Name: Sample, Adam  
Grade: 4.1  
Date of Birth: 07/23/2005  
Age: 9 years, 3 months  
Sex: Male  
Dates of Testing:  
10/09/2014 (COG)  
10/10/2014 (OL)  
10/08/2014 (ACH)

REASON FOR REFERRAL

Miss Miriam Smart, Adam’s teacher, referred him for an evaluation of a suspected learning disability. This evaluation is intended to address the following questions: What cognitive, language, and/or academic strengths and weaknesses exist? What are Adam’s cognitive, language, and academic developmental levels?

TESTS ADMINISTERED

Woodcock-Johnson IV Tests of Cognitive Abilities  
Woodcock-Johnson IV Tests of Oral Language  
Woodcock-Johnson IV Tests of Achievement Form B  
Woodcock-Johnson Online Scoring and Reporting Program, Release 1.0

TEACHER’S REPORT

Miss Miriam Smart, Adam’s teacher, responded to a checklist on 09/23/2014 to provide information based on recent direct observations of, and typical experience with, Adam.

Miss Smart described Adam as motivated and intelligent, but also insecure. At school, his mood is typical of others of his age. He needs more one-to-one attention but completes about as much schoolwork as other boys his age.

Adam generally persists with difficult tasks. He always, or almost always, listens when spoken to directly. His oral responses to questions are slow but careful. Adam usually organizes his tasks and activities, follows instructions, and finishes his schoolwork. He usually keeps assignments and school supplies in order and remembers what he is supposed to do. He reacts normally to distractions and adapts to them. Some reported behaviors may be inhibiting classroom performance. Adam frequently fails to give close attention to details or makes careless mistakes. He seems to have difficulty sustaining attention in tasks or play activities.

Adam usually remains seated when expected to. His activity level and style of motor activity are similar to other boys his age. He can play quietly when required. He generally talks much less than other boys his age. Adam's social interaction skills are typical for boys his age. For example, he takes turns appropriately. Miss Smart is most concerned about the amount of one-to-one attention he requires in the classroom. This behavior interferes with his classroom performance from time to time.

Miss Smart provided the following observations about Adam’s behavior in the classroom. He demonstrates slightly serious anxiousness and withdrawal in the classroom. However, these behaviors are not disruptive.
Miss Smart rated Adam’s levels of oral language ability and academic achievement based on observations of him in the classroom. His levels of oral expression and listening comprehension were rated as average. Adam’s levels of basic reading skills, reading comprehension, and reading fluency were rated as very limited. His levels of math calculation skills and math reasoning were rated as advanced. His level of written expression was rated as limited; however, his level of basic writing skills was rated as very limited.

Adam is being instructed at the grade 5 level in mathematics. His instruction is at the grade 4 level in oral language. He is being instructed in reading and writing at the grade 3 level.

TEST SESSION OBSERVATIONS

Observation of Adam’s behavior were made during the Tests of Cognitive Abilities and the Tests of Oral Language. His conversational proficiency seemed typical for his age level. He was cooperative throughout the examinations but he appeared fidgety or restless at times. He appeared tense or worried, and often distracted, during the examinations. He sometimes responded too quickly to test questions, and he gave up easily after attempting difficult tasks.

Further observations of Adam’s behavior were made during the Tests of Achievement. His conversational proficiency seemed typical for his age level. He was cooperative throughout the examination but he appeared fidgety or restless at times. He appeared tense or worried, and often distracted, during the examination. He responded very slowly and hesitantly to test questions. He generally persisted with difficult tasks.

On word identification tasks, he required increased time and greater attention to phoneme-grapheme relationships to determine the correct response. On a passage comprehension test, Adam appeared to read passages very slowly. On a word attack (phonics) test, Adam appeared to have limited ability to apply phoneme-grapheme relationships. On a sentence reading fluency test, Adam appeared to read sentences slowly for his age.

The examiner listened to Adam read aloud from a story with sentences of increasing difficulty. When the sentences were at an easy to moderate reading level for him, a few errors were observed: hesitation(2), repetition(1), transposition(1), and ignoring punctuation(1). When the reading material was at his frustration level a few errors were observed: mispronunciation(4) and hesitation(2).

Adam’s performance on Applied Problems tasks appeared to be typical for his age. On math calculation tasks, Adam solved many problems quickly with no observed difficulties. Adam solved problems quickly on a test of fluency with basic math facts.

