

## **Lesley College Graduate School**

### **COMP 5007 - Technology and Special Needs**

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#### **Course Objectives:**

1. Knowledge of learning characteristics of special needs learners.
2. Awareness of current issues regarding the education of special needs learners.
3. Knowledge of the role of assistive technology in aiding special needs learners.
4. Knowledge of research findings for utilizing microcomputer instruction to facilitate the learning of special needs learners.
5. Ability to use hypermedia software to meet the specific needs of special learners.
6. Knowledge of methods for integrating computers into the curriculum.
7. Ability to modify word processors in order to improve instructional effectiveness for special needs learners.
8. Knowledge of available state and national resources in the area of special education technology.
9. Knowledge of exemplary public domain, shareware and commercial software useful in the education of special needs learners.
10. Skill in choosing the appropriate software to meet the needs of special learners.

11. Knowledge of the methods for designing a web document that meets the needs of special learners.

**Handouts:** A CD with the assigned readings will be used for homework assignments between weekends. **Bring lesson materials (worksheets, books, tests, etc.) to be modified for a special needs learner the first weekend of class.**

Recommended Texts (Not Required):

For those who would like a companion text to supplement handouts: Brett & Provenzo (1995) Adaptive Technology for Special Human Needs. SUNY call: 607-277-2211 (Approximately \$16)

A Family Guide to Assistive Technology - \$15.

Services and Responsibilities to Students With Disabilities: Lesley College is committed to ensuring the full participation of all students in its programs. Accordingly, if a student has a documented disability, and, as a result, needs a reasonable accommodation to attend, participate or complete course requirements, than he/she should inform the instructor at the beginning of the course. For further information about services through Lesley College for students with disabilities please contact Manju Banerjee, Coordinator of Disability Services at (617) 349-8194 or (617) 349-8530 (message), or e-mail: [bannerjee@mail.lesley.edu](mailto:bannerjee@mail.lesley.edu)

### **Lesley's Academic Honesty Policy**

True learning can only exist in an environment of intellectual honesty. As future professionals, you have a particular responsibility to yourselves and society to conduct your academic studies with integrity. The Lesley community must refuse to allow plagiarism and cheating; all of us must work to create an environment where intellectual curiosity and honesty are valued.

Plagiarism is defined as using or knowingly representing the words or ideas of another as your own in any academic exercise. Cheating is defined as using or attempting to use unauthorized materials, information or study aids in any academic exercise.

You have specific responsibilities in maintaining academic integrity in the community:

1. It is your responsibility to learn how to document sources and what constitutes plagiarism. The Modern Language Association Handbook and the American Psychological Association Handbook define plagiarism and give complete descriptions. You can ask at the Center for Academic Achievement for assistance as well.

2. It is your responsibility to report observed cases of cheating or plagiarism to the faculty member in whose course the incident took place or to the Dean for the Adult Baccalaureate College, who will refer the case to the Academic Honesty Committee.

3. It is your responsibility to keep notes, rough drafts, and a copy of each finished paper until it has been graded and returned.

4. You may not submit one piece of work to meet the requirements for more than one course. If you wish special consideration to do so, you must request and receive written permission from the instructors of the courses involved.

Violation of the Lesley University prohibition of cheating or plagiarism may result in lowered grades, suspension from classes or dismissal from the University. The complete policy can be found in the student handbook and on the Lesley University Web page:

<http://www.lesley.edu/policies/catalog/integrity.html>

Course Outline:

First Friday

5:00 - 10:00 -Introductions and overview of course (Review syllabus, TOC and CD)

-Special education technology and research. ([mild.ppt](#))-[Activity 1](#)

-Brief overview of special education (history & current trends and AT laws) [spedhist.ppt](#), [inclusio.ppt](#) -[Activity 2](#)

-Brief review of characteristics of special needs learners. - [Activity 3](#)

**Please bring lesson materials (worksheets, books, tests, etc.) to be modified for a special needs learner.**

### **First Saturday**

8:00 - 10:00 -Review and questions over Friday's material Rev.doc - (Activity 4)

-Characteristics of special needs learners with video presentation and discussion (Activity 5) OR

-General modification/adaptation considerations and activities- Simulation activity. (Activity 6) (optional activity if the film is not sent)

10:00 - 12:00 -Word processors Modifying word docs - (Activity 7)  
-Keyboarding and word processing with special needs learners.

