

Fabrizio/Moors Consulting

Report of Assessment Results for John Smith

October 2002

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General Information

Client Name: John Smith

Birth date: 06/13/94

Assessment Date: September 9-19, 2002

Age: 8 years, 3 months

Skill Area(s) Assessed: Language and academic skills

Assessment(s) Administered: Assessment of Basic Language and Learning Skills
Woodcock-Johnson III Tests of Achievement

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Date of Report: October 15, 2002

Reason for Assessment:

We completed this assessment at the request of John's parents to analyze John's current performance in the areas of academic and language development, and to assist his current IEP team in developing goals and objectives.

Introductory Statement

Before delving into the details of the results of John's assessment, it seems important to stress the progress he has made since his earlier educational career started. While John's performance on the two assessment tools used for this report showed significant deficiencies, the fact that his performance is strong enough to allow administration of normative tests that compare John to typically developing children his own age is impressive. This progress is largely due to the diligence and dedication of his family and in-home intervention staff. Their efforts are to be congratulated. Each of John's strong skills on the Assessment of Basic Language and Learning Skills as well as the Woodcock-Johnson III was explicitly taught to him in his in-home program.

Assessment of Basic Language and Learning Skills Results

The Assessment of Basic Language and Learning Skills (ABLLS) is a criterion referenced assessment that analyzes language based on Skinner's (1957) analysis of verbal behavior. It is important to understand that the criteria for the items on the ABLLS have not been experimentally validated for their predictive validity. Accordingly, meeting the criteria for any given item should be interpreted cautiously in terms of what that might say about true skill mastery. While the assessment is not linked to any particular age or grade, one would expect students to have mastered all academic skills listed on the ABLLS no later than the middle of first grade (allowing for some variance due to differences between local achievement standards.) One would expect students to have mastered the spoken language, motor, imitation, and self-help skills listed on the ABLLS by the end of kindergarten. We elected to administer the ABLLS because its functional approach to the analysis of language allows for a more fine grained analysis of variables controlling and maintaining John's language, it may be administered repeatedly and so serves as a quasi curriculum based assessment to provide intermediate feedback more frequently than most normatively referenced tests, and because its detailed description of subskills within each language repertoire allows for easy translation from assessment to intervention planning.

To summarize the results of the ABLLS, we chose to provide counts of the percentage of completion with each repertoire (area) assessed. Below is a table of those results:

Repertoire/Area	Items Mastered/ Total	Repertoire/Area	Items Mastered/ Total
Cooperation & Reinforcer Effectiveness	9/11	Group Instruction	1/12
Visual Performance	21/21	Reading	15/15
Receptive Language	51/52	Math	31/42
Imitation	13/13	Writing	9/9
Vocal Imitation	9/9	Spelling	6/6
Requests	16/27	Dressing	14/15
Labeling	31/42	Eating	9/10
Intraverbals	25/42	Grooming	7/7
Spontaneous Vocalization	8/9	Toileting	10/10
Syntax and Grammar	13/20	Gross Motor	27/28
Play and Leisure	8/10	Fine Motor	28/28
Social Interaction	12/22	Classroom Routines	7/10

Strength areas for John on the ABLLS included cooperation and reinforcer effectiveness, visual performance (matching, identifying patterns, etc.), vocal and non-vocal imitation, receptive language, basic reading and writing skills, self-help skills, and motor development. Weakness areas for John on the ABLLS included advanced labeling, requesting information, intraverbal development, syntax and grammar, social interaction, mathematics, and participating in group instruction. Below we summarize what John was able to do and not able to do within each of these weakness areas.

ABLLS Weakness Area: Labeling

John was able to label single objects and ongoing actions, body parts, and features of 6 items. He could label the functions of at least 25 items, as well as their class or category. He had significant difficulty being more descriptive with his labeling, including using carrier phrases to label multiple items, including descriptive words within his labels (adjectives and adverbs), use of locatives¹, and describing social interactions including emotions.

ABLLS Weakness Area: Requesting

John was able to request items he wanted, request other people to engage in actions, use syntactically correct sentences to request, ask for help, and request using the word, "where." He was unable to request joint attention from another person, or to request using other informational words (e.g., "who", "what", "when", "why", "how"). As with his labeling repertoire, John was unable to use descriptive words when requesting or prepositional phrases.

ABLLS Weakness Area: Intraverbal

Intraverbal responses are pieces of language occasioned by preceding verbal stimuli. For example, saying "thank you" in response to hearing a compliment from someone is an intraverbal response. Answering a spoken question is another example of an intraverbal response. Strengths for John in this area included answering questions about personal information, filling in words about a minimal number of items' features, functions, and classes. Weaknesses for John in this area included answering questions starting with "who," "when," "how," and "why," making comments related to comments from another person, and describing sequences of activities

¹ Locative refers to a grammatical case in inflected languages that refers to location or time.

