

DOCUMENT RESUME

ED 312 479

CE 053 615

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TITLE Learning Differently: Meeting the Needs of Adults with Learning Disabilities.
INSTITUTION Tennessee Univ., Knoxville. Center for Literacy Studies.
SPONS AGENCY Tennessee State Dept. of Education, Nashville.
PUB DATE Nov 89
GRANT 2-400-82
NOTE 34p.
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Academic Failure; Adult Basic Education; *Adult Literacy; Basic Skills; Classroom Techniques; Cognitive Style; *Diagnostic Tests; *Educational Diagnosis; Educational Testing; Functional Literacy; *Learning Disabilities; Learning Processes; Learning Strategies; Literacy Education; Metacognition; Miscue Analysis; Multisensory Learning; *Student Evaluation

IDENTIFIERS Adult Literacy and Basic Skills Unit; Fernald Multisensory Approach

ABSTRACT

This document explains various approaches to diagnosing learning disabilities in adults learning to read and approaches to teaching these adults. Following an introduction, the first three sections answer the questions What are learning disabilities? How do learning disabilities affect reading? and How is a learning disability diagnosed? A section on how to teach reading to learning-disabled students includes eight general points to remember. The description of Educational Diagnosis provided by the Adult Literacy and Basic Skills Unit (ALBSU) in the United Kingdom explains the use of a learning history, miscue analysis, spelling error analysis, and writing analysis. The section on learning about learning lists ways in which good readers use metacognition as they read. Metacognition skills that are covered in ALBSU learning support classes are listed. The section on learning styles directs literacy coordinators to help their tutors deal with this aspect of teaching learning disabled adults. The conclusion includes the notion that much of what is useful for adults with learning disabilities is useful for all adult learners. The document includes a 17-item annotated bibliography and appendices that explain miscue analysis and summarize the Fernald multisensory approach, strategies for teaching learning disabled adults, and spelling teaching techniques. (CML)

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ED312479

LEARNING DIFFERENTLY: MEETING THE NEEDS OF ADULTS WITH LEARNING DISABILITIES

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NOVEMBER 1989

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The preparation of this report was funded, in part, through grant number 2-400-82 from the Tennessee Department of Education, Adult and Community Education and also, in part, through funding received from the Office of Provost-Research at the University of Tennessee, Knoxville.

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U. T. Publications Authorization number RO1-1557-45-001-90

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***There are no 'quick fix' solutions,
no one method that meets the
needs of all. But learning disabled
adults can and do learn to read.***

PREFACE

The Center for Literacy Studies, The University of Tennessee, is a multi-disciplinary research center on adult literacy. Funded by grants from the Tennessee Department of Adult and Community Education, The University of Tennessee and the Knoxville News Sentinel Company, the Center's goal is to conduct research which develops our understanding of adult literacy, its causes and effects on our society, and methods and approaches for literacy education.

When the Center for Literacy Studies began its work late in 1988, we met with literacy program coordinators and teachers in different parts of Tennessee to learn about their concerns and problems. We wanted to base our research on key issues in adult literacy for the state of Tennessee. Wherever we went we kept hearing about learning disabilities. Practitioners wanted answers to their questions: "How can we tell if someone has learning disabilities?" "How can we diagnose specific problems?" "Are there special methods for teaching learning disabled adults?"

In response to these concerns, we asked Beth Bingman to review the literature in the field, and to pull together approaches to diagnosis and teaching which easily could be applied by Tennessee programs. This is her report. We have concluded that there are no easy answers to all those questions. There are no 'quick fix' solutions, no one method that meets the needs of all. But learning disabled adults *can and do* learn to read. They and their tutors need to understand what their problems are, to take a flexible approach to teaching and learning, to be creative and to work hard. All of these are within the reach of every literacy program. We hope this report will help coordinators and tutors develop their own approaches to meet the special needs of the learning disabled.

Our thanks Mallory Clarke and to Advisory Committee members Anne Hablas, Margaret Bott and Jane Cody for commenting on a draft and to Mike Lemonds for design and production.

Juliet Merrifield
Director, Center For Literacy Studies

INTRODUCTION

Few issues are of more concern to literacy coordinators, or cause more frustration to students and tutors than learning disabilities. Why do some people have such a hard time learning to read? How can we tell if someone is dyslexic? How do we teach these students? This report looks at these questions and provides some tentative answers.

We look at working definitions of learning disabilities, and how they affect reading. We discuss how learning disabilities can be diagnosed, especially when professional testing is not available. And we review some useful ideas from a variety of sources on teaching reading to learning disabled adults. A Resources section will enable anyone who wants to learn more to follow up on the ideas presented here. And a series of Appendices contain some concrete methods which have been found useful in other programs.

WHAT ARE LEARNING DISABILITIES?

Many of you have taught in public schools and found that some children learned much more easily than others. Some seemed never to learn. And now you've found the same thing with adults. What is going on? Probably several different things. A few people may not have the time or motivation to work hard enough. But these are probably very few, and their lack of "motivation" may come from the difficulties they are having with learning. Some may have vision or hearing problems. These should be checked: can the person see clearly, can s/he hear? Some people have no problem with decoding, but have trouble with comprehension because they lack the background knowledge to understand much of what they read. We need to provide a lot of material that is familiar in language and content to build their fluency and at the same time begin to build their background information in all kinds of ways — like reading, videos and discussions.

Some learners have limited intelligence. They may be mildly or moderately mentally handicapped. Their difficulty in learning affects all areas and is evident in their conversation as well as in their attempts to read. They may be great at phonics, and therefore sound like good readers, but have little or no understanding of what they have read. Or their reading may be limited to survival words, words needed specifically for work, and things like family names. They may not become readers of new materials.

Then there are learners who clearly have the intelligence to read. They may even have learned to read, but can't spell "cat." These are the learning disabled.

