

## Dynamic Assessment of Narrative and Expository Discourse

The ability to understand and create stories and explanations plays an important role in the acquisition of literacy. This article describes how clinicians can use an assessment process known as Dynamic Assessment to evaluate children's narrative and expository discourse abilities. These assessment procedures help speech-language pathologists better describe the language learning potential of children who are referred for language assessment, and they yield information that is useful for determining whether children present a language difference or a language disorder. We also demonstrate how Dynamic Assessment provides critical information for planning language intervention. Key words: *dynamic assessment, expository discourse, mediated learning experiences, narration*

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THE ATTAINMENT of literacy is necessary for active participation in most cultural groups, and it is essential for the achievement of financial independence and success. Two types of discourse, narration and exposition, play critical roles in literacy learning. Narrative discourse is important because it is prevalent in thinking, in socialization, and in instruction. Expository discourse is also important for literacy development. Teachers use many forms of explanation as they define sound-symbol relationships, describe how to decode words, give instructions about various reading and writing assignments, and clarify answers to questions. As children's language skills increase, their own narratives and expositions become more elaborate. They tell multiple episode stories, answer teachers' questions more completely, and begin to expound on their stories and answers if asked to do so. This article describes how clinicians can use a process known as Dynamic Assessment for evaluating children's narrative and expository discourse abilities.

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## **CULTURE, DISCOURSE, AND LITERACY**

Most children employ both narrative and expository forms in their everyday conversations. They arrive at school with sufficient practice in narration and explanation to immediately understand and use the language conventions that are needed to function in formal instructional contexts. There are some students who arrive at school lacking the language forms and rhetorical devices necessary for understanding and producing the type of discourse conventions typical of the narrative and expository discourse that they encounter during classroom interaction and instruction. Children with insufficient knowledge and use of the narrative and expository discourse forms that are prevalent in mainstream American education are at risk for academic failure. Children who struggle to understand the language of instruction and the language of the instructional materials they are exposed to take longer to discover the critical links between spoken language and literacy.

There are a variety of cultural, experiential, and developmental reasons for atypical narrative and expository discourse abilities. Some children come from cultures that value different kinds of narratives or expository texts than the types that are typically used in elementary classrooms (Heath, 1983). These students need to understand and use new forms of narrative and expository texts that they encounter at school, even though these forms may not be particularly useful at home. Some other students' discourse skills may differ simply because they have less experience with listening to and telling stories and/or with explaining their answers to questions in greater detail. This

happens when children grow up in communities in which storytelling and explanation are less prevalent forms of communication (Heath, 1983). In our experience, children who are good language learners can usually learn new discourse forms, or they can make up for differences in experience when they are provided with extra support in their regular classrooms.

Unfortunately, some children with atypical discourse abilities are relatively poor language learners. They may not: (1) attend very well to what their parents and teachers say; (2) mentally process and represent multiple pieces of language information at once; (3) readily relate new information to what they already know; and (4) retain new information in a manner that permits easy retrieval. Children with these kinds of problems have language-learning impairments that interfere with their ability to take maximum advantage of their language experiences. These children probably need specialized assistance beyond the extra support that can be provided within regular classroom environments.

## **DIFFERENTIATING LANGUAGE DIFFERENCE FROM LANGUAGE DISORDER**

It is important to understand that our view of language development and language performance is culturally driven. In mainstream American society and culture, "good communicators" are thought to be those who have mastered a "literate" style of speaking. These individuals use language to create context, they have large vocabularies, and they use complex sentence constructions to associate and embed multiple clauses. This style of discourse is highly in-

fluenced by education, which is influenced by economic advantage.

It can be very difficult to distinguish children whose problems with narrative and expository discourse result from cultural differences, lack of experience, or language-learning impairments. This is especially true for children who come from non-mainstream cultures. Due to issues relating to test bias, standardized tests are nearly useless for differential diagnosis when culture or experience is an issue. Even when the child being assessed is from mainstream American culture, there are numerous factors that influence language and literacy learning that do not lend themselves to direct measurement with norm-referenced tests. For example, preparatory attention, maintenance of attention, level of engagement during learning, and resilience to failure might be as important or even more important for language and literacy development as the kinds of language and readiness skills that are often tested (i.e., vocabulary knowledge, ability to understand sentences, phonological awareness, knowledge of the alphabet, ability to repeat non-words, words, and sentences, etc.). In the quest for the "quantitative perfect measure," examiners often miss critical factors in learning altogether.

