

Rethinking assistive technology for students with diverse learning needs.

IDEAS

...

Fiona Thomas
Texthelp



TEDx Talk - Todd Rose

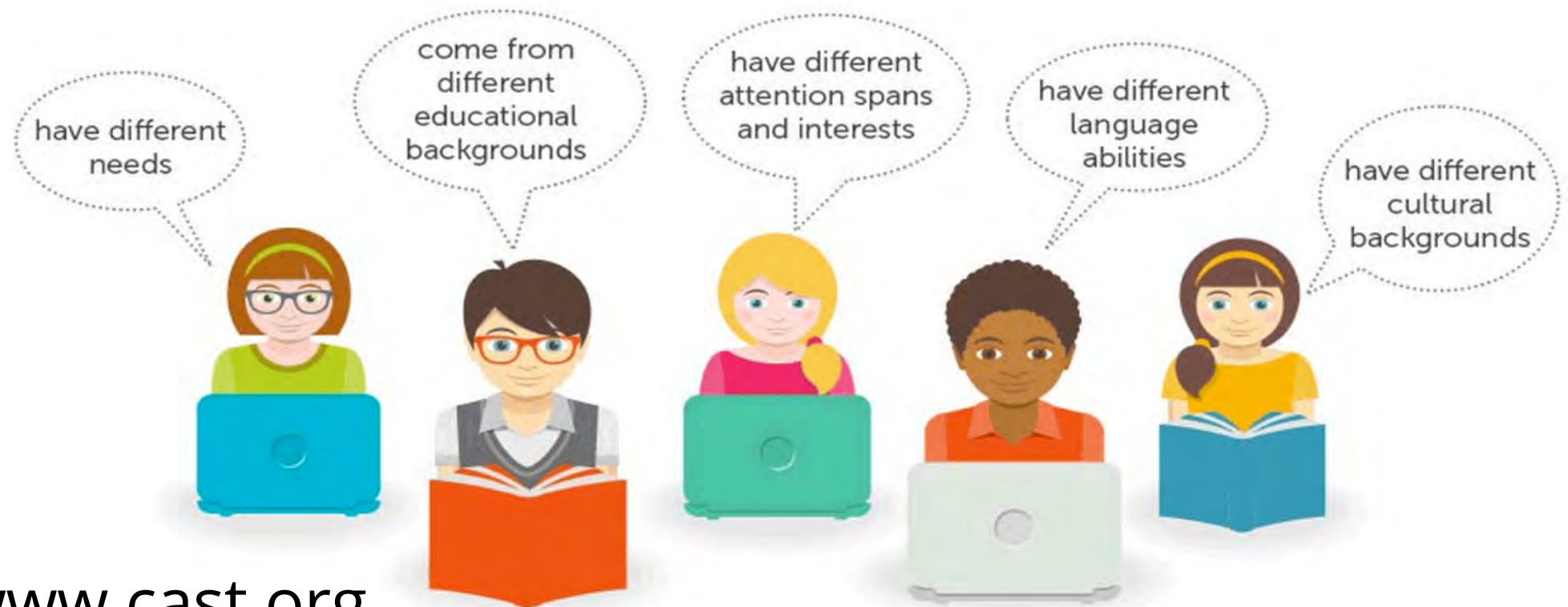
The myth of average.

TED^x SonomaCounty
an independently organized TED event



WHY UNIVERSAL DESIGN FOR LEARNING?

