

# Make a Difference

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## TIPS FOR TEACHING STUDENTS WHO HAVE LEARNING DISABILITIES – HANDBOOK –

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Director, Disability Support Services



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**University of Arkansas at Little Rock  
Little Rock, AR**

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# Acknowledgments

## Handbook

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We are grateful to Sharon Downs, Project Coordinator of the Arkansas State Outreach and Technical Assistance Center (SOTAC) at UALR, for the concept and format of this handbook.

## Video

This guide was developed to accompany the video of the same name. The video is also a product of Project PACE. The staff members of Project PACE are grateful to the UALR Department of Radio, Television, and Film for their production expertise with a special thanks to David Weekley. We also are grateful to our narrator, Vince Bailey, and to the numerous individuals who shared their time and experiences with us by providing interviews for this video.

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## Introduction

This handbook was written to accompany the video also entitled *Make a Difference: Tips for Teaching Students who have Learning Disabilities*. Both resources were developed to provide postsecondary educators with guidelines to assist them in working with these students. Through utilization of these resources we hope instructors will:

- Achieve a better understanding of the impact of learning disabilities
- Improve interactions with students who have learning disabilities
- Increase awareness of possible accommodations and assistive technology
- Learn effective strategies for teaching students who have learning disabilities
- Learn how to make course materials more accessible

This resource is not intended to replace consultation with service providers. Most postsecondary institutions have an office or individual on campus to assist faculty and staff in making accommodations for and working with students with disabilities. If you need assistance in accommodating a specific student, contact your administration or the disability services office to ask about the procedures for your campus.

## Instructions for the In-service Presenter

If you are showing this video as a part of a workshop, you may want to consider pausing or stopping the video for group discussion.

If you need additional copies of this handbook or the video, contact **Project PACE** at (501) 569-8410 (voice) or (501) 569-3143 (v/tty).

This video and handbook are the third in a series. The first video/handbook set in this series is *Make a Difference: Tips for Teaching Students Who Are Deaf or Hard of Hearing* and can be ordered through the PEPNet website ([www.pepnet.org](http://www.pepnet.org)). The second video/handbook in this series is *Make a Difference: Tips for Teaching Students Who Are Blind or Have Low Vision* and can be ordered by contacting Project PACE. An order form is available from the Project PACE website ([www.ualr.edu/pace](http://www.ualr.edu/pace)) and, once completed, can be faxed or mailed to Project PACE.

# Overview of Learning Disabilities

## What is a Learning Disability?

Learning disabilities are neurological disabilities that may alter an individual's ability to store, process, retrieve, or produce information (Thornton, 2000). As you can see, the term "learning disability" is a very broad term. Learning disabilities are manifested by significant difficulties in listening, speaking, reading, writing, or math. There is no one type of learning disability nor is there one specific profile to describe a person with a learning disability. A learning disability may be discovered at any time during a person's life. A number of factors, such as severity of the disorder; demands of social, academic, or vocational settings; and educators' knowledge of learning disabilities, can impact the discovery of learning disabilities.

Learning disabilities are neurologically based and, thus, are not changed by environmental exposure. While a person can learn effective ways to manage a learning disability, the learning disability does not go away. Occasionally learning disabilities may result in problems with behavior, social perceptions, and social interactions, but these problems are not the disability. Nor are learning disabilities the result of other disabilities such as loss of sight or hearing, lack of intelligence, or lack of schooling (*LD Online*, 2000).

## Impact

The impact that a learning disability has on learning and the accommodation process will vary. "Each student may present unique needs for accommodations" (Thornton, 2000). Some of the factors that influence this variation are:

- Type
- Severity
- Presence of multiple disabilities
- Educational setting
- Exposure to assistive technologies and accommodation strategies

What happens if a person has a learning disability but it is not discovered or accommodated appropriately? Research shows that people with undetected learning disabilities are at higher risk for:

- Failure in school
- Depression
- Behavioral problems
- Failed relationships
- Unemployment
- Substance abuse
- Dependency on welfare programs

## Language

Many people are concerned that they may insult a person with a disability by using the wrong language. Here are some tips that may help you.

- When referring to a person with a disability, put the person first. That is, speak of "a student with a learning disability" or "people with disabilities" not "a learning disabled student" or "disabled people."
- Also, remember to use the term "disability" instead of the term "handicap."
- Terms such as "slow," "dumb," "thick-headed," or "retarded" are incorrect and inappropriate when referring to a person with a learning disability. In fact, people with learning disabilities, by definition have average or above average intelligence.

## Initial Preparations for the Semester

It is not uncommon for professors to experience some anxiety when they first learn that a student with a learning disability will be in their course. An increased awareness of the impact of the disability and the accommodations that may be needed can go a long way toward reducing such anxieties. Here are some tips that should make the process go more smoothly. Many faculty members have found that by implementing these tips and strategies, all students - not just those with learning disabilities - benefit.