To overcome this predicament, wise clinicians employ qualitative assessment procedures like language sampling and observation that enable them to observe communicative performance in the child's everyday environment. This is useful for determining whether there is a mismatch between communicative ability and communicative expectations. However, observation may not readily reveal whether a mismatch between communication abilities

and expectations results from lack of experience, lack of language learning abilities, or a combination of the two. This determination requires knowledge of a child's ability to learn. Examiners could obtain the information they need by observing the child in the same learning context over time, or they could use interactive assessment procedures such as Dynamic Assessment.

Even the combination of quantitative measures and observation does not necessarily provide the kind of information that is needed for the accurate diagnosis of children from nonmainstream culture groups. Some educators and clinicians have responded to this dilemma by adopting a "watch and see" approach, meaning that they defer making a judgment about language difference or language disorder for a period of time (usually six or seven months) while they monitor the child's progress. Clinicians who adopt this strategy reason that if lack of experience is the basis of a language learning problem, children from nonmainstream cultures will begin to catch up when they are provided with adequate classroom support. If a child's discourse problems result from language-learning impairments, that child will not make the same kinds of gains during the "watch and see" period. Clinicians who use the "watch and see" strategy are, in a sense, ruling in a diagnosis of impairment by ruling out cultural differences and lack of experience as the basis of narrative and expository discourse problems.

While clinicians and educators are waiting for signs of learning, children with language impairments fall further behind their classmates. The "watch and see" period can be little more than the beginning or the extension of a cycle of academic and social

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failure. What is needed is an assessment strategy that enables examiners to assess children's language learning capabilities and their responsiveness to intervention strategies within a very short period of time. We believe that Dynamic Assessment is just such a strategy.

Our interest in assessment extends beyond differentiating between children whose difficulties with narrative and expository discourse result from cultural and experiential differences and children whose narrative difficulties result from language-learning deficiencies. We also want our assessment to provide information about the kinds of support (i.e., scaffolding interactions, explanations, demonstrations, multiple attempts, etc.) that are the most helpful for children, whether or not they happen to qualify for speech and language services. This is the main reason why we find Dynamic Assessment so compelling. The information we obtain through the Dynamic Assessment process is as useful for diagnosis as it is for developing educational plans.

#### **DYNAMIC ASSESSMENT**

Dynamic Assessment allows us to observe the "modifiability" of language in a neutral manner that is relatively independent of experience and economics. This is because Dynamic Assessment focuses on observed change. When we conduct Dynamic Assessment, we do not think we are

measuring language per se. Rather, we are inferring language learning potential from the observation of language change. We carefully observe the kinds of learning strategies that children use productively. In addition, we observe the child's acquisition of new or emerging strategies. Assessing language change and language learning leads to insights about an individual's learning processes.

#### **The underlying theory**

Dynamic Assessment is based on Vygotsky's ideas about the zone of proximal development (ZPD). Vygotsky proposed that the ZPD was the distance between the level of functioning that children could demonstrate independently and the higher level at which they could function with adult help and support (Vygotsky, 1978). Vygotsky demonstrated that children could successfully perform a previously difficult task and improve academic achievement when given minimal modification by a teacher who provided support based on her assessment of the child's modifiability. He proposed that assessment of this ZPD could reveal children's potential for learning. Dynamic Assessment is one way to systematically go about "mapping" the ZPD for a given area of learning, in our case, the ability to generate narratives. The test-teach-retest model of Dynamic Assessment is the modern application of Vygotsky's ZPD to educational and psychological evaluation. Important characteristics of Dynamic Assessment are summarized in the box, "Characteristics of Dynamic Assessment."