Then there are learners who clearly have the intelligence to read. They know and understand a great deal. They have been in school long enough to have had the opportunity to learn to read. They may even have learned to read, but can't spell "cat." These are the people we mean when we talk about the learning disabled.

Specific Learning Disabilities is a chronic condition of presumed neurological origin which selectively interferes with the development, integration, and/or demonstration of verbal and/or non-verbal abilities. (ACLD Board of Directors)

Students with specific learning difficulties, commonly known as dyslexia, are those who have some interference in the basic processes involved in using language, i.e., perceptual/ motor/ linguistic processes. These difficulties are independent of school experience, social, economic, or emotional factors or intelligence. (Adult Literacy and Basic Skills Unit Report)

These are two of many definitions of a condition which is usually called learning disability in this country and learning difficulty in Britain. You are probably familiar with the definition in P.L. 94-142 of learning disabled children which covers nearly any school problem children may have which is not called something else.

Historically, educators talked about "word blindness", linked learning disabilities with hyperactivity, and assumed brain

damage. More recently learning disabilities were assumed to be the result of visual perceptual problems, were called dyslexia, and were suspected any time someone made reversals of b and d. This is still a common perception of the problem.

Some people believe that the idea of learning disabilities has little scientific basis, but has been adopted by parents and teachers as an acceptable way to explain school failure. Our view is that learning disabilities are real, but the concept probably has been abused.

For our purpose we will define learning disability as a problem of people who have average (or above average) intelligence, but who have *specific* difficulties with basic language learning processes which affect their ability to acquire competence in reading, spelling, and writing. When we are talking specifically of reading we may also refer to dyslexia. While not discussed in this paper it is important to remember that learning disabilities can affect areas besides reading, including social skills.

Current research seems to indicate that learning disability is primarily a language disorder, a problem with information processing.

HOW DO LEARNING DISABILITIES AFFECT READING?

Probably a more important question than definition is what does it mean when someone has a learning disability? Often we assume that the learning disabled see differently, that they reverse letters, see backwards, etc. For a small proportion this may be true; their problem involves visual perception.

Current research seems to indicate that learning disability is primarily a language disorder, a problem with information processing. This approach views the mind as a computer with information going in (sensory input), being processed (analyzed, sorted, etc.), stored (in short or long term memory), and in some cases resulting in an output (speech, writing). Most learning disabled people have problems with tasks in processing and storage of information. They may not be able easily to produce a verbal label. They see, for example, a picture of a train, they

understand it is a train, but they are slower than most people in coming up with the word train.

These learners may have problems with memory, either short-term memory for things like sequences of letters, or access to long term memory. Breaking words into separate sounds (phoneme segmentation), is difficult for many learning disabled readers. They may have difficulty in learning and remembering the sounds of words, with phonics.

Most learning disabled readers have trouble with breaking words into separate sounds.

Most "normal" readers seem to start by learning sight words, often in stories they already know. But because it is difficult to memorize very many words by sight alone, new readers begin to use phonics and word patterns to decode words. They begin to pay attention to beginning sounds, to "see" and "hear" the difference between **sick** and **stick**. This process happens automatically to some extent as readers try to decode words they don't know, and as they want to write. Phonetics are even more important in spelling.

Most learning disabled readers have trouble with breaking words into separate sounds. So for these readers the phonetic cues don't come easily. They have to learn them in a structured sequential way. And even then the phonetic cues may never work as well for them.

Fortunately most dyslexic people do not have problems with the meanings of words or text and so at the next stage of reading they can use context - semantic and syntactic cues - to decipher new words. The phonics problem become less significant when we recognize that reading is gaining meaning from print. Using a combination of basic sight words, phonetic cues like initial sounds and word patterns, and the meaning of the text, most learning disabled adults can learn to read. They will continue to need special work on spelling and often in how to organize their writing.

HOW IS A LEARNING DISABILITY DIAGNOSED?

Most literacy programs do not have access to a psychologist to give the battery of tests often used to “diagnosis” learning disabilities. It probably doesn’t matter. The most common “symptom” for such a diagnosis is a significant difference on the verbal and performance sections of the Weschler intelligence test. As a teacher you will can tell this difference when you have a student who seems intelligent, who you expect will not have trouble learning, and s/he does. You are seeing a difference between expected and actual performance. Or you may notice a pattern of difficulties like these:

- ** shows significant discrepancy between verbal and written performance
- ** experiences persistent or severe problems with spelling, even with “easy” words
- ** has difficulty getting ideas on paper
- ** loses place easily in a series or in reading
- ** finds it difficult to memorize or remember facts, new terminology, names, etc.
- ** may easily misread or miscopy
- ** may experience right-left confusions
- ** handwriting may be messy
- ** written work may not adequately express student’s understanding, ideas, or vocabulary
- ** has persistent problems with sentence structure, punctuation, and organization of written work, (not due to lack of experience)
- ** has trouble generalizing, or acquiring and applying rules
- ** has difficulty seeing his/her errors
- ** does not seem to learn by “ordinary” teaching methods
- ** may be described as a “quick forgetter”

It is important to remember that all of these difficulties can be found in beginning adult readers. It is the persistence of these symptoms over time that indicates learning disability.

It is important to remember that all of these difficulties can be found in beginning adult readers. It is the *persistence* of these symptoms over time that indicates learning disability.

Educational Diagnosis

The next step to take with a student who seems learning disabled is for student and teacher to work together on an educational diagnosis. They will explore how the student learns, their strengths and weaknesses, why learning has been so difficult, and the student's learning style. In this process, the student should find that s/he is not stupid or crazy, but is someone who learns differently. A diagnostic approach should enable the student and teacher to establish an effective, individualized program, and encourage independence and confidence in learning. There are different ways to approach this process, but it should be done with the student. In the Resources section is the STALD test, which is somewhat mechanical, but could be useful (Montgomery, 1986.) The ALBSU program in England uses the four-part diagnostic process outlined on the next page.

