



USER'S GUIDE

"I CAN SOAR" VIDEO USER'S GUIDE

To assist you in using this video most effectively, we have developed a series of collateral materials to build on the information in the video, which can enhance and supplement systems of support around the use of assistive technology. They potentially can be used by such diverse stakeholders as teachers, family members, administrators, teacher trainers, researchers, and policymakers. The *User's Guide* will describe the different components of this video kit, provide you with some basic information about assistive technology, and offer suggestions for how to use this video kit to inform and improve your work.

OBJECTIVES OF THE VIDEO KIT

The objective of the video and its collateral materials is to reach out to multiple audiences with useful information and tips concerning the appropriate selection and use of assistive technology. Recognizing that different audiences have different information needs, this video kit incorporates a range of information designed to meet those needs.

For example, the 26-minute video entitled *Assistive Technology: I Can Soar*:

- Shows how assistive technology has been integrated successfully into the lives of four children with disabilities;
- Builds awareness for family members, teachers, and administrators about the benefits of assistive technology for students with disabilities; and
- Inspires family members, teachers, and administrators to learn more about assistive technology, how it can benefit the children that they know, and the roles that they can play in making assistive technology work.

The accompanying collateral materials to the video

- Describe the decision-making process that went into selecting and implementing assistive technology for the children featured in the video;
- Stimulate dialogue among family members, teachers, and administrators about the best strategies for ensuring that assistive technology is effectively used with students with disabilities; and
- Provide practical, how-to information and tips to practitioners responsible for implementing assistive technology.

The video and its collateral materials can be used by family members, teachers, and administrators, as well as by teacher trainers and policy makers to raise awareness, initiate discussion, and provide guidance around the most effective ways to implement assistive technology in schools and classrooms.

To order a copy of the kit, please email ncti@air.org



INCLUDED IN THE KIT

The video, *I Can Soar*, features positive examples of how assistive technology has bettered the lives of students with disabilities, their families, and their educators. The attached chart, “Children, Outcomes, and Principles Highlighted in Video,” describes the children, their learning challenges, the benefits that they have experienced as a result of using assistive technology, and the best practice principles that have guided successful implementation of assistive technology into their daily lives.

A series of materials has been developed to accompany this video. Each individual product can serve as a stand-alone resource or can be used in conjunction with other pieces to provide you with the information and support you need to move from mere interest in assistive technology to advocacy, implementation, and systematization. Using the video and its collateral materials, audiences can work together to promote the use of assistive technology in the classroom to improve results for all students.

Along with this *User’s Guide*, materials in the video kit include:

— *Principles in Practice: Four Stories.*

Teachers and administrators watching the video will want to know how they can use assistive technology in their own schools and classrooms to create benefits similar to those illustrated in the video. The vignettes included in this kit build on the stories told in the video and describe *how* the people involved selected, gained access to, and implemented assistive technology for their students.

— *Executive Summary of the Synthesis on the Selection and Use of Assistive Technology.*

The use of technology in education can have a significant impact on the delivery of services to students with disabilities, yet its potential cannot be fully realized unless it is implemented appropriately. The Executive Summary of this government-sponsored synthesis report lists and describes seven principles for the effective implementation of assistive technology.

— *Fact Sheet on IDEA and Assistive Technology.*

This fact sheet explains how federal special education law defines assistive technology and what the law requires of schools with respect to providing assistive technology for students with disabilities.

— *Resource Guide.* Many teachers, family members, and administrators lack the resources necessary to help students with disabilities succeed in school. To help get the right information into your hands, we have included a resource guide with a listing of government agencies, national organizations, technical assistance providers, resource centers, and researchers.

General facts about assistive technology

According to the Individuals with Disabilities Education Act:

- An 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 functional capabilities of a child with a disability”
(P.L. 105-17, Sec. 602(1)).
- An assistive technology service is defined as “any service that directly assists a child with a disability in the selection, acquisition, or use of an assistive technology device”
(P.L. 105-17, Sec. 602(2)).
- Federal special education law requires that assistive technology be included as a “special consideration” in the development of each child with a disability’s Individualized Education Program (P.L. 105-17, Sec. 614(3)(B)(v)).
- Assistive technology can range from very simple, inexpensive, low-tech tools, such as a pencil grip or a piece of velcro, to much more complex high-tech devices, such as speech synthesizers and computer software programs.



How students with disabilities benefit from assistive technology

“One can never consent to creep when one feels the impulse to soar.” (Helen Keller)

Assistive technology can play an incredibly important role in the lives of students with disabilities. It helps students to communicate and interact with their peers in ways that would otherwise be impossible. It enables them to gain access to the general education curriculum by helping address challenges they may have producing written work, reading text, or using abstract problem-solving techniques. Overall, assistive technology enhances the independence of a child with a disability, allowing the child to learn, play, and socially interact with his or her nondisabled peers.