Adam appeared to spell words in a laborious manner. On a writing samples test, Adam’s sentences were observed to be inadequate. On a test of sentence writing fluency, Adam appeared to have difficulty formulating or writing sentences quickly.
INTERPRETIVE OVERVIEW OF SCORES

The scores derived from this administration can be interpreted at different levels. Interpretation of Adam’s performance can be based upon single tests and/or upon logical-empirical combinations of tests called clusters. Variations within groups of scores are evaluated to determine if any relative strengths and weaknesses exist.

Adam’s overall intellectual ability, as measured by the WJ IV General Intellectual Ability (GIA) standard score (90), is in the average range of others his age. There is a 68% probability that his true GIA score would be included in the range of standard scores from 86 to 95. A composite index of Adam’s fluid reasoning and comprehension-knowledge intellectual abilities (109) is also in the average range of standard scores (106 to 112).

Among the WJ IV cognitive measures, Adam’s standard scores are within the high average range for one test (Number Series). His scores are within the average range for three clusters (Comprehension-Knowledge, Fluid Reasoning, and Visual Processing) and eight tests (Oral Vocabulary, Visualization, General Information, Concept Formation, Numbers Reversed, Nonword Repetition, Visual-Auditory Learning, and Picture Recognition). His scores are within the low average range for four clusters (Short-Term Working Memory, Auditory Processing, Long-Term Retrieval, and Number Facility) and three tests (Verbal Attention, Phonological Processing, and Number-Pattern Matching); and within the low range for two clusters (Perceptual Speed and Cognitive Efficiency) and two tests (Letter-Pattern Matching and Story Recall).

An analysis of variations among Adam’s cognitive scores (including some cognitive-linguistic scores) suggests that Number Series, Number Matrices, and Fluid Reasoning are relative strengths for him. He demonstrated relative weaknesses in Letter-Pattern Matching, Story Recall, and Perceptual Speed.

Among the WJ IV oral language measures, Adam’s standard scores are within the average range for six clusters (Oral Language, Broad Oral Language, Oral Expression, Listening Comprehension, Phonetic Coding, and Vocabulary) and five tests (Picture Vocabulary, Oral Comprehension, Sentence Repetition, Understanding Directions, and Sound Blending). His scores are within the low average range for one cluster (Speed of Lexical Access) and three tests (Segmentation, Rapid Picture Naming, and Retrieval Fluency).

An analysis of variations among Adam’s oral language scores (including some cognitive-linguistic scores) revealed no relative strengths and weaknesses.

Adam’s overall academic achievement, as measured by the WJ IV Brief Achievement standard score, is in the low average range of others his age.

Among the WJ IV achievement measures, Adam’s standard scores are within the high average range for three clusters (Mathematics, Broad Mathematics, and Math Calculation Skills) and three tests (Calculation, Math Facts Fluency, and Number Matrices). His scores are within the average range for three clusters (Math Problem Solving, Academic Fluency, and Academic Knowledge) and four tests (Applied Problems, Science, Social Studies, and Humanities). His scores are within the low average range for 13 clusters (Reading, Broad Reading, Basic Reading Skills, Reading Comprehension, Reading Fluency, Reading Rate, Written Language, Broad Written Language, Basic Writing Skills, Written Expression, Academic Skills, Academic Applications, and Phoneme-Grapheme Knowledge) and 11 tests (Letter-Word Identification, Passage Comprehension, Writing Samples, Word Attack, Oral Reading, Sentence Reading Fluency, Sentence Writing Fluency, Reading
Recall, Editing, Word Reading Fluency, and Spelling of Sounds); and within the low range for one test (Spelling).

An analysis of variations among Adam’s achievement scores in broad curricular areas suggests that Calculation, Number Matrices, Math Problem Solving, Math Facts Fluency, and Math Calculation Skills are relative strengths for him. He demonstrated relative weaknesses in Spelling and Reading Fluency.

An analysis of variations among Adam’s achievement cluster scores (and including some cognitive cluster scores) revealed no relative strengths and weaknesses.