- *Announce in class that you are available to discuss modifications with any students who need accommodations for a disability.* Making yourself available to all students is an invitation for the student to approach you. Avoid singling out students in class. Also be sure to have a disability statement in your syllabus about the availability of accommodations (Thornton, 2000).
- *Work closely with the student to develop accommodation strategies or to apply those outlined by the disability service provider on your campus.*
- *Prepare the course syllabus, assignment list, and reading list early so they are available, should they be requested before the class begins.* These materials may need to be read onto audiotape or the student may need additional preparation time.
- *Provide examples of good projects or research papers from previous years when making such assignments.* Most students will be honored to give you consent to use their assignments as successful models for fellow students.
- *Provide a class outline at the beginning of each class session.*
- *Review key points at the end of each class.*

- *Provide study questions or practice exams that familiarize students with the format and the content of the test.* Provide an example of a good response and explain why it is acceptable.
- *Allow time for an early draft of a paper or project to be turned in for feedback.*
- *Use multiple formats, such as visual aids, three-dimensional models, charts or graphics, when presenting information.*
- *Allow students with learning disabilities to demonstrate understanding of course material using approved accommodations.* These may include extended time for taking a test, oral exams, taped exams, or a reduced-distraction environment for testing.
- *When ordering textbooks, ask the publisher about the availability of an electronic version.* When possible, choose a text from a publisher that provides digital formats.



## Considerations for Instruction During the Semester

Once the semester begins, you may want to keep the following tips in mind.

- *Allow students to record lectures on tape. Laws that entitle people with disabilities to equal access entitle students to tape record lectures.* If you are concerned about copyrighted materials or materials that you plan to publish in the future, you may wish to have the student sign an agreement not to release the recording or to erase it at the end of the semester.
- *When providing handouts, make sure the copies are legible.* Black print on white paper provides the best contrast for most people. However, for some people with learning disabilities, colored paper with black text may be easier to read. Be prepared to make large print copies or provide handouts on a computer diskette if requested.
- *If you are using the blackboard or other visual aids, describe verbally what you are showing to the class.* Be specific in your description. This allows students access to the information by using both their visual and auditory senses. It is ideal to provide the information that is included on your visual aids or overheads to the student in an accessible format before the class lesson.
- *Be aware that some students may choose to use note taking devices that make some noise, such as a laptop computer.* Seating arrangements can be discussed to minimize the impact of the sound of these devices on other students.
- *Your academic standards or course content should not be modified.* You may need to modify the presentation of the materials and the form of student evaluation, but hold all students to the same standards of competencies. This ensures that all students receive the same quality of education.

## Guidelines for Preparing and Administering Exams

In order to be certain that testing procedures provide equal access without giving the student an advantage over other students, disability service providers on college and university campuses develop guidelines for providing testing accommodations. Consult with your disability services office or administration to help determine which modifications are appropriate for a particular student.

- *Discuss plans for modifying testing procedures prior to the first exam.* Appropriate accommodations may include extended time, use of adaptive equipment, and a reduced-distraction location for taking the test.
- *Remember that the use of adaptive equipment or an alternate format such as audiotape, large print, or a scribe takes extra time.* Be prepared to provide up to double the time allowed other students to complete the test.
- *Determine which format will work best for the student. The student may choose to get the exam in large print or on a computer diskette.* Some students may prefer having the test read onto an audiotape or by a live reader.
- *Consider how students will record their answers to the exam.* Possible options for your student may include:
  - Writing their answers on an answer sheet or directly on the test.
  - Recording their answers on an audiotape or typing them on a computer.
  - Telling a scribe the answers and having the scribe write the answers.

Recognize that it may take time to get the information transferred into the appropriate format for testing.

## An Overview of Assistive Technology

Technological innovations have opened many doors for people with disabilities and have provided increased options for access to information for people with learning disabilities. Here are some examples of how the use of technology can improve accessibility.

- *Digital formats* may be the most accessible media for students to review notes or handouts. Students may request that notes or handouts be provided on computer diskettes or through email. Digital formats allow students to access the information using the methods they find most helpful. They can print it in large print for easier visual processing or listen to the information on a computer with synthesized speech. Consult the student to determine the best file format. For directions on providing files in accessible formats, see Appendix B.
- *Word processors* may benefit a person with a learning disability. Because text can be corrected before printing, a person with a learning disability can write without having concern about errors. "Knowing that they can simply 'generate' language and correct errors later may reduce anxiety, 'liberate' their writing abilities, and ultimately facilitate written expression at a level commensurate with their intelligence" (LD Online, 1998).
- *Spell checkers and grammar checkers*, which may be included in word processors or found as stand-alone, battery-operated devices, can also be immensely helpful. Some may be very basic while others are more complex - such as dictionaries and thesauruses.
- *Proofreading software* may also be found in some word processors or as stand-alone programs.