#### **The Dynamic Assessment process**

Dynamic Assessment usually begins with a testing phase in which the examiner ob-

### Characteristics of Dynamic Assessment

- Dynamic Assessment is interactive—In contrast to traditional static approaches in which examiners observe children in a more neutral manner, in Dynamic Assessment, examiners become an active part of the assessment. Examiners observe and interpret observations on line in order to facilitate change and to reveal learning.
- Dynamic Assessment focuses on the learning process—During mediated teaching, examiners focus on how children solve problems and how children learn. Observations reveal information about children's learning strategies and the amount of effort required for learning new skills.
- Dynamic Assessment yields information about learner responsiveness—Examiners make judgments about how easily children respond to new teaching and how well new strategies are incorporated into performance.

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tains a baseline measure of the behavior of interest. The baseline measure can be a formal or informal test. The purpose of the testing that occurs within Dynamic Assessment is to compare children with themselves. The testing and rating procedures that we have included in our approaches to Dynamic Assessment were not designed for norm-referenced comparisons. Rather, our Dynamic Assessment procedures have been designed to help clinicians determine how well chil-

dren respond to intervention. In a sense, Dynamic Assessment turns intervention into assessment. As a result, evaluation leads more directly into treatment.

Our testing phase is followed by a teaching phase that consists of one or two teaching sessions. The special kind of social constructivist teaching that we use in our approach to Dynamic Assessment is called the mediated learning experience (MLE). In MLE, examiners carefully support children's learning at a level that is somewhat above what they are able to do without that support. Examiners do this by pointing out the learning goal, explaining why that goal is important, helping children develop and follow a plan for learning, and helping children think about possible relationships between the learning goal and everyday situations and events. Through this process, the examiners discover how modifiable children are and how they responded to adult assistance.

Following the teaching phase, children are retested in order to obtain a measure of change following mediation. The primary focus of Dynamic Assessment is on how much the child learned during the teaching/intervention phase and what aspects of instruction were the most successful.

### The effectiveness of Dynamic Assessment

Mediated learning within a dynamic assessment paradigm has been shown to be effective in four areas. First, it is an effective demonstration of the optimum level of functioning for children with mental retardation, learning disabilities, and language differences and disorders (Missiuna & Samuels, 1989; Peña, Quinn, & Iglesias, 1992; Reinharth, 1989). Second, mediated

learning and dynamic assessment can be helpful for intervention planning (Bain & Olswang, 1995; Long & Olswang, 1996). Third, mediated learning has been shown to be a more effective teaching approach than direct instruction approaches when used with linguistically and culturally diverse children (Stubbe-Kester, Peña, & Gillam, under review). Finally, mediated learning and dynamic assessment are useful for distinguishing between language difference and disorder (Peña, Iglesias, & Lidz, under review).

### THE DYNAMIC ASSESSMENT OF NARRATIVES

Our model for dynamic narrative assessment of narratives uses a test-teach-retest approach, and is described more fully in Miller, Gillam, and Peña (in press) and Peña and Gillam (in press). Using a test-mediate-retest format, we have children tell or retell stories, we mediate some aspect of story-telling in two separate intervention sessions, then we repeat the initial testing condition.

#### Pretesting

The pretest and post-test vary with respect to the age of the child and the presenting language difficulties. We tend to prefer informal narrative assessments for baseline testing and retesting, but there are some instances in which norm-referenced tests are appropriate, such as when scores are required by a state agency or a school district. For those situations, we know of two formal tests that contain narrative subtests. *The Detroit Tests of Learning Aptitude* (DTLA-3) (Hammill, 1991) has a story construction subtest in which children are asked to create stories about three black and white pictures

(a bear walking up to a school bus, a girls' basketball game, and a space station scene). Children's stories are scored according to the number and complexity of semantic themes that are present. In our clinical experience, one difficulty with this approach is that children can receive very high scores for long but incoherent stories. *The Test of Memory and Learning* (Reynolds & Bigler, 1994) contains a memory for stories subtest that requires children to retell three short stories that the examiner reads. Children earn points for including characters and actions in their retellings. Like the story construction subtest from the DTLA-3, the retelling score reflects story content rather than story form. One interesting aspect of this test is that there is a delayed retelling condition in which children are asked to retell the three stories again approximately 30 minutes later.

