



WELCOME

“LD Resources Foundation is committed to overcoming barriers, and providing access to knowledge, for adults with learning disabilities.”

From our inception in 2001, our non-profit was focused on bringing Assistive Technology (AT) to students in high schools and colleges.

We created LDRF award programs to enable students to get free Assistive Technology.

We donated technology to colleges and train their staff and students.

We continue to advocate for universal design in the classroom.

Zahavit Paz, Co-founder of LDRFA.org



WE ARE...

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Choosing the right Assistive Technology for your students is key

An overview of the different types of critical assistive technologies needed to provide support for student success in all academic settings



Special Training for Students with Learning Disabilities Transitioning to College



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PURPOSE/HYPOTHESIS

In order to reduce the high drop-out rate of LD students upon their transition to post secondary education, the LD Resources Foundation designed a 3-year program to provide special training for 12th grade students with IEP (Individualized Education Program) for learning disabilities.

Planning the transition for many high school students with learning disabilities (LD) or attention deficit hyperactivity disorder (ADHD) is often difficult.

As compared to their typical non-LD peers, Students with LD/ADHD experience:

- A higher drop out rate from post secondary education (Ancitil, Ishikawa, & Scott, 2008)
- A lower graduation rate, and
- An extended period of study from six to eight years to complete a degree.

Studies indicate these outcomes can be attributable to the major difference in the education environment at college in comparison to high school. Unlike the disability accommodations and support provided in a high school IEP the post-secondary environment is very different and governed by a set of different federal laws and regulations than in high school. (ADA Amendments Act of 2008).

In order to reduce the high drop-out rate of LD students upon their transition to post-secondary education, students need to effectively self-advocate for support services and have direct interaction with the institution's disability office (DS) to obtain these services. Students require a heightened awareness of the College workload and need to gain confidence in obtaining and utilizing resources such as Assistive Technology (AT) and skills for success.

Often high school students resist using assistive technology ("AT") because of its stigma, or they may not have been made aware of the existence of AT by their teachers.

Most high school students with individualized education programs have access to AT. However, not enough of the LD students are actually using AT tools.

SUBJECTS

Thirty-six high school students in the 12th grade who were receiving IDEA services for a specific learning disability were interviewed to participate in the pilot program. The students were selected based on the experience that almost all graduates of this school go on to attend post-secondary education in a two or four year college program.

MATERIALS/METHODS

A survey questionnaire was developed for the students to self-assess their preparedness for post-secondary education prior to the commencement of the program-start of the Spring 2012 (March 2012) semester and post completion of the program in May 2012. In a semi-structured interview a school staff member provided the students with assistance in the completion of the survey. Twenty-two students completed the questionnaire pre and post participation in the program.

The student survey included questions ranked using a psychometric Likert scale and questions using a phenomenological approach.

1. Do you feel confident that you have the skills you need to succeed in college?

1 not confident to 5 very confident

2. What area do you feel most confident about?

Organization, knowledge of academic content, use of technology, social competence, writing ability, or anything else you think is important

3. What are some challenges you face, or think you might face, in college?

Schedules, professors, writing, reading, anything else you think is important

4. Pick one of the challenges you listed and tell us how you might overcome it.

5. Do you think technology will help you succeed in college?

1 not really to 5 absolutely

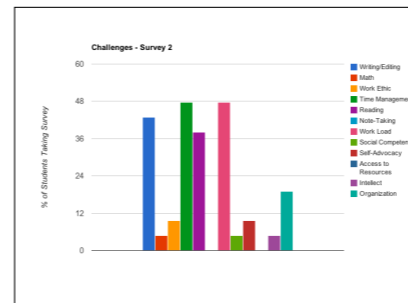
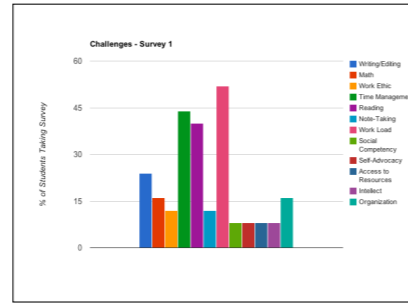
6. If you think you will use technology to help you succeed, what kinds of technology will you use?

ipad, computer, google apps, read aloud, etc.

The Researchers in collaboration with the school faculty developed a program for College Transition and Assistive Technology Awareness for the Students:

1. Designed and implemented activities to familiarize the students with available Assistive Technologies (AT) students about challenges they will face in college.
2. Developed a variety of activities focused on using AT within the "regular" school environment
3. Encouraged students to self-advocate utilizing role playing, applying to LD Resources for AT

A cohort of thirty-six students participated in the program with twenty-two students completing the March 2012 survey, pre participation in the program and twenty-two students completing the May 2012 post participation survey.