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TEACHING READING TO A LEARNING DISABLED STUDENT

Some general points to remember when working with learning disabled adults:

- ** remember, the important skill is getting meaning from print
- ** have student do a lot of reading, e.g., language experience
- ** the material should be relevant, interesting, and familiar
- ** be positive, build on students' strengths
- ** usually one-on-one tutoring is needed for at least some individualized direct instruction on needed skills
- ** divide learning into small chunks
- ** provide many opportunities for repetition, review and over-learning
- ** pay attention to learning style (more about this later).

ALBSU (UK) EDUCATIONAL DIAGNOSIS

1. **A LEARNING HISTORY** - informal interview. Students tell what they view as their significant problems and strengths, talk about learning to read, family history, school experiences, and so on.

2. **MISCUE ANALYSIS** - looking at miscues (errors) in an oral reading passage. (See details in Appendix A.) Students with visual processing problems may have difficulty recognizing known words, may rely heavily on sounding out words, will usually have poor comprehension. Students with auditory processing problems may have trouble decoding long or unfamiliar words, but will use context to correct many errors, and will remember a great deal of detail. Asking the student to re-tell the story, and questioning her/him about significant details enables the teacher to check comprehension, memory and sequencing ability.

3. **SPELLING ERROR ANALYSIS** - a dictation of at least 20-25 words.

With the student the teacher analyzes errors into five categories:

- a) logical phonetic alternatives which follow English spelling conventions, **hart** for **heart**.
- b) visual sequencing errors, **dose** for **does**.
- c) rule-oriented errors which do not follow English spelling conventions, **stashun** for **station**.
- d) auditory perception errors, sounds missing or confused, **natul** for **natural**. (This could also be the result of regional accents.)
- e) motor integration errors, repeating or adding or telescoping parts of words: like **beginning**, **rember**.

Students with visual processing errors are more likely to have a number of errors in b) and c); students with auditory processing problems in d).

4. **WRITING ANALYSIS**, in a piece of free writing, look at handwriting, compositional skills and technical skills. Does the student use standard punctuation and capitalization? Can s/he organize his or her thoughts in a coherent way? Does the writing make sense?

Source: Adult Literacy and Basic Skills Unit, London

When planning instruction for learning disabled adults there are three areas to consider: direct instruction in the areas the students has problems with, usually reading and spelling; learning about learning or metacognition; learning style.

Direct Instruction

Each learner is different, has different needs and different problems.

Although some claim to have it, there is no one way to teach dyslexics to read. Each learner is different, has different needs and different problems. If a method promises to be the way, be careful!

Phonics: For most people with learning disabilities a reading program should include direct instruction on basic sight words, some phonics, and a lot of reading to practice using context and phonetic and word pattern cues. For many people the Laubach program may be as effective as any. But it is important to be flexible, not to worry too much about skills like blends if the student has a lot of difficulty with them. The important skill is reading in context, so while some practice on sight words, or 'word attack skills' (consonants, prefixes and suffixes) is useful, it should not take up much of the reading session or become frustrating.

Some severely disabled readers will need a multi-sensory approach to get started with sound and sight words. Seeing, hearing, saying, and tracing words may be necessary. Laubach does this to a certain extent, but additional work may be needed. The outline of the Fernald method in Appendix B may help.

Language experience: It is important to include a lot of additional reading which is in the oral tradition of the reader in subject and language. This includes language experience stories. It is much easier to read when you know what to expect: 'I was thinking about buying a new pickup,' instead of 'The time was approaching to purchase a new automobile.' Writing and collecting good material is an activity that may be useful to the individual learner, and can be used by other learners as well.

Comprehension: Because the emphasis needs to be on meaning not decoding, work on comprehension should be ongoing. Talk about the *who, what, why, where, how* of a passage. Help the student organize verbal information so word-by-word reading is avoided. Sometimes breaking sentences into meaningful phrases can help, e.g., "I was thinking / about buying / a new pickup." Comprehension strategies like questioning as you read, reviewing meaning, and finding the main points should be taught. Making a summary, or getting the gist of a piece of writing is an important skill, although difficult particularly for people with sequencing problems. Strategies developed by Keefe and Meyer are in Appendix C as well as information on how to get copies of an article by Bill Cosby which should help more advanced readers.

The emphasis needs to be on meaning not decoding.

Spelling: Many students identify spelling as the skill with which they have most difficulty. Working on spelling can improve reading, as students learn to pay attention to word patterns. The ALBSU program uses the LOOK, COVER, WRITE, CHECK method developed by Robin Miller and Cynthia Klein. This method is in Appendix D. They find it is important to be regular and thorough in following the method. People do learn to spell.

LEARNING ABOUT LEARNING - METACOGNITION

In addition to direct instruction in skills, learning disabled adults, and probably all literacy students, need to learn about learning. This is 'metacognition.' Skilled readers use metacognition when they:

- are aware of the purpose of reading - to construct meaning from what is read
- can distinguish the important parts of text, and know where to focus their attention and what to summarize
- monitor their comprehension and have strategies for 'de-bugging' (for example, varying their speed and attention level)
- apportion their time effectively

Learning disabled adults need metacognitive skills to become autonomous and active learners.

Learning disabled adults need metacognitive skills to become autonomous and active learners. "To be able to use, modify, and generalize learned skills and strategies, learning disabled students must be able to monitor how well they are performing previously learned skills and strategies" (Wong, 1987.)

The ALBSU program includes classes specifically focused on teaching metacognitive skills. These classes are for students with specific learning difficulties who already attend classes, but need individualized support. Learning Support Classes cover:

- ** Developing spelling skills, discussion of:
 - what spelling is (visual-motor memory skill)
 - the distinction between reading and writing
 - memory and memorization
- ** Becoming an effective reader: discussion of:
 - what reading is (gaining meaning from print)
 - distinction between reading and decoding
 - distinction between reading and reading aloud
 - skills needed in reading for different purposes
 - the active reader
- ** Developing writing skills: discussion of:
 - proofreading and its importance in becoming an independent writer
 - writing for different purposes
 - link between reader and writer
 - distinction between writing and speaking
- ** Becoming an independent learner: discussion of:
 - the role of the tutor/student in learning
 - role of motivation in learning
 - different types of learning (memorization, understanding, and activity)

The learning support class also gives students an opportunity to discuss problems which their disability has caused and share strategies for coping. They can share experiences and discover that other people are struggling with similar difficulties.