- *Outlining/brainstorming software* may be beneficial for a student who has difficulties with organizing information. These programs allow the user to put down the information, and later reorganize the ideas logically.
- *Speech recognition software* may be an alternative for the student who has a writing disability. The speech recognition software allows the student to 'talk' to a computer. The spoken words are converted to digital text.
- *Screen readers* may be useful to students who have reading disabilities. A screen reading program can read aloud information displayed on the computer.
- *Calculators, either basic or talking ones*, may be beneficial for students with learning disabilities that impact their ability to do math computations, to read numbers accurately, or to understand mathematical concepts.
- *Books on tape and tape recorded lectures* are used by many students who have reading disabilities or cognitive processing disabilities.
- *Digital books* are used with increasing frequency along with some type of adaptive software.

## Appendix A: The Range of Learning Disabilities

To help you increase your awareness and understanding, the varieties of learning disabilities are explained below.

*Dyslexia* is quite common and affects reading development. Language processing along with reading, writing, and spelling are impacted.

Some characteristics of dyslexia include:

- Problems understanding what is read.
- Spelling difficulties (sometimes spelling the same word differently within the same paper).
- Difficulty with the order of letters in words.
- Problems with pronunciation of words.
- Difficulty with the subtleties of language (such as jokes or slang).

*Dysgraphia* involves a difficulty with writing. Such difficulties may include the physical aspects of writing (such as bad handwriting or poor pencil grip), spelling, or putting thoughts onto paper.

Some characteristics of dysgraphia include:

- Problems involving a written document (such as difficulty with using an outline).
- Handwriting that is difficult to read or illegible.
- A pencil grip that is awkward or cramped.
- Difficulty expressing ideas on paper in contrast to the ability to discuss such ideas orally.
- Letters and words may be inconsistently written within a document.

*Dyscalculia* involves difficulty with math skills and impacts math computation. Other areas which may be impacted are memory of math facts; and concepts of time, money, or music.

Some characteristics of dyscalculia are:

- Poor mental math ability.
- Difficulty with money, such as balancing a checkbook, making change, and tipping.
- Math processing difficulties (e.g., addition, subtraction, multiplication).
- Difficulty with math concepts (e.g., sequencing of numbers).
- Directional difficulties, trouble reading maps, telling time, and grappling with mechanical processes.
- Difficulty with abstract concepts of time and direction, schedules, keeping track of time, and recalling the sequence of past and future events.

*Information processing disabilities* entail difficulty recognizing and/or interpreting information an individual receives through various modes.

Difficulties may include one or more areas of perception/reception such as:

- Auditory - speech discrimination of sounds or hearing over background noise.
- Visual - seeing a specific image, differentiating between similar objects.
- Tactile - distinguishing soft touches, determining differences between similar objects, or tolerating being touched.
- Spatial - determining depth and location, distinguishing right from left.
- Short-term memory - ability to remember names, specific facts, what happened a few minutes previously, or numbers.

*Motor disabilities* affect the planning and coordination of appropriate body movements.

*Catastrophic response* is an involuntary reaction due to overload of sights, sounds, extreme emotions, or other strong stimuli.

While *Attention Deficit (Hyperactivity) Disorder* is not a learning disability, it is often categorized with learning disabilities.

Some characteristics include:

- Problems paying attention to details.
- Inability to sustain attention.
- Difficulty following instructions.
- Memory problems.
- Problems remaining seated without fidgeting.
- Talking excessively or interrupting in conversations.
- Difficulty controlling excessive energy.
- Impulsivity.

## Appendix B: Creating Electronic Documents in Accessible Formats

If you have students who will print documents in large print or access them using screen reading software, you can simplify this process by following some simple steps.

- *Provide materials in a digital format such as diskette or email instead of in printed format.* Students can then access the information by printing it in an appropriate format, such as large print, or by using screen reading software. This eliminates the need for someone to read the information onto audiotape.
- *Check with the student for format preference (e.g. word processing document or text format).* "Text only" files are more compatible with some screen readers. To convert a document that you have created with a word processing application to "text only," choose the "file" command and then choose "save as." You will be given the option to select the type of file. Select "text only." You can also create "text only" documents by using a plain text editor, such as Notepad.
- *Save text from multimedia programs as rich text format (RTF) or text files.* Multimedia programs such as PowerPoint are also inaccessible to older screen readers. You can make the text from your PowerPoint slides accessible by creating a text version of this file. To do this, open the PowerPoint file. Choose the "normal view" which displays the outline on the left side of the screen and the slides on the right side. Choose "file" command and then choose "save as." You will be given the option to select the type of file. Select "rich text format."

*To save the file as text only:*

Place your cursor in the left side of the screen where you see the outline of the slides, and click once. Choose "edit" and then "select all" to highlight all of the text. Choose "edit" and then "copy." Close the PPT file and open Notepad or your word processing program. Choose "edit" and then "paste." The text should appear on the screen. Now save the text as a text file. Note: Text placed in text boxes does not appear in the outline view of PPT. Therefore, this information must be typed in or copied and pasted separately.

When listing multiple-choice items on a test, do not use columns.

Format to avoid:	Preferred Format:
a. 1    c. 10	a.        1
b. 52   d. 42	b.        52
	c.        10
	d.        42

The student may also be able to provide you with other tips to improve his/her ability to access materials.