ABLIS Weakness Area: Syntax and Grammar

Strengths for John within the Syntax and Grammar section of the ABLIS included using articles appropriately most of the time, using the verb present progressive tense, using the past tense of regular and irregular verbs, subject/verb agreement, and using statements related to negation in spoken language. Weakness areas for him included using the future tense of regular verbs, using conjunctions to coordinate words (dog and cat, soda or juice, etc.), and using demonstrative pronouns (this, that those, these, etc.).

ABLIS Weakness Area: Social Interaction

Social Interaction strengths for John included showing interest in others and their actions, following simple directions, and initiating greetings. Weaknesses in this areas included maintaining eye contact during interaction, sharing items with others, and maintaining conversational exchanges.

ABLIS Weakness Area: Mathematics

In the Mathematics section of the ABLIS, John's strengths included counting (rote counting and counting objects), naming numbers, one-to-one correspondence between counting numbers and objects, and some mathematical concepts (e.g., "same" and "different" as they relate to quantities, "more", and "less"). Weakness areas for him included telling time, addition with multiple digit addends and carrying, understanding the mathematical concept "equal," "greater," "all," and "some."

ABLIS Weakness Area: Group Instruction

The Group Instruction area was John's weakest on the ABLIS. He was reported as being able to follow teacher instructions that request all students to do the same thing when such an instruction was delivered to a group of students. He was reported to be unable to independently sit appropriately within a small or large instructional group for up to 15 minutes, to attend to a teacher while participating as a member of a group, to shift his attention between other students in a group as they spoke, to raise his hand to get his teacher's attention or to answer a question, to follow group instructions that required discrimination (e.g., "If your table has finished its work, clean up and get ready for recess."), or learn new skills from group instruction.

Woodcock-Johnson III Tests of Achievement

The Woodcock-Johnson Tests of Achievement (WJ-R III) assess John's performance on a range of school-related tasks organized by subtests. The WJ-R III allows us to compare John's performance on these tasks with that of typically developing children his own age or in his grade. Because of John's history of intensive home schooling, all scores reported here are based on his age rather than his grade level. John generally scored within the Below Average to Average range on most subtests of the Woodcock-Johnson III. Table 1 below shows a summary of John's performance on each of the subtests. Percentile Ranks below 10 are considered well below average, less than 25 are considered below average, and 25-75 are considered average. The Raw Scores reflect the number of test items John answered correctly.

Subtest	Raw Score	Percentile Rank	Standard Score
Letter-Word Identification	37	34	94
Reading Fluency	12	14	84
Understanding Directions	-	<0.1	51
Calculation	7	12	82
Math Fluency	14	4	74
Spelling	24	35	94
Writing Fluency	2	4	74
Passage Comprehension	16	15	84
Applied Problems	8	<0.1	47
Writing Samples	7-B	7	78
Word Attack	7	23	89
Picture Vocabulary	15	12	82
Oral Comprehension	0	-	-
Editing	0	-	-
Reading Vocabulary	-	5	76
Quantitative Concepts	-	2	69
Academic Knowledge	-	1	64
Spelling of Sounds	7	1	67
Sound Awareness	2	<0.1	48
Punctuation and Capitals	8	2	69

To aid in interpretation of the above results, below is a description of each subtest after grouping the tests according to whether John performed in the Average range, the Below Average range, or the Well Below Average range

In terms of programming for John's future educational needs, those areas in which his performance is most discrepant should be given higher priority, and those areas where his performance is less discrepant given lower priority. We strongly urge, however, that John's IEP team heavily consider the relative importance of each type of performance when prioritizing his educational needs. For example, while John performed better in picture vocabulary than he did in editing, gaining information from pictures is a more important skill to functioning in the world than is the ability to edit one's own writing. Given this difference in importance, we recommend his IEP team target developing his ability to gain information from pictures before they do his editing.

Subtests on which John scored within the Average Range (25th – 75th percentile)

Letter-Word Identification (34th percentile rank performance)

This is a test of John's ability to sight read words. John performed rather well on this test. He was able to identify both regular (e.g., "must") and irregular (e.g., "could") words of both one and two syllables. John was not required to explain the meanings of the words he identified, only to say them correctly.

Spelling (35th percentile rank performance)

The Spelling subtest measures John's ability to write words he hears. He performed within the average range on this test, and was able to encode (write) both phonetically regular and irregular words.

Subtests on which John performed within the Below Average Range (10th – 24th percentile)

Reading Fluency (14th percentile rank performance)

This subtest measures John's ability to read a simple statement (e.g., "Some people have long hair.") and circle "Yes" if the statement is true or "No" if the statement is false. Given John's stringer performance in reading sight words, and his weaker performance on other areas of this test requiring understanding of oral language, we suspect John's lower performance on this subtest was due to his difficulty understanding the statements he read rather than dysfluent decoding.