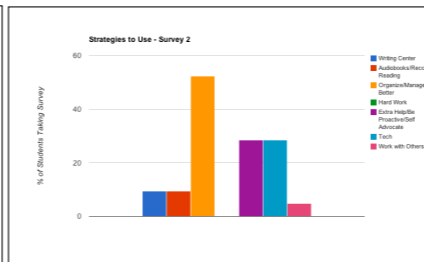
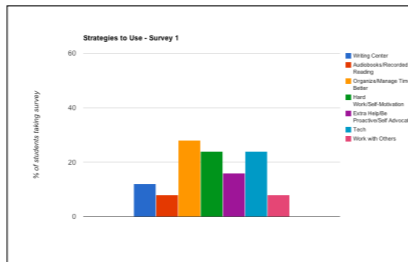


Results for question 3. What are some challenges you face, or think you might face, in college?

Of significance is the change in the percentage of students that recognize the challenges in subject areas that they would face in college post participation in the program.

% Change	Challenge
79% increase	Writing/Editing
10% increase	Time Management
100% decrease	Note - Taking
25% increase	Self-Advocacy
100% decrease	Access to Resources
18% increase	Organization

As a result of the program the students felt confident that they now had the knowledge to access resources and improved their Note Taking skills.

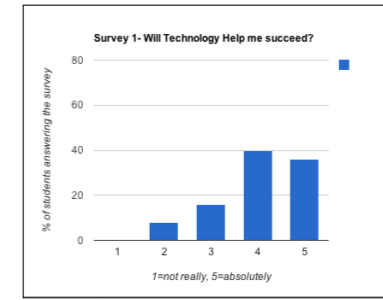


Results for question 4. Pick one of the challenges you listed and tell us how you might overcome it.

Of significance is the student response to strategies that they would utilize to overcome challenges

% Change	Strategy
46% increase	Organize and Manage Time Better
100% decrease	Hard Work
81% increase	Extra Help/Be Proactive/Self Advocate
17% increase	Technology

Students recognized that just hard work would not guarantee success without developing organization and time management skills, obtaining and advocating for help and utilizing assistive technology.



Results for question 5. Do you think technology will help you succeed in college?

In March of 2012, less than 40% of the students indicated that technology would absolutely help them succeed in college.

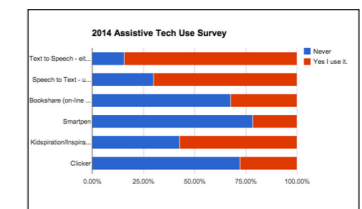
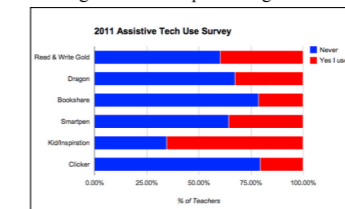
In the May 2012 survey post participation in the program and receiving instruction on the benefits of AT, 60% of the students indicate that technology would absolutely help them succeeded in college.

CONCLUSIONS

As a result of this pilot project, in the Spring of 2012, there was a pedagogical change to incorporate Assistive Technology in the curriculum for the Middle School LD student in addition to the High School rather than having a concentrated assistive technology awareness and Post Secondary Education Transition program for the high school seniors. The initiative provides a one to one laptop program in the high school and more recently a one to one iPad program in the 7th and 8th grade. Additionally the school hired an instructor whose primary goal is to train teachers and students to use assistive technology on a regular basis. There is a marked improvement in the Teacher use of Assistive Technology in 2014 as compared to utilization in 2011.

Pedagogical changes to prepare students with LD and ADHD for success in post-secondary education need to begin early at the Middle School level to assist students to develop the skills and strategies needed for success.

Additional study is needed to determine the outcome of early intervention programs to develop these skills and strategies on the dropout and graduation rate of LD ADHD students.



Acknowledgement

Special thanks to LD Resource Foundation, Inc for providing the funding and research resources for this research project.

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Key to Life

Assistive Technology is key to eliminate students' barriers. AT helps students realize their full potential and turn their academic frustration into accomplishments.

AT Empowers LD students to master their skills and develop a game plan for success in mainstream, academic or vocational settings.











