The booklet, fifth in a series, examines the assessment and remediation of reading difficulties in adults with learning disabilities. The section on assessment concerns touches upon reading recognition difficulties, and includes a list of questions for investigating auditory, tactile, and visual processes. Reading comprehension difficulties are also addressed. Remediation approaches are listed for reading recognition skills according to problems in eight areas: auditory, visual, word categories, context clues, comprehension, memory, vocabulary, and specific reading comprehension skills. Resource materials are listed for word attack skills, vocabulary development, and comprehension. (CL)
ACADEMIC ASSESSMENT AND REMEDIATION OF ADULTS WITH LEARNING DISABILITIES:

A Resource Series
For Adult Basic Education Teachers

Assessment and Remediation of

READING

Five County Adult Education Program
(Barrow, Clarke, Jackson, Oconee, and Oglethorpe Counties)
Clarke County Board of Education
Athens, Georgia 30601

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All adults who have not completed high school are potential clients for our Adult General Education Program and are aggressively recruited. Most of them with motivation proceed normally through our instructional program until they reach their goal. While following the progress of our students, we observed that some of them made slower progress and gained lower than expected achievement levels. These students did not reach their goal or our goal for them, although many had good motivation, seemed alert and bright, and occasionally made excellent progress in one or more skills. An awareness grew that a significant number of the students might be learning disabled.

Assistance was at hand from the University of Georgia, Department of Special Education, in the persons of Dr. Cheri Hoy and Dr. Noel Gregg, who met with the staff of the project for planning, worked with our adult education teachers in workshops, as well as wrote our project publications. Our appreciation is also expressed to the teachers of the five-county program for their participation, to Mrs. Betty Westbrook, Athens, for her extra-hours typing of the manuscripts, to Ms. Shelby Johnson, Snellville, for editorial assistance, and to Dr. Edward T. Brown, Stone Mountain, for facilitating the development and production processes.

Dr. Janie Rodgers
Project Director

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ASSESSING READING DIFFICULTIES

Adult education teachers are keenly aware of how important functional reading skills are to the adult student. Significant difficulty in reading has already kept the student from completing high school and can now interfere with completing the GED. Reading problems can also prevent the adult from finding fulfilling employment and learning about social and political activities from the newspapers. Severe reading deficits may even prevent the adult from reading a menu in a restaurant.

It should also be noted that many poor readers have abandoned reading or avoided it whenever possible, resulting in deterioration of whatever skills they had. Others have found ways to hide their inability or have developed compensatory behaviors which mask it. The initial placement test and interview in the learning center or classroom identifies the level of reading skill then operative and the individual skills that are deficient. Much more information than this is needed when there may be cognitive processing deficits.

Reading Activities To Examine

Learning disabled adults may have learned to cope with little or no reading ability in a way that makes diagnosis difficult for the teacher. By using materials that are important to the learner, the following questions can begin the diagnosis. Does the student have difficulty with:

1. reading job manuals used in training?
2. reading newspaper want-ads in sections of special personal interest (employment, autos, etc.)?
3. reading job applications?
4. understanding written information?
5. reading quickly for information?
6. reading long passages when shorter passages are not a problem?
7. scanning a long passage for specific information?
8. perceiving the organization of written material?
9. answering inferential or evaluative questions about information read?
10. keeping up on the job and/or in course work due to reading problems?

In addition to the above, note especially any discrepancy between oral language skills and reading ability.

Information from these appraisals, combined with that from the entrance interview, placement testing, and informal assessment of oral language facility and visual processes can suggest learning disability. Once suspected, there are activities and tasks to pursue in the areas of reading recognition and reading comprehension. In each of these areas, the teacher can manipulate the input/output and level of response that are described in the Appraisal and Assessment booklet.