We prefer to use informal narration tasks during the pretest and post-test phases of Dynamic Assessment. One of our favorite tasks is to ask children to create stories that correspond to wordless picture books. In contrast to static pictures, these books provide visual outlines of elaborate stories. We often use a wordless picture book such as *Two Friends* (Miller, 1999a) or *Frog, Where are You?* (Mayer, 1969) for collecting a pretest narrative. In either case, children are invited to look through the book first so that they can formulate a story that is consistent with the sequence of pictures in the book. After children look at all the pictures, they return to the beginning and tell the story page by page.

The children's story is audiotaped and transcribed into C-units (Hunt, 1965) for analysis. We perform four story productivity analyses (number of words, number of

C-units, number of clauses, and clauses per C-unit). We also describe three main aspects of stories: episode structure, story components, and story ideas and language. The various components of our story analysis strategy are summarized in the box, "The Analysis of Narratives."

### Mediation

After we analyze the pretest stories, we select the goals for the MLE sessions. We usually select two aspects of narration from two different areas of our analysis scheme. The MLE sessions should target aspects of narration that the child has some knowledge of. For example, we might decide to focus on teaching basic episodes and adding character information if a child's story had an incomplete episode and contained only some information about one character.

The assessment mediation lessons are based on Lidz's (1991) principles of examiner mediation for young children. First, the examiner points out the learning goal and makes sure that the child understands the purpose of the lesson. Next, the examiner explains why that goal is important. For instance, if a child had difficulty with providing character information, the examiner would then tell the child that the purpose of the lesson was to learn about telling stories and that the focus was on telling the listener who the characters in the story were. The examiner would go on to explain that characters are an important part of stories. Naming the characters and providing some information about them helps the listener understand to whom things are happening.

Next, the principle of hypothesizing is used to help the child associate the goal to other events that might be more familiar. The examiner may use some "what if" questions to

## The Analysis of Narratives

### Story Productivity

- Total number of words
- Total number of C-units
- Total number of clauses
- Number of Clauses per C-unit

### Episodic Structure

- Incomplete episode—One or two elements
- Basic episode—Initiating event, Attempt, and Consequence
- Basic episode plus one element
- Basic episode plus two elements
- Complete episode
- Multiple episodes

### Story Components

- Setting—References to time and place
- Character Information—Descriptions of the characters
- Temporal Order—Use of adverbial phrases and clauses to clarify the sequence of events
- Causal Relationships—Explanations about the reasons for the events in a story

### Story Ideas and Language

- Complexity of Ideas—The concreteness or abstractness of the ideas in a story
- Complexity of Vocabulary—Elaborateness of the vocabulary
- Grammatical Complexity—Use of compound and complex sentences
- Dialogue—Use of character dialogue
- Creativity—Elements that make stories interesting and captivating

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help the child understand the goal, its importance, and its relevance to other daily life situations. For example, the examiner might point out that in conversations, it is difficult to understand what one is talking about if the topic or the people involved are not mentioned. Questions like, "Would you know whom I was talking about if I said, 'one day they wanted to go to the store'?" are used to illustrate these principles.

Finally, the examiner helps the child to develop a plan for applying the learned information, for instance, by asking the child how she is going to remember to use what she has learned. The examiner may help the child develop strategies such as counting on fingers, or making a story map to identify the "who" and "what" of the story that provides character information. The examiner and child together carry out the proposed plan and may discuss what worked and did not work. After two of these sessions, we rate the amount of teacher effort that was needed to help the child improve and the child's responsiveness to the mediation process. We also note which strategies appeared to be the most helpful for the child.

### Post-test

We administer a post-test after two mediation sessions. We follow the same procedure for analyzing and describing the post-test story that was used for analyzing and describing the pretest story. If we used a formal test as the pretest procedure, that test is repeated for the post-test. As we noted previously, we usually collect pretest stories using wordless picture books. In that case, our post-test involves asking the child to tell a second story using a different wordless picture book, such as *Bird and His Ring* (Miller, 1999b) or *One Frog Too Many*

(Mayer & Mayer, 1975). We follow the same story transcription and analysis procedures, then we compare the results from the first and the second story. We consider the kinds of changes the child made, how much effort was required to help the child change, and the nature of the change. More specifically, we ask five questions:

1. Was the child able to form a more complete and/or more coherent story with examiner support?
2. How hard did the examiner have to work in order for the child to make positive changes?
3. Did the child pay attention to and include more elements of the story when the examiner used interactive teaching?
4. Once examiner support was withdrawn (as in the second story) was the child able to transfer newly learned strategies?
5. Was learning quick and efficient or was it slow and labored?