## Appendix C: Video Script

### **Make a Difference: Tips for Teaching Students Who Have Learning Disabilities**

[Music opener]

**Vince Bailey:** Hi, I'm Vince Bailey. In this presentation, we'll be showing faculty how to better teach individuals who have learning disabilities. With us today is Susan Queller, and Susan is the director of Disability Support Services at the University of Arkansas at Little Rock.

Susan has worked with students with learning disabilities over the years and has been very instrumental in helping them get the accommodations they need for proper education. She's been very instrumental in helping us put this presentation together.

Susan, could you give us a few opening remarks on why learning disabilities are an evolving issue that teachers in higher education need to know about?

**Susan Queller:** Well, one of the main things is that the number of students with learning disabilities has increased dramatically on our campus and nationwide over the last decade. Close to half of the students who have disabilities on our college campuses today are students with learning disabilities.

**Vince:** Well, why do you think that number is increasing like that?

**Susan:** Well, I think it may be more an issue of awareness and not so much an issue that more people are being diagnosed with learning disabilities. It may be some of both, but there's an awareness now that there are services for students with learning disabilities on our college campuses. Although it might not look the same as it did in K through 12 education, there are services for college students with learning disabilities that will benefit them and help them succeed.

**Vince:** There are a number of students this affects. What are some of the students' concerns as far as disabilities go?

**Susan:** One of the main concerns I hear students express is whether they want to identify themselves to their professors, versus keeping their disability hidden. They're afraid of the stigma that might be associated with having a learning disability, and that could prevent them from getting the services that they need. I think that, over the years, faculty have become more and more aware that students with learning disabilities are just as bright and capable and hard working as any other students, and because of that, the stigma has decreased over time.

I do think, though, that this is still one of the most difficult disabilities for faculty to understand.

**Vince:** Well, that's why we're here today to make this presentation. What is it that we want the faculty especially to know when dealing with students with learning disabilities?

**Susan:** The main thing is that we want them to understand that students with learning disabilities can excel in college. They attend very selective universities, they get into graduate school programs and law schools. They are a very motivated and hard working bunch of people. They've had to be to get where they are today. So the main concern or the main concept here is that students with learning disabilities can and do learn; that this is not a disability that prevents learning.

**Vince:** That's great. Again, Susan, we would like to thank you for coming in today and for all of your valuable input on this production.

**Susan:** Thank you.

**Vince:** Thank you.

As faculty, we want to provide the best education available to all students. It is evident that every individual has a particular style of learning. Some are more verbal, some are visual, some work best on

their own, and some work better in groups. Learning preferences also exist among students with learning disabilities. No two individuals with learning disabilities are exactly alike.

Knowing that a person has a disability only tells you a little about that person. We need to ascertain the needs of that student, providing equal opportunity without compromising standards. There are many factors to be considered when you have a college student with a learning disability in your class. These pointers will introduce you to some ways of accommodating learning disabilities in your classroom with comfort and ease.

We spoke with Dr. Jennifer Hune, a professor in special education at the University of Arkansas at Little Rock. Her specialty is teacher preparation for students who have disabilities. She is dynamically involved in learning disabilities. Here's what she had to say.

**Jennifer Hune:** At the beginning of every course, I think every teacher should make the learning environment safe for her students - her students or his students - to come to them if they're having some concerns. That was what I learned as a brand new professor; that if I didn't tell someone, "If you have a problem, come to me," that many times the students waited until the very end of course when they were making a C and they wanted to make an A, and then they came.

Or I've had students who waited until the very, very end of course, they made a C, and they got mad at me because they made a C. And after my first semester, I learned if - to tell my students, "If you have a problem, it's okay for you to come and tell me about it; if I don't know about it, there's nothing I can do about it. Please, don't assume that I know everything there is to know about you, how you learn, and about your life. So if there's something that is happening that I can assist you with, that I can refer you to someone, just come to me in the privacy of my office. I will even make time for you. If you have email, email me, just communicate with me what your needs are in order to support you in this - in this class."

**Ludwik Kozlowski:** I've been Golden Key Honor Society, Who's Who among American Universities. I've served in student



government, lived a very active campus life and have enjoyed it. The one concern I would say is, be patient, you know. Understand that you may not be able to see the learning disability or be able to tell any difference, but sometimes, you know, extra time is what's needed to have an equal playing field, and not-it's not an advantageous thing for me.

**Vince:** So what is a learning disability? It is a disorder in one or more basic processes involved in understanding or in using language, spoken or written, which may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Brain injury, minimal brain dysfunction, and developmental aphasia may also result in a functional learning disability. Now, a learning disability is not the result of vision, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or environmental, cultural, or economic disadvantage.

**Cindy Halbrook:** I'm sure she probably didn't intentionally try to humiliate me, but she would sit me at the front of the class while everybody else was taking their test, right next to her like a child, and she would say, okay, she would read the first question, I would answer it. And it was, you know, she usually had me in a shorter chair, you know, which put her at the dominant level, and I would sit there embarrassed with, you know, 30 or 40 people out there watching me, you know, take my test.