TEXT TO SPEECH

- When do you use Text-to-Speech (TTS)?
(program that generates synthesized audio output with appropriate cadence and intonation)
- Elementary
- MS/HS
- College
- Vocational



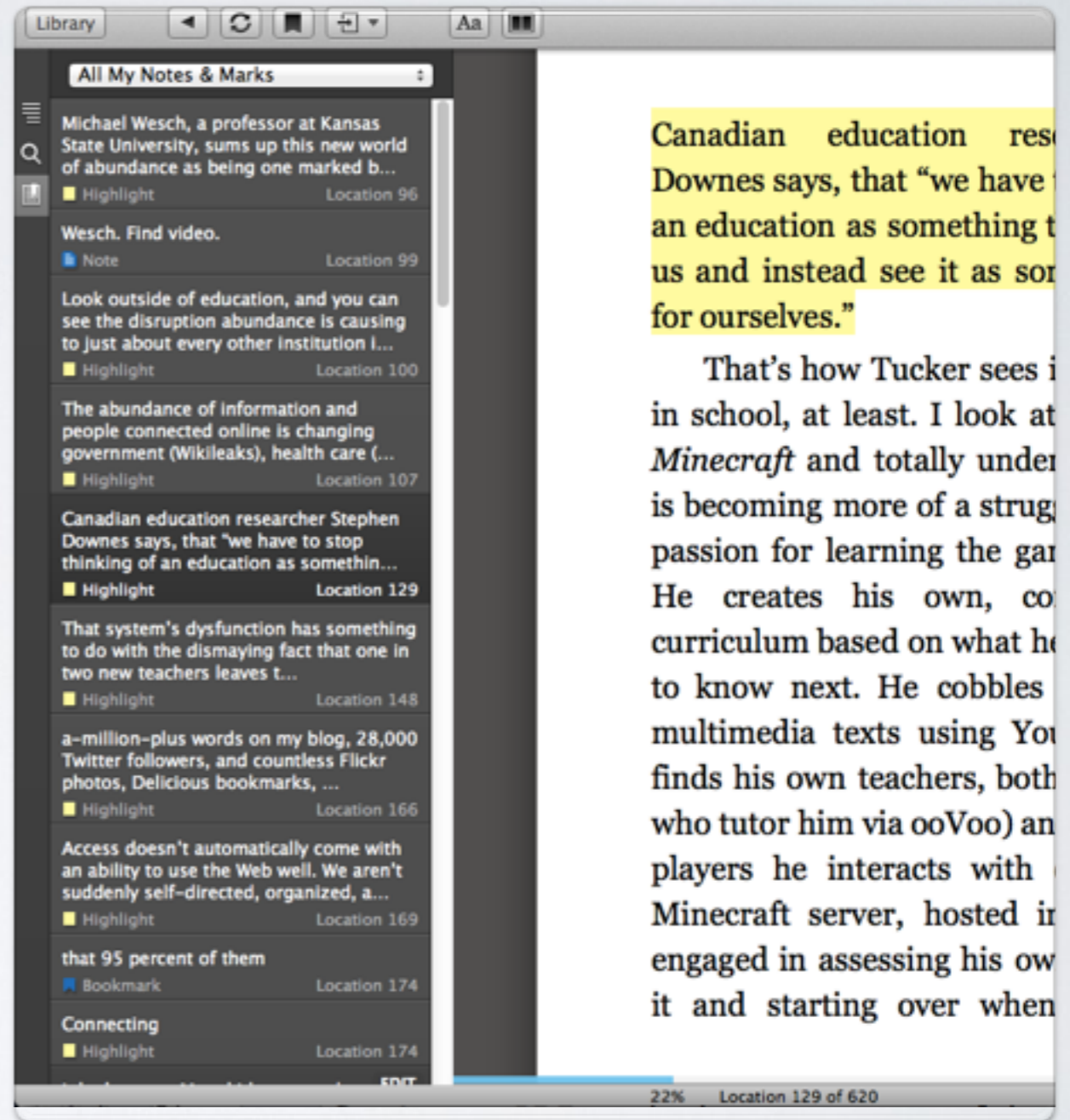
FREE BUILT-IN TEXT TO SPEECH

- Now it is part of your Operating System - all types of devices
 - Mac/iPad - in Settings under Accessibility 
 - Windows - in Control Panel under Ease of Access 
 - Android - Settings - Language and Input 
 - Chromebook - in Settings under accessibility 
- Browsers have it built in:
 - Safari has great TTS - just right-click after highlighting 
 - Chrome TTS has several free extensions 
 - Firefox -Add Extensions -Text to Speech
 - Explorer - No plugin but can use Windows extensions



WHY USE E-BOOKS?

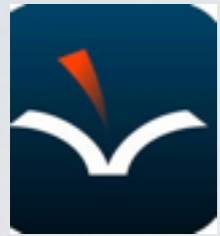
- E-books allow you to
 - search the text
 - interact with the text with highlights and annotation
 - export highlights and notes for further study
 - use your highlights to find a particular section of a text
 - Very useful for MS and above





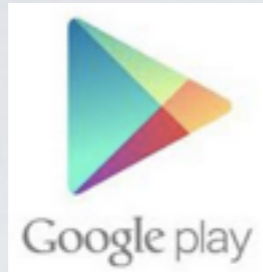
RECOMMENDED TEXT TO SPEECH APPS

- **Voice Dream** - available for iOS and Android
 - control over how much text you see
 - control highlight amount, color and background
 - multiple fonts including Dyslexia
 - compatible with the best voices, multiple languages
 - can load content from website, Gutenberg, Dropbox, Google Drive and Bookshare to name a few.
 - highlighting and annotation available and can be exported
 - great for all ages