LEARNING STYLE

A third area to consider in planning the program with the adult learner, whether disabled or not, is learning style. The term 'learning style' is often used for different concepts. Probably we are most familiar with learning style as learning modalities - visual, auditory, kinesthetic, and tactile. These modalities are important. Some of us remember what we've heard better than what we've read. For others, the opposite is true. For some, writing or even "performing" a word or concept is the best way to learn. There are many checklists and tests to determine strong and weak modalities. Observation and asking may serve as well. When you and your student are aware of how s/he learns best, instruction and practice can be modified to fit.

It is also important to be aware of your own learning style in this area, and be sure that you use the style that helps your student.

It is also important to be aware of your own learning style in this area, and be sure that you use the style that helps your student. Looking at your own learning style also helps you be sensitive to students' different needs.

Another way to look at learning style is in terms of 'global' versus 'analytic' styles. Global learners are whole word readers and learn holistically, whereas analytic learners learn things in sequential steps (as in phonics instruction.) Although dyslexic learners often read in a holistic way, they may also need some structured work on phonics. They are not as likely as other students to acquire these decoding skills without direct instruction.

The differences in the right and left hemisphere of the brain give rise to a similar theory of learning style. 'Left-brain' people tend to like sequence, be more structured and systematic, solve problems by looking at parts, are excellent planners, and are analytic. Those who are more 'right-brain' people are involved with visual-spatial activities and are more random and spontaneous; they see patterns, solve problems by looking at the whole picture, and arrive at accurate conclusions intuitively.

Other learning style theorists look at environmental preferences in determining learning style. They consider such factors as level of noise, lighting, temperature, room arrangement, group size, time of day, mobility, whether people prefer to eat or drink while they study. It may be useful for learners to explore the environment that they prefer, and try to match it as much as possible.

Learners and teachers who take account of different learning styles when planning activities, work in styles that are most comfortable for them, but can also experience new ways of learning.

Learners and teachers who take account of different learning styles when planning activities, work in styles that are most comfortable for them, but can also experience new ways of learning. One model for this is the 4MAT system developed by Bernice McCarthy. She speaks of four styles:

1- Innovative learners who seek meaning, need to be personally involved, perceive information concretely and process reflectively, are innovative and imaginative. They ask "Why?"

2- Analytic learners who seek facts, need to know what the experts think, perceive abstractly and process reflectively, are interested in ideas and concepts more than people, are data collectors, create concepts and models. They ask, "What?"

3- Common sense learners who seek usability, need to know how things work, learn by testing theories in ways that seem sensible, perceive abstractly and process actively, need hands-on experiences, have limited tolerance for ambiguity, develop practical application of ideas. They ask, "How does this work?"

4- Dynamic learners who seek hidden possibilities, need to know what can be done with things, learn by trial and error, perceive concretely and process actively, are adaptable to change, intuitive, and carry out plans. They ask, "What can this become?"

McCarthy's model, 4MAT, involves teaching in a way that uses the strengths of all four types. The instructional process goes around a "circle of learning": from a concrete experience,

through reflection to concept formation, practice, and planning and carrying out work which involves the new concepts. This model of instruction is particularly useful in planning group activities, but can also be used in a one-on-one situation.

How useful are "learning styles?" At one extreme, Adrienne Bonham says, "The general view of learning styles is one of thinly developed theory and weak instruments, supported by fragmented research, often in settings not typical of adult education." At the other extreme are the claims that all educational ills can be solved by paying attention to learning style. The truth probably lies between the two. The notion of learning style is useful in at least these ways:

- 1- To help tutors be aware that we all learn differently
- 2- To help tutors be aware of their own style and how it affects their teaching
- 3- In designing methods that meet the needs of all students
- 4- To help students realize how they learn best

CONCLUSIONS

When we talk about adults with learning disabilities or dyslexia we mean people whose intelligence is at least "normal" but who have difficulty learning to read, write, and spell because of some disability in their language processing, a disability which is probably physiological. There are others who have a hard time learning to read because they have limited intelligence or a physical disability in hearing or vision. Some of the methods used with dyslexic learners may also be helpful for these people, but they are not learning disabled.

Many coordinators mentioned a need for determining who is learning disabled. To a large extent the important issue is how the person learns and doesn't learn. This is an issue with any student. Educational diagnosis, continually observing and discussing with the student what works and what doesn't is

Educational diagnosis, continually observing and discussing with the student what works and what doesn't is probably the most important part of "diagnosis".

probably the most important part of "diagnosis". While a professional diagnosis is usually not available and not always helpful, it can be a relief to students (and tutors) to understand that the reason they have had difficulty is because of a learning disability. This understanding can relieve the guilt and poor self-concept on one hand and lead to assurance that though it may not be easy, together the student and tutor can discover ways the student can learn. Going through checklists together is one way student and tutor can reach this understanding.

While a professional diagnosis is usually not available and not always helpful, it can be a relief to students (and tutors) to understand that the reason they have had difficulty is because of a learning disability.

Current research seems to indicate that most learning disabled people have problems with processing the sounds of language. They may not "hear" the different phonemes or sound that make up a word so they have difficulty in breaking a word into sounds for spelling and in blending sounds for reading. They may also be slower in retrieving the word they want from their memory. So, for example, when shown a picture of a laundromat, they understand that this is a place where people pay to wash and dry clothes, but they are slower in retrieving the word "laundromat". Problems with short-term memory complicate learning. Some learning disabled adults do have problems with visual memory and processing, for example the reversals we have tended to associate with 'dyslexia,' but most have problems in the area of memory and auditory processing.