Calculation (12th percentile rank performance)

The Calculation subtest measures John's ability to perform basic mathematic operations under untimed conditions. Here, John sees math problems written on a page and writes the answers to the problems. He successfully added single addends with sums as high as 16, correctly completed single digit subtraction problems, and was able to complete 2-digit minus 2-digit subtraction problems that did not require regrouping. He was unable to correctly add multi-digit numbers without carrying due to difficulty with column alignment.

Passage Comprehension (15th percentile rank performance)

This subtest requires John to select the correct picture shown on a page based on text. For example, he might see "blue house" and touch the picture of the blue house on the page. John did quite well on those test items that required him to select pictures based on text. He also did fairly well on items that required him to combine text and pictures to complete the sentence. John's performance dropped off significantly when the items changed such that he had to complete sentences without picture cues. For example, he was unable to read and then complete the sentence "When you go to the library, you will find many things to..." Given John's results from the ABLLS showing deficiencies in his intraverbal repertoire, his lower performance on those items without a picture stimulus probably reflects deficient contextual control over his spoken language rather than a reading problem *per se*.

Word Attack (23rd percentile rank performance)

The Word Attack subtest measures John's ability to sound out phonetically regular (rule-governed) nonsense words (e.g., "weg"). While technically below average, John's performance in this area was fairly strong indicating he has a solid foundation in some of the basic phonetic principles of reading. It is important to note that John's performance on the test items was not consistent across the test. This subtest, like all others on the WJ-III, is organized by difficulty with easier items at the start of each subtest and more difficult ones towards the end. John consistently missed 2-3 easier items, and would then correctly say 1 harder item. For example, he was unable to say the sound for the letter "k", but was able to correctly say the nonsense word "tiff". He incorrectly decoded the nonsense word "rox", but correctly decoded the nonsense word "gawl." Given this, and his difficulty with oral language comprehension, we recommend that John receive quick, time-efficient remedial instruction on basic decoding skills.

Picture Vocabulary (12th percentile rank performance)

The Picture Vocabulary subtest measures John's oral language development and lexical (word) knowledge. The test requires John to look at a picture and name what he sees. He was able to successfully identify common objects such as a flower, ball, bed, and bird, but unable to identify objects such as pieces of luggage, binoculars, and a light switch. While his difficulty with these certain items should not be of any particular concern, his IEP team should be concerned with the relatively few facts (labels) in his repertoire. These basic units of language provide the building blocks for semantic and pragmatic development. Accordingly, we recommend that his fact repertoire be expanded significantly.

Subtests on which John performed within the Well Below Average Range (<0.1st -9th percentile)

Understanding Directions (<0.1th percentile rank performance)

The Understanding Directions subtest is an oral language measure that required John to listen to a sequence of directions and then follow the directions by pointing to objects on a page. John was able to follow directions consisting of requests for single actions and that did not require discrimination between objects with similar features. For example, he could point correctly when told to, "Point to the bird." He could not respond correctly when told to, "Point to the bird and then the tree." Nor could he respond correctly when told to "Point to the tallest tree." Given John's very performance on this subtest and its essentialness for performing well within the classroom and larger world, we strongly recommend John's IEP team target enhancing his ability to follow increasingly complex oral directions.

Math Fluency (4th percentile rank performance)

Unlike math computation, the Math Fluency subset of the WJ-III is a timed test. It required John to solve as many math facts as he could within 3 minutes. Of the 21 problems he completed in 3-minutes, he correctly answered 14. This is an accuracy ratio of only 66% and well below a threshold that would indicate fluent performance. All 7 of John's errors on the test were on subtraction math facts, and in each case he added rather than subtracted. Because of his accuracy, rate, and discrimination errors (inattention to operation sign), we recommend improving John's ability to perform basic computation.

Writing Fluency (4th percentile rank performance)

The Writing Fluency subtest measured John's ability to quickly write simple sentences based on a picture and a list of words the sentence was to contain. For example, John saw something like the following:



John would score a correct response if he wrote something like, "Dogs are nice." While the subtest does not count writing mechanics (e.g., capitalization, punctuation), it does insist that sentences be constructed in syntactically correct ways. John wrote a total of 4 correct sentences, but only 2 of those within the first 2 minutes. Because of this, and as per the subtest administration directions, the additional 2 sentences he wrote correctly did not count towards his total score. John's correctly inserted the article "the" within his sentences as appropriate. Unless a test item specified a verb, however, he did not include a verb in his sentences. For example, he wrote, "the TV nat working" rather than, "The TV is not working." John's difficulty with fluently expressing ideas related to what he sees is probably related more to his difficulty with oral language than a writing deficit.