But I also had a lot of professors that were very good. I also had some instructors who felt that I should not go into anything in the medical field, and I had to fight that. Disability Support Services has come along way because, when I went to college, you were forced to take math if you had dyscalculia.

**Cindy Halbrook:** Okay, you ready?

[Singing - graduation march]

I think we all want to get - you know, be something better than we are, and I still strive for that. But when it's the hardest thing that you've ever done in your life and you know you probably only got

one chance at it, it's pretty scary when somebody with such power, they have the ability to stop you.

**Vince:** The difference for a person with a learning disability is that one or more of these modalities may be impaired, making the ability to attend to tasks unreliable. This causes the learning process to become scrambled and can trigger a scrambled response or output. As a consequence, the brain may not store information in a customary manner, particularly when moving input between sensory, short-term, and long-term memory. This results in difficulty using information quickly and/or in its complete form.

**Viki Vinson:** Working in therapy, you enter in the units of how many hours or minutes you have worked with that patient, and the numbers were coming across backwards. Some fours, some sevens. And when I questioned who did this and what it was, that's when I found out that Cindy had dyslexia.

**Chrissy Woodson:** She had entered, you know, a 40-minute treatment session on a patient three days in a row, and it was "40, 40, 40." And since she wrote her fours backwards, the occupational therapist came up and said, "What's this 'ho, ho, ho'?" So that was kind of a cute thing I remember. And I said "Oh, that's my dyslexic PTA."

Ho, ho, ho.

**Cindy Halbrook:** We are proud to bestow you with the diploma that you have successfully completed Paragon Rehab's physical therapy, and you are of the class of 2000.

**Cindy & Patient:** ..11, 12, 13, 14, 15, 16, 17, 18, 19, 20.

**Patient:** If I can count by twos, it'll go quicker.

**Cindy:** [laughing] I know!

**Vince:** Since this disability affects the way a person processes information, it's not readily visible. Students with learning disabilities not only have to deal with their limitations, but often also deal with the frustrations of trying to prove that they do in fact have a disability.

It is important to remember that students with this more hidden disability compensate by gathering and communicating information in ways that work best for them. They may need to adapt to different ways of learning, but that does not mean that they are unable to learn.

**Betty Freeland:** This is not a situation where people are - are stupid, it's not a situation where they're lazy, and it's not a situation - oftentimes where there's been no family support or recognition. All of the studies now that are talking about it refer to the fact that it really is just faulty wiring in the brain.

**Vince:** Verifying a student with a learning disability can be difficult at times. There are characteristics that may help you to detect this condition. Students with learning disabilities may be affected in one or more of these areas.

**Betty Freeland:** If you could imagine having a full text of paper there - a page in front of you and you have to read it and you know that you haven't been successful in the past, and so you dread it and you've put it off, and finally, you have to do it. And you sit down to read it. And as you get into it, you realize that, oh, on about two-thirds of the sentences in that entire text, you've had to stop, you've had to stop either for one word or two words in each sentence of that two-thirds of the text, and you've had to go back and try to sound it out so that you could understand it so that you could then go on. And you can imagine that, once you do that, the kind of frustration it's going to lead to. And then the most important thing it just makes comprehension so difficult.

**Heidi Lefebure:** This is - this is typical of what someone with a reading disability like dyslexia, what they might have to go through. They are so busy decoding word for word, that, you know, they'll read something and they've got - they finally gotten some of the words or most of the words, but they haven't gotten any content.

Now, this sheet that you have here, what I would like you to do, Joanne, if you would - start with that first paragraph, please, and just read it aloud to the group.

**Joanne Benica:** In modern society of individuals - something - to be self-sufficient is usually encouraged in childhood.

**Melody Redding:** In - inde - independence is also considered a civic virtue. For self-reliance means pulling your own seu.

**Cheryl Thomas:** This arrived puts tremendous pressure on the disabled - person - something.

**Vince Capps:** Able-bodied or not, everyone - everyone experiences - I'm sorry - something of independence. Illness and old age are indiscriminating. Moral independence, on the other hand, is - I'm going to have to stop right there. I don't understand. I can't get that word.

**Heidi Lefebure:** Okay. How - how were you all feeling when you started to read this?

**Cheryl Thomas:** Frustrated.

**Heidi Lefebure:** Why?

**Cheryl Thomas:** Because I know there's some good points there, and it - and I can't figure what they are, plus things are backwards, and I have to take longer to figure it out. And I was thinking, when Melody was reading, you can just see the professor teacher breaking out that red pen.

**Melody Redding:** Because I was trying to read it the way it was written, I couldn't tell you one thing that I read. It made absolutely no sense at all.

**Vince:** When writing, sentence structure may be askew resulting in incomplete sentences, run-ons, a poor use of grammar, and missing inflectional endings. Spelling errors may abound, especially in specialized vocabulary, or for some students even in very common words. Copying accurately from a book or a blackboard may be challenging. The writing may be slow, and the penmanship poor.