The answers to these questions become the basis for determining whether children present a language disorder or a language difference. It is our experience that children who make rapid changes and who are highly responsive to examiner assessment mediation typically have language differences and not language disorders. These children, when provided with instruction that focuses their attention on the necessary elements of mainstream narratives, are able to quickly and efficiently make changes. On the other hand, children who need continued support and who have a very difficult time making even small changes likely have a language impairment. These children typically demonstrate low responsiveness, require high examiner effort, and demonstrate few pretest to post-test changes.

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***The results from Dynamic Assessment provide a framework for developing an intervention plan that can be implemented through classroom lessons and/or through direct intervention.***

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The results from Dynamic Assessment provide a framework for developing an intervention plan that can be implemented through classroom lessons and/or through direct intervention. For children who have language differences but not language impairments, the teaching strategies can be implemented within the classroom by the teacher. For children with language impairment, mediated teaching, based on the results of the Dynamic Assessment, will focus on strategies that will help the child become a more competent language user.

## **SUMMARY**

Dynamic Assessment of narratives provides valuable clinical insights into the learning process. From this assessment, clinicians can develop goals for intervention of school-age children with language impairment. Furthermore, because of the direct relationship between narrative skills and classroom learning, the goals generated are directly linked with school success. This can provide teachers and speech-language pathologists a common framework for instruction.

## **DYNAMIC ASSESSMENT OF EXPOSITORY DISCOURSE**

In the upper elementary, middle school, and high school grades, teachers often ask

complex questions that require students to reason about a situation, predict what might happen under a particular set of circumstances, identify cause and effect, analyze problems, evaluate results, and justify their opinions.

Preadolescents and adolescents with language disorders and learning disabilities sometimes present difficulties with the communication demands of the classroom. All too frequently, students with language disorders choose not to respond when they are called on to answer questions. When they do respond, their answers may be incomplete, ambiguous, or incorrect. Additionally, children with language disorders often have difficulty with the kinds of complex sentence structures that are required to express complex ideas (Gillam & Johnston, 1992). In our opinion, the ability to understand and create elaborate and specific expository texts is critical for academic success in the upper elementary and secondary grades.

We have updated a procedure for the Dynamic Assessment of expository discourse that was first proposed by Gillam and McFadden (1994). This dynamic assessment is structured around the Elementary version of the *Test of Problem Solving* (TOPS) (Zachman, Barrett, Huisingh, & Jorgensen, 1992). The TOPS is a standardized test in which children are shown pictures that depict a problem. The examiner asks questions that require the student to clarify, analyze, and/or evaluate the problem, and generate and explain various solutions. There are no basals or ceilings, so every question is administered. Reliability and validity evidence is lacking in detail, but the measures of test-retest reliability and internal consistency that are provided suggest that the TOPS meets minimum standards of

reliability and validity. Unfortunately, there are a number of problems with the standardization samples that interfere with our confidence in the norm-referenced scores. For these reasons, we believe the TOPS is best suited for informal test procedures like the one we suggest below.

In our procedure, baseline testing is conducted with the even numbered items from the TOPS. Rather than score student responses according to the correct vs. incorrect (0, 1) scoring system advocated in the manual, we score each item on a 6-point adequacy scale (Table 1).

After conducting a pretest using the even numbered items, the examiner uses the principles of MLE to help the student modify responses to examiner questions in order to improve reasoning and explanations. Specifically, examiners help students understand the meaning and purpose of the learning experience while teaching them to regulate impulsive thought styles. Examiners explore various ways to improve expository language, thereby helping children understand the discourse processes that are involved in responding to complex ques-

tions. The idea is that students will gain confidence in their abilities and feel competent in performing the reasoning tasks. Similar to the MLE activities that were discussed in previous sections of this article, mediation of expository discourse begins from the general and moves to the specific, with examiners progressively providing less and less support.