Applied Problems (<0.1th percentile rank performance)

The Applied Problems subtests required that John look at a picture, listen to spoken directions containing a question, and answer the question based on the picture. He had quite a bit of difficulty with this. He was unable to look at a picture and indicate how many of a requested item were present in the picture. He was also unable to indicate changes in quantity. For example, if he saw:



and was asked, "If you took away two chairs, how many would be left?" or, "If you brought in one more chair, how many chairs would you have?" he was unable to answer correctly. John was also unable to select the correct pictures of analog clocks based on spoken times. He was able to identify coins, but was unable to sum coins correctly.

Writing Samples (7th percentile rank performance)

This subtest of the WJ-III measured John's ability to look at pictures and construct sentences based on them. The test is untimed, and the pictures increased in complexity and subtlety across the subtest. John was able to complete sentences started for him by inserting nouns referring to the picture with an item. He was unable to complete sentences by comparing stimuli on a page. For example, when shown a picture of a small dog with the sentence, "This is a little dog." Underneath it, he was unable to write "...big dog" to complete the sentence written under the picture of a big dog just to the right of the picture of the small dog. He also did not include verbs within his sentence. When shown a picture of a bird emerging from an egg, for example, he wrote "bird" rather than indicating that the bird was hatching.

Oral Comprehension (no basal performance established)

A basal score is the minimally correct performance John needed to get on any subtest for the items on the test to measure his skill accurately and compare it to other typically developing children his age. Because we could not establish a basal score for John on the Oral Comprehension subtest, we are unable to compare his performance to that of other children. Understanding that the WJ-III begins at the entering kindergarten level, however, being unable to establish a basal score for John on a test of oral comprehension skills is meaningful in planning for his education. It indicates that the skills measured on the subtest are quite deficient and in need of remediation.

The Oral Comprehension subtest measures a type of intraverbal responding called sequelic responding. Sequelic verbal responses are those where the word that is said is controlled by preceding spoken words. For example, if a student hears, "Winnie the..." and says, "Pooh," the saying of the word, "Pooh" is under sequelic control – the student said, "Pooh" because they heard "Winnie the..." On the Oral Comprehension subtest, John was unable to finish the following statements:

- "People sit in..."
- "Cars almost always have four..."
- "Candy tastes..."
- "A bird flies. A fish..."

John's difficulty finishing such statements (which was corroborated with his low performance on the intraverbal section of the ABLLS) reflects significant deficiencies in what most people would call his "background knowledge." Specifically, he demonstrated difficulty understanding the function of objects (chairs are used to sit in) and features of objects (cars have four wheels and fish swim). Helping John learn to organize and expand his spoken language by

teaching him more about objects' features, functions, and classes (e.g., cars belong to the class vehicles) should be a major goal of his education.

Editing (no basal performance established)

As on the Oral Comprehension subtest, we were unable to establish the minimal performance needed to attain a basal score with John on the Editing subtest. The Editing subtest measures John's performance in the area of Autoclitic verbal behavior. Specifically, it evaluates his ability to discriminate correct and incorrect capitalization and punctuation in written sentences. John was unable to identify that the word "I" should be capitalized, that an interrogative (question) statement should end with a question mark, that the word "see" was misspelled, or that the incorrect past participle of the verb "lose" was used within a sentence (e.g., "Robert losed his money.")

While the ability to correct one's own writing is an important skill for classroom performance and personal expression, given John's significantly deficient performance in understanding language and language concepts, we do not recommend his IEP team categorize improving his editing performance as a high priority at this time. Once his oral language performance improves significantly, his team should revisit his editing needs. Because writing mechanics consists primarily of sets of rules based on fairly simple discriminations (at John's writing developmental level), and the facility with which most children with autism acquire rule-governed behavior, we do not predict he will have as much difficulty learning to edit appropriately as he will enhancing his spoken language.

Reading Vocabulary (5th percentile rank performance)

The Reading Vocabulary subtest measured John's ability to read words and say synonyms, antonyms for the word, or to provide a word that completes an analogical statement. We were unable to establish basal performance for John on both synonym and antonym generation. This means he was unable to provide words that meant the same thing as words such as "puppy" and "hop." For antonyms, he was unable to provide words that meant the opposite of words such as "on" and "king." This lack of flexibility around language is consistent with John's performance on other subtests of the WJ-III. He was able to correctly complete 2 analogies: saying that a man had the same relationship to a boy as a woman did to a girl, and saying that the word "night" had the same relationship to the word "dark" as "day" did to "light."

Quantitative Concepts (5th percentile rank performance)

Quantitative Concepts measured John's knowledge of mathematical concepts, symbols, and vocabulary. The subtest itself is divided into two parts. The first part of the subtest measures skills such as counting, number identification, and symbol identification. The second part of the subtest required John to see a series of numbers and determine which number would come next in the series.