**Heidi Lefebure:** You're going to write with that hand, the hand that you normally do not write with. What you're going to do is, we're going to make nametags. And you're going to write your name with the wrong hand, you're going to write from the end of your name to the first of your name, and you're going to write it up-side down, all the letters up-side down and backwards.

[Chuckling and laughing]

How do you all feel when everybody else is looking and laughing at your nameplate - name tag?

**Cheryl Thomas:** Not very good.

**Heidi Lefebure:** What if you thought that what you had written was just fine, okay? Imagine that it was just fine and then everybody started laughing. How would that make you feel?

**Cheryl Thomas:** Worse, especially if you still didn't understand what was wrong with it, you know.

**Heidi Lefebure:** This is an experience that kind of gives you a feel for what someone with dysgraphia might go through.

**Idorenyin Uto-Uko:** At the time I was struggling with my writing, and they had me to just to keep writing just different papers because I received a low grade on them. And I had stated to the teacher that I have a learning disability, and then the teacher kind of worked with me after a while. And I was getting Ds, I was getting Fs on the paper. Finally, at the end, I had rewrote all of my papers again. Then I received a B in the course. And then when the course was through, she had stated to me that I could have got an A that - if I just would have worked a little bit harder.

**Vince:** Some will be unable to concentrate on and comprehend the spoken word. Expressing ideas can be equally frustrating. Telling a story in proper sequence and getting it grammatically correct can also be challenging. Those with oral language obstacles may be able to

communicate much more effectively in writing, while those with visual difficulties may do better orally.

When the disability affects mathematical skills, the individual may have never completely mastered the basics like multiplication tables. Numbers are easily reversed, operational symbols like the "+" or "x" and the ">" or "<" are confused, abstract concepts and word problems are difficult to understand and retain. The proper sequence of the operational process gets scrambled and gaps in reasoning make it hard to solve problems.

**Jennifer Hune:** They will say, "I see the numbers, I know what the numbers are, I know what the numbers mean, but when I go to do it, I just can't." And that's what you'll hear. You will hear more affect with adult students than you will - than you will opposition to trying to do it or noncompliance with attempting to do the work. They want to, they just have a breakdown in the neurological processes that keep them from doing it, and it's been a block for them all of their lives. And that's - that's a term that you will hear from them. "It's been difficult for me to do this all of my life."

**Vince:** Organizational and study skills can also be impacted by a learning disability. Managing time, starting and completing tasks, following oral and written directions and organizing may all be difficult. A short time span in lectures and the inability to recall many things that are taught are also things that need to be addressed.

Social skills can also be affected in many ways. A joking wink may be misconstrued as a disgusted glance. Just as people with learning disabilities may confuse symbols, they can also confuse body language.

Auditory perception problems may make distinguishing subtle changes in tone of voice or between sincere and sarcastic comments difficult. Students may also have trouble meeting other students, working cooperatively with others, and making friends. Obviously, these challenging life situations can manifest a low self-esteem.

It is important to note that a learning disability is often inconsistent. It may be diagnosed early on in life, then seemingly disappear, and then manifest itself in only one specific academic category, such as math or foreign language.

Some learning disabilities may have a biological basis. It is common to find a learning disability tends to run in families. The cause of some learning disabilities may not be known. Or, a person may have another primary disability which causes some similar learning difficulties. Examples of this are a person with a traumatic brain injury, and a person with attention deficit disorder.

There are many types of learning disabilities. The best way to identify a learn disability is through a psycho-educational evaluation done by a licensed professional. They're diagnosed by establishing a significant discrepancy between ability and performance. In other words, scores on tests of achievement are lower than expected when compared to scores on tests of intelligence. It is important to know that the presence of a learning disability does not necessarily guarantee protection under the Americans with Disabilities Act. The learning disability must present a substantial limitation to learning. The best way to determine if a student with a diagnosed learning disability is in need of an accommodation is to consult the disability support provider on your campus. They may consider the effects of the disorder to determine whether it results in a substantial impairment. Then they can recommend strategies and specific accommodations. With faculty input, the disability service provider can also help determine whether the accommodations would fundamentally alter the course of the program. When an accommodation does fundamentally alter the course, the law does not require that this particular accommodation be made.

**Betty Freeland:** You want to try that a minute? I'll try not to breath down your neck.

**Dallas Baggett:** Yeah, yeah, I can do that.

**Betty:** And see what you're - see what you come up with. You want to look at what we got now?

**Dallas Baggett:** Yeah.

**Betty:** Okay. Let's see. Start - you want to read the new stuff?

**Dallas Baggett:** Okay.

**Vince:** A variety of classroom accommodations are sometimes made for college students with disabilities. Most accommodations help clarify course demands and content. These may include assistance with note taking, either through written copies of notes provided by a note taker or by you, or allowing the use of a tape recorder in the classroom. Some faculty members may express concern regarding the tape recording of their lectures. However, Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities act of 1990 identify students with vision and other impairments as legally entitled to tape record lectures. If you're concerned that these tapes will infringe on your copyright privileges of course material, you may want to ask students to sign an agreement not to release the recording, and to use it only for the purpose of studying. Your institution's faculty handbook may include a copy of such documents.