-Modifying with word processors to help teach anything

-General modification/adaptation considerations and activities  
-Design considerations for special education - (Activity 8) (part 1)

-Hypermedia review and modification techniques using Hypermedia programs. - Word dir (Activity 9)

12:00 - 1:00 -Lunch

1:00 - 5:00 -**Begin Project 1**-Modifying a word processing document/hypermedia program for special needs learners.

Work on Project 1

### **First Sunday**

8:00 - 12:00

-Review the IEP process and AT considerations in an IEP - - AT access considerations.ppt (Activity 10)

-Review forms for AT process ie. AT checklist - (Activity 10)

-Review design considerations for special needs (Activity 8) (part 2)

-Review and answer questions over Hypermedia/word processing program features and design for special needs.

12:00 - 1:00 -Lunch

1:00 - 5:00 -Continue Project 1 development (work on Hypermedia modifications which make it an interactive program.)

-Closure/ discussion for weekend one

-(Homework - "Reading Homework" CD articles. Do Project 2 in the syllabus. Bring Web page from previous class to Second Friday class)

Second Friday

5:00 - 10:00 -Review of key points from weekend 1.

-Alternative browsers (Activity 11)

-Project 3-Web Accessibility issues

-Project 1 demonstrations

-Open Lab for final touches to Project 2

-(Turn in Project 2)

**Second Saturday**

8:00 - 9:30 -Discussion on readings for second weekend

-Discussion on Project 2 results

-Computer Access Issues-Modifications needed for computer access (Adapting computers-simple modifications.ppt etc.)

-Software Adaptability features - (Activity 12)

-Adaptive software - (Activity 13)

10:30-12:00

-Adaptive features in Operating Systems (i.e. Win98, OS9) (Project 4A-Part 1)

12:00 - 1:00 -Lunch

-Adaptive technology devices for the Mac / PC (Project 4B)  
1:00 - 5:00 -Cont. Project 5

## **Second Sunday**

8:00 - 10:00 -State and National resources (Activity 14)

-Adaptive shareware Project 4A-Part 2

10:00 - 12:00 -Project 5: The Internet as a special education resource

12:00 - 1:00 -Lunch

1:00 - 3:30 -Project 5 continued

3:30 - 4:00 -Unanswered questions and answers/closure

4:00 - 5:00 -Open lab to support completion of remaining projects

### **Course Requirements:**

-Attendance: Lesley policy requires that those absent up to 1/2 day complete an extra assignment. Those absent more than 1/2 day must complete an extra assignment and will have their final grade lowered by 1/2 letter for each additional half day missed beyond the first 1/2 day missed. **Note:** Lesley College requires the course instructor to inform the academic advisor, should a student be absent more than 1/2 day during a course. In addition, the student is required to contact their academic advisor to request permission to miss more than  $\Pi$  day of class **prior** to course meetings.

**Incompletes:** Students, who because of extreme or unusual circumstances may request an incomplete. The issuing of an incomplete is at the discretion of the instructor and is granted **only** for serious circumstances such as illness. It is the student's responsibility to contact the instructor and request the incomplete prior to the due dates of assignments.

### **-Projects:**

-3 1/2 inch disks

-Project 1: Software development: word processing/hypermedia for students with special needs. (Started in class). (20pts.)

-Project 2: Paper: Special ed. and technology at your school (completed independently) (10pts)

-Project 3: Web Page Accessibility: modifying web pages for students with special needs. (Done in class) (5 pts.) (if not already done in previous class)

-Project 4: Internet resources in special education (in class) (15 pts.)

-Project 5: Adaptive technologies for Macintosh/PC (in class) (20 pts.)

-Project 6: Final: Plan to incorporate what you learned in the course at your school. (completed independently) (20pts)

Final Grades: A = 85-90, A- = 82-84, B+ = 80-81, B = 76-79, B- = 74-75,

C+ = 72-73, C = 69-71, C- = 66-68, D+ = 64-65, D = 61-65, D- = 58-60, F = < 58

References:

Behrmann, Michael (1995). Eric Digest E529, "Assistive Technology for Students with Mild Disabilities", pp. 1-4.