John's performance on the number series portion of the subtest was much stringer than his performance on the general mathematical knowledge section of the subtest. He correctly answered 9 items from the number series portion, and 5 from the general mathematical knowledge portion. In the number series portion of the subtest, he was able to correctly complete series of missing numbers where the series was either increasing or decreasing in steady increment of +/- 1. Once the series changed to +/- 2, however, he was unable to correctly complete missing numbers from them. In terms of general math knowledge (which relied heavily on an understanding of language), John was able to count item son a page and read both single and double digit numerals. He was unable to identify objects based on comparative features (e.g., "Point to the largest and the smallest star.") or based on direction containing ordinal language (e.g., "Touch the first and the last house.") He was unable to count by two's, or find the day of the week corresponding to a requested date from a calendar.

Academic Knowledge (1st percentile rank performance)

The Academic Knowledge subtest measured John's understanding of basic knowledge related to the areas of science, social studies, and the humanities. The early items required John to point to a picture in response to a question, with later items requiring him to answer a question without seeing a picture. In the science area, John was able to correctly identify simple body parts on himself and correctly point to common animals such as a dog and a fish. He was unable to describe what was happening in a picture or identify subtler body parts such as his wrist. In the social studies areas, he was able to identify common items such as pieces of clothing, tools, and household items. He was unable to explain the functions of items such as gasoline or banks. In the humanities area, John was able to identify common school items such as scissors, common colors, and common musical instruments. He was unable to point to items when given a less frequently heard name of the items' class (e.g., "jewelry".)

Spelling of Sounds (1st percentile rank performance)

The Spelling of Sounds subtest measures John's ability to translate sounds he hears into their corresponding letter(s) (phonological encoding) and to spell

correctly even when what he hears does not encode based on how it sounds (orthographic encoding). These two processes (phonological and orthographic encoding) are responsible for translating spoken words into text. John was able to (inconsistently) write letters corresponding to single sounds and most of the phonetically regular consonant-vowel-consonant patterned nonsense words he was presented. He was unable to correctly encode nonsense words containing consonant digraphs (e.g., -ch, -sh, -th) or diphthongs (e.g., -oy, -ay, -ow).

Given that John was able to encode real words containing many of the sounds he was unable to encode when embedded within nonsense words, coupled with his string performance across subtests on this test where he was able to rely on a sight history with a word, it seems John has learned to read primarily through sight reading and is in need of a modest amount of remedial instruction in phonetics and the relationships between sounds and letters. This is supported by John's performance on the next subtest summarized in this report.

Sound Awareness (<0.1th percentile rank performance)

The Sound Awareness subtest measured John's ability to discriminate and manipulate sounds in the absence of text. The subtest consisted of skills from four areas: rhyming, sound deletion, sound substitution, and sound reversal. John was able to rhyme with 2 words ("might" and "boy"), and was unable to complete any test items correctly in the sound deletion, sound substitution, or sound reversal subtests.

While the ability to discriminate and manipulate sounds as separate units within words (skills collectively referred to as phonological coding or phonemic awareness) has been shown to be important to the development of early decoding skills, we recommend John's IEP team not target this as an area of primary importance for remediation. First, the relationship between decoding and phonological coding has not been established for children with autism. Second, teaching children to perform most phonological coding tasks often requires a great deal of intervention to establish understanding of the language of instruction. The tasks require complex and rapidly changing direction from the teacher. Given John's challenges with oral language and understanding directions, the amount of time invested in explaining the task to him may not be worth the benefits he reaps from learning the skills. Finally, John already has some decoding skills. While his reading performance is certainly deficient, he will probably make the most gains in reading if provided intensive remediation in the area of reading comprehension. This requires better oral language development.

Punctuation and Capitals (2nd percentile rank performance)

The Punctuation and Capitals subtest of the WJ-III required John to demonstrate his facility with basic mechanics of writing English. On the test, John was able to correctly write uppercase and lowercase letters, and to insert a period at the end of a simple sentence (a sentence containing one independent clause.) He was unable to make a question mark or exclamation point when directed. John's performance on this subtest was certainly within the well below average range (2nd percentile), but had he been able to insert end marks accurately, it would have moved into the average range.

Instructional Objectives and Plans

The numbering of the instructional objectives below does not connote recommended teaching order. Please refer to the scope and sequence charts listed above for descriptions of the component/composite relationships between skills. Also, all objectives are written with suggested frequency aims as part of the mastery criterion for each. Frequency aims require that students not only be accurate, but also fast. Frequency aims measure rate of response. A discussion on the use of rate to measure student performance is beyond the scope of this report. The reader is referred to the extant literature within the field of Behavior Analysis and the subfield of Precision Teaching for theoretical, experimental, and applied articles related to the use of rate as a measure of performance.

Further, while some people may consider the number of objectives recommended in this report to be high, it is our opinion that each objective is needed to provide John with a floor of opportunity so that he reasonable likely to receive benefit from a free and appropriate public education. We base this opinion not only on our clinical experience working with children with autism, but also on our own experience designing and supervising John's in-home educational intervention program over the course of the past approximately 12 months. John is quite capable of making meaningful and measurable progress on this number of objectives and this number of skills.