When compared to a measure of intellectual ability comprised solely of fluid reasoning and comprehension-knowledge abilities, Short-Term Working Memory, Auditory Processing, Long-Term Retrieval, Number Facility, Perceptual Speed, Cognitive Efficiency, Brief Achievement, Reading, Broad Reading, Basic Reading Skills, Reading Comprehension, Reading Fluency, Reading Rate, Written Language, Basic Writing Skills, Written Expression, Academic Skills, Academic Applications, and Phoneme-Grapheme Knowledge were relative weaknesses (significantly lower than predicted) for Adam.

Comparisons were made between Adam’s overall intellectual ability and his performance on several achievement and oral language clusters. When compared to his overall intellectual ability, Adam’s performance was significantly higher than predicted in the areas of Mathematics, Broad Mathematics, Math Calculation Skills, and Math Problem Solving.

Comparisons were also made between a measure of Adam’s English oral language ability and his performance on several achievement and cognitive-linguistic clusters. When compared to his English oral language ability, Adam’s performance was significantly lower than predicted in the areas of Reading, Reading Comprehension, Reading Fluency, and Basic Writing Skills.

Comparisons were made between Adam’s academic knowledge and his performance on several achievement and oral language clusters. When compared to his academic knowledge, Adam’s performance was significantly lower than predicted in the areas of Reading, Broad Reading, Reading Comprehension, Reading Fluency, Written Language, Broad Written Language, and Basic Writing Skills.

INSTRUCTIONAL RECOMMENDATIONS AND INTERVENTIONS

Adam may gain the most from reading instruction presented within the late first grade to early second grade range. In addition, Adam may benefit from a program of supplemental reading interventions. The interventions should be explicit (skills should be taught directly), intensive (a concentrated number of related learning opportunities should be provided), delivered in small groups of 2-7 students when possible, and should employ scaffold learning principles with emotional support.

The most effective program for Adam may be a multicomponent reading intervention program that simultaneously addresses phonology, orthography, morphology, syntax, and semantics.

The direct instruction approach taken by the Corrective Reading program may help Adam further develop efficient word-decoding skills. In this program, teachers provide lessons targeting word attack, where students practice sounding out words of varying sound combinations (10 minutes). Next, students engage in group reading and orally respond to questions posed by the teacher (15 minutes). Finally, students engage in
workbook exercises, some of which are teacher directed, that require students to answer questions after reading passages and completing word activities (15 minutes). The effectiveness of this intervention is further enhanced by adding repeated reading to the Corrective Reading program. Specifically, the repeated-reading intervention would require two students to chorally read an unfamiliar passage to each other a total of four times. For the first round, the learner would read aloud to the tutor, and the tutor would provide an unknown word after 3 seconds. Next, the two students would switch roles and follow the same procedure. Both students should have the opportunity to act as tutor and learner two times on each passage. After this has occurred, the pair may move on to another passage.

Improving Adam’s ability to decode text may be a very important opportunity for intervention. DISSECT is a mnemonic for a word-decoding strategy that promotes the development of word-decoding and reading-comprehension skills. Significant improvement may be expected in about 6 weeks after daily 20-minute sessions. The seven steps of DISSECT require students to Discover the context by skipping a difficult word and using the meaning of the remaining words in the sentence to decode the unknown word; Isolate the prefix from a known list of prefixes if the previous strategy was unsuccessful; Separate the suffix if further problem solving is necessary; Say the stem after excluding any prefix or suffix; Examine the stem if the word is still unknown; Check with someone, such as another student, parent, or teacher; and then Try the dictionary and use the pronunciation guide if the previous steps are unsuccessful.

Generating questions about expository texts will help Adam improve Adam’s understanding of concepts. Teach Adam to generate questions about material he is about to read. Model how to think of questions, if needed. Encourage both literal and inferential questions. As Adam reads, he should look for answers to the questions initially posed.

Adam’s reading comprehension may improve with an individualized program of instruction focusing on fluent oral reading of sentences and passages. In this simple but effective intervention, Adam would read sentences and passages aloud to an accomplished reader. If Adam makes an error, the more accomplished reader would immediately offer corrective feedback. In addition to correcting word reading inaccuracy, effective feedback would include attention to the prosodic features of the sentences and passages, such as tonal emphasis, pause placement and duration, and phrasing consistent with the syntactic structure of the text. Sentences and passages at Adam’s instructional level should be read aloud with the same tonal and rhythmic characteristics of his everyday speech.