**Reading Recognition Difficulties**

Investigation into reading disorders requires inquiry into auditory, tactile, and structure recognition facility, as well as visual activity. Each is an aspect of the cognitive process of reading that is observable to the teacher. The following questions can be investigated in an informal way during normal but guided instructional sessions. Each question should be separately and specifically addressed so that the responses are fully identifiable. The questions are presented in a single page arrangement so that skill defects can be pursued across these investigative areas.
Questions for investigating the auditory process:

a. Can the individual recite all the letters of the alphabet?
b. Can the individual associate all the phonetic sounds of all the letters?
c. Can the individual blend sounds to form a word when given one sound at a time (c-a-t)?
d. Can the individual break down an unfamiliar word into the component sounds?
e. Can the individual listen to an orally presented word and identify the number of syllables?
f. Can the individual listen to an orally presented word and name the syllables?
g. Does the individual have an obvious articulation problem and if so does the articulation problem interfere with reading recognition?

Questions for investigating the visual process:

a. Can the individual read all the letters of the alphabet?
b. Can the individual match similar looking letters and/or words?
c. Can the individual match words to their visual configurations (i.e., hotel = hotel)?
d. Can the individual visually track across a line of print without losing his or her place?

Questions for investigating the tactile process:

a. Can the individual identify words and letters written on his or her palm or back with a stylus? (Important to consider in the development of instructional strategies)
b. Can the individual recognize and name common objects placed in his or her hand while blindfolded?
c. Is the individual's tactile recognition much better in one hand than the other?

tasks for assessing reading recognition:

a. Can the individual read categories of words? (nouns, verbs, prepositions, etc.)
b. Do semantic groupings assist the individual in reading unfamiliar words? (fruits, time concepts, colors, etc.)
c. Can the individual utilize context clues in decoding unfamiliar words?
d. Does the individual utilize structural analysis in the decoding of unfamiliar words? (prefixes, suffixes, root words)
e. Can the individual read unfamiliar words if they are grouped as word families? (nan, pan, fan, Dan)
f. Can the individual quickly identify identical words from groups of similar looking words?
g. Is the individual aided when color coding of specific letters and/or patterns is used?
The following factors affecting reading comprehension are among those frequently encountered in the adult learning situation. Awareness of them can help in distinguishing between those who haven't learned from those who can't learn from typical instruction.

a. Short and long term memory.
b. Knowledge of the rules of grammar and sentence order.
c. Understanding of the organization of written text.
d. Comprehension of abstract language.
e. Simultaneous processing of all cognitive processes quickly (automaticity).
f. Decoding ability.

The following questions can be used for assessing reading comprehension:

a. Was the information being read important to the student?
b. Did the student have difficulty keeping his or her place while reading (i.e., skipping lines)?
c. Did the student need to read out loud in order to gain meaning?
d. Did the student show a discrepancy between ability to answer inferential questions and ability to answer factual questions?
e. Did the student do better when the passage was only two or three sentences in length rather than a whole paragraph?
f. Did the student perform better if there was a picture or graph?
g. Did the student perform better on a cloze (fill in a missing word) format rather than a standard format of read-and-answer-questions?
h. Did changing the content affect the student's performance?
i. Was reading rate a significant problem for the student?
REMEDIAING READING DIFFICULTIES

The adult education teacher who suspects that a student has a specific reading deficit must be able to take information gained during formal and informal assessment and translate it into instructional practices. The information about the student's specific strengths and weaknesses can be used for selecting appropriate teaching strategies and materials. A mismatch between the student's abilities and the instructional approach will result in tremendous frustration for both the teacher and student. Since many of the adults who come to adult education classes have experienced failure and frustration in the past, it is extremely important to use all of the available information to make the current experience a successful one.