Principles for the appropriate selection and use of assistive technology

“Despite evidence that assistive technology has been successful in improving educational, and other, outcomes for students with disabilities, its benefits are often not fully realized because of the existence of certain implementation barriers... assistive technology cannot fully realize its potential unless its implementation is facilitated.” (OSEP, *Synthesis on the Selection and Use of Assistive Technology*, 2000)

Research has proven that assistive technology can help students with disabilities achieve at high levels; interact with and control their environment; communicate with their families, educators, and peers; and grow to become independent and productive citizens. However, assistive technology does not accomplish such outcomes on its own. Rather, a number of other contributing factors form a support system through which assistive technology can be effective in helping students with disabilities learn and succeed.

The U.S. Office of Special Education Programs sponsored a synthesis report that reviewed the results of 47 research projects on assistive technology, and recommended a set of seven, best practice principles that reflect lessons learned about how to implement effective strategies and reduce barriers to selecting and using assistive technology.



These seven principles are:

1. *Providing leadership,*
2. *Supporting stakeholder collaboration,*
3. *Monitoring impact,*
4. *Building capacity,*
5. *Reducing fear and becoming comfortable with technology,*
6. *Acknowledging diversity, and*
7. *Focusing on supporting student learning.*

Each child featured in the video benefited from a support system that reflects these seven principles. The *Principles in Practice: Four Stories* piece included in this video kit shows you how.

Suggestions for Video Use

This video kit is designed to raise awareness about the benefits of assistive technology, motivate audiences to want to learn more, and stimulate meaningful dialogue about *how* you—as a teacher, family member, or administrator—can make assistive technology an important part of your students’ and children’s lives. We suggest that you incorporate this video kit into naturally occurring opportunities for professional development and technical assistance in your school or community. For example, you can arrange for a viewing of the video at staff development meetings or teacher trainings, PTA meetings, faculty meetings, or public meetings in your district. The video and its accompanying materials can engage parents, teachers, administrators, and representatives from community organizations and businesses in a thoughtful discussion and resolve some common issues of concern.

Before scheduling a viewing of the video, identify someone who can serve as a facilitator to guide discussion among the audience around the issues raised in the video. Below, we have provided suggestions for some “discussion starters,” targeted towards particular audiences. These are questions to raise before and after viewing the video, which are designed to help viewers think contextually about the stories highlighted in the video, connecting the stories to their own experiences. They are also designed to connect to the best practice principles that are described in the Executive Summary of the synthesis report, included in this video kit. You should use these questions to engage your audience in a discussion around these seven principles and how they apply in their own practice.

Teachers

Before viewing the video:

- Are you currently using assistive technology in your classroom? If so, how does it address your students’ learning needs? If not, how do you think assistive technology could address your students’ learning needs?
(Principle: Focusing on Supporting Student Learning)
- What type of supports do you need in order to use assistive technology?
(Principles: Providing Leadership, Building Capacity, and Supporting Stakeholder Collaboration)
- What contributing factors apply when the assistive technology appears to “fit” the students, his or her tasks, class peers, and staff?
(Principles: Providing Leadership, Supporting Stakeholder Collaboration, Monitoring Impact; Building Capacity, Reducing Fear and Becoming Comfortable with Technology, Acknowledging Diversity, and Focusing on Supporting Student Learning)
- How is assistive technology monitored in the classroom? What happens if it is found that a specific technology is no longer meeting the students’ needs?
(Principles: Monitoring Impact and Focusing on Supporting Student Learning)



After viewing the video:

- Were you familiar with any of the assistive technology featured in the video? What hesitations or concerns would you have about using any of these tools in your classroom?
(Principle: Reducing Fear and Becoming Comfortable with Technology)
- If you were to use assistive technology with any of the students in your classroom, how would you go about accessing it?
(Principle: Providing Leadership, Supporting Stakeholder Collaboration, and Building Capacity)
- If you decided to use assistive technology, who would need to be included in the selection and decisionmaking process?
(Principle: Supporting Stakeholder Collaboration)
- How can you use technology to promote acceptance of differences and recognition of individual strengths in your classroom?
(Principle: Acknowledging Diversity)

Families

Before viewing the video:

- Does your child currently use assistive technology? What needs does that assistive technology meet? If he or she does not use assistive technology, do you think it could help? How?
(Principle: Focusing on Supporting Student Learning)
- How can families improve the delivery of assistive technology services?
(Principle: Supporting Stakeholder Collaboration)
- What sources of community and school support are available for families?
(Principles: Providing Leadership and Building Capacity)