Many college students with a learning disability find it helpful to get a syllabus and reading list as early as possible. Students with a learning disability that affects reading may require books on tape, and these must be ordered or recorded as early as possible. Some students with a learning disability like to preview course materials, then organize and plan their study time well in advance. Providing a handout of new or technical vocabulary will help support your students' organization and note taking skills.

**Ludwik:** ...take home classes, I found my grades grow substantially by reading the notes that I took, transpiring them, writing out the study guide, recording them, and driving in my car and listening to them on the way to school, on the way from school, on the way to class the week before the exam. And my test scores showed there 95, 99, et cetera. A lot of extra - a lot of extra work.

**Vince:** Dyslexia describes a pattern of difficulties students may experience in learning. It commonly affects memory, organizational

skills, and the acquisition and use of language. There's evidence to suggest that dyslexia has a genetic origin and is connected to how a person processes information. Supporting students who have dyslexia should involve a team approach, a process that involves the student, their lecturers, and the university support services with each party having specific responsibilities. Each student will need adjustments that may be unique to them.

It is often helpful to provide some students with learning disabilities extended time to take a test and a distraction-free environment. It is important for students to have access to you for answering questions or clarifying material when taking an exam. Just for note, when a student requests clarification of test questions that involve rephrasing or substituting a less-complex word for another word without any substantial change, consider this a legitimate accommodation, and one that will best be done by you in order to not alter the essence of your test content. Sometimes clarifications are just a matter of helping the student figure out what the question is asking, or may be a part of the unscrambling process.

Occasionally, we may all have difficulty sitting still, paying attention or controlling impulsive behavior. For some people, the problem is so pervasive and persistent that it interferes with their daily lives, including home, social, academic, and work setting.

Attention deficit disorder, or ADD, is characterized by developmentally inappropriate impulsivity, attention, and in some cases hyperactivity. ADD is a neurobiological disability that affects three to five percent of school aged children, and approximately two to four percent of adults. Although individuals with ADD can be very successful in life, without identification and proper treatment, ADD can have serious consequences, including school failure, depression, behavior problems, failed relationships, and substance abuse. Early identification and treatment increase the likelihood of positive long-term outcomes.

**Vanessa Lewis:** I have attention deficit disorder. A lot of times, they'll be talking and I hear someone outside and it's hard for me to maintain my attention span, so I have to really focus, because I can

tell if somebody walks by the door, you know, or if someone says something out in the hall, I have to stay really focused.

So what I have - I keep little ideas in my head by crossing my fingers. So what I do is, if they say something to me, then I - and they're talking, I don't want to interrupt them, because that's a habit of someone with attention deficit disorder - is that they will interrupt someone, and I know that. So I'm aware of that, so I try to maintain and I'll cross my fingers. And that reminds me to comment or say something about what they're talking about, you know, if they're saying something.

**Vince:** Students often find the use of computer technology with relevant software useful. Some students may only need spell checker capabilities, while others benefit from using speech output, speech input, or organizational software.

**Vince Capps:** This is Kurzweil 3000. It's a program that can read electronic or scanned text in the form of human synthetic speech. Basically, this is like any type of word processor, except you can get definitions, synonyms, syllables, and use spell checker, use multiple documents at one time. That way you can look at both the definition, particular parts of the document, or even the syllables.

**Computer Voice:** One of the features of Kurzweil 3000 is word prediction. Word pre-dic-tion. We are going to talk about obtaining workplace accommodation.

**Vince:** Oral tests may be administered using a cassette recorded version of the test. A scribe or tape recorder can record responses if a student has difficulty writing. You may be asked to allow some students to use electronic devices, like calculators, electronic spellers, and spelling dictionaries during an exam. If you have a concern about equity issues or security, you may ask the student to show you the device and explain to you it's use from a functional perspective.

Be sure to consider whether or not it will compromise what you're trying to test. And remember, pop quizzes, in-class writing, or other in-class assignments are performance measures just like tests.

Students with learning disabilities must be afforded the same accommodations as those used for testing.

Be encouraging and sensitive to the needs of individual students. Students with learning disabilities often suffer from a lack of self-esteem and confidence. Write clearly and provide handouts whenever possible. Copying for the student may be slow and difficult. Write key words or phrases on the board. Follow or provide an outline. Begin the lecture with an overview or end with a summary. Stress important words. Note taking is often a problem for students with some types of learning disabilities. Avoid writing in red. For some, this can be difficult to read. Some students with dyslexia have difficulty reading black on white. Handouts on pastel-colored paper can help. Highlight important items in book lists to help students select. Students who have dyslexia cannot skim, and reading can take a very, very long time. Reading, writing can be a laborious process, so be aware that course work may take students with learning disabilities longer than peers. And be prepared to clarify course work questions if requested. Don't ask people with a reading disorder to read aloud to a group.