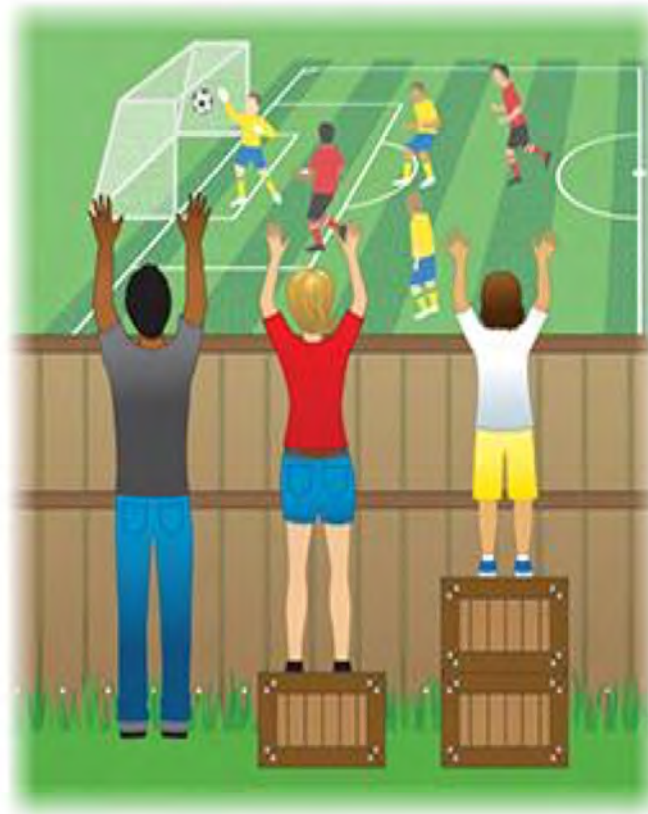
Classrooms are filled with students who:



www.cast.org



Equality



Equity



Accessibility

How will/ do your students....



Greg Alchin 2018

An illustration from a top-down perspective showing a light blue surface with several hands interacting with various digital devices. The devices include tablets and smartphones, each displaying a large, colorful, cloud-like shape. The shapes are blue, green, red, purple, orange, and teal. Some hands are pointing at the shapes, while others are typing on keyboards. The text "Differentiation done digitally" is centered in the middle of the image in a white, sans-serif font.

Differentiation done
digitally

SETT Framework

Joy Zabala

SETT Framework

- Developed by Joy Smiley Zabala
- Group of questions to guide Assistive Technology Decision Making
- Focuses on:
 - The Student
 - The Environment
 - The Tasks
 - The Tools
- Be as specific as possible when answering questions

Student & Environment Tasks. Tools. Flexibility



Guiding principle

Assistive technology is related to function not a specific disability.

Joy Zabala



Accessibility

Everyone can acquire the same information, engage in the same interactions and enjoy the same services.....

in an equally effective and integrated manner, with substantially equivalent ease of use.....

Freemium

Freemium is a pricing strategy by which software, apps and/or services are at first offered free of charge for a basic version of the tool, but a payment is required to unlock the more advanced features. (which are considered "premium").

Digital Technologies

Student & Environment

Tasks. Tools. Flexibility



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Accessibility features of devices & platforms



Apple Accessibility

Windows accessibility

Find out how Windows accessibility features help you do more

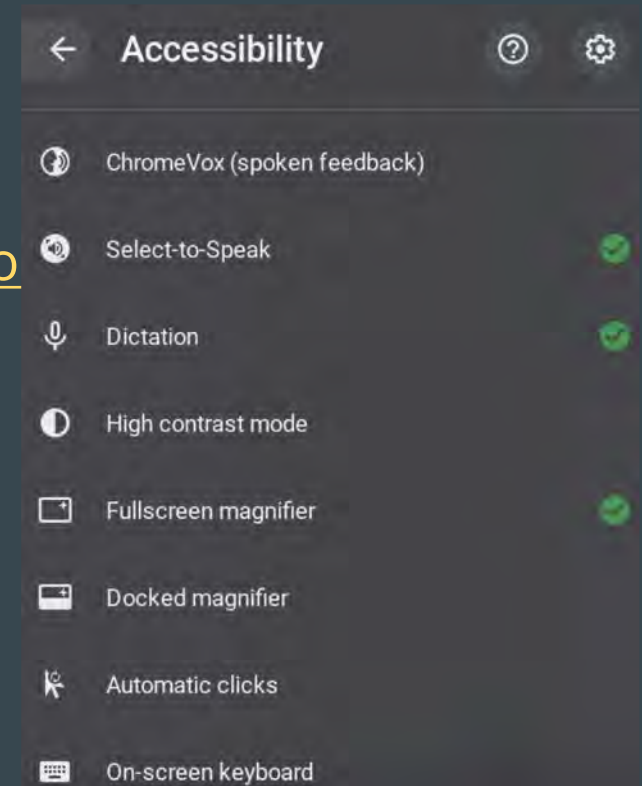
Google Accessibility



Chromebook
Accessibility

Where to get more info on Google Accessibility

- ✓ Google Accessibility site: google.com/accessibility
- ✓ [G Suite User Guide to Accessibility](#)
- ✓ Chromebook Help Center: [Personalize your Chromebook Accessibility](#)
- ✓ [Chrome & Chrome OS Accessibility Video Series:](#)
<https://goo.gl/IBcDFj>
- ✓ [Chrome Web Store Accessibility Category](#)