After viewing the video:

- Were you familiar with any of the assistive technology featured in the video? What hesitations or concerns would you have about using any of these tools with your child?
(Principle: Reducing Fear and Becoming Comfortable with Technology)
- What supports would you need to integrate the use of your child's assistive technology in home and community settings?
(Principles: Supporting Stakeholder Collaboration and Acknowledging Diversity)
- How would you know if the assistive technology was “working” for your child? What would you do if you felt that it could be improved?
(Principle: Monitoring Impact)

Administrators

Before viewing the video:

- What is the role of the school district in the utilization of technology? Assistive technology? Should the technology teams be responsible for assistive technology?

(Principles: Providing Leadership and Building Capacity)

- What sources of district support are available for families, teachers, and staff?

(Principle: Providing Leadership and Supporting Stakeholder Collaboration)

- Do you notice resistance in your school district to assistive technology? What kind of resistance, and why do you think this is so?

(Principle: Reducing Fear and Becoming Comfortable with Technology)

After viewing the video:

- How could assistive technology meet the varied needs of students in your district?
- (Principles: Acknowledging Diversity and Focusing on Supporting Student Learning)*

- What people need to be involved in decisions surrounding the selection and use of assistive technology for use with individual students or for general use in classrooms?

(Principle: Supporting Stakeholder Collaboration)



- How can your school develop and promote its own views and supportive programs for assistive technology?

(Principle: Providing Leadership)

- How would you know if the assistive technology was successfully being used in your district? What would you do if you felt that it could be improved?

(Principle: Monitoring Impact)

CHILDREN, OUTCOMES, AND PRINCIPLES HIGHLIGHTED IN VIDEO

Child	Learning challenge	Outcome	Principles*
Angie 5 years old	Angie is nonverbal, due to her cerebral palsy, and comes from a Korean-speaking family. She, therefore, faces challenges in developing her language and literacy skills, both in English and Korean.	With the use of a voice output communication aid, Angie has been able to communicate her needs and desires to her teachers, her classmates, and her family members. This has enabled her to develop her language, as well as given her a foundation from which she will continue to work on literacy skills when she enters the first grade.	<ul style="list-style-type: none"> • Providing leadership, • Supporting stakeholder collaboration, • Monitoring impact, • Building capacity, • Acknowledging diversity, and • Focusing on supporting student learning.
Aaron 13 years old	Aaron's multiple disabilities have interfered with his mobility, vision, fine motor, gross motor, and communication skills. He has difficulty accessing and using traditional educational materials, such as textbooks and writing utensils, independently and also faces challenges in engaging as an active participant in class.	Using tools such as a power wheelchair, special computer software, an alternative keyboard and keyguards has enabled Aaron to access the general education materials and curriculum and to participate fully and learn alongside his nondisabled peers.	<ul style="list-style-type: none"> • Providing leadership, • Supporting stakeholder collaboration, • Monitoring impact, • Building capacity, and • Reducing fear and becoming comfortable with technology.
Stacey 11 years old	Stacey was diagnosed with educationally significant hearing loss, which affects her ability to tune out background noise and focus on what the teacher is saying in class. In addition, her hearing loss has had an effect on her language and literacy development skills.	Stacey's FM system helps her to stay focused in class, by tuning out background noise and amplifying the sounds of the teacher's voice. In addition, Stacey's portable word-processing device helps her maintain that focus during lengthy writing assignments.	<ul style="list-style-type: none"> • Supporting stakeholder collaboration, • Monitoring impact, • Building capacity, • Reducing fear and becoming comfortable with technology, and • Focusing on supporting student learning.
Sean 17 years old	Sean's vision loss makes it difficult for him to access the general education curriculum in the same way as his nondisabled classmates. In geometry, for example, he finds it especially challenging to understand complex graphical concepts that are often explained in visual terms.	With the help of the vision center at his school, Sean has all of his text reading and homework assignments translated into Braille. He also uses a Braille scientific calculator that helps him understand abstract mathematical concepts, such as graphs, fractions, and decimals.	<ul style="list-style-type: none"> • Supporting stakeholder collaboration, • Monitoring impact, • Building capacity, • Reducing fear and becoming comfortable with technology, and • Focusing on supporting student learning.

*See the "Principles in Practice: Four Stories" section of the video kit to see how these principles were critical in helping these students face their learning challenges.



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Finally, we appreciate the time and commitment of the teachers, families, and students who participated in the video. They were a model for us in understanding what can be done when families and educators work together to increase the access to and use of assistive technology for students with disabilities.

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