Teaching Adam the elements of story grammar and story mapping may result in improved reading comprehension of literature. This intervention makes use of direct instruction of story grammar components, story maps prompting strategy use, guided practice, and independent practice. Teach Adam to identify the major elements of a story-characters, setting, conflict, and resolution-and use those elements to determine the theme of the story. Teach Adam to create a statement addressing the author’s intended message and what the story meant to Adam. Guided practice is undertaken prior to independent use of these strategies. In the guided-practice phase, students take turns reading, and a teacher asks story grammar questions. If the student’s response is incorrect or incomplete, the teacher then demonstrates how the answer could be reached using information within the text. As time goes by, the teacher provides less specific guidance in favor of general questions that prompt strategy use.

Question-Answer Relationship (QAR) is a technique that can help Adam improve Adam’s reading comprehension. There are three types of question-answer relationships. The first type of question has an answer explicitly stated in the text and is called Right There. The second type, Think and Search, requires
making inferences. The third type draws on prior knowledge and is called On My Own. Help Adam generate these three different types of questions to improve his comprehension. Provide demonstrations and guided practice.

Adam may improve Adam’s word identification skills through a highly structured and intensive program of direct and fully guided instruction. Carefully scripted lesson plans of approximately 20 minutes presented each day may help Adam improve his mastery level, if implemented consistently. The lessons can be implemented as a program of interventions specifically for Adam or as part of a small group instructional program with other children at the same ability level.

Translating written words into speech (i.e., orally reading words in isolation) may help Adam activate and output the sound representations of printed words.

Word recognition strategies may help Adam build automatic sight-word recognition. These strategies include word walls, flow lists, word banks, flash cards, and games. Use high-frequency words when implementing these strategies, because this may enhance Adam’s ability to read independently. For example, a word wall might present five high-frequency words that Adam needs to learn. Engage Adam in activities, both planned and unplanned, that use the words on the wall. Word walls help build word recognition, analysis skills, and vocabulary, and they serve as a spelling reference.

Speed drills may help develop Adam’s automatic sight recognition of words. Using lists of words (e.g., high-frequency words), allow Adam to read the list for 1 minute. Record the number of errors Adam makes during the timed reading. Have Adam chart Adam’s progress on each timing.

Select a short passage at Adam’s instructional level and set an oral reading rate criterion. Determine the criterion by timing Adam for 1 minute and then counting how many correct words Adam reads. Next, have Adam read and reread the passage over time until the rate criterion is reached. Ask Adam to chart his rate to keep a record and to maintain motivation.

Repeated reading may help increase Adam’s reading fluency. Adam should read a short passage several times until Adam can read the passage with ease. Select material that is at Adam’s instructional level. Have Adam read through the passage aloud. Record the number of errors and the time it took Adam to read the passage. When Adam completes the passage, review the misread words and then have him read it again. Continue this approach until Adam has read the passage three to five times or has read the passage fluently and accurately.

The phrase-drill error-correction procedure may be helpful for developing Adam’s reading fluency. In this procedure, combine immediate corrective feedback with rehearsal of the corrected error. When Adam makes an error on a word, model the correct word immediately. Then ask Adam to reread the phrase (where the error occurred) three times.

Select an appropriate text for reading practice, and pair Adam with a proficient reader. Teach both students the procedures you want them to follow for practicing their reading. Tell them that they will each have a turn to read a paragraph aloud while the other student follows along. Have the proficient reader go first to model fluent reading. After both students have read the same paragraph aloud, the students should discuss what they have read and retell or identify the main points during the discussion. Then they should repeat this procedure for each of the remaining paragraphs in the passage.
Explain to Adam that a question may contain clue words that Adam can watch for to locate the answer in the text. For example, if the question uses words like *in the chapter, according to the author,* or *in the author’s words,* this signals the answer is in the text, so Adam should reread or look back at the text to find the answer. However, if the question uses words like *in your opinion* or *what do you think,* then the answer cannot be found in the text, and Adam will have to think about the answer.

To build Adam’s reading comprehension, engage Adam in a Directed Reading-Thinking Activity (DR-TA). This method uses activities before, during, and after reading to enhance comprehension. Before reading, activate prior knowledge on the topic to be read. Then ask Adam to make predictions about what he thinks will happen. Have him read the text to a predetermined point and then check Adam’s predictions. After reading the first section, discuss Adam’s predictions and have him revise his predictions before reading the next section. Repeat this process until Adam has read the entire selection.