Learning disabled adults don't easily pick up the phonetic cues as they begin to learn basic sight words. They may not be able to determine where the words **clear** and **clean** are different. Using context, both semantic and syntactical, is more useful than phonics for learning disabled readers. At the same time, some very specific instruction in phonics, particularly beginning sounds and recognition of common syllables like **ing** and **tion** is important. Phonics can help in word recognition, but should not be used to the point of "sounding" out words. Learning how to learn is at least as important as specific instruction in reading for learning disabled adults. The student and tutor working together discuss learning style and which learning styles works best for the students. The characteristics of a good reader, particularly reading for meaning are stressed. And specific strategies like **LOOK, COVER, WRITE, CHECK** for spelling are taught.

Much of what is useful for adults with learning disabilities is useful for all adult learners. Learning how we learn, discovering how learning style affects our teaching and learning, reading as a search for meaning, not decoding—these are relevant to all of us.

Much of what is useful for adults with learning disabilities is useful for all adult learners.

RESOURCES/ BIBLIOGRAPHY

(Copies of these materials are available at the Center for Literacy Studies, or at the UTK library as noted)

L. Adrienne Bonham (1988) 'Learning style use: in need of perspective, *Lifelong Learning*, 11(5): 14-19.

Jane Callisle, Cynthia Klein and Aisling O'Reilly (1988) *Report on the ALBSU Project on Specific Learning Difficulties: March, 1986- March, 1988*, London, UK: Adult Literacy and Basic Skills Unit.

Marie Carbo (1987) "Deprogramming Reading Failure: Giving Unequal Learners An Equal Chance," *Phi Delta Kappan*, November: 197-202.
Looks at effects of learning style on children's beginning reading; not directly relevant, but thought-provoking.

Grace M. Fernald (1943) *Remedial Techniques in Basic School Subjects*, McGraw-Hill. (See also summary in Appendix B.)

A.L. Jorm (1983) *The Psychology of Reading and Spelling Disabilities*, Routledge & Kegan Paul, 1983. (Available at UTK Library.)
This book is heavy going, but good for understanding the nature of learning disabilities. It is written in reference to children, but applies to adults as well.

Donald Keefe and Valerie Meyer (1988) 'Profiles of and instructional techniques for adult disabled readers,' *Journal of Reading*, 31(7):614-619.
(See summary in Appendix C.)

Cynthia Klein (1989) "Specific Learning Difficulties," *ALBSU Newsletter* No. 32, Winter.

This summary of the ALBSU Learning Difficulties Program is a very good introduction to the issues, and has many helpful ideas which have been drawn upon for this report. Reprint available from Adult Literacy & Basic Skills Unit, Kingsbourne House, 229/231 High Holborn, London WC1V 7DA, U.K.

Bernice McCarthy (1980) *The 4MAT System, Teaching to Learning Styles with Right/Left Techniques*, EXCEL Inc., Oak Brook, IL (Available in UTK Law Library)

A good introduction to learning style and how to plan instruction which includes all learning styles; written with children's classrooms in mind, but has adaptable ideas.

Robin Millar and Cynthia Klein (1986) *Making Sense of Spelling*, London, UK: Inner London Education Authority (ILEA), Diagnostic Center for Learning Difficulties. (See summary in Appendix D.)

Dorothy Montgomery (1986) *STALD: Screening Test for Adults with Learning Difficulties and Strategies for Teaching Adults with Learning Difficulties*; Education Service Center Region 9, Wichita Falls, Texas. (An ERIC document available through UTK Library.)

The foreword describes this as "a testing instrument, a remediation model keyed to it, and instructional resources for those working with adults... It aims to screen adult learners individually to identify if characteristics common to those with learning difficulties are present, and if so, to prescribe specific materials and methods known to be successful with them."

I have not used either the test or many of the materials mentioned. I doubt if it's the magic solution, but the test can probably be helpful in beginning to learn about diagnosis and there are some useful suggestions about materials. Does not really involve the student in the process of diagnosis or program planning.

Edward Followay, J. David Smith and James Patton (1988) "Learning Disabilities: An Adult Developmental Perspective," *Learning Disabilities Quarterly*, Vol. 11 (Summer): 265-272.

The nature of learning disabilities in adults is examined in relation to models and research in adult development.

Jovita Martin Ross (1987) "Learning disabled adults: Who are they and what do we do with them?", *Lifelong Learning*, 11(3):4-8.

A good general survey of the issues; does not contain a lot of specific suggestions, but does consider effects of learning disability beyond learning to read; useful for understanding what can be happening to learning disabled students.

Margaret Snowling (1987) *Dyslexia*, Basil Blackwell, Inc.
Probably more helpful than Jorm's book; surveys the research about what dyslexia really is, how it affects the reading process. (Available at UTK Library)

Linda Thistlethwaite (1986) "The adult beginning reader: Assessment/discussion/instruction, *Lifelong Learning* 10 (2): 4-7.
A good discussion of working with any adult beginning reader; not aimed at learning disabled readers, but with many good ideas.

William Vaugh (1985) "Project ABLE: Help for Adults with Learning Disabilities," *Phi Delta Kappan*, 66(6): 444-445.
Description of program in Connecticut which combines individual and group work.

Margaret Walsh (1979) 'Miscue analysis,' *A.L.U. Newsletter (England)*, 5(June).
(This article is reproduced in Appendix A.)

Bernice L. Y. Wong (1987) "How do the results of metacognitive research impact on the learning disabled individual?" *Learning Disability Quarterly*, 10:189-195.
A helpful discussion of metacognition and how this research can help the learning disabled and their teachers.

APPENDIX A

This explanation of miscue analysis by Margaret Walsh is from the ALU Newsletter (No. 5, June 1979)

Miscue Analysis

Often the most obvious truisms are worth repeating. For instance, reading is only any real use if you read for meaning and yet we often still concentrate on errors of recognition, often when they make little real difference to the sense of the piece being read. We all use approximations when calculating (sometimes we also need exact answers) whereas reading often tends to be seen as 'right' or 'wrong'.

