



Assistive Technology Research to Practice Bridge

Considerations for supporting the translation of research into practice –
an important discussion.

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Center on Technology and Disability

Technology Solutions for Early Childhood...The Future is Now

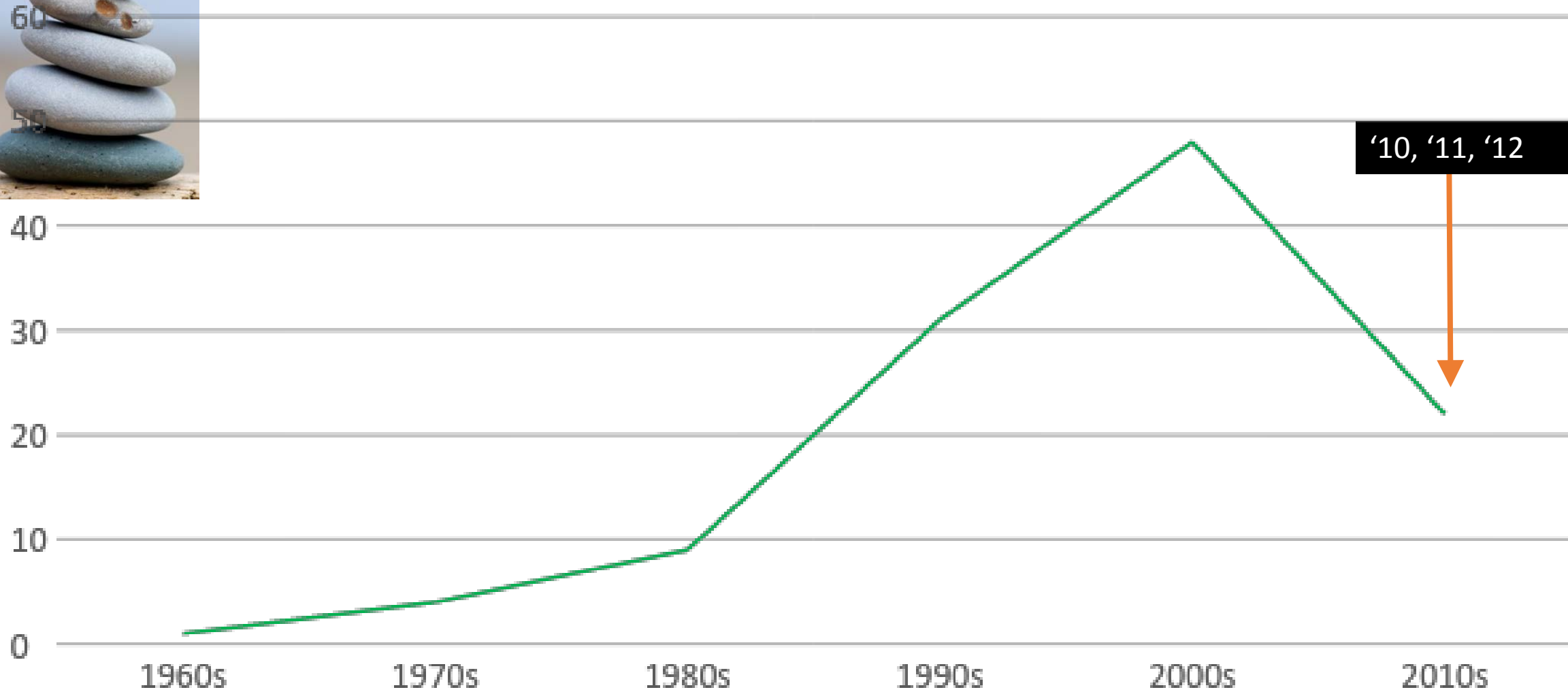




Evidence indicate that Assistive Technology (*services and devices*) helps children, regardless of age or disabling condition to **PARTICIPATE IN EVERYDAY LIFE ACTIVITIES**; and therefore grow and develop.