Readers who construct mental pictures while reading increase their comprehension. Teach Adam to make pictures in Adam’s mind while reading. Demonstrate how to do this using sample passages and a think-aloud approach. Point out that it is important to study any pictures or illustrations in the passage to help create images and find clues about the meaning of the passage. Read aloud a short passage, stopping at various points, and ask Adam to describe his mental pictures. Share the pictures you saw in your mind related to the passage and offer insights into what triggered those images. Provide additional guidance and practice for Adam as needed. When Adam is reading independently, remind him to create pictures in Adam’s mind while reading.

Shared reading can be especially useful for helping Adam’s comprehension of important stories or books. In shared reading, Adam and other students have a unique opportunity to become familiar with, and enjoy, a story or book. First, read a story or book to the group. After the initial reading, draw the students into reading the story or book with you. Pause for students to contribute, repeat a particular refrain in a predictable book, and eventually read the book or story chorally. This can occur over several days. After the students become familiar with the story or book, they should read it to each other in pairs or small groups. To increase active involvement, the students also may act out the story, draw parts of it, write a new title, or recreate the ending.

Reciprocal teaching engages small groups in learning specific research-based reading comprehension strategies while using a text written at the reader’s instructional level. The four comprehension strategies are: predict, question, summarize, and clarify. Adam may learn to employ these strategies flexibly and interchangeably, as needed, for good comprehension, including setting a purpose for reading, reading for meaning, and self-monitoring Adam’s comprehension. A teacher models the steps of a selected strategy for the group at key points in the text, and then the learners practice using the strategy cooperatively. Students first learn to use the strategies one at a time and then gradually build to the point where they can model any of them for one another, as needed, to maximize their comprehension.

Have Adam practice reading words that end in *-ful.* Make sure Adam knows that the *-ful* ending is a suffix that is added to many words such as *care/careful, play/playful,* and *help/helpful.* Ask Adam to name other words that end in *-ful,* Write the words on the board. Then ask Adam to read each of the words. Words that can be used include *plentiful* and *beautiful.*

Say the word *age* aloud and ask Adam what sound is at the end of the word (i.e., /j/). Explain to Adam that no word in English ends with the letter *j,* so if Adam hears a /j/ sound at the end of a word, it is spelled with the
letters ge. Write the following words on the board or a paper: age, huge, strange, fudge, bridge, and pledge. See if Adam can discover why some of the words end with ge and others end with dge. Help him see that one-syllable words with a long vowel sound end in the letters ge, and one-syllable words with a short vowel sound end in the letters dge.

Understanding the rules of hard and soft g will help Adam decode words more accurately. Explain that when g is followed by a, o, or u, it makes a hard sound. This means that the g makes a /g/ sound. Write several examples of words containing the hard g sound on the board, such as gas, got, and gum. Ask Adam to read each of the words and focus on the sound the g is making. Remind Adam that the /g/ sound is called hard g. Next, tell Adam that when g is followed by e, i, or y, it makes a soft /j/ sound. Write several examples of words containing the soft g sound on the board, such as gem, gin, and gym. Ask Adam to read each of the words and focus on the sound the g is making. Remind him that the /j/ sound is called soft g. Finally, provide a set of words for Adam to sort into hard g and soft g groups. Include words such as gentle, garden, guess, change, regular, giraffe, gallop, cage, goat, giant, and guard.

Teach Adam that the letter x sounds like a k and s together. It makes two sounds, but it is spelled with one letter, x. Write the word fox on the board and ask Adam to read it aloud. Have Adam tell you how many sounds he hears in the word. If needed, indicate there are four sounds and pronounce each sound: /f/ /o/ /k/ /s/). Ask Adam to write these words on the board: box, fix, tax, mix, wax, and ox.

Math instruction presented within the late fourth grade to late fifth grade range may produce the greatest gains for Adam.

Writing instruction that is presented within the middle first grade to early second grade level may be appropriate for Adam.

Look-Spell-See-Write is a strategy for learning to spell sight words independently. In this method, a teacher identifies words Adam needs to master, makes sure Adam knows what each word means, writes the words on cue cards, and gives the cards to Adam. Adam is instructed to use the following steps to study the words independently:

1. Adam looks at each word and says it aloud.
2. Then he says each letter in the word.
3. Next, Adam looks carefully at the word, forms a mental picture of it, and tries to visualize the word with his eyes closed. Adam turns the cue card over and tries to write the word from memory.
4. Adam checks the spelling and, if correct, writes the word once again.
5. If Adam writes the word incorrectly, he goes back to the first step.