HOW TO USE THIS SECTION

This section is designed to help the adult education teacher use the assessment information for planning instruction which will match the student's strengths and weaknesses. The organization of this section parallels the organization of the first. Thus, if the answers to the assessment questions posed in the first section indicate that the student has problems with reading recognition because of auditory deficits, then the teaching suggestions under the same heading will provide some specific teaching suggestions that should be tried first. A word of caution: The suggestions here are meant to help the teacher get started. Comprehensive instructional plans must be developed according to the needs and progress of each student. For additional help, refer to the list of materials which appears at the end of this booklet.
Reading Recognition Skills Development

Recognition skills are so basic that this should be the first area of remediation and exhaustively pursued. The skills of comprehension can only be implemented to the level that the recognition skills permit. The many suggestions which follow are for selective use -- pick and choose each as it seems appropriate or useful with each student. Remember that compensatory and alternate patterns of learning may be necessary if a cognitive processing deficit is involved.

Auditory deficits

Auditory deficits make it difficult for the individual to discriminate between similar sounds, blend sounds, associate sounds with symbols, and gain all the available information from oral instruction. Therefore, teaching reading recognition skills through a phonetic approach is often difficult and becomes very frustrating for the student. Approaches which rely on the visual processing of information are recommended in these cases. Here are a few specific suggestions.

1. Beginning instruction should emphasize the development of a sight vocabulary rather than learning the sounds of individual letters.

2. The words selected for the sight vocabulary should be in the individual's speaking vocabulary.

3. At first select words which can be matched to objects, pictures, or actions.

4. Select sight words which can be combined to form compound words.

5. Teach prefixes and suffixes which can be added to the sight vocabulary words to create words with slightly different meanings.
6. Teach rules to help the student 'see' syllables even though he may not be able to 'hear' the vowels in the syllables.

7. Teach the student to combine syllables that he knows to form new sight words which are in his speaking vocabulary.

8. Teach the student to use the syllable rules he has learned to decode unknown words.

9. Help the student form a visual image of the word by asking him to copy the word while saying it slowly, and then writing the word from memory. Have the student compare his word written from memory with the model. Repeat the procedure until the student can write the word from memory without any errors.

10. Have the student use newly learned words in a meaningful context. As soon as the student has learned a few sight words, give him opportunities to read short passages containing those words.

11. Teach reading recognition and spelling together.

Visual deficits

Visual deficits make it difficult for the individual to see the differences between words which look similar, to follow a line of print without losing his place, and to match words to their configurations (i.e., hotel = [hotel]). Thus the individual has trouble associating meaning with the printed word. These individuals will likely have better oral reading comprehension than silent reading comprehension and will tend to have more success with a phonetic rather than a sight approach to reading recognition. Specific suggestions follow:

1. Beginning instruction should emphasize the sounds made by individual letters and then the blending of those sounds.
2. Teach specific phonetic rules and provide opportunities to use these rules.

3. Use color coding to highlight the letters which make the sound you are teaching.

4. Develop activities which will develop the skills of scanning and orderly inspection of material. For example, encourage the student to carefully evaluate words such as "accept" and "except" by covering all of the letters except the "cept" and gradually exposing the first and second letters.

5. Omitting letters from words can aid the student's awareness of letters and words. For instance, students can be given exercises such as the following where they must supply the missing elements:

   efficient
   e_ _cient
   eff_ cient
   effi_ ient
   effic_ _nt
   efficie_ t
   efficient

6. Students should be given practice matching words to their visual configurations (i.e., valuable = [ ] );
(grammer = [ ] ).

7. Words which are used in the application of phonetic rules should be in the student's speaking vocabulary.

8. Spelling and reading recognition skills should be taught together.

9. Phonetically regular words should be used before introducing the exceptions to the phonetic rules.
10. Some students may need to have a marker to hold under the line of print they are reading so they can keep their place.

11. In order to help the student develop the idea of phrasing and smooth (rather than word-by-word) reading, the teacher should read out loud and have the student read along.

Both auditory and visual deficits

Some students may have both auditory and visual deficits which are interfering with the development of reading recognition skills. Generally, these students have an extremely difficult time learning to read. Some of them will remain virtual non-readers despite extensive remediation efforts. Often the most effective instructional approach for these students is a multisensory approach. In such approaches elements of structural and phonetic approaches are combined along with tactile and kinesthetic approaches. Some specific suggestions follow.