E-READERS AND E-BOOKS



- Google Play, Kindle, iBook and Nook,
- The apps are free.
- All but iBooks available on multiple platforms
- They all have dictionary, highlighting and annotation options
- Text to speech is not very seamless but can be done
- If there's no other source (such as Bookshare) you can make it work



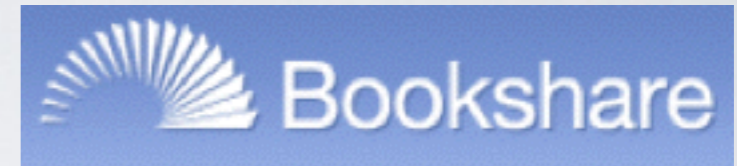
SOURCES OF E-BOOKS

-  www.bookshare.org
 - Free ebooks, including textbooks for people with reading disabilities.
 - Requires registration and proof of disability. Free for all students in all academic settings.
 - Free digital versions of 521,371 books and textbooks also available in daisy format.
 - You can submit a request for books to be digitized can take 4-6 weeks.
 - Option to download a pure audio version of a text
 - Not good for picture books, so better for upper elementary ages and above



READING BOOK-SHARE BOOKS

- Resources to read Bookshare books



- Several free options on their website
- Bookshare books are also compatible with many other assistive technology apps, programs and suites - DAISY format
- There are options for every type of device from phones to tablets to computers



FREE E-BOOK LIBRARIES

- Free Libraries – No Registration-mainly for MS and above
 - Project Gutenberg -offers over 53,000 ebooks
<http://www.gutenberg.org/>
 - Google Scholar free published articles.
<http://scholar.google.com>
 - Textbooks (k-12)
<http://www.ck12.org/flexbook/>
 - Internet Archive
<https://archive.org/index.php>



FREE E-BOOK LIBRARIES

- **Free Libraries – These require registration before use**

New York Public Library, has ebooks and audiobooks,

<http://ebooks.nypl.org/>

The Andrew Heiskell Library requires registration and proof of reading disability offers several services.

<https://www.nypl.org/locations/heiskell>

The National Library Service for the Blind and Physically Handicapped.

<http://www.loc.gov/nls/>



AUDIO BOOKS



- **Learning Ally** - <http://www.learningally.org/>
 - Audio versions of over 80,000 textbooks and literature.
 - Offers membership to qualified students and individuals for an annual fee.
 - Reading Ally offers free software and apps for Android devices, iPad, iPhone or iPod.
- **Librivox** - <https://librivox.org/>
 - Audio recording of public domain books read and recorded by volunteers.
- **Audible**- <https://www.audible.com/>
 - high quality dramatic readings for a fee. Can be bought in conjunction with Kindle e-books and they will sync.



SPEECH TO TEXT

- Why and when do you try speech to text?
 - Elementary
 - MS/HS
 - College
 - Vocational



FREE SPEECH TO TEXT

- Now it's part of your Operating System or Browser
 - Mac - in Settings under Accessibility
 - iPad - Siri or microphone icon
 - iPhone - Siri or microphone icon
 - Windows - in Control Panel under Ease of Access
 - Android - Settings - Language and Input
 - Chrome - Add Extensions then turn them on
 - Firefox- none
 - Explorer - none, but can use Windows extension



SPEECH-TO-TEXT

- **Dragon** - the mainstream standard of Speech to Text
 - Dragon app- free - needs wifi
 - Nuance Software - Wifi not needed
 - Specific vocational packages available
 - Builds a personal voice profile to overcome accent or speech impediment issues.
 - Only for older students who intend to use STT a lot.



OTHER TOOLS TO HELP WITH WRITING

- For ES and MS students, writing doesn't have to be all words.
- Tablets make it easy to collect photos, graphs or videos from the internet and then create photo collage or slide presentation
 - gradually increase the amount of text in the presentation
 - use visuals to begin the task of sequencing the presentation