This article by Margaret Walsh, the Literacy Organiser for South Glamorgan, looks at this truism by describing a useful technique called Miscue Analysis.

Why use it?

It's fun! It means that the tutor is actively involved while listening to a student read. No more bored looks on the tutor's face as the student practises his reading. There's more to hearing students read than merely supplying the unknown word — or helping him to sound it out.

Did you ever want to be a detective? If so now's your chance. Teachers of reading should be like detectives — always questioning. Why did my student say that? Has it altered the meaning? If not, does it really matter? Is it a good mistake or a bad mistake? The more we probe, the more we learn about the process of reading. Miscue analysis throws valuable light on this process but . . .

What is it?

Miscue Analysis? The analysis of miscues; but what's a miscue? The American, Kenneth Goodman maintains that reading involves more than merely looking closely at each letter and each word. He suggests that as teachers of reading, we should take a much broader view of the subject. We should help student select the most useful cues in order to produce the correct guess the first time.

Where an incorrect guess is made a miscue occurs. The term error is seldom used because of its negative association with failure. The tutor's task is to observe the miscues, try to analyse them with the student, and decide upon a strategy for future work. In helping the reader to select the most useful cues they are working together, towards more proficient reading. Consider the following passages:—

Example 1

In the first passage about John Cameron, the following words were substituted

- 'performance' for 'programme'

- 'hadn't changed' for 'hated change'
- 'clean' for 'clear' (but immediately corrected)
- 'found' for 'fond' (but immediately corrected)

Although different from the text, the first two words do not dramatically alter the sense of the passage. The reader has substituted noun for noun, and verb for verb clause. He is reading intelligently. His substitutions are

acceptable. The word 'performance' looks like 'programme', in the same way as the clause 'hadn't changed' looks like 'hated change'.

The reader was obviously satisfied that this sounded like language, and made reasonable sense.

However, as soon as he had substituted 'clean' for 'clear', he probably noticed the following word 'up' and realised that 'clean up' didn't make sense, in that context. Until this point the sentence sounded reasonable "and watched his robot clean . . ." But as soon as he noticed what followed, he was immediately able to give the correct word.

Similarly he substituted the word 'found' for 'fond'. These again look very much alike but as soon as he had said the word 'found' he knew that it didn't sound right. He probably glanced at the last two words, and knew that by using the word 'found' the sentence was meaningless. He re-examined the word and immediately read 'fond'.

HE WAS ALL THE TIME READING FOR MEANING

He was selecting the cues which he felt

Example 1 Actual Passage from Book

Now John Cameron lived alone-apart from his household robot. And his life certainly did run smoothly. Some people changed their robot's programme every day, and left it in the 'Transit' position, that is, ready to receive orders. But not John.

He was a rigid man who hated change. He wanted every day to be the same as the one before. So HIS robot was programmed once and for all.

One weekend, he sat down after breakfast as usual, and watched his robot clear up the dishes. There were times when he felt almost fond of it. It was the silence he liked. Robots never argued-not like wives.

(From 'Knockouts' 'The Man Who Loved Robots' by Jan Carew)

Passage as read by Student

Now John Cameron lived alone-apart from his household robot. And his life certainly did run smoothly. Some people changed their robot's performance every day, and left it in the 'Transit' position, that is, reading to receive orders. But not John.

He was a rigid man who hadn't changed. He wanted every day to be the same as the one before. So HIS robot was programmed once and for all.

One weekend, he sat down after breakfast as usual, and watched his robot clean clear up the dishes. There were times when he felt almost found fond of it. It was the silence he liked. Robots never argued-not like wives.

were most useful to him and when one didn't work, he tried another.

At all times he considered one or other of the following:

- The look of the word
- The meaning of the word in the sentence
- How the word sounded i.e. grammar

Example 2

Now let's consider the second passage 'Wild Wheels' where the following substitutions were made:

- 'camera' for 'cinema'
- 'the' for 'to'
- 'dropping from' for 'dropped on'
- 'plans' for 'planes'
- 'arches' for 'horses'
- 'already' for 'really'
- 'move' for 'more'

In nearly every instance the substituted word changed the meaning of the sentence and the passage. Therefore each was unacceptable.

However, on closer examination we notice that most look like the original (apart from 'arches' for 'horses' and this because of the accompanying illustration.)

This reader is paying no attention whatever to the meaning of the passage — he is concerned only with reaching the end. The tutor might suggest that because he has substituted the word 'plans' for 'planes' he needs a revision of the 'magic c'. This may well be the case, but it would probably be more helpful to him if the tutor suggested he thought about what he

was reading, and tried to get some meaning from it. Perhaps he needs to go back a stage and read something easier. Simple cloze exercises, — where one fills in missing words — would be useful. When filling in the blanks he would be learning the art of prediction which is invaluable when learning to read.

Of the two readers, clearly the first was more proficient. Not because of the number of miscues, but because of the kind of miscues. By examining his miscues we have discovered that he reads with understanding, and always searches for meaning. It is important to stress that it is not necessarily what you read, but how you go about it, that is all important.

How often do we point out every word that is misread — whether or not it alters the meaning? How soul-destroying that must be! How can our student possibly read for meaning if he is always being interrupted or told "No, it's not 'dad' — it's 'father'." "It says 'i' not 'the'."

Marking System

Errors can be recorded in different ways, but the chart below includes the most useful symbols.

Practice makes perfect

Now that we know a little about miscue analysis, we are ready to try it out. As with everything else we learn by doing.