Because our MLE activities for expository discourse focus on students' verbal interactions, our interventions are built around pictures (rather than written texts) that demonstrate problem situations. We like to use pictures and scenarios from the *Elementary Tasks of Problem-Solving Kit* (Zachman et al., 1990), but clinicians can use pictures from newspapers and magazines to create their own materials as well. *The Elementary Tasks of Problem-Solving Kit* contains sets of line drawings of events. An explanation of the context that is depicted and a set of potential questions are written on the back of each card. We use some of the questions that appear on the cards, but our primary focus is on the child's ability to describe the picture, state the prob-

**Table 1.** An informal scoring system for TOPS-R and adolescent TOPS items

Score	Category	Description
5	Detailed	An unusually good answer that provides extra information that exceeds the examiner's expectations.
4	Complete	A correct answer that meets the examiner's expectations.
3	Incomplete	A partially complete answer. The child is close to being right but doesn't provide quite enough information.
2	Ambiguous	An answer that is unclear or imprecise.
1	Incorrect	The answer is wrong.
0	No Response	The child says, "I don't know."

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lem, devise possible questions, and explain possible solutions to their own questions and to questions that we pose.

First, we select a card from the *Elementary Tasks of Problem-Solving Kit* (Zachman et al., 1990). For example, one card from the "school" section of the kit depicts a child holding a gerbil. Four other children who are standing around the gerbil's cage are holding various gerbil supplies (water bottle, food, and paper). One child, with an angry expression on her face, is pointing at the girl who is holding the gerbil. The explanation on the back of the card reads, "Mr. Tucker's class has a new gerbil named Barney. Everyone wants to take care of him. It looks like Emma and Stacy are having an argument. Let's see why they're arguing." In addition, nine questions about the situation are listed including: (1) What could have caused the argument? (2) How can the student avoid an argument over Barney's care? (3) Last night Lana left the cage door open and Barney disappeared. What can the students do to find Barney? (Zachman et al., 1990, School #3). We begin an MLE session with mediation of intentionality and mediation of meaning. We explain the task and the expected responses.

Teachers often ask questions in class. Many times, they have not taught you the exact answer to their questions. They want to see if you can use your problem-solving skills to answer the questions. They're looking for an answer that is detailed enough so that they can tell that you know what you are talking about. It's usually better to take a chance at saying something, even if you are not sure that you are right, than to just say, "I don't know." That way, teachers know you are trying.

Next, we mediate meaning by supporting students as they describe the picture. If stu-

dents' descriptions are incomplete, we provide cues to lead the learner through a description. If students cannot make use of the cues, then they might be provided with alternative answers. If they select the wrong alternative, the mediator explains which answer is best and why.

Tell me about what's happening in this picture. What are the children doing? Which children are happy? Which children aren't happy?

Next, we use mediation of transcendence/hypothesizing to help children relate the situation depicted on the card to their own personal experiences.

Do you have a pet at home or in your classroom? Tell me about him. What do you need to do to make sure that your pet is happy and healthy? Who is responsible for caring for your pet? How did you decide who would be responsible for taking care of your pet?

Then, we ask three or four of the questions on the back of the card. When students don't understand our questions, we prompt them to ask clarification questions.

After I ask a question, ask yourself, "Do I know what this question is about?" If you are not sure, ask me to explain the question. You could say, "I'm not sure what your question means. Could you please explain it to me?"

When students encounter difficulties formulating answers to the questions, we use prompts and cues to assist them in arriving at a complete answer. We make sure students understand that they are expected to answer, even if they have to guess, and they are expected to be as specific and as detailed as they can.

Finally, to mediate self-regulation, we ask, "What are you going to remember to do the next time your teacher asks you a question in class?"

When these steps have been completed, we take out another problem solving card and follow the same process. We encourage children to ask clarification questions when they do not understand our initial questions. We also remind them to remember to say as much as they can about the question that was asked, even if they have to guess. After presenting four or five such pictures across two short 20-minute MLE sessions, we administer the odd items from the Elementary or the Adolescent TOPS. As with the baseline test, we score children's responses according to the six-point scoring system in Table 1.

We evaluate children's performance three ways. First, we are interested in the extent of improvement upon retest. Some children change from earning primarily 0s and 1s on the baseline test to earning primarily 4s and 5s on the retest after experiencing only two short MLE activities. Clearly, such children do not have a language disorder. Their poor performance on the baseline test was very likely not a result of language learning difficulties. Rather, they were probably unsure of the nature of the task or the expected responses. On the other hand, children with language disorders tend to show less change from their baseline performance to their retest performance.