Brownell, G. et al. (1997). A Mac for the Teacher (2nd edition). West Publishing, New York.

Cafolla, R., Kauffman, D. & Knee, R. (1997). World Wide Web For Teachers. Allyn and Bacon, Boston, Ma.

Grabe & Grabe. (1998). Integrating Technology for Meaningful Learning (2nd edition). Houghton Mifflin, Boston.

Lewis, R. (1993). Special Education Technology: Classroom Applications. Brooks/Cole, Pacific Grove, Ca.

Male, M. (1997). Technology for Inclusion: Meeting the Special Needs of all students (3rd Edition). Allyn and Bacon, Boston, Ma.

NICHCY News Digest, (1997) "Planning for Inclusion", Volume 5, Number 1.

Robin, Keeler & Miller. (1997). Educator's Guide to the Web. MIS Press, NY

Sax, C., Pumpian, I., Fisher, D., (1997) "Consortium on Inclusive Schooling Practices Issue Brief 2 (1)", CISP Publications and Resources.

**Activity 1: Do mild.pot.** (On the CD in Weekend 1\Friday\mild.pot) Go over what assistive technology is in general and how it can be used with special needs kids.

**Activity 2:** History of Special Education, IDEA, and Computer Use with special needs students: Discussion- using **spedhist.ppt**, **inclusio.ppt** (On the CD in Weekend 1\Friday) as a guide to cover main points.

**Activity 3: Disability features - disabil.doc & gendis.ppt**

Students will sign up for a Disability category to present to the class. Review the file Disabil.doc as a guideline to find important information for presentations. Use the document and highlighting tool to highlight key points for presentation. (On CD on Weekend 1\Friday\Disabilites\Disability Info\docs)

Using Gendis.ppt as a guideline of disabilities and their definitions as defined by IDEA, students will present information in the area signed up for.

Activity 4: Rev.doc - Review of Friday's information. This document is also an introduction into using a word processing document interactively.

Activity 5: **Film-Fat City Workshop-How Difficult Can This Be?**

OR

Activity 6: Simulation activity

General Modification/ adaptation considerations and how to incorporate technology into the modifications/adaptations. (Include Demo of Word's-Outline features, highlighting, adding comments, auto-summarizing a document etc.)

Activity 7 - Modifying Word Docs - Review ways to use word processor features with special needs students and how to accommodate and adapt documents to be more appropriate for Special needs students.

Activity 8-Design Guidelines for Project 1. Discussion using design **guidelines.doc, text.ppt, and color.ppt** (found on CD in Weekend1/Saturday/Design Considerations/)

**Activity 9 - Worddir.doc - Demonstrate** how to do the various interactivity features and animation in a word processing document (part 1) and a hypermedia program (part 2). (Review mild.pot and how it was designed for interactivity. Use rev.doc as an example for how to design a word processor for interactivity.)

**Review previous projects as examples.**

Activity 10: Discuss general procedure for students being referred for Special Education, and the tests, procedures etc. that are followed for initial diagnosis for services. Also discuss considerations for technology needs in the IEP process and review forms AT in IEP use. - **AT access considerations.ppt (On CD in Weekend 1\Sunday\IEPinfo\ATAssessment)**

Activity 11: 2-WAI.ppt- Introduction to Web Accessibility Issues.  
(WAI)

Demo of how search engines differ in how they view document using Netscape and Internet Explorer.

Then load **PWWebspeak**, **WeMedia\_TB**, & **Opera** (on CD - Weekend 2\Friday\Web Access\Alt Browsers) and view a web page with each. Identify how they may help a disabled student. Identify how they are different from Netscape and Internet Explorer.