1. Use words which the student is very interested in learning or which are needed for "survival".

2. Have the student watch the teacher write the word while the teacher says it slowly.

3. Have the student look at the word and say it.

4. Have the student trace the word the teacher wrote and say the word while he or she is writing.

5. Have the student write the word without looking at the model. The student should then check his copy against the model.

6. Have the student write the word while his eyes are closed. The student should concentrate on the "feel" of the word.

7. Have the student use the newly learned word in a meaningful context.
Problems reading categories of words

If reading recognition problems seem to involve only certain categories of words (i.e., nouns, verbs, adjectives, prepositions, etc.), then the student may require specific help in understanding and using that category of word rather than just the development of reading recognition skills. The teacher must first determine which category of words poses the particular difficulty. Specific suggestions follow.

1. Determine if the student is able to use the particular category of words in his oral language.

2. If the student is not using that category of words in his oral language, then concentrate the instruction on language development activities. Additional suggestions for these activities appear in the booklet of this series dealing with oral language.

Problems using context clues to aid reading recognition

Some students have particular difficulty using the context to aid them in decoding a different word. Some specific suggestions for those students follow.

1. Check with the student to see if he is even aware of the use of context clues as a strategy for decoding unknown words. Inefficient readers may need explicit instruction in the use of context clues.

2. Provide the student with single sentences in which one word is missing. Ask the student to read the entire sentence out loud and insert "blank" where the missing word occurs. Ask the student what the sentence is about. Then ask the student to guess two or three words which might "make sense" in that sentence. Have the student try all of the guesses and then select the word that fits best.
3. If a student has particular difficulty guessing two or three words, the teacher may have to use a multiple-choice format until the student is able to think of words on his own.

**Reading comprehension skill development**

Comprehension implies that the student can repeat and explain what has been learned or act in accordance with it. It is not enough to ask and receive a "yes" reply to the question "Now, do you know it?" Performance, sometimes more than once, should be required. Many times observation and analysis of the performance can provide clues to further instructional steps. It can also show wherein a difficulty can exist; for example, a student who cannot concentrate because of habit or personal worry rather than a specific processing deficit; or a student who concentrates so hard on pronunciation of word fragments that meaning is lost. Oral reading especially is not a task for checking on comprehension.

Instructional suggestions for developing comprehension are presented according to the problem areas frequently encountered.

**Memory problem**

Some students develop good word attack skills and can read passages, yet appear not to comprehend the passage because of problems remembering what they have read. Here are some suggestions for improving memory skills.

1. Prior to reading the passage, briefly discuss with the student what the selection will be about.
2. Ask the student what he already knows about the topic.
3. Have the student hypothesize what new information might be included in the selection.
4. Pose specific questions the student should keep in mind while reading.

5. Immediately after reading the material, have the student discuss or write the answers to the previously posed questions.

6. Have the student relate what he already knew about the topic to any new information contained in the passage.

**Vocabulary problem**

At times students have trouble comprehending what they have read because they do not understand the vocabulary. Adults with learning disabilities frequently have difficulty understanding and differentiating among all of the meanings of a word. When they apply the only meaning they may know, the intent of the author might be lost or distorted. The following activities will develop vocabulary skills; when the basic skills are mastered, extended effort can be given to that of using the context, which is listed last.

1. Teach dictionary skills so that the student can find the meanings of unknown words.

2. Teach vocabulary using a theme approach. All of the new words introduced at a time should be related to a particular topic.

3. During group discussions try to integrate the new vocabulary the students have just learned. Provide practice using the new vocabulary in a variety of contexts.