Area I: Auditory Memory

1. Hear/Say Sentences

Given spoken sentences, John will repeat the sentence at a rate of 40-60 syllables correctly repeated per minute with no more than one error across a set of novel (untaught) sentences of 30 syllables in length.

2. Hear Prose/Say Details

Given spoken stories of up to 200 words in length, John will say details from the story at a rate of 20-25 details recalled per minute with no more than one error across at least 3 untaught (novel) narrative and expository stories at the mid-second grade reading level.

3. Hear/Say Words

Given strings of unrelated words, John will repeat the words in order at a rate of 30-35 words repeated correctly in order per minute across at least a 1-minute timing, and at least 2 sets of untaught 7-9 word strings.

4, Hear/say Number Sequences

Given strings of single digit numbers, John will repeat the numbers in order at a rate of 30-35 numbers repeated correctly in order per minute across at least a 1-minute timing, and at least 2 sets of untaught 7-9 number strings.

Area II: Auditory Processing/Direction Following/Syntactic Language Development

1. Hear Direction and See a Picture/Touch Items

Given a spoken direction to touch specified items and pictures from books, John will touch the items requested across the features of order (e.g., "Touch the hat then the coat), comparative structures (touch the tallest tree), locative discrimination (e.g., touch the one on the left side of the page), and conjunction structure (e.g., touch the cat or the dog) at a rate of 30-35 items correctly touched per minute with no more than 1 error across the following syntactic structures:

Order – sequences of up to 4

Comparative structures: big (-er, -est), large (-er, -est), small (-er, -est), fat (-er, -est), skinny (-er, -est), tiny (-er, -est), dark(-er, -est), light (-er, -est), round (-er, -est), young (-er, -est), old (-er, -est)

Locative structures – first, next, last, behind, in front, next to, besides, under, above, over, right, left, bottom, top, middle, second, third, fourth, fifth, sixth, seventh, eighth, ninth, tenth

Conjunctive structures – and, but, or, either

2. Hear/Do Conditional Discrimination Direction Following

Given a spoken direction containing a conditional dependent clause and while looking at printed stimuli (e.g., "If the bird is on the house, color the house red," or "Color the house red if the bird is on the house."), John will correctly follow the direction at a rate of 20-25 direction followed correctly per minute with no more than 1 error, across at least 3 untaught (novel) pictures and the following conditional relation forms:

If...then (e.g., if the bird is on the house, color the house red.)

If...not...then (e.g., if the bird is not on the house, color the house red.)

3. Hear Question/Say Answer with Conjunctions and Pronouns

Given a question occasioning the use of subordinating conjunctions, coordinating conjunctions, and/or demonstrative pronouns (e.g., “Why do you go to the store?” or “Who lives at your house?”), John will answer the question at a rate of 20-25 questions answered correctly per minute with no more than 1 error across at least 20 untaught questions delivered by at least 2 different typically developing peers. He will do this across the following words:

Subordinating conjunctions: while, because, if, when, since

Coordinating conjunctions: but, and, for, or, so

Demonstrative pronouns: that, this, these, those

4. Hear Question Occasioning a Comparison and See Picture/Say Answer

Given a question occasioning a comparative response and a picture containing two or more items, John will say the correct answer using either a comparative or superlative word form at a rate of 20-25 questions answered correctly per minute with no more than 1 error across at least 20 untaught questions delivered by at least 2 different people. He will do this across the following morphographs –er and –est attached to at least 40 different nouns.

Area III: Mathematics

1. See/Write Math facts

Given a sheet of randomly ordered addition and subtraction math facts, John will write the answer to those facts at a rate of 60-70 correct answer digits per minute with no more than 1 error across a 1-minute timing, across addends and subtrahends² of 0-9, and equations containing up to 4 different addends and subtrahends with sums to 10 and differences to 0 (e.g., “5+1+2 =”, “7-3-1-1 =”).

2. Hear/Write Math Facts

Given spoken addition and subtraction math facts without the answer, John will write the equation and the answer at a rate of 35-40 answer digits per minute with no more than 1 error across a 1-minute timing, across addends and subtrahends of 0-9, and equations containing up to 4 different addends and subtrahends with sums to 10 and differences to 0 (e.g., “5+1+2 =”, “7-3-1-1 =”).

² Addends and subtrahends are the numbers added to or subtracted from another number. In the equations, “5+2=7” and “5-2 = 3”, the number “2” is the addend in the former and subtrahend in the latter.

3. Free/Say Math Problem Solving Words

Given a textual math word problem requiring the operations of addition or subtraction, John will solve the problem and then say the steps he went through to solve the problem at a rate of 90-110 words per minute with no more than 1 error across at least 10 different untaught addition and subtraction math word problems.