CHART

| ERROR | SYMBOL | |
|--------------|--------------------------|---|
| Non-response | <u>work</u> | Needs prompting after a few seconds or asks for word. |
| Substitution | play work | Write substitution above appropriate part of text. |
| Insertion | his for \wedge work | Indicate by insertion sign, and write inserted word above. |
| Omission | (work) | Circle word, words, or parts of words. |
| Repetition | <u>work</u> | Underline words repeated. |
| Correction | ⊙ play work | Place small circle beside corrected word. |
| Reversal | work } hard o/n | Symbol that shows which parts of letters, words, phrases or clauses have been interchanged. |
| Hesitation | work/hard | Hesitation between two words. |

Example 2 Actual Passage from Book



Wild Wheels

In the early days of the cinema the film star was often on a train. Stuntmen jumped on to trains from bridges, dropped on to trains from planes, fought on trains, ran along the tops of trains, jumped from trains to the ground, and on to trains from horses.

Fights on top of a train are not easy. A train not only runs forwards, it also moves from side to side. And winds can be strong. In the cinema, we think one fighter is trying to throw the other off. Often, he's really trying to hold him on.

Today we more often see fast cars in films. In the early cinema, cars were usually funny. Not now.

(From 'Stunt' by Lewis Jones published by Longman)

In the early days of the cinema stuntmen jumped onto trains from bridges

Passage as read by Student

Wild Wheels

In the early days of the camera, the film star was often on a train. Stuntmen jumped on the trains from bridges, dropping from to trains from plans, fought on trains, ran along the tops of trains, jumped from trains to the ground, and on to trains from arches.

Fights on top of a train are not easy.

A train not only runs forwards, it also moves from side to side. And winds can be strong. In the camera, we think one fighter is trying to throw the other off. Often, he's already trying to hold him on.

Today we move often see fast cars in films. In the early camera, cars were usually funny. Not now.

However, before we begin, here are some points to remember.

1. Put the student at ease.
2. Tell him that you want him to read the passage through, without any interruptions or promptings from yourself. But stress that this isn't a test of any sort.
3. Encourage him to guess or skip any word he finds difficult.
4. Tell him that when he has finished reading, you will ask him to retell the story in his own words.

Retelling

This is an important aspect as it shows the reader's ability to retain meaning. It is preferable to asking direct questions, as these would give cues to the reader about the significant parts of the passage.

The better reader will probably be able to retell most of the story. Even if he makes slight alterations to the original it probably won't alter the overall meaning.

Following the unaided retelling, ask questions about

- areas the reader may have omitted
- character recall and development (Who else was in the story? What was he like etc?)
- events
- plot
- theme

What material should we use?

The passage should be new to the student, complete in itself, with a beginning, middle and end. It should be difficult enough to ensure the students will produce miscues.

Miscues tell us whether a reader is understanding and seeking meaning from the passage. What do we learn about the three students who read this passage?

Uncorrected substitutions are very revealing. Do they alter the meaning?

- (A) 'large' for 'load'
 (B) 'to point' for 'and pointing'
 (C) 'lots' for 'load'?

Similarly with omissions — do they alter the meaning?

- (a) 'it'
 (b) 'soon'

It would appear that A is a less proficient reader than B and C, both of whom are continually looking for meaning when reading — something we must always encourage students to do. We are now able to consider reading in a new light — not merely counting mistakes but analysing miscues.

Good luck with the detective work!

A

I live in a flat and look^s after myself.

As my clothes get^{the} dirty I put them in a black/plastic bag which is delivered by the/council for rubbish.

On the weekend I take the bag to the/laundrette.

One day I left it with the attendant lady. She said

I could pick (it) up in an hour.

Well I went for a pint in the pub. Then I went

back to the/laundrette. As soon as I opened the door the lady was waving her hands and pointing to a load of rubbish. I soon/realised that I had left the weekly rubbish bag by mistake.

B

I live in a flat and look^{ed} after myself.

As my clothes get dirty I put them in a black/plastic bag which is delivered by the council for rubbish.

On the weekend I take the bag to the laundrette.

One day I left it with the attendant lady. She said

I could pick it up in an hour.

Well I went for a pint in the pub. Then I went

back to the/laundrette. As soon as I opened the door the lady was waving her hands and pointing to a load of rubbish. I (soon) realised that I had left the weekly rubbish bag by mistake.

C

I live in a flat and look after myself.

As my/clothes get dirty I put them in a black plastic bag which is delivered by the council for rubbish.

On the weekend I take the bag to the/laundrette.

One day I left it with the/attendant lady. She said

I could pick it up in an hour.

Well I went for a pint in the pub. Then I went

back to the laundrette. As soon as I opened the door the lady was waving her hands and pointing to a load of rubbish. I soon realised that I had left the weekly rubbish bag by mistake.

APPENDIX B

SUMMARY OF FERNALD MULTI-SENSORY APPROACH

From Fernald, *Remedial Techniques in Basic School Subjects*

Introduction

This method is for use with students who have no success with other methods. Fernald developed it for those with "total or extreme disability." Other methods should certainly be tried first.

Stage 1

Because of its tremendous possibilities and wide usage, the Fernald-Keller Approach should be studied in detail so that all four stages are understood by the teacher. Stage I seeks to motivate the student and get him to want to learn. New words are taught through the use of the tracing technique, along with visual and auditory emphasis. Once the student has developed facility in the use of the tracing methods and has accumulated a group of sight words which he can use, he moves into Stage 2.

Teacher

1. Finds a word the student wants to learn.
2. Asks student to use word in a sentence or to give the meaning.
3. Asks "How many parts do you hear?"

Student

Selects word to be learned.

Responds appropriately.

