Assistive Technology for Students with Learning Disabilities

Presented by the Regional Center for College Students with Learning Disabilities:

– Michelle Meyer, MA, Assistive Technology Coordinator & Learning Specialist

Regional Center Website: www.fdu.edu/rcsld
Main Assistive Technology Topics

- Time Management
- Note-Taking
- Reading
- Writing
- Studying/memorizing
Time Management

- On-line calendars
- On-line assignment calculators
- iPhone/iPad Apps
  - MyHomework
  - Grades 3
On-Line Calendars

• **Google Calendar**
  – Links to iPhone/iPad through G-Whizz app
  – Share calendars with others
  – Create multiple calendars so that you have the option of viewing specific calendars at one time

• **Other Calendar Options**
  – Most email addresses are linked to a calendar that has similar features to those of the Google calendar
On-Line Assignment Calculators

• Fresno State Assignment Research Calculator
  – Good time management tool for students with due dates for each portion of the assignment as well as information about approaching that portion

• Colgate University
  – Another tool that helps students manage their time but also offers helpful links to other Universities websites for additional support
Time Management Apps

• My homework app for iPhone/iPad
  – Tracks due dates for homework, papers, exams
  – Class schedule
  – FREE!

• Grades 3 App for iPhone/iPad
  – Calculate grades needed to receive “A” in course
  – Keeps track of all course grades and calculates overall GPA
  – Cost $1.99
Note taking

• Portable Device
  – Livescribe Smartpen

• Software
  – Microsoft OneNote

• Web based note-taking
  – Evernote

• Apps
  – Evernote
  – SuperNote

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Livescribe Pen

- Records lecture while taking pictures of the notes you are writing
  - You must use the specialized dot matrix paper
- Plug the pen into your computer and download the written note and audio
- Share notes with friends

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Microsoft OneNote

• Create different notebooks with sections to maintain a higher level of organization
• Automatically dates your notes
• Capture information from the web and add it to your notebook
• Access notes virtually through SkyDrive
Evernote Website and Download

- Organizes notes more efficiently than word processing programs
- Dates note automatically, allows you to share via social media or email, gives you the option of adding tags so note can be searched more easily
- Free for basic access but a Premium subscription costs $45.00 annually
- The website, software and app all autosync any change occurs everywhere
Note Taking Apps

Evernote

- More basic than the website but also allows students to record while taking notes
- All notes are synced to the website, i-device and pc software download
- Also includes a speech to text feature
- The App is a free download

SuperNote

- Another free option with space restrictions
Reading using Technology

• Text to Speech
• Alternate Format
Text to Speech

• Software
  – Kurzweil
  – Natural Reader
  – Microsoft

• Website Add-on
  – Evernote Clearly
  – Announcify

• Operating System
  – iOS (Apple)
Kurzweil

• Scan and read program
  – Used for testing accommodations
  – Scan test; computer reads to student