Second, we are interested in evaluating the syntactic complexity of the responses. We score each utterance in an answer as grammatically acceptable or unacceptable and as syntactically simple (1 clause) or complex (1 main clause plus 1 or more coordinated or subordinated clauses). One outcome of our training is that children's responses to questions increase in syntactic complexity as they increase in semantic complexity.

### **The Knowledge, Skills, and Processes Being Evaluated in the Dynamic Assessment of Expository Language**

- Learner intention and motivations
- Ability to focus attention on critical problems
- Ability to distinguish critical aspects of a pictured problem
- Ability to shift focus of attention from one question to another
- Ability to shift from one perspective to another
- Comprehension of examiner questions
- Ability to integrate verbal and visual information
- Ability to relate past experiences to the problems posed by the examiner's question
- Ability to integrate old and new information
- Ability to reason logically
- Ability to predict outcomes
- Ability to justify a decision
- Ability to construct and explain inferences
- Ability to determine and explain causes and consequences
- Use of abstract vocabulary
- Use of grammatical complexity that appropriately reflects conceptual complexity
- Response speed
- Independence and self assurance

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Third, we are especially interested in determining how much teaching effort was necessary to achieve change in any of the

areas listed in the box, "The Knowledge, Skills, and Processes Being Evaluated in the Dynamic Assessment of Expository Language." This relates to the students' zone of proximal development and effective learn-

ing strategies. Some students make small changes despite a great deal of examiner effort. It is likely that these students will need one-to-one intervention in order to improve. Other students present moderate gains in a

**Table 2.** Expository discourse assessment procedure

Procedures	Analysis of Responses
Administer Pretest: <i>Test of Problem-Solving</i> (Zachman, et al., 1992) (even numbered items)	Adequacy Scale— detailed—exceeds expectations complete—meets the expectations incomplete—partially complete ambiguous—unclear or imprecise answers incorrect—the answer is wrong no response—the child makes no attempt to respond Grammatical Complexity— Number of clauses Type of complex sentences Grammatical acceptability
Select 1–2 examples for mediation from the cards in the <i>Elementary Tasks for Problem Solving Kit</i> (Zachman, et al., 1990) or make your own tasks	Determine how to mediate for story structure using: Intentionality—What will be taught? Meaning—Why is this structure important? Planning—How will child approach the task? Transfer—What is this related to? How can the child remember?
Retest with the odd numbered items from the <i>Test of Problem-Solving</i> (Zachman, et al., 1992)	
Summarize	Child learning during MLE Pre-post changes
Implications for intervention	What helped the child learn? How can this support be integrated within classroom contexts? How can support be targeted during intervention?

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number of the areas listed in the box on page 44 but still earn similar scores upon retesting. These students might be good candidates for classroom intervention or classroom consultation programs. The entire Dynamic Assessment procedure is summarized in the box.

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Dynamic Assessment is yet to become a routine part of evaluations of children suspected of having speech and language disorders. However, there is a rapidly growing community of speech-language pathologists who are exploring the usefulness of Dynamic Assessment for differentiating language difference from language disorder and for informing intervention practices. These clinicians are interested in Dynamic Assessment practices because they represent learners as complex beings who function in a variety of ways depending upon the circumstances that face them. We have been involved in the development of Dynamic Assessment procedures to distinguish language difference from language disorder,

and, more recently, to guide language intervention.

We have described Dynamic Assessment procedures for the assessment of narrative and expository discourse. The outcomes of these assessment processes help speech-language pathologists better describe the language learning potential of children who are referred for language assessment. Furthermore, these procedures yield information that is useful for determining whether a child's low performance on a static language test is due to language difference or language impairment. Finally, the information that is derived from Dynamic Assessment procedures can provide critical information for planning language intervention. When Dynamic Assessment is conducted as part of the language assessment process, speech-language pathologists can describe successful and unsuccessful learning. This will lead to better language intervention planning and prediction that results in the provision of services that have better outcomes for students with communication disorders.

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