Studies Examining the Use of Assistive Technology Devices by Young Children with Disabilities





Results of 2013 meta analysis of 109 studies of AT use by 1023 children 3 to 8 years of age:

Dunst, Trivette, Hamby, Simkus, 2013



Results of 2013 meta analysis of 109 studies of AT use by 1023 children 3 to 8 years of age:

AT improved child outcomes in cognitive, social, communication, literacy, motor, adaptive skills & AT increases in engagement in learning activities.

Regardless of age or level of disability, AT is effective in promoting development.

Dunst, Trivette, Hamby, Simkus, 2013



Results of 2013 meta analysis of 109 studies of AT use by 1023 children 3 to 8

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Systematic Review of Studies Promoting the Use of Assistive Technology Devices by Young Children with Disabilities



Carl J. Dunst
Carol M. Trivette
Deborah W. Hamby
Andrew Simkus

Tots N Tech Research Brief

the use of the technology (Judge & Parette, 1998; Mistrett, 2004). According to Campbell, Milbourne, Dugan, and Wilcox (2006), assistive technology includes both adaptations to readily available items (e.g., spoons, car seats) and the use of specialized devices (e.g., switch interfaces, power wheelchairs). The effectiveness of different



Benefits of AT use





Benefits of AT
use



Actual
AT use

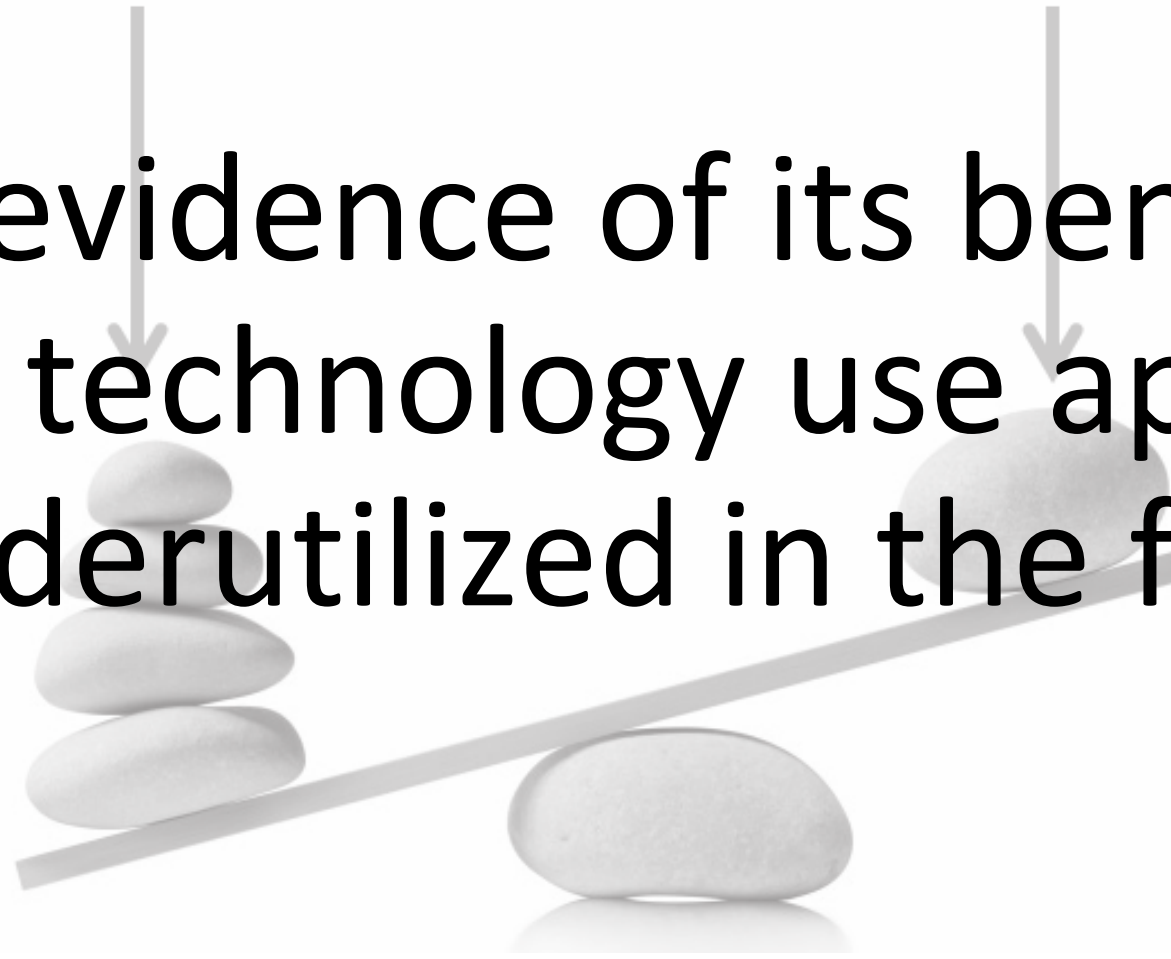




Benefits of AT
use

Actual
AT use

Despite evidence of its benefit,
assistive technology use appears
to be underutilized in the field.





Benefits of AT
use



Actual
AT use





If...
Then...
Hypothesis

Benefits of AT
use



Actual
AT use





Myths often curtail Assistive Technology use with young children



AT can only be used in a setting
where an AT specialist is
available

MYTH



Myth Buster

Myth Buster Resources

SPECIALIST

AT can and should be used by multiple professionals and family members across a variety of routines and activities and environments (home, school, community, etc.)

CARA's Kit (for Preschoolers and for Toddlers)

http://inclusioninstitute.fpg.unc.edu/sites/inclusioninstitute.fpg.unc.edu/files/handouts/Milbourne_SA%20CARAs%20Kit%20NECTAC%202012.pdf

http://www.kirkwood.edu/pdf/uploaded/1163/caras_kit_7_adaptation_lessons.pdf

CONNECT Module -

<http://community.fpg.unc.edu/connect-modules/learners/module-5>