• Study Toolbar
  – Highlight, make notes, extract into study guides

• Writing Toolbar
  – Word prediction
<table>
<thead>
<tr>
<th>Main Ideas</th>
<th>Supporting Ideas</th>
<th>Other</th>
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<tbody>
<tr>
<td>Major Types of Unemployment</td>
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<tr>
<td>Frictional Unemployment</td>
<td></td>
<td>- change jobs or take new jobs during the year.</td>
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<tr>
<td></td>
<td></td>
<td>- There will always be some frictional unemployment</td>
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<td></td>
<td></td>
<td>- job-hunting costs</td>
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<tr>
<td>Structural Unemployment</td>
<td>- some workers to become unemployed</td>
<td>- workers who did not have the ability, training, and skills</td>
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<td></td>
<td>- they cannot find jobs that use their particular skills.</td>
<td>necessary to obtain available jobs.</td>
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<tr>
<td>Cyclical Unemployment</td>
<td>- related to business fluctuations.</td>
<td>- recessions and depressions.</td>
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<tr>
<td>Seasonal Unemployment</td>
<td>- comes and goes with seasons of the year in which the demand for particular jobs</td>
<td>- construction workers can often work only</td>
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<tr>
<td></td>
<td>rises and falls.</td>
<td>- construction workers can often work only during the warmer months;</td>
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<td></td>
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<td>- Summer resort workers can usually get jobs in resorts only</td>
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<td></td>
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<td>during the summer season.</td>
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<td>Price Index</td>
<td>- defined as the cost of a market basket of goods today, expressed as a percentage</td>
<td>- Consumer Price Index (CPI),</td>
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<td></td>
<td>of the cost of that identical market basket of goods in some starting year, known</td>
<td>- Producer Price Index (PPI),</td>
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<td></td>
<td>as the base year;</td>
<td>- GDP deflator,</td>
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<td></td>
<td></td>
<td>- Personal Consumption Expenditure (PCE) Index.</td>
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<tr>
<td>CPI</td>
<td>- measure changes only in the level of prices of goods and services purchased by</td>
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<tr>
<td></td>
<td>consumers.</td>
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<td>PPI</td>
<td>- attempts to show what has happened to the average price of goods and services</td>
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<td></td>
<td>produced and sold by a typical firm. (There are also wholesale price indexes</td>
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<tr>
<td>GDP deflator</td>
<td>- most general indicator of inflation.</td>
<td>- it measures changes in the level of prices of all new goods and</td>
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<tr>
<td></td>
<td></td>
<td>services produced in the economy.</td>
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<tr>
<td>PCE Index</td>
<td>- measures average prices using weights from surveys of consumer spending.</td>
<td></td>
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</table>
Natural Reader

• Can be used to read web articles
• Cut and paste information into program to listen
• Free download for basic features
Evernote Clearly

• Web Add-on
  – Makes news articles easier to read by eliminating adds and distractible text
  – Highlight key points and save to your research using your Evernote account
  – With the premium subscription you can also have the text read aloud in your Chrome browser

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Announcify

• Web Add-on (Google Chrome only)
  – Reads most text aloud
  – Free of charge but must be added to your Chrome toolbar
  – Enhances focus on area being read
Operating System (iOS)

• Using iOS for text to speech
  – Will allow you to listen to any selectable text on your iDevice

• How to set it up:
  – Go to your General Settings
  – Choose Accessibility
  – Turn on Speak Selection
  – Once this is on, any time you select text you can have it read aloud
    • To select text you must tap on a word, then you will have the option to copy, select all, define or speak
    • If you choose select all you will then be offered the option of copy and speak
    • This allows you to listen to just one word or the whole document
Microsoft Office

• Can add the Speak tool to your toolbar in Word, and OneNote

• Once the icon appears on your toolbar you simply highlight text, click on speak and listen to what was written.
Instructions for Microsoft Speak

1. Go to the file menu.
2. Choose “options”.
3. Choose “Quick Access Toolbar”.
4. On top of the left column “Choose commands from:” – Click on the down arrow and choose “Commands from NOT in the ribbon”.
5. Choose “Speak”.
6. Click on “Add”.
7. Choose “Ok” at the bottom and when you go to your Home tab (or whichever tab you choose), you will see your new group with your new command.
8. Highlight text, click on the speak icon, and Microsoft will read aloud your selection.
Alternate Format Materials

Alternate Format

• Web Based Tools
  – Learning Ally
  – Bookshare

• Apps
  – Kindle
  – Google Playbooks

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Web Based Tools

• Learning Ally (formally RFB&D)
  – Membership fee for individuals and/or institutions
  – Books are accessible in audio format for students to download on their PC, MAC, or iDevices

• Bookshare
  – Membership is inexpensive and you must have proof of a disability
  – eBooks are available in a number of formats but usually does not have audio option
Apps

• Kindle
  – Free app available on Apple and Android devices
  – Must have an Amazon account to download books
  – Can highlight, make notes and search

• Google PlayBooks
  – Free app available on Apple and Android devices
  – Must have a Google account to download books
Writing