## **Activity 12: Software Accessibility Features Discuss Guidelines for Software Accessibility**

1. Visit <http://www.microsoft.com/enable> and find the Software Guidelines.

(If the Internet is not working, open the file "Software Accessibility2.html". Open Weekend 2/2-Second Saturday/2-Software Accessibility2.html)

2. Review 3 software programs designed for special needs students.  
(COW, WOL, and E-reader)

Complete a **software evaluation sheet** on software packages. Open Weekend 1\Friday\software\soft.doc

Use the "checklist for accessibility software" and rate the accessibility of one program, ie. COW, WOL, E-Reader.

**a. Identify the accessibility features that one piece of software has and the disabilities addressed.**

b. Identify the pros and cons of the software in regard to its accessibility features.

Activity 13 - Preview the rest of the software programs sent by Lesley.

Activity 14 - Look at state and national resources for special needs students and assistive technology. (Potential resources on CD at Weekend 2\Sunday\Nat, State and Local Resources)

Find local, state and national resources with information on technology for the special needs population that will:

Identify viable resources for funding -fund-at.html and funding.ppt

Identify loan programs &/or trading programs

Identify grants that may provide funding - grant links.html

Identify any cooperative for assistive technology in your area.

Identify your states assistive technology center.

Identify your states forms and procedures in using technology with special needs students.

Identify disability specific Organizations as well as organizations that help various causes.

Project 1: Modifications with a Word Processor (part 1) and a Hypermedia program (part 2)

Using a Hyperstudio/Powerpoint and Appleworks/Word, develop a lesson which could be used with special needs learners. Design the lesson for special needs learners using the following functions to add an interactive element as described in class:

**Find, replace, move function, cut and paste, delete and graphics, hyperlinks**

The lesson should conform to the design considerations discussed in class for special needs learners.

It **SHOULD NOT** teach students how to use Hyperstudio/Powerpoint or a word processor.

Your total program (two documents) should be at least a total of 10 cards/pages in length (each)

The two documents should link together to make one activity.

The lesson must begin with an objective describing what the student will learn.

The lesson should be based on actual content you teach your class.

The lesson must stick to one consistent theme, rather than sample from a variety of subject areas.

Grading Criteria:

1. The opening screen explains to students what the purpose of the program is and what they will learn as a result of using it. (2pt).
2. Your lesson could be used with special needs learners and is consistent with design considerations discussed in class (3pt).
3. Your lesson includes a narrative that describes how the features of your programs conform to the special education design considerations discussed in class. (2pts)
4. The program uses graphics, buttons, text fields and sound. (3pts)
5. The lesson includes animation. (1pt)
6. The lesson incorporates most of the following elements: find, replace, move function, cut and paste, delete and graphics (4pts).
7. The lesson is up and running, and bug free (1pts).
8. The program is able to evaluate student responses, provide appropriate feedback and branch accordingly. (2pts)
9. The lesson exceeds the minimum requirements of the assignment (2pts)

**Total = 20 points**

## Project One Alternative:

### Technology Resources Available in Your State

This alternative maybe completed in lieu of project 1. This project is due the second Friday meeting of the class. This project must be completed on an individual basis.

Develop, a list of 5 questions regarding special education issues adaptive technologies, funding for technologies, legal issues etc., pertinent to your professional interest as an educator.

Step 1: Present-the-list to the instructor before the end of the first weekend for approval. If the list is OK, the instructor will sign your list for approval.

Step 2: Contact at least two resources identified on your state resource guide. Obtain answers to your questions. If a resource cannot answer your questions, ask than to, refer you to a new resource they believe can, or find a new contact on your state guide. Each of your five questions must be answered by at least two resources.

Step 3: Ask your resource to send you any printed material they may have available that is pertinent, as well as a pamphlet that describes the services offered by that agency if available.

Step 4: Prepare a written report that includes your questions, the answers provided, the names of the persons you spoke with, their titles and phone numbers. Attach each agencies informational pamphlet obtained in step-3 **(2 points)**. The answers to your questions should include full details. Enough detail should be provided so that each questions response should be at least 2 pages in length, bringing the minimum length of the project to 6 pages **(16 points)**.

**Total = 20 points**

## Project 2: Special Education and Technology at your School

**THIS PROJECT MUST BE COMPLETED AND SUBMITTED ON AN INDIVIDUAL BASIS, NO GROUP PROJECTS.** Complete the project 2 form by interviewing the appropriate personnel at your school. This project is due on the second Friday night of class. Late projects will have 4 pts subtracted from their earned grade.