4. See Addition and Subtraction Problems with Multiple Digits/Write the Answer

Given written addition and subtraction problems containing up to four 4-digit numbers that require carrying (for the addition problems) and regrouping (for the subtraction problems), John will write the answers to these problems at a rate of 50-55 answer digits written correctly per minute with no more than one error across at least 30 untaught problems.

4. See Picture and Hear Math Problem/Say Answer

Given pictures containing multiple examples of the same object, and a question asking about increasing or decreasing the number of objects seen, John will say the correct answer at a rate of 30-35 questions answered correctly per minute with no more than one error across at least 20 different untaught pictures and at least 20 different verbs (e.g., picked, took away, gave, returned, took back, subtracted, added, placed). Please see the example problem below:



“If we had four books, and we returned three of them to the library, how many would be left?”

5. See Clock/Say Time

Given pictures of analog clocks, John will say the time shown on the clocks to the hour and half hour at a rate of 50-55 times said correctly per minute with no more than 1 error across at least 5 untaught times.

6. Hear Time and See a Blank Clock/Show Time on the Clock

Given a sheet of blank analog clock faces and a spoken time to the hour or half hour, John will draw the time on one of the blank clocks at a rate of 30-25 times correctly drawn per minute with no more than 1 error across at least 5 untaught times.

7. See Items and Hear a Question about Quantitative Concepts/Say the Answer

When given two visual stimuli and the cue, "What are these?" John will answer correctly at a rate of 40-60 responses per minute with 0-1 errors, and 10 untrained stimuli across the concepts of "equal", "unequal", "greater", "some", "all", "none", and "less"

8. See Coins/Say Amount

When shown configurations of up to 10 coins containing pennies, nickels, dimes, and quarters, John will say the amount represented by the coins. He will do this at a rate of 60-70 movements per minute with no more than 1 error.
NOTE: 1 movement should be counted for each coin touched and for saying the correct amount.

Area IV: Written Expression

1. See Picture/Write Words About the Picture

Given a picture, John will write a sentence explaining what is happening within the picture. He will do this at a rate of 30-40 correct words per minute with no more than 1 error across at least 10 untaught pictures showing an agent engaged in an action.

2. Hear/Write Phonetically Regular Words

Given spoken phonetically regular words, John will write the words correctly at a rate of 40-60 letters per minute with no more than 1 error across untaught phonetically regular words containing consonant digraphs, vowel digraphs, blends, and diphthongs.

3. Hear/Write Phonetically Irregular Words

Given spoken phonetically irregular words, John will write the words correctly at a rate of 40-60 letters per minute with no more than 1 error across at least 30 different words.

4. Hear Sentences Spoken with Prosody/Write the Sentence

Given spoken sentences, John will write the sentences using punctuation (period, exclamation point, question mark, comma) appropriate to the tone of the speaker's voice for declarative, interrogative, and imperative sentences as well as subordination of clauses to show secondary importance at a rate of 25-30 marks per minute with no more than 1 error across at least 5 different people and 30 untaught sentences.

Note: The intent of this objective is to teach the semantic relationships between basic punctuation and speakers' voices. Accordingly, it is essential that the main outcome the objective be generalization across spoken statements and speakers. The speakers should be of different ages and genders.

Examples:

:

John hears:	John marks:
"The cow jumped" spoken with consistent emphasis	The cow jumped.
"The cow jumped" with emphasis showing enthusiasm	The cow jumped!
"The cow jumped" with voice inflexion showing questioning	The cow jumped?
"The cow, while in the field, jumped" with a drop in voice tone while saying the subordinate clause (while in the field)	The cow, while in the field, jumped.

Area V: Reading

1. See Words/Say the Sounds and the Word

Given printed regular words containing 2-4 sounds, John will say each sound in the word and then say the whole word at a rate of 70-90 movements per minute with no more than 1 error across at least 20 untaught words.

2. See/Say Sounds

Given printed sounds, John will correctly say the sounds at a rate of 70-90 sounds per minute with no more than one error.

3. Hear Word/Say the Sounds in the Word

Given a spoken word and the presence of placeholder manipulatives, John will touch a manipulative (in order) for each sound contained in the word and then say the whole word at a rate of 25 sounds touched per minute with no more than one error across at least 10 untaught words.

Area VI : Language Development

1. See/Say Items

Given pictures of items, John will correctly say the name of the item at a rate of 50-55 items correctly identified per minute with no more than 1 error across untaught examples of at least 200 previously unknown items.

2. Hear Items/Say Features

Given names of spoken items, John will say features of those items at a rate of 30-40 feature statements per minute of the form, "A [concrete noun] has[feature]." He will do this with no more than 1 error, across at least 100 previously unknown concrete nouns.

3. Hear Items/Say Functions

Given names of spoken items, John will say functions of those items at a rate of 30-40 function statements per minute of the form, "You [function] with/in a [concrete noun]." He will do this with no more than 1 error, across at least 100 previously unknown concrete nouns.