This process continues until he writes the word three consecutive times with no mistakes.

Teach Adam the spellings of common irregular words, such as of, what, and were. Also teach Adam important grade-appropriate words, especially those that cannot be spelled solely by using rules or phonics knowledge.

The five-step spelling strategy is an effective, multisensory approach to improving spelling performance. Explicitly teach the strategy to insure that Adam understands the strategy and can implement it independently. Provide Adam with a cue card containing the following five steps of the strategy: (1) say the word, (2) write and say the word, (3) check the spelling of the word, (4) trace and say the word, and (5) write the word from memory and check the spelling of the word.
Confirm that Adam can spell most short vowel, single syllable words. Then help Adam expand his knowledge of within-word patterns by teaching long vowel patterns such as the consonant-vowel-vowel-consonant pattern (CVVC) in *tail*, the CVCe pattern in *came*, and the CVV pattern in *pie*. Keep this instruction relevant and engaging by using word-building tiles, word sorts that compare and contrast spelling patterns, word hunts, and word lists that share common spelling patterns.

Daily writing practice at school and at home helps Adam learn to write for different purposes and for different audiences. Devoting more time to writing will help Adam make the connection between writing and real-world applications and is an important motivator in developing Adam's writing skills.

Explicit instruction in the mechanics of writing may improve Adam's fluency with writing tasks. Adam's writing fluency may improve if he can spell words phonetically, can spell high-frequency sight words correctly, and has legible writing. In addition, when Adam’s focus is on the ideas being expressed rather than on the underlying basic skills, the quantity of his writing may increase.

Provide explicit instruction in proofreading so that Adam will begin to recognize the areas of Adam’s writing that need attention, and so that he also will have a method for finding new errors. As Adam practices proofreading strategies, he will learn which ones work best for Adam and may become more efficient with the process.

Make a list of the types of errors that Adam is making when writing and then provide practice in detecting and correcting the specific mistakes (e.g., starting sentences with capital letters or ending sentences with periods).

Teach Adam how to analyze the syllables in words to increase Adam's ability to spell words. For example, instruct Adam to divide a word’s pronunciation into syllables by raising a finger with each beat and then announcing the number of beats (e.g., *table* has two beats). If Adam responds incorrectly, model correct responses and allow him to practice them.

He should be able to understand classroom vocabulary that falls within the early third grade to early fifth grade range.

Use the following sequence to teach Adam segmentation. Begin with tasks that require Adam to break apart compound words (e.g., *raincoat*). Then progress to syllables. Have Adam clap the number of words or use markers to represent each word part. When Adam has learned to break words into syllables, teach Adam how to segment short words into onsets and rimes (the first part of a syllable and the ending part of a syllable) and then into individual phonemes.

Accommodations that may help compensate for Adam’s limitations in perceptual speed might include providing extended time, reducing the quantity of work required (breaking large assignments into two or more component assignments), eliminating or limiting copying activities, and increasing wait times after questions are asked as well as after responses are given.

Repetition is an important factor in building speed. Repeated and extensive practice may enable Adam to perform some tasks in a more automatic fashion to increase performance speed. Activities can be teacher directed or student directed. Related computer programs or games can provide opportunities to practice responding quickly. Select computer programs or games that provide Adam with immediate feedback and maintain a record of Adam's performance over time.
Overlearning improves storage and recall. Overlearning occurs when Adam continues to review and rehearse information Adam already knows. Even one additional review can increase recall significantly.

Elaboration is a method to improve Adam’s encoding ability which, in turn, facilitates later recall. When presenting new information, it is important to associate the key points to Adam’s prior knowledge or personal experiences. When rehearsal is combined with elaboration, it is more likely that the information will be successfully encoded, stored, and available for recall. Elaborative rehearsal goes beyond simple recitation of information by focusing on meaning and association of the new information with other knowledge. As Adam interacts with the material by thinking about it, associating it with prior knowledge, or reflecting on it, deeper processing of the information occurs.

Visual representation is a means of improving the long-term retrieval process. For example, have Adam create illustrations of or visualize the content being studied. Help Adam think in pictures to improve learning and recall of information.