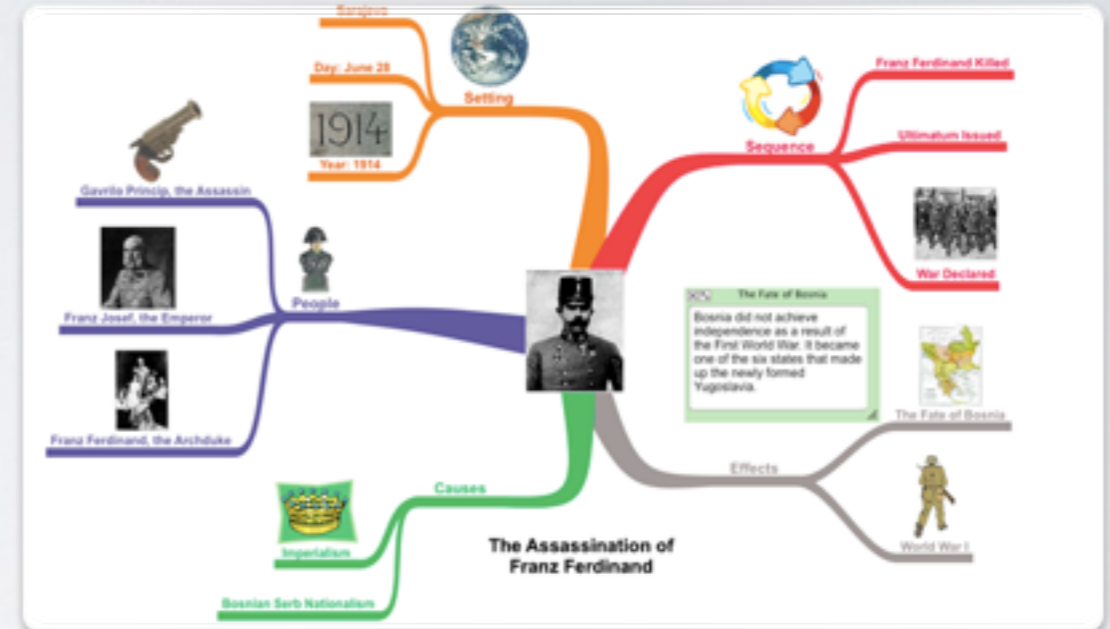
OTHER TOOLS TO HELP WITH WRITING

- For upper ES and older students
 - webs for brainstorming
 - word prediction that reads to you
 - echo typing - useful for all ES
 - speaking spellcheck and dictionaries
 - homophone checkers.



OTHER TOOLS TO HELP WITH WRITING

- Inspiration/Kidspiration/Webspiration
 - an oldie but a goodie
 - now available for mobile devices and Chromebooks
- allows you to make graphic organizers and switch to outline format and v.v.



The Assassination of Franz Ferdinand
On June 28, 1914, the heir to the Austro-Hungarian Empire, Archduke Franz Ferdinand was assassinated by Bosnian Serb nationalists. This event, combined with a complex network of international alliances, led to the First World War.

I. Setting

A. Sarajevo
Sarajevo is the capital of Bosnia. Bosnia was on the southeast extremity of the Austro-Hungarian Empire in 1914, right next to Serbia. Collectively, the area is known as the Balkans. Archduke Franz Ferdinand was in Bosnia on an official visit.

B. Year: 1914
Political unrest increasingly characterized Bosnia in 1914. The archduke had been warned that his visit to the region could result in trouble, even tragedy.

C. Day: June 28
Earlier in the day, Gavrilo Princip, a Bosnian Serb nationalist, had made an unsuccessful attempt at assassinating the archduke by throwing a grenade at his car. The police couldn't find him. By coincidence, the archduke's car drove by him once again later that same day. This time, Princip was able to fire fatal shots at the car, killing Franz Ferdinand and his wife, the Duchess Sophie.

II. Causes

A. Imperialism
Austria-Hungary exercised political control over Bosnia, a region within the Balkans, with which it had little or no historic or cultural ties. This was common of many of the world powers by the turn of the twentieth century. Countries conquered and dominated other countries and territories across the world. This led to native resentment and rebellion.



LITERACY SUITES

- For High School seniors, college and above.



Kurzweil 3000-firefly

TTS, highlighting and note taking (including voice notes), dictionary, word prediction, idea mapping, cross-out tool, can create audio file from text. Available for most platforms, including iOS. Includes a free firefly (web based access) account. Also has a customizable test-taking module that allows teachers to choose which AT features to allow during a test.



Texthelp - Read & Write

TTS, highlighting and note taking (including voice notes), dictionaries, homophone checker, speaking spellchecker, word prediction, idea mapping, echo typing. Available for most platforms, including iOS and Chrome.



LITERACY SUITES



Snap and Read Universal and Co:Writer

Chrome extensions or Software. Snap and Read provides TTS, highlighting and note taking, leveled reading, automated bibliographer, dictionary, and a teacher portal to view reading data. Works with Kindle Cloud Reader (on a laptop). Co:Writer provides word prediction, and STT. Has over 4 million topic dictionaries. Available for most platforms, including a limited iOS which is a version of Co:Writer.



Claro

ClaroRead is available for Mac, PC and Chromebooks. Limited versions are available for free for iOS and Chrome browser. A variety of features depending on which version you get. Includes TTS, dictionaries, homophone checker, speaking spellchecker, word prediction, idea mapping, echo typing. Prices: Individual \$100-250, Institutional is much cheaper, minimum 250 licenses.