Name of School: \_\_\_\_\_ Your  
Name: \_\_\_\_\_

1. Describe the types of special needs students attending your school (e.g. learning disabilities, mental retardation, physical disabilities, sensory impairments, behavioral/emotional disabilities, other:
2. What are the most serious issues, as seen by school personnel, regarding special education at your school? (e.g. inclusion). Be specific, for example, if inclusion, what specifically about it seems to be the difficulty.
3. What are the resources available to your school for resolving the difficulties described in 2 above?
4. How are computers used at your school to augment the learning of special needs students? How can computers be used to help resolve some of the problems described in 2 above?
5. Do any students at your school use adaptive devices to facilitate communication or work on a computer? If so, describe:

**2 points per question**

**Total = 10 points**

Project 3: Modifying a Web page (if not already done in Web class)

Review alternative browsers and their adaptive features. Using a Web page you designed from a previous class, use the given evaluation tool to find any accessibility issues with the page.

Evaluate your site at the following 3 web sites.

Enter your web site into the Bobby program on the internet at <http://bobby.watchfire.com/bobby/html/en/index.jsp> and evaluate the site

Enter your web site into Dr. Watson at <http://watson.addy.com/nph-watson5.cgi> and evaluate all features.

Enter your site into <http://www.hisoftware.com/access/repair.html> and use this tool to evaluate your site.

Write a brief paragraph that describes the accessibility issues that your web page had and what you need to do to modify them. Modify the Web page (if time permits and you know how) to make it more accessible.

### **Grading Criteria:**

Evaluation is completed accurately (1 pt)

Paragraph describes accessibility issues of the web page (1 pt)

Paragraph describes modifications needed for web page to be accessible (1 pts)

Use an alternative browser to view your file. (Open:Weekend 2\1-Second Friday\Web Access\Alt Browsers\pwWebSpeak) Describe how this browser affects a visually impaired person's access to the WWW. (2 pt)

**Total = 5 points**

## Project 4A: Adaptive technology (for Windows)

### **Grading Criteria:**

Completed Project 4 assignment sheet; send in with Project 6 if not turned in during class.

### **Part 1: Windows Accessibility Features (5 pts)**

Windows provides a number of accessibility options as a part of the Operating System. They can be loaded from a Windows CD if they are not already available.

For a "Resource guide", visit <http://www.microsoft.com/enable> Look under the **Training** heading for **Step by Step Guides** and find the Guide for the Operating system on your computer. (If the Internet is not working, open the File "1-Win 98" from Weekend 2, 2-Second Saturday, Win 98. **This file is a guide for "Microsoft Windows 98 Accessibility Features"**. Directions are similar for other Windows Operating Systems. )

*1. What is one benefit to making accessibility changes in the operating system rather than in an individual program? (1 pt)*

2. The Accessibility Options are loaded automatically onto your computer during Windows Setup, but you'll need to install it before you can access the Accessibility Options. Once installed, you can access it any time you want. (to install: Open your control panels, open Add/Remove programs and click on the Windows Setup tab. Double click Accessibility. Check both options and click OK)

**3.** When using the Accessibility Wizard, and the set Wizard Options, select each of the options. (Start-Programs-Accessories-Accessibility-Accessibility wizard) With the various accessibility features that are enabled, change the options in each program and see what happens. ***What accessibility features occur with each selection? (1 pt)***

For-I am blind or have difficulty seeing things on screen

For- I am deaf or have difficulty hearing sounds from the computer

For- I have difficulty using the keyboard or mouse

For I want to set administrative options

4. Open the Magnifier component in the accessibility options. (Start-Programs-Accessories-Accessibility-Magnifier) Try each of the options available. (To exit the Magnifier, press ALT+F6 until the Magnifier Settings button is selected. In the Magnifier Settings dialog box, press ALT+X.)