The IRIS Center - Early Childhood Environments:
Designing Effective Classrooms

<http://iris.peabody.vanderbilt.edu/module/env/#content>



A child must be “old enough” to
benefit from AT

MYTH

Myth Buster

Myth Buster Resources

AGE

Use of AT for even a short time has been shown to yield positive outcomes even for the youngest child/children

Video - SLP working with 18 month old twins using Vantage Lite (2 min 30 sec)

<http://www.youtube.com/watch?v=7eXD-6TJJ7I>

Video - Maya's Journey (10 min)

http://www.youtube.com/watch?v=UyGr7_B2Nrk

Video - Babies Driving Robots: Dr. Cole Galloway's Breakthrough Research (3min)

<https://youtu.be/PQnPclGY02I>



AT comes from specialized sources

MYTH

Myth Buster

Myth Buster Resources

SOURCE

As the world of AT and IT and ET collide more universal technology is being developed for all learners not just learners with disabilities.

http://www.fisher-price.com/en_US/brands/laughandlearn/products/66016

Tiggly shapes <http://tiggly.com/> (sold in Apple stores)

“Ideas to Share” on the Tots N Tech web site
www.tnt.asu.edu

[Go Baby Go](#) providing young children mobility access

[fabricATe](#) a maker-movement approach to making low- and light-tech AT



There are prerequisites to the use of AT that a child must have before considering AT

MYTH



Myth Buster

Myth Buster Resources

FIRST

There are NO prerequisites to the use of AT

The notion of presuming competence - Emma's Hope Book - Blog

<http://emmashopebook.com/2013/05/14/parenting-presuming-competence/>

Go-Baby-Go at UD

<https://www.youtube.com/watch?v=qcZtW18WgtE>

(5min) and

<https://www.youtube.com/watch?v=5twOYebytX4> (1

min) and

<https://www.youtube.com/watch?v=EH1BA792PQc>

(2min) and

<https://www.youtube.com/watch?v=f6D860rsV9w> (2min)



Assistive Technology **IS** effectively being used with children regardless of age or level of disability



Assistive Technology **IS** effectively being used with children regardless of age or level of disability

But... NOT OFTEN ENOUGH.



Assistive Technology **IS** effectively being used with children regardless of age or level of disability

But... NOT OFTEN ENOUGH.

So...IT IS OUR RESPONSIBILITY TO TEACH and BUST those MYTHS!



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Suzanne A. Milbourne 11/16

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