PRODUCTIVITY TOOLS

- Multi-sensory presentations of information
- Organization
 - of materials
 - Study apps
 - Calendars



MULTI SENSORY LEARNING

- Everyone



- Smart TV or Apple TV or Roku or Echo - Streaming devices for video, news, youtube, etc...
- Voice recognition for searches



- ES and lower MS



- Brainpop
- NeoK12



- High School and College



- Khan Academy
- iTunes U





ORGANIZATION

TABLET VS. LAPTOP OR COMPUTER -

- younger students (ES/MS) work well with tablets
 - automatic saving
 - simple saving protocol
 - touchscreen
- transition very explicitly in HS so they have direct instruction in setting up folders and using them
- in both settings having some sort of classroom management system is very helpful
- transition to College - critical that student has access to organizational supports



ORGANIZATION

CLOUD STORAGE

- Keeps data organized and accessible
- Suites of services: Google, live.com, Yahoo
- Accessibly on multiple devices - Google Drive, Dropbox, iCloud
- Organizing Web resources: Evernote, Flipboard, Goodreader
- Start in MS with guidance



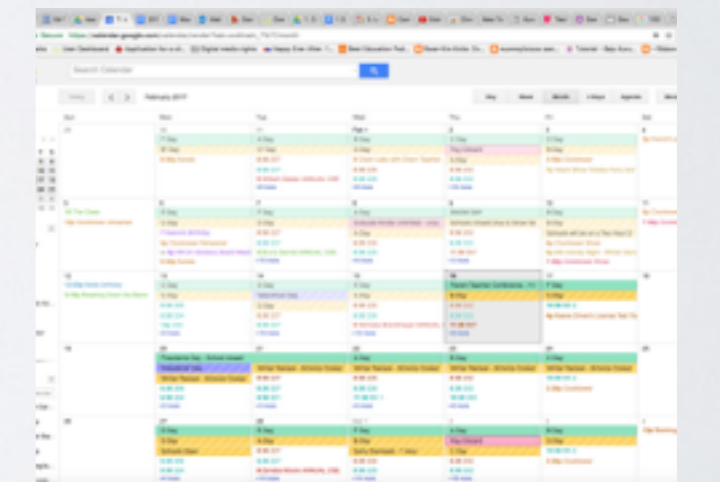
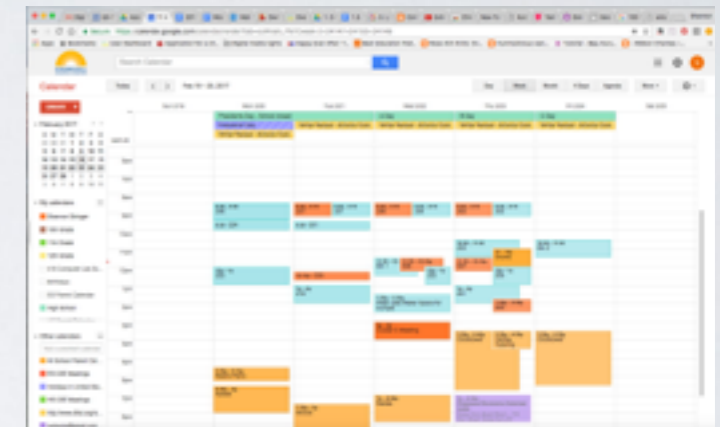
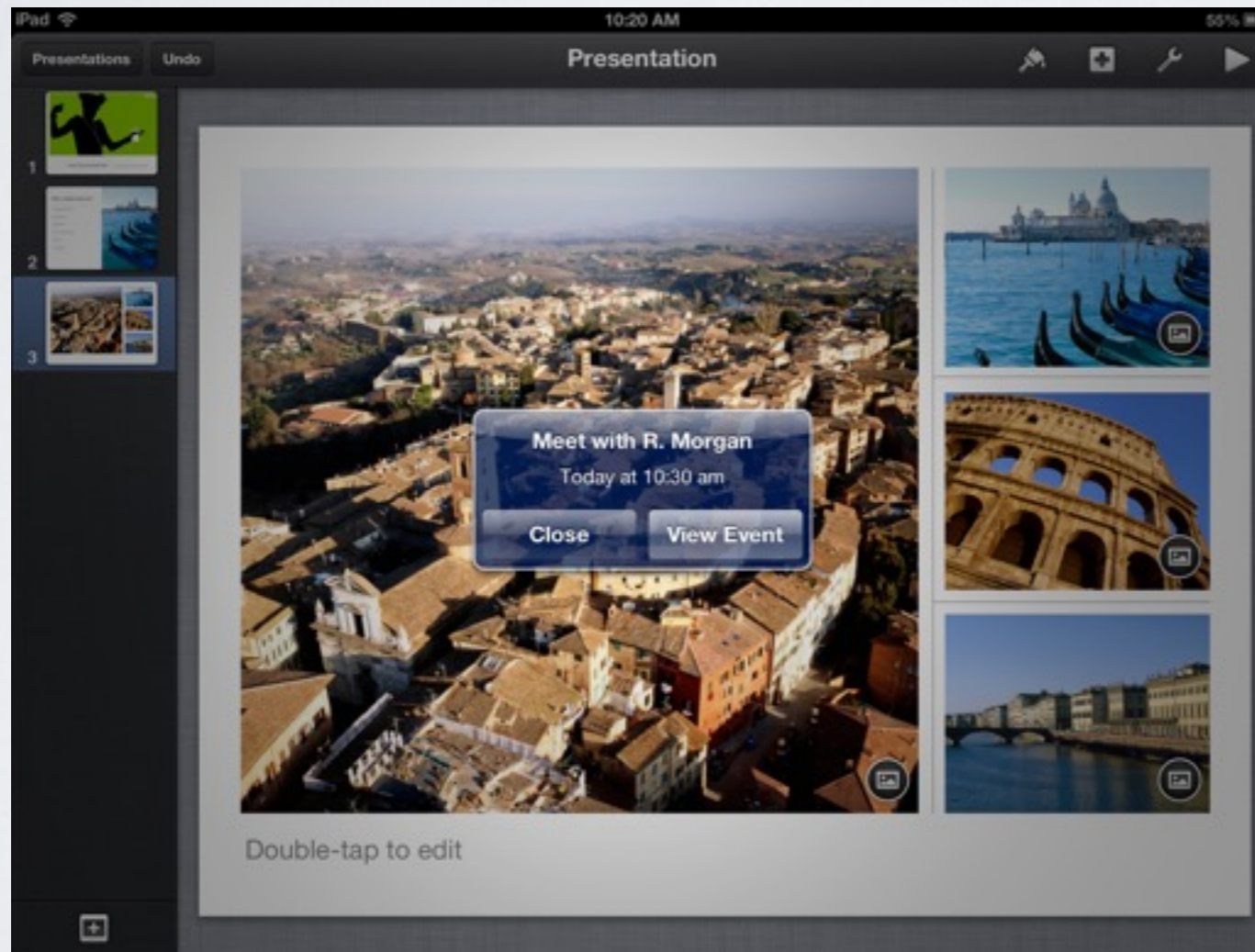
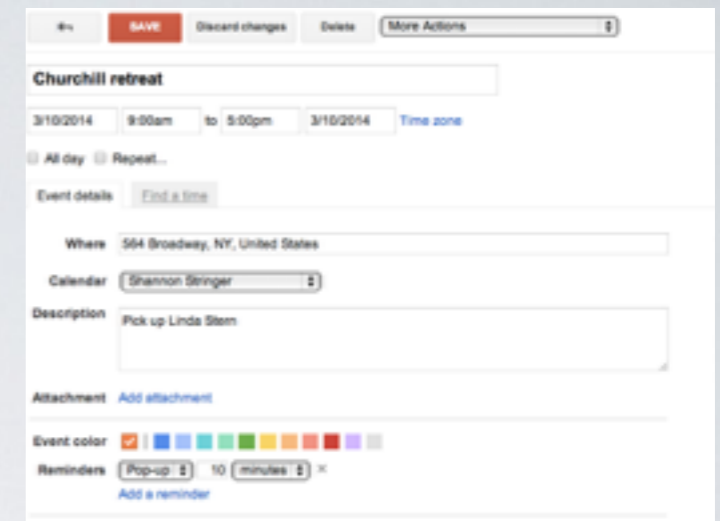
ORGANIZATION CLOUD STORAGE





ORGANIZATION CALENDARS

- Start in MS with guidance

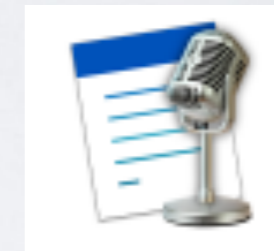




ORGANIZATION

ACADEMIC PRODUCTIVITY

- Start in MS with guidance
 - Flashcards
 - EasyBib app and website
- Notetaking with audio:
 - AudioNote,
 - Notability
 - Livescribe





ORGANIZATION

FLASHCARDS

- Can be web-based and share-able:
 - Quizlet
 - StudyBlue
- Some iBooks create flashcards of your highlights and notes (one on each side)
- Track success rates and eliminates those you get right



ORGANIZATION

BIBLIOGRAPHIES

Online resources:

- Endnote.com
- EasyBib.com
 - Now a Google Extension

Can create your whole bibliography or one citation.