***Describe each option available and describe how it benefits the disabled computer user? Are there better magnifier applications to use than the Magnifier component of Windows and if so where could you find one? (1 pt)***

### **5. Accessibility Control Panels**

1. Open the Accessibility control panel. (Click on My Computer, then control panels, then accessibility options). Turn on StickyKeys. Also review the "settings" for StickyKeys by clicking on the "settings" button. Open any word processor and type several sentences. Try saving your document by using keyboard commands such as Control-S. **NOTE:** be sure to press only one key at a time, that is do not hold down the control key while pressing the "S". Note how StickeyKeys works.

2. Turn StickeyKeys off. Repeat the above procedure for FilterKeys; Toggle Keys, SoundSentry, MouseKeys, and High Contrast. Remember to turn each used function off before turning the next function on. Remember to experiment with the settings by pressing the setting button for each function.

***Identify each disability that each of these functions would benefit, how and why? (1 pt)***

8. Windows includes ways to "Adjust Mouse Properties for Easier Use". (click on Mouse in the Control Panels and click on Accessibility Options in the Control panels, then click the mouse tab) **(1 pts)**  
*List these.*

How do you know if the accessibility option has been turned on or is in use?

10. For W2K and XP - Turn on the Narration feature in the Accessibility Options?

How do you know that the new narration feature is on, and how might you use it?

Part 2: Shareware (5 pts)

Open the file "**windows.html**"/"**mac.html**" from the CD. (Weekend 2, 3-Second Sunday, Shareware, windows.html) These are shareware or freeware programs that assist people with disabilities in using Microsoft Windows 3.x and Windows95/98. Read the "ReadMe" files to learn how to install the programs.

**Sign up for the program you would like to demo.** (Demo - 2 pts)

Be prepared to demo one of the programs. Run the program and try all options available. Describe how to install it, what function it serves, what disability areas would benefit from this program and what you think about it. (If you know of a program I should add, have any difficulty, or have questions, please let me know.)

***Find another shareware program appropriate for use with disabled students. Describe the program, how to load it, what its purpose is, and the disabilities that would benefit from this program. ( 1 pt)*** Try <http://www.shareware.com> , <http://www.tucows.com> , <http://www.hotfiles.com> and <http://www.cheapsoftware.com> . You can also use some of the other shareware resource files provided to help you find another shareware program.

Load ***EasyOffice 2001***. How can the programs that are installed be used to adapt curriculum for special needs students? (There are 8 programs that load with this suite and they are all free!) **(1 pt)**

Load ***Talk to Me***. (This program is shareware and has a minimal cost) How can this program be used with special needs students? **(1 pt)**

## Project 4B: Adaptive Devices (10 pts)

There are tutorials for these devices at <http://www.aac.unl.edu/AACTU>. (If the Internet is not working there are copies on the CD also. Go to: Comp5007\Weekend 2\3-Second Sunday\Tutorials)

1. **The Discover system:** Discover Switch, Discover Keyboard and Discover Screen will be demonstrated in class. Then you will have an opportunity to try them yourself.

***What is the purpose of each of these and how might each be of benefit to special needs learners. (1 pt)***

2. **IntelliKeys.** This system will be demonstrated and then you will have an opportunity to try it.

***Describe how this product could be used with at least one student you work with.***

**Explain how IntelliKeys and Intellitalk could benefit students with visual, physical and learning disabilities. Describe how these products could be used with at least one student that you work with. (4 pts)**

3. **Dragon Naturally Speaking.** Do the enlistment for Dragon. Open speech pad and dictate one paragraph.

***How well did it go and with what accuracy? (1 pt)***

4. Explain how an "alternate keyboard" input function could benefit school-aged pupils with physical disabilities, young children and persons with learning disabilities. (1 pt)

***Explain how the "on screen" and "scanning" input method could benefit children with disabilities. (1 pt)***

***Explain how the "Assisted Keyboard" input method could benefit pupils with learning disabilities. (1 pt)***

## Project 5

Developed by Dr. Jeff Messerer, Department of Special Education,  
Northeastern Illinois University, 5500 N. St. Louis Ave, Chicago, IL.  
60625 (revised & by Terry Carter)

Instructions: This activity will demonstrate the use of the Web to locate information, software and resources related to special needs learners. "Take your time" visiting the sites. Follow the directions below. Text that appears in bold and is italicized are questions for you to answer. On a sheet of paper print your name and number each of your responses as they relate to the outline below. For example, the first question to answer is 1-b. **(15 pts)**

1. Visit the I. B. M special needs resources at:

<http://www-3.ibm.com/able/index.html>

**What resources are available at this site?**

Among the features of this site are the many links to other very useful sites.