Apple Accessibility



Apple Accessibility

<https://www.apple.com/au/accessibility/>

iPad Accessibility

<https://www.apple.com/au/accessibility/ipad/>

Microsoft Accessibility

All in one link Windows 10, 8 and 7

<https://www.microsoft.com/en-gb/accessibility/windows>

Office accessibility

https://www.microsoft.com/en-us/accessibility/office?activetab=pivot_1%3aprimar2

Accessible Educational Materials



**National Center on
Accessible Educational Materials**

[CAST](#)

Texthelp Tools



[Web](#)

[R&W for Google](#)

[R&W for Tablets](#)

[R&W for Windows](#)

[Blog](#)

[Transform PDF's](#)



[Web](#)

[EquatIO Google](#)

[EquatIO for Windows](#)

[EquatIO Mathspace](#)

[Blog](#)

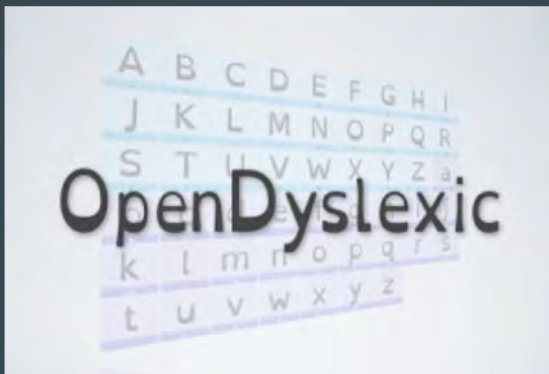
[EquatIO Mathspace](#)

Personalising Reading



Display Options

Allow learners to adjust the content within the same media in order to make the information easier to see and process. These options include text resizing, font selection, and spacing adjustments.



Display Options

StayFocused

AdBlockPlus

Dualless

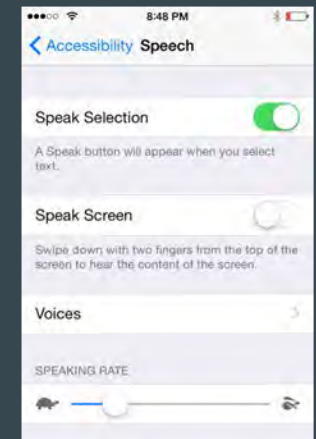
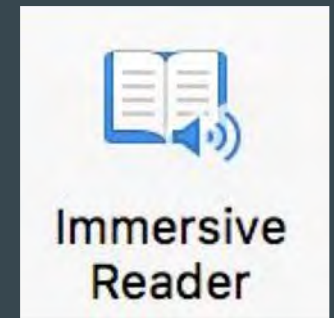
Bee Reader



Personalising Reading

Text to Speech

Transform the information into a different medium (audio) in order to support challenges with decoding or allow the information to be consumed without the need to look at a screen.



Personalising writing

Texthelp Read&Write

Across Platforms &
Devices

Word prediction & Voice typing



Voice Typing/ Dictation

Google



Apple Mac & iOS



Microsoft/ Office

Personalising maths

EquatIO

Desmos

MathType

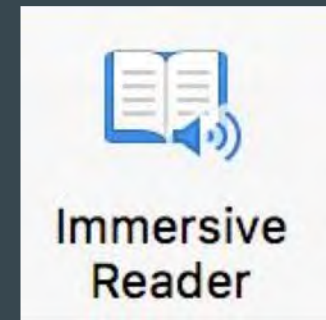
Immersive Reader

G Suite Tools

Web based

Microsoft OneNote

Word Doc's



Reading on an E-Reader App

Popular e-reader apps learners can use to acquire and read e-books include:

- [iBooks](#) (free): Mac, iOS
- [Amazon Kindle](#) (free): Windows, Mac, iOS, Android
- [Google Play Books](#) (free): iOS, Android
- [Nook](#) (free): Windows, iOS and Android
- [Kobo](#) (free): Windows, Mac, iOS and Android
- [Libby](#) by Overdrive (free): Windows, iOS and Android
- [Moon+ Reader](#) (freemium): Android
- [Voice Dream Reader](#) (commercial): iOS and Android

Text Leveling

Text leveling provides materials for instruction with simplified vocabulary and sentences that are not as complex as materials written on grade level. It is important to ensure that the content aligns with the original materials and meets the expectations of the grade level standards.

