features of potential AT tools/systems are to help the student achieve success.

- Features are drawn from the barriers identified with regard to the student, the environment, and the tasks.
- Features define the functions of potential AT tools/systems without initially specifying the tools/systems themselves.
- Feature matching helps to narrow down the tools/systems to try with the student.

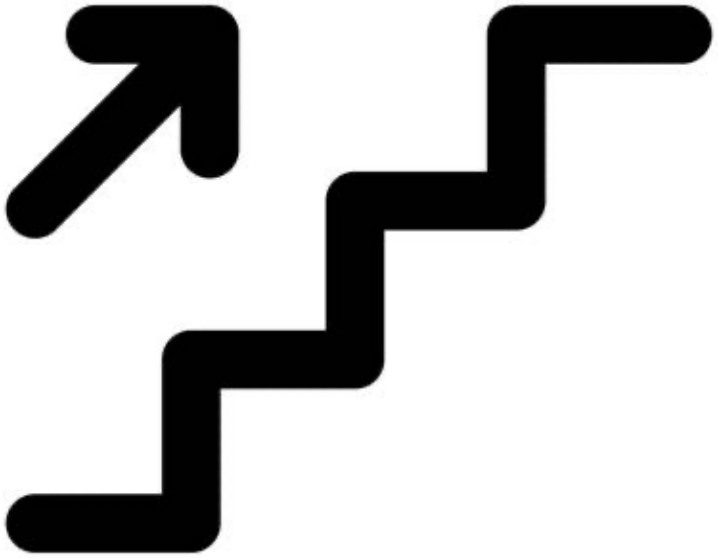
Try

Feature Match

What does the student need to do?

What are the barriers preventing the student from succeeding?

What are potential features of AT would help the student succeed?



Step 2 – Consider Current and Future AT Needs

AT Within Transition Services



Employment



Independent Living



Recreation and Leisure



Community Participation



Post-Secondary and Lifelong Learning

AT may provide compensatory supports in each of these activities.

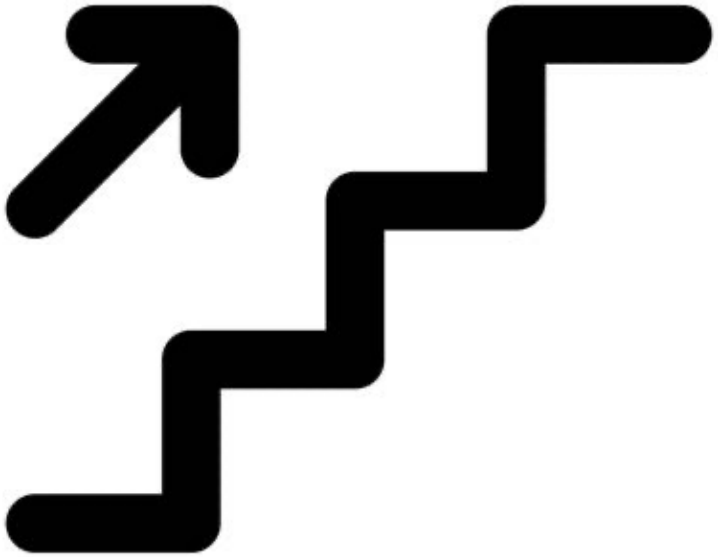
Consider the Postsecondary Goal(s)

What AT and AT Services are currently being used?

What barriers may persist in thinking about the future activities and setting related to the postsecondary goals?

What new barriers may exist in future activities and settings related to the postsecondary goal?

What existing AT may be continued into the future activities and settings and what new AT may need to be added?



Step 3 – Implement AT in the Transition Services

Plan Components

Operational and Strategic Use of Current AT Devices

Operational and Strategic Use of Future AT Devices

Developing Self-Advocacy / Self-Determination Skills for AT

Develop Maintenance and Care Plans

Coordinating with Adult Agencies



Diving Deeper – Case Studies

Photo Credit: https://www.perkinselearning.org/transition/ecc/assistive-technology

Case Study

- What are barriers Alex currently faces?
- What AT may be used to overcome those barriers?
- What is his current postsecondary goal?
- What additional barriers may be faced in the future?
- What current AT may continue and what additional AT may be needed?

Alex is a 15-year-old high school sophomore who dreams of studying robotics engineering after graduation. He excels in hands-on learning environments and thrives when building and programming robots during school competitions. However, Alex has a diagnosed specific learning disability that significantly impacts his reading fluency and comprehension.

Currently, Alex struggles to read technical manuals, online articles, and digital instructions related to robotics projects. In class, he often needs additional time to read assignment directions and frequently misses key information when instructions are text-heavy. When researching college programs, Alex becomes frustrated navigating websites filled with dense academic language. He also has difficulty reading and understanding standardized test questions and online forms for scholarships and applications.



Feedback

Session Feedback:
Please ensure that you complete this short survey at the conclusion of the event.
Your feedback is valuable to our future planning!!

https://s.esu10.org/ATP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Thank You!