***List several links and follow one. Which link did you follow and what did you discover?***

2. Visit the apple disabilities connection. Go to:

<http://apple.com/education/k12/disability/>

What is ***available here?***

3. Visit <http://www.cec.sped.org/>

Note that this is a good place to learn about federal legislation for the disabled, and special education in the schools. Also note that you can connect to the ERIC disabilities index, Select Divisions, then select the "Technology and Media division". Once at technology and media select "Related Web Sites". Visit three sites. You may want to visit Scott's Place and the Do-It Program as two of the three sites.

***Summarize what is available at each site.***

Return to the **CEC homepage**. Select the **ERIC Clearinghouse on Disabilities and Gifted Education**.

***Summarize how this link could be of use to you?***

4. Visit <http://www.thearcpub.com>

Use the search option at this site to search for "assistive technology".

***How can assistive technology be of benefit to people with mental retardation? (list 3 benefits)***

***How can assistive technology used by people with mental retardation?***

5. Visit <http://ldonline.org>

Upon arrival take a quick look around. Take a look at the guide to LD Online.

Choose two links from the guide that are of greatest interest to you.

***Summarize what you found at each of the links you choose to view.***

6. Open: <http://www.yahoo.com>

Search the web for each of the following terms (three searches)

"Special education" [remember to use quotation marks]

disabilities

"adaptive technology"

**How many "Hits" were identified with each search?**

Visit one site for each term.

**List the name of the site, the site's URL and what is available at the site.**

7. Open <http://ldresources.com>

When you arrive at this site, note the frame on the left. Scroll through this frame to see what is available at this site. Choose one link of interest.

**Summarize what is offered at this link.**

8. Visit <http://www.oneaddplace.com>

When you arrive, scroll down to "Special Features on this Site"

Scroll through the list of what is available and choose one link of interest.

**Summarize what is offered at this link.**

9. Visit <http://www.icdi.wvu.edu/others.htm>

Click and explore at least three hyperlinks.

**List three uses for these resources.**

10. Visit <http://www.seriweb.com/>

**List three uses for these resources.**

11. Visit <http://www.quasar.ualberta.ca/ddc/INDEX.html>

**How could this site be of use to you?**

12. Visit <http://www.Chadd.org>.

Use the search option to search for "Teachers". When your results are displayed, select the fact sheet entitled: "ATTENTION DEFICIT DISORDER: WHAT TEACHERS SHOULD KNOW"

**What can teachers do in their classrooms that might help students with ADD to perform better?**

Return to CHADD home page and select Research from the frame on the left.

**Choose one study, list its name and describe what is being researched.**

14. Visit <http://www.microsoft.com/enable>

**What is the purpose of the training guides?** (We will look specifically at the Accessibility features training guides in the next activity.)

Reset the URL to <http://www.microsoft.com/enable/at/default.htm>

Search the accessibility database for '**Telepathic II**' .

***What is it?***

***How much does "Intellitalk" cost?***

What is the purpose of the Access Pack for Microsoft Windows?

15. Visit <http://www.closingthegap.com>

***Request a free copy of the "Closing the Gap" newspaper.***

***How could this site be of use to you?***

16. Visit <http://washington.edu/doit/Brochures/Order/>

Order free copies of any information that you can use.

17. Visit <http://www.quia.com>

Find a game that you could use with a special needs student.

18. Visit <http://trackstar.hprtec.org/> -Trackstar-ready made lesson plans or you can make your own plans , tests, etc and post them on the web. Find a ready made lesson for a special needs student in your class.

19. Visit <http://208.183.128.3/ce/ppt.htm> - CyberExchange- This site contains ready made Powerpoint presentations in multiple subject areas. Download any presentations you can use and modify using the "software design guidelines" for a special needs student.