The screenshot shows the EasyBib website interface. At the top, there is a navigation bar with tabs for 'Research BETA', 'Notes & Outline', 'Bibliography', and 'Citation'. Below this, there are sub-tabs for 'Website', 'Book', 'Newspaper', 'Journal', and 'Database'. The 'Book' tab is selected. A search bar contains the text 'catch 22'. Below the search bar, there are links for 'Manual entry' and 'Help', and a dropdown menu for citation styles with 'MLA (free!)', 'APA', and 'Chicago' visible. The main content area displays 'Book search results for catch 22:' followed by a list of search results. Each result includes the title, author, publisher, and year, along with a link to 'More about this source' and 'Find at your local library through WorldCat'.

EasyBib
by imagine easy

Research BETA | Notes & Outline | **Bibliography** | Citation

Website | **Book** | Newspaper | Journal | Database

[Manual entry](#) | [Help](#) | **MLA (free!)** | [APA](#) | [Chicago](#)

catch 22

powered by

Book search results for catch 22:

Catch 22
Joseph Heller - Brice Mattheussent - B. Grasset - 1985
[More about this source »](#) [Find at your local library through WorldCat »](#)

Catch 22: notes
Joseph Blakey - Coles Pub. Co. - 1976
[More about this source »](#) [Find at your local library through WorldCat »](#)

Catch-22, Joseph Heller: curriculum unit
Ann Wolensky.Williams - Center for Learning - 2005
[More about this source »](#) [Find at your local library through WorldCat »](#)

Catch 22 Roman
Joseph Heller - Süddt. Zeitung GmbH - 2007
[More about this source »](#) [Find at your local library through WorldCat »](#)

Catch 22
Joseph Heller - Herbert Svenkerud - J.W. Cappelens Forlag - 1994
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ORGANIZATION

0:00

Meeting brought to order by Cynthia.

Cell phones off

Consultant introduced - Diane Hulse? brief bio

Diane introduces David Lowry - they have been together since the 70s in F Seminary

Introduces me and tells them to ignore me

Group dynamics is the focus - important task to focus the work of the school vision. Every voice needs to be heard and to participate - mentions the book importance of the introvert's voice

Planning is a process, this is day 1, we won't complete a plan today, a good a long time, this is the foundation where we establish the principles on which base our plan. Planning is about meeting challenges and embracing change. Maintaining the status quo is not a plan - change happens.

As a school, you have done an excellent job of planning and have maintained leadership in special ed for decades.

She wants to challenge you, take you out of your "board roles" - here you are not your titles. We have heart and history and feelings. We care about the s

NOTES WITH AUDIO

- While you type, it records the audio.
- You can pinpoint a spot in the audio by clicking on the text, so you can enhance your notes or repeat something you didn't hear correctly.
- Audio Note for laptop
- Notability for tablet
 - also allows drawing etc..



LEGAL RIGHTS

- How do you fund all this technology?
- IDEA The Individuals with Disabilities
 - For more info refer to the US Department of Education website: <https://www2.ed.gov/policy/landing.jhtml?src=pn>



- LD Resources Foundation is committed to overcoming barriers, and providing access to knowledge for students with learning disabilities.

A PDF version of this presentation can be found on the LD Resources Foundation Website, under the Resources section:

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GLOSSARY

Biometrics- (or biometric authentication)

Refers to the identification of humans by their characteristics or traits

Daisy Format-DAISY

(the Digital Accessible Information System) is the emerging world standard for digital talking books for people who are blind or have a print disability.

E books-

An **electronic book** (variously: **e-book**, **eBook**, **e-Book**, **ebook**, **digital book**, or even **e-edition**) is a book-length publication in digital form, consisting of text, images, or both, readable on computers or other electronic devices.

Executive function- Also known as: cognitive control and supervisory intentional system.

Is an umbrella term for the management (regulation, control) of cognitive processes, including working memory, reasoning, task flexibility, and problem solving as well as planning, and execution.

Homophone

a word that has the same sound as another word but is spelled differently and has a different meaning:

Multi sensory learning-

Multisensory learning is a category of learning that uses more than one sense to obtain and retain information. This learning is normally categorized into: auditory, visual, and kinaesthetic learning. Children diagnosed with a learning disability find this type of learning very beneficial.

STT-

Short for speech to text voice recognition

Ability of computer systems to accept speech input and act on it or transcribe it into written language.

TTS-

Its Short for **text-to-speech**, a form of **speech** synthesis that converts **text** into spoken voice output. TTS systems were first developed to aid the visually impaired by offering a computer-generated spoken voice that would "read" **text** to the user.

Universal design –(often **inclusive design**)

Refers to broad-spectrum ideas meant to produce buildings, products and environments that are inherently accessible to older people, people without disabilities and people with disabilities. The term "universal design" was coined by the architect Ronald L. Mace to describe the concept of designing all products and the built environment to be aesthetic and usable to the greatest extent possible by everyone.