Many people with learning disabilities have strong, creative talents in the arts, design, computing, and lateral thinking. Be aware that such students will find information in a diagram easier to comprehend than text.

**Augustus Swain:** Whenever we get our students together in groups, we talk about time management techniques, study skills improvement, relationships with instructors. We try to have general sessions whenever we can get the schedules in time for the students to, if nothing else, sit down and talk with them about how things are going within their--within their academic lives.

**Vince:** Auditory comprehension is not a problem for students with dyslexia, and their long-term memory is often very good. However, their short-term memory may be poor. Encourage students to write down dates, times, and instructions. On the other hand, an auditory comprehension may be a weakness for students with other types of learning disabilities.

Many students require specific tutoring from a specialist tutor to help them overcome the difficulties they experience from having learning disabilities.

**Yvonne Delnis:** Primarily what we do is a lot of drill and repetition. If a certain problem-solving technique doesn't seem to be catching on, we'll try another method and just kind of see what clicks best with the individual student. It's really different for each student. Also, sometimes using different colored markers, a technique like that might help to kind of emphasize different parts of the problem and how it fits together. We also have--actually, this is for any student--most of the textbooks provide videotapes that are key to each individual section.

**Vince:** The use of a note taker can be helpful for students who find it difficult to take notes. Other accommodations that you might want to consider are: Provide students with a detailed course syllabus. Make it available before registration week. Clearly spell out expectations before the course begins, such as grading, materials covered, due dates. Speak directly to students and use gestures and natural expressions to convey further meaning. Give assignments both orally and in written form to avoid confusion. Announce reading assignments well in advance for students who are using taped materials. Students using books on tape are generally asked by disability support offices to have their requests in two months before the start of the semester. Facilitate use of tape recorders for note taking by allowing students to tape lectures. Provide study questions for exams that demonstrate the format as well as the content of the test. Explain what constitutes a good answer and why. If necessary, allow students with learning disabilities to demonstrate mastery of course material using alternative methods such as extending time limits on oral exams, taped exams, individually proctored exams in designated alternate locations. Permit use of simple calculators, scratch paper, and speller's dictionaries during exam. Speller's dictionaries do not include definitions. Provide adequate opportunities for questions and answers, including review sessions. If possible, select a textbook with an accompanying guide for optional student use. Encourage students to use campus support services, pre-registration, assistance in ordering taped textbooks, alternative testing

arrangements, specialized study aids, peer support groups, study skills courses, and academic tutorial assistance.

**Yvonne Delnis:** With 4.4, which is kind of hard. I mean, you can't exactly identify 4.4 off the picture. It might be 4.3 or - what you do notice is that it's a little bit more than four. It actually looks like it's about half way between four and five.

**Vince:** There are many factors to consider in the educational process for students with learning disabilities, but there is no need to feel uncomfortable or inadequate when teaching these individuals. With proper instruction and classroom and testing accommodations, we can make the student-teacher relationship a rich and rewarding experience.

When in doubt, get advice. Contact your disabilities support services office at your college or university for information on helpful resources.

Remember, the extra effort that you make in the development of each and every individual in your sphere of experience will help to insure a rich, rewarding, satisfying, and productive life for your students.

I hope you continue to work diligently with your students and start to apply the tips we have presented to you in this presentation. Thank you for your time.

[Closing music]

## References

- ABCs of LD/ADD - Learning Disability (LD) and Attention Deficit Disorder (ADD). (n.d.) Retrieved November 13, 2000 from [www.ldonline.org/abcs\\_info/articles-info.html](http://www.ldonline.org/abcs_info/articles-info.html)
- Arkansas Department of Workforce Education, Adult Education Section; and Arkansas Adult Learning Resource Center. (2000). *Learning disabilities training and dissemination workbook*.
- Association on Higher Education and Disability. (2001). *College students with learning disabilities*. Brochure.
- Coordinated Campaign for Learning Disabilities. (1998, Summer). Overview of assistive technology for learning disabilities. Retrieved November 13, 2000 from [www.ldonline.org/ld\\_indepth/technology/ccld\\_assistive\\_technology.html](http://www.ldonline.org/ld_indepth/technology/ccld_assistive_technology.html)
- Day, S.L. & Edwards, B. J. (1996). Assistive technology for postsecondary students with learning disabilities. *Journal of Learning Disabilities*, 2, 5, 486-492.
- LRP Publications. (2001). Teaching students with disabilities, 2, 2. National Adult Literacy and Learning Disabilities Center. (1999). *Bridges to Practice: A research-based guide for literacy practitioners serving adults with learning disabilities*.
- National Information Center for Children and Youth with Disabilities. (2000). General information about learning disabilities - fact sheet #7. Retrieved November 13, 2000 from [www.ldonline.org/ld\\_indepth/general\\_info/gen-2.html](http://www.ldonline.org/ld_indepth/general_info/gen-2.html)
- Thornton, M.P. (2000, June). Disability highlights: Key strategies in teaching students with learning disabilities. *PACESETTER Newsletter*, 2.

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