20. Visit <http://www.esu5.org/techteacher/index.htm> - The Tech Connected Teacher. Go to Powerpoint in the Classroom and get a blank copy of a Jeopardy template. Visit the Online Quizzes, the Puzzles and Games site, etc.

21. Visit <http://www.webplaces.com/html/sounds.htm> for a collection of sound files that can be used with Powerpoint.

22. Visit

[http://www.csun.edu/~vceed002/book/games/science\\_games.html](http://www.csun.edu/~vceed002/book/games/science_games.html) - Games for the Science Curriculum. Look for appropriate games for a special needs student.

23. Visit <http://its.guilford.k12.nc.us/webquests/math.html> - Web Quests for Math. Look for Web Quests that would be appropriate for Special needs students.

24. <http://www.internet4classrooms.com/> - Internet for Classrooms helps teachers make use of the Internet. It is an excellent resource of On-line practice modules/online tutorials for multiple applications. Grant Opportunities, Links for k-12 teachers, links for daily use of the Internet, and more are featured.

25. [attechnology@yahoogroups.com](mailto:attechnology@yahoogroups.com) - This is a discussion group about Assistive Technology Issues. It is a great resource for ideas and questions. Sign up to receive the overall list of topics.

26. To keep abreast of the latest hardware and software developments in the area of assistive computer technology subscribe to the Assistive Technology Listserv. Just send an email message to:  
[\*\*mailto:attechnology-subscribe@yahoogroups.com\*\*](mailto:attechnology-subscribe@yahoogroups.com)

## Project 6: Final Project

Please type your paper. This paper must be received by \_\_\_\_\_. Late papers will have 4pts subtracted from their earned grades. **This project must be completed and submitted on an individual basis. No group projects. Send your papers to:**

Terry Carter

2109 S. Owing

Oak Grove, MO 64075 (816-690-4458)

e-mail: [TerryCurtCarter@aol.com](mailto:TerryCurtCarter@aol.com) If you e-mail, please tell me the program you saved in.

I. Provide a minimum two-page narrative using the following topic (note: It is always better to be more descriptive rather than too brief. Examples are always helpful):

What aspects of this course have been most helpful to you regarding future work with special needs learners? Explain the specifics, and how you might use this information at your job site. (10 pts)

II. Develop a brief lesson plan that includes the use of your project two or project three or both in your teaching situation. Use the following outline:

**A. Lesson Objective** - What you want your students to know or be able to do by the end of the lesson. (1pt)

**B. Lesson materials** - What materials, software etc. that your lesson requires. This section should also briefly describe your Word processing project and your hypermedia project. (Project 1 should only be a part of the lesson.) (3pt)

**C. Lesson activities** - The systematic steps you will follow in teaching your lesson. The steps should be specific enough so that a substitute teacher could follow your plan exactly without making a mistake. Be very specific. (3pt)

**D. Lesson evaluation:** How will you evaluate the success of your lesson. How will you know if your students have achieved the lesson objective. (3pt)

**Optional final projects:** (in place of the Parts I and II above one)

1. Write a grant to provide for the technology needs of the special population in your class, school, or district.  
(In place of only Part I above. Part II must be completed also)
2. Visit an Assistive Technology Center in your state. Write a brief description of your visit, of the resources available at this center, how an individual can access these resources, and how you could use them in your class, school or district. (Minimum of 5 pages). (10 pts)
3. Based on the needs of your school that you discovered while doing assignment 4, develop an in-service for your school for using technology with special needs students.

**Part 1** Write at least a 2 page narrative description of what you hope to accomplish with your in-service ie. Types of students your in-service will address, (10 pts)

**Part 2**-Make a multimedia presentation of the materials you plan to cover. (10 pts)

**4. Part 1**- Describe the features of an alternative (one different than what we covered in class) operating system that make it more accessible for the disabled computer user. (10 pts)

**Part 2.** Find five (10) shareware programs designed to make the PC more accessible to disabled computer users. Provide the following for each program:

**A. Download site and directions for downloading**

**B. Description of the program**

**C. What type of disabilities it may address**

**D. Description of how to load the program**

**E. Description of how to operate the program**

5. Other ideas for a final project need to be submitted for approval.