

Rabobank: The Global Food and Agriculture Bank

Deana Szeto and Jennifer Haydon

• AT in the classroom setting has made an important improvement for students with disabilities to learn in different ways.
 • Efforts toward having these types of technological devices in schools reflect a movement toward better understanding relationships between specific technology applications and positive classroom outcomes for students with disabilities.

Where can assistive technology be used?
 Home and School Environment
 School is a popular setting for students because it's where children have highest demands
 TheCaseSolutions.com

Who is assistive technology for?
 People with disabilities
 Multisensory a few, some, or none
 TheCaseSolutions.com



Two Types of AT
 Text-to-Speech
 Computer Usage
 TheCaseSolutions.com

Social Emotional
 TheCaseSolutions.com

Reading Children
 TheCaseSolutions.com

• Scheja, Lisa Behrmann, and Sutton (2016)
 • examined the success of speech-generating devices in classroom performance based on four children with autism
 • Purpose of this study was to find evidence regarding the effectiveness in a public school setting
 • Outcomes AT provided helping all students open up to enhance their performances
 • Students in special education received interventions provided by AT devices



• Roschelle, et al (2001)
 • compared both group and individual feedback with the use of two different types of technology

Computer Usage
 TheCaseSolutions.com



Activity Design on Assistive Tech Device
 Philip is a kindergarten. He uses a wheelchair because he can't walk and has difficulty using his hands.
 Philip wants to talk to others and participate in daily activities.

Assistive Tech in Education
 AT has increased the ability for students with disabilities to learn and relate to others in the classroom setting
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Let's hear from you! Pair Share

What do you know about assistive technology?
 Do you or someone you know, have a disability?
 What's your experience working with children with disabilities?
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What is Assistive Technology?
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Students and Teachers Perceptions about AT

Students and teachers' perceptions about AT
 TheCaseSolutions.com

How does assistive technology affect children's development?

• Social-emotional development
 • In education
 TheCaseSolutions.com

Text-to-speech

• Scheja, McCullum, Hsieh, Chhabra, and Singha (2017)
 • Examined 4 students battling while reading, learning, writing, and silent reading
 • Study looked at what would happen if listening while reading was extended
 • They found text-to-speech improved reading comprehension
 • When students listen while reading the text, it helped them process information easier



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 • Efforts toward having these types of technological devices in schools reflect a movement toward better understanding relationships between specific technology applications and positive classroom outcomes for students with disabilities.

Where can assistive technology be used?
 Home and School Environment
 Schools to support setting for students because it's where children have highest demands
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Who is assistive technology best for?
 People with disabilities
 Multi-sensory or low cost or portable
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Two Types of AT
 Text-to-Speech
 Computer Usage
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Social Transition
 TheCaseSolutions.com

Reading Children
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• Schep, Lisa Benmann, and Susan King
 • examined the success of speech-generating devices in classroom performance
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Students and Teachers Perceptions about AT
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How does assistive technology affect children's development?
 • Social-emotional development
 • In education
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 What's your experience working with children with disabilities?
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What is Assistive Technology?
 TheCaseSolutions.com

Assistive Tech in Education
 AT has become the ability to interact with disabilities by using and make it fun when in the classroom setting
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Activity: Design an Assistive Tech Device
 Philip is a kindergartener. He uses a wheelchair because he can't walk. He can't talk and has difficulty using his hands.
 Philip wants to talk to others and participate in daily activities.
 TheCaseSolutions.com

Computer Usage
 TheCaseSolutions.com

Electronics AT Use in classroom
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 • compared both group and individual feedback with the use of two different types of technology
 TheCaseSolutions.com



Text-to-speech
 • Schuch, McCallum, Hain, Oberholzer, and Singua (2007)
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Let's hear from you!

Pair Share

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What do you know about assistive technology?

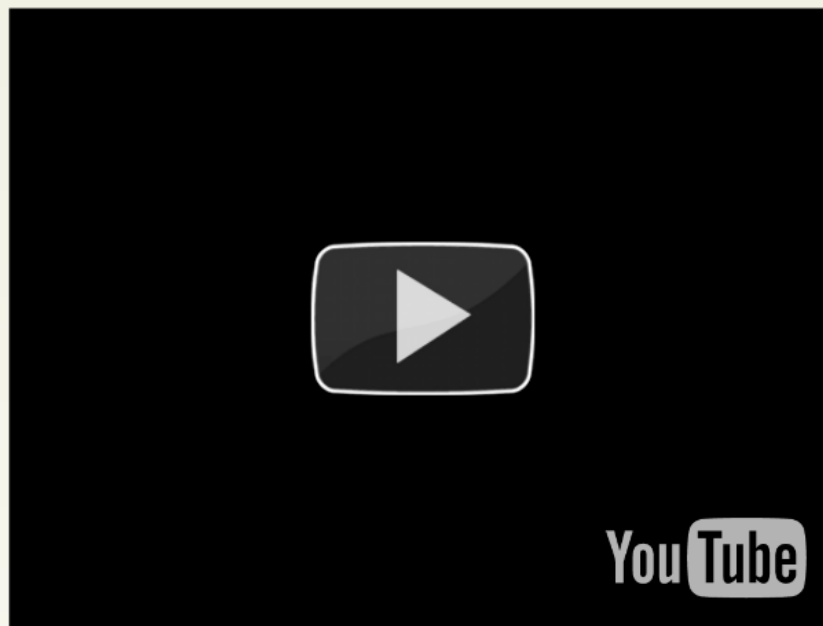
Do you, or someone you know, have a disability?

What's your experience working with children with disabilities?

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What is Assistive Technology?



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ASSISTIVE TECHNOLOGY

Who is assistive technology for?

People with disabilities

Much research is from users'
perspectives

[http://childtrends.org/?
indicators=children-with-limitations](http://childtrends.org/?indicators=children-with-limitations)

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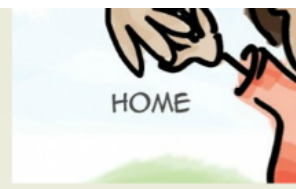
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Home and School Environment

School is a popular setting for studies because it's where children have highest demands



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- Social-emotional development
- In education

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 Multisensory or low-cost alternatives
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 Computer Usage

Social Emotional

Reading Children

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Computer Usage



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Assistive Tech in Education
 AT has become the most used tool for students with disabilities to learn and relate to the school setting



Effectiveness AT Use in classroom



Students and Teachers Perceptions about AT



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What is Assistive Technology?



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 • Schwa, McCallum, Hain, Chhabra, and Singua (2007)
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