4. Relate new vocabulary to words the student already knows.

5. Give the student activities involving the use of antonyms, synonyms and analogies.

6. Provide practice exercises in which the student must select the meaning of a multiple-meaning word which fits best within the context.
Problems specific to reading comprehension

Sometimes a student who seems to have mastered many of the component subskills for reading continues to have difficulty in understanding the meaning of a full passage. This difficulty can be related to memory, language comprehension, sequencing and organizational deficits or any combination of them. Depending on the nature of the difficulty, any of the previous suggestions might be applicable, as well as those presented in this section.

1. Determine whether the breakdown in comprehension is at the level of the sentence or the paragraph. (Some students may understand isolated sentences but cannot extract meaning from paragraphs.)

2. If the breakdown is at the level of the sentence, the following activities can be used:
   a. Have the student determine whether a group of words is a complete sentence or not.
   b. Have the student determine the main thought of a sentence.
      
      After I go shopping, I will fix dinner.
   c. Have the student rearrange the order of the sentence to gain meaning.
      
      Hand a lend please.
   d. Stress reading in phrases as a strategy for comprehension.
   e. Have the student select two sentences which have similar meanings when given a set of five sentences.

3. Some students understand the meaning of sentences but have difficulty recognizing how the organization of a reading text influences comprehension. Activities can be provided to develop the following skills:
   a. Have the student identify topic sentences.
b. Have the student locate important details.

c. Have the student paraphase the main idea of the paragraph.

d. Have the student find the words or phrases within a paragraph which signal a new idea is coming (first, next, last).

e. Have the student learn to recognize different organizational strategies used in text (i.e., time order, following a sequence, structural connective).

f. Have the student list the ways items are the same or different in paragraphs which discuss comparisons.

g. Have the student recognize that reading comprehension strategies will need to change depending on the type of text (narrative, science, history, popular).

h. Provide activities in which the student must comprehend a paragraph in order to complete an activity (following directions).

4. Some students will need practice activities which will develop their critical reading skills. Provide activities in which the student must:

a. Decide if a sentence expresses a fact and/or an opinion.

b. Decide if a paragraph expresses a fact or an opinion.

c. Decide if information in a paragraph is directly stated or inferred.

d. Predict the conclusion of the text.
PROGRESS AND CIRCUMVENTION

The remediation strategies suggested in the previous section will help students progress but at very different rates. Adult students having difficulty reading due to poor prior instruction will begin to show good progress once well-sequenced instruction is initiated at the appropriate level. The adult student whose reading difficulty might be attributed to low intelligence will make progress commensurate with cognitive ability. Learning disabled students will show little or no progress if inappropriate instructional strategies are used. If the instruction is matched to their strengths and weaknesses, some progress will be noted. However, if the student's progress reaches a plateau that seems inconsistent with their normal abilities in other areas, or with another area of excellence created through instruction, a disability is probably indicated. Inconsistent performance between instructional sessions is often a characteristic of the learning disabled population.

The learning disabled person's inability to read is due to inefficient neurological functions. Teaching cannot repair abnormalities in cell structure, therefore, the need is to concentrate on developing compensation strategies rather than on improving specific reading skills. Some suggested compensation strategies for reading disabilities are listed here.

1. Provide the student with books on tape.
2. Provide large print books in order to help with difficulties in scanning visual information.
3. Emphasize auditory means of presenting information and obtaining answers, unless an auditory disability is evident.
4. Reduce the amount of material to be read. Use highlighters, possibly in different colors, in texts to emphasize names, definitions, dates, formulas, etc.

5. Avoid worksheets which require close visual inspection of information.

6. Use a "window" or marker for reading to focus on words and short phrases and to keep on the correct line. A cover sheet which is moved down the page can be used for keeping on the same line.
MATERIALS

Word Attack Skills


Vocabulary Development


Comprehension


REFERENCES


Titles in this series:
Description and Definition of Learning Disabilities
Appraisal and Assessment of Learning Disabilities
Assessment and Remediation of Oral Language
Assessment and Remediation of Written Language
Assessment and Remediation of Reading
Assessment and Remediation of Mathematics
Occupational and Career Information