Web pages and extensions

Web pages and extensions

Summarisers

Text Compactor

Shorten

Read&Write for Google

Text Complexity

Rewordify

Newslea

Tween Tribune

Simple English Wikipedia

Text Compactor



- Type or paste text into Text Compactor text box
- Choose the % you wish to compact text
- Step 3 it will appear in Text Compactor at reduced percentage.

Reduces number of words not complexity

Text Compactor

Free Online Automatic Text Summarization Tool

[Home](#)[About](#)

Follow these simple steps to create a summary of your text.

Step 1

Type or paste your text into the box.

Why cognitive load theory? To improve student performance, teachers need to understand the evidence base that informs and helps improve their practice. An area of research with significant implications for teaching practice is cognitive load theory. Cognitive load theory was recently described by British educationalist Dylan William as 'the single most important thing for teachers to know' (William 2017). Grounded in a robust evidence base, cognitive load theory provides theoretical and empirical support for explicit models of instruction. Research in cognitive load theory demonstrates that instructional techniques are most effective when they are designed to accord with how human brains learn and use knowledge. This paper describes the research on cognitive load theory and what it means for more effective teaching practice. The first part of the paper explains how human brains learn according to cognitive load theory, and outlines the evidence base for the theory. The second part of the paper examines the implications of cognitive load theory for teaching practice, and describes some recommendations that are directly transferable to the classroom.

Step 2

Drag the slider, or enter a number in the box, to set the percentage of text to keep in the summary.

30 %

Step 3

Read your summarized text. If you would like a different summary, repeat Step 2. When you are happy with the summary, copy and paste the text into a word processor, or [text to speech program](#), or [language translation tool](#)

Why cognitive load theory? The first part of the paper explains how human brains learn according to cognitive load theory, and outlines the evidence base for the theory. The second part of the paper examines the implications of cognitive load theory for teaching practice, and describes some recommendations that are directly transferable to the classroom.

Text Compactor
Free Online Automatic Text Summarization Tool

Rewordify

Reduces complexity of text.

Yellow highlighted text can be changed.

Rewordified text

Stats

Share

Print / Learning activities

Parts of speech

Why thinking-related load explanation (of why something works or happens the way it does)? To improve student performance, teachers need to understand the (event(s) or object(s) that prove something) base that informs and helps improve their practice. An area of research with significant effects/results/suggestions for teaching practice is thinking-related load explanation (of why something works or happens the way it does). Thinking-related load explanation (of why something works or happens the way it does) was (not very long ago) described by British educationalist Dylan Wiliam as 'the single most important thing for teachers to know' (Wiliam 2017). Grounded in a strong and healthy (event(s) or object(s) that prove something) base, thinking-related load explanation (of why something works or happens the way it does) provides (related to ideas about how things work or why they happen) and (based on actually seeing things) support for clear models of instruction. Research in thinking-related load explanation (of why something works or happens the way it does) demonstrates that instructional ways of doing things are most effective when they are designed to agreement/peace with how human brains learn and use knowledge. This paper describes the research on thinking-related load explanation (of why something works or happens the way it does) and what it means for more effective teaching practice. The first part of the paper explains how human brains learn according to thinking-related load explanation (of why something works or happens the way it does), and outlines the (event(s) or object(s) that prove something) base for the explanation (of why something works or happens the way it does). The second part of the paper examines the effects/results/suggestions of thinking-related load explanation (of why something works or happens the way it does) for teaching practice, and describes some recommendations that are directly move (from one place to another)able to the classroom.

Enter English text or a web page to simplify:

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Rewordify text

[Rewordified text](#)[Stats](#)[Share](#)[Print / Learning activities](#)[Parts of speech](#) texthelp®

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Rewordify + Text Compactor

Rewordified text

Stats

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Print / Learning activities

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