• Storage and Collaboration
• Organization
• Speech to Text
• Editing
Storage and Collaboration

• Google Drive
  – Allows you to create documents, spreadsheets, surveys and presentations using your web browser.
  – These can be shared with others to allow for easier collaboration
    • All parties included in a document can be making changes simultaneously and be “chatting” with each other about the document in the “chat” feature
  – You also have the option of downloading the Google Drive folder to your computer and saving any documents virtually for easier access at a later time

• Drop Box
  – Great way to back up files and share documents

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Organization

• Inspiration
  – Has been in use for many years and is still a great tool for pre-writing
  – Some of it’s best characteristics are it’s templates and rapid fire feature

• Bubbl Us
  – Works very similarly to Inspiration but it free and web based
Speech to Text

• Operating Systems
  – Windows (PC)

• Apps
  – Dragon Dictate
Operating Systems

• Setting up Windows 7 - Speech to Text
  – Open the “Start” menu.
  – Go to the “Control Panel”.
  – Go to the “Ease of Access Center”.
  – Choose “Start Speech Recognition”.
  – It will first prompt you through the steps to set up a microphone.
    • You must have a headset with microphone in order to use this tool.
  – Once the microphone set up is complete you will be prompted to choose to activate your speech recognition manually or with your voice.
    • If you choose manual you will have to open the toolbar when needed
    • If you choose voice activation you simply have to say “start listening” to wake up the toolbar.
  – When the toolbar is open and listening, you can dictate instructions for your computer or use it to type in a document, email, etc.
  – It will type what you say into your document.
  – Once being used on your computer it will become more familiar with your voice and you will get more accurate results the more you use it.

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Apps

- **Dragon Dictate**
  - Speech to text application
  - Used to record lectures and transfer them to text
  - Allows you to record yourself and transfer your thoughts to written words
Editing Tools

- Microsoft Word Advanced Features
- WhiteSmoke Software
- Websites
  - Visuwords
  - Grammar Check
Microsoft Word Advanced Features

• Readability Statistics
  - Shows grade level, reading ease, number of words/characters/paragraphs

• Find/Replace
  – Press and hold the “Ctrl” key and the “F” and you will receive a text box in which to type what phrase or word you are looking for within the text
  – Once that term is found you have the option of replacing with something else or simply highlighting it for your own viewing
Whitesmoke Software

• Must purchase and download
• More in-depth check than Microsoft Word
  – Detects homonyms and improper word usage
  – Once the application is opened on your computer you can check any document by simply pushing the F2 key
  – Once you have made the changes in Whitesmoke you can have that re-inserted into your document

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Websites that can be used for Editing

• Visuwords
  – A visual thesaurus that gives synonyms, antonyms and parts of speech in a colorful way

• Grammar Check/Grammarly
  – Enter text in the text box offered and then choose to the free check option
  – It will underline items that need to be changed, when you click on the underlined item it will explain why it is underlined
  – If you choose the advance check option it will filter your information through the Grammarly website and give more details, including if it has been plagiarized
  – It will give you an grade rating and tell you about errors that exist for free but for further details you will have to sign up, and a monthly fee of $29.95 will be incurred after the 7 day free trial

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Studying/Memorizing

• Electronic flashcards
  – Quizlet.com
  – Flashcardmachine.com

• Videos
  – TED Talks
  – Khan Academy
Electronic Flashcards

• Quizlet Website and App
  – Create flashcards online but able to access them through your app
    • Makes studying in small time frames easier
  – Able to create practice tests and play games to study terminology

• Flashcard Machine Website
  – Also allows you to create virtual flashcards but without the distraction of games

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Videos

• TED Talks Website and App
  – Great tool for acquiring more information about topics

• Khan Academy Website
  – Offers videos on a number of topics
    • Math videos and online practice questions are extremely helpful
    • Teachers can track student progress on problems through the Coach option
  – Does have an app but that only has the videos not the practice problems
Questions
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<td>Fresno State Assignment Research Calculator</td>
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