Responds. With teacher rendering needed help, the student verifies his answer by dictionary

| <u>Teacher</u> | <u>Student</u> |
|---|---|
| <p>4. In script with crayon, writes the word.</p> <ul style="list-style-type: none"> - Says word - Says each syllable without distortion, as each part is written. (Pronunciation of each syllable begins with and ends with the initial stroke of the syllable.) - Going from left to right crosses t's and dots i's. - Underlines each syllable while pronouncing the syllable. | <p>Student observes teacher.</p> |
| <p>5. Demonstrates tracing technique.</p> <ul style="list-style-type: none"> - Index and second finger held still while tracing over words. - Says word. - Says syllable on initial stroke of each syllable. (Without distortion) - Crosses t's and dots i's from left to right. - Says word. - Repeats word until student is ready to trace. | <p>Student observes teacher.</p> <p>Traces the word following the procedure demonstrated until he thinks he can write the word without the copy</p> |
| <p>6. Checks student's tracing technique.</p> | <p>Pronounces. Says each syllable as he begins to make it. Says again as he underlines each syllable.</p> |

TeacherStudent

- When student hesitates or makes an error, stops him.
- Records number of tracings
- Praises success

7. Checks writing of word.

- No erasures.
- Does not stress errors.

Compares his writing to original copy

If successful, dates paper and files word.

If unsuccessful, either retraces, or makes a second attempt.

8. Checks retention the next day.

Stage 2

In this stage the teacher-student "step-by-step" procedure in writing the word is still followed except that the student no longer traces the word. The student makes use of oral and auditory modalities. He looks at the word, pronounces the word after the tutor, watches the tutor write the word, then writes the word without looking at the copy, saying the word as he writes it.

Stage 3

The student reads the word (with tutor help if necessary) says it and writes the word.

Stage 4

The student recognizes new words from their similarity to words or parts of words he has already learned.

APPENDIX C**SUMMARY OF STRATEGIES FOR TEACHING LEARNING DISABLED ADULTS.**

From Keefe and Meyer, 'Profiles of and Instructional Techniques for Adult Disabled Readers'

Some suggestions from Donald Keefe and Valerie Meyer for working with students at various levels. They discuss "disabled" readers without distinguishing between learning disabled and other reasons for disability, but their suggestions are practical.

For non-readers:

- (1) Make a book using words the student recognizes from the environment. Cut advertisements with words like "ccke" or "McDonald's" and put on one page. On the opposite page write the word in large print.
- (2) Find highly predictable stories with patterns that lead the student to "read" the text.
- (3) Write sentence stems such as "I can _____" or "I like _____." Have the student complete the sentence with his/her own words and read.

For readers who can read "just a little," who can read simple texts with help, it is important to stress reading as "making meaning" rather than sounding out words. For this group:

- (1) Use language experience stories and tape to read at home.
- (2) Encourage learners to skip unknown words and self correct miscues.
- (3) Encourage learners to take risks and make guesses, for example figuring out what an ad or logo is with only a small part presented.

Additional ways to focus on meaning for readers with more skill:

- (1) Silly Sentences with one word which does not make sense-"I smell with my knees." Ask the reader to figure out which word does not make sense.

(2) Written conversation between the student and tutor on some event, your feelings about work, your children, etc. The conversation is started by the tutor who briefly writes what s/he wants to say and the student responds- in writing. Keep it simple without concern for spelling or grammar.

(3) Flash card directions to force readers to read more than one word at a time. Place a few words of direction on a card. Flash each card and ask the learner to do what the card says, e.g., "Put your hands on the table." Encourage "chunking" all the words in one glance. It may take four or five flashes. Later use two directions per card.

To work on comprehension with more advanced readers:

(1) Use key word predicting activities. From a story or chapter select about 10 key words. Give the list to the student and have him/her predict the content of the story. Then read to see if the predictions are correct.

(2) "GIST" requires the reader(s) to reduce the first sentence of a passage to 3 or 4 words, then the first two sentences to 5 or 6 words, three sentences to 7 or 8 words, etc. until the whole paragraph is reduced to 15 or so words which are the gist of the passage.

(3) Prepare directions for a simple card game leaving out a crucial instruction. After playing the game ask the reader to determine what has been left out.

A useful article by Bill Cosby, "How to read faster," suggests previewing, skimming, and clustering to increase speed and comprehension. It is available in reprints and as an 11" x 17" poster from:

"Power of the Printed Word"
International Paper Company, Dept. 3
P.O. Box 954
Madison Square Station
New York, NY 10010

APPENDIX D**SUMMARY OF SPELLING- LOOK, COVER, WRITE, CHECK**

From Millar and Klein, *Making Sense of Spelling*

Use lists of words taken from students' writing, common words, and words with common patterns. Words with confusing patterns like -el and -le should not be used in the same list. Divide a page into 4 or 5 columns. Write each word correctly in the first column or make sure the student has copied the list correctly. Explain to the student that they should:

LOOK at the word, noting any particular difficulty and say it aloud. Close their eyes and try to visualize the word.

COVER the word. Say it aloud.

WRITE the word in column 2. Say it as they write it.

CHECK that the word is correct. If not, copy the correct spelling above or near the original, paying attention to the mistakes. If a mistake has been made it is important to correct it by writing the whole word again not just by changing or adding letters. The experience of writing the whole word is important (cursive is best).

Next day, repeat the process and spell each word in column 3.

Two or three days later, repeat the process and spell the words in column 4.

General memory aids which any individual student may find useful:

Teaching students to beat out syllables and then write them as they say them.

Highlighting the words with colored pens. This can be useful to help students focus on the bit of the word they are misspelling.

Saying the names of the letters, spelling in rhythm. This is useful for confusing endings such as **-cial, -ght**, etc.

Understanding the derivation of words (**television**: tele means "far," vis means "see").

Memory aids for students with auditory perceptual difficulties:

Finding words within words. This may need to be demonstrated to the student. (**Cap/a/city** for capacity; **we/at/her** for weather).

Reinforcing spelling by finding words of similar letter patterns (**please - ease - disease; sound - round - found**).

Memory aids for students with visual memory difficulties:

Exaggerating pronunciations of words: **Wed/nes/day** for Wednesday; the student is advised to "say it funny" while writing it.

Understanding the structure of words, for example morpheme, root words, suffixes, prefixes, etc.

Provide format for building on root words: for example appoint, disappoint, disappointment, disappointed, etc.