4. Hear Items/Say Class

Given names of spoken items, John will say the class to which those items belong at a rate of 30-40 class statements per minute of the form, "A [concrete noun] is a [class name]." He will do this with no more than 1 error, across at least 100 previously unknown concrete nouns.

5. Hear Class/Say Items

Given names of spoken classes, John will say the names of items belonging to that class at a rate of 30-40 items per minute. He will do this with no more than 1 error, across at least 100 previously unknown concrete nouns.

6. Hear Word/Say Synonym

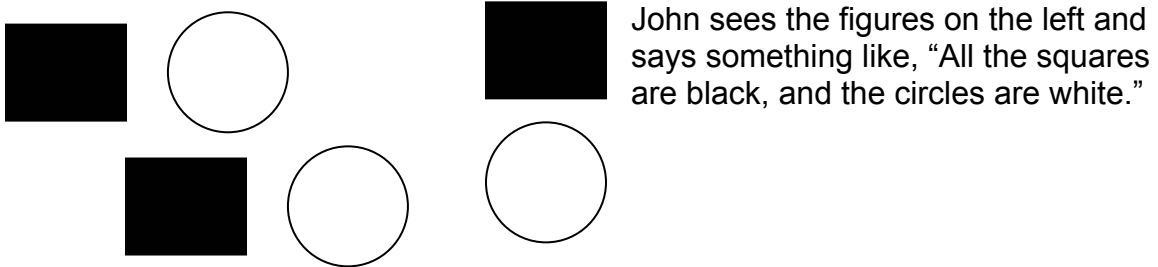
Given spoken words, John will say 1-2 words with the same meaning at a rate of 40-60 synonyms said correctly per minute with no more than 1 error across at least 50 different words.

7. Hear Word/Say Antonym

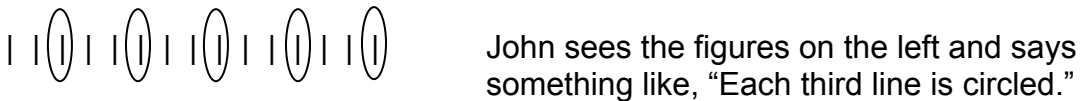
Given spoken words, John will say 1-2 words with the opposite meaning at a rate of 40-60 antonyms said correctly per minute with no more than 1 error across at least 50 different words.

8. See Pattern/Say Rule

Given a visual stimulus exemplifying the application of a rule, John will say the rule at a rate of 50-70 words per minute with no more than 1 error across at least 20 untaught visual stimuli.



Another example:



9. See Picture/Say What is Happening

Given picture stimuli, John will describe what he sees in the picture at a rate of 90-110 syllables per minute with no more than 1 error across at least 10 untaught pictures using the following structures:

- Adjectives – at least 30 different adjectives
- Adverbs – at least 20 different adverbs
- Prepositional phrases – at least 30 different prepositional phrases

10. See a Peer Playing/Say Words Describing What They are Doing

Given the presence of typically developing, age-appropriate peers, John will say what the children are doing at a rate of 70-90 syllables per minute with no more than one error across at least 5 untaught peers in at least 2 untaught contexts/environments.

11. See Someone Doing Something/Say Words Describing What They are Doing

Given the presence of various people engaged in activities John has done previously, John will say what the people are doing at a rate of 70-90 syllables per minute with no more than one error across at least 5 untaught people in at least 2 untaught contexts/environments.

12. See Picture/Say Words Describing the Picture Using Carrier Phrases

Given pictures, John will say what he sees in the picture by including a carrier phrase at a rate of 90-110 syllables per minute with no more than 1 error, using at least 6 different carrier phrases across at least 20 untaught pictures.

13. Free/Say Request Statements

Given scenarios or statements containing missing information, John will say requests for that information at a rate of 15 statements per minute with no more than 1 error across at least 20 untaught instance of missing information and using the following words: “what”, “when”, “how”, “why”, and “who.”

14. Hear Statement and a “Wh” Question/Say the Answer

Given a spoken statement (e.g., “Last night, the dog ran home because it was scared.”) and a “Wh” questions (e.g., “Why did the dog run home?”), John will say the answer to the “Wh” question at a rate of 20-25 questions correctly answered per minute with no more than 1 error across at least 20 untaught statements across the following variable features for each question type:

- Who – Agent number (simple and complex)
 Plural number (2 versus more than 2)
 Noun type (proper, common, pronoun)
 Agent position (Beginning, middle, and end of sentence)
 Conjunction (and, but not, or)
- When – Type of subordination (temporal, conditional, sequential)
 Subordination format (date, day, etc.)
 Preposition (before, after, next, etc.)
 Conjunction (since, because, for, to)
 Position (beginning, middle, and end of sentence)
- How - Preposition (by, through)
 Adverb (across at least 20 different adverbs)
 Position (beginning, middle, and end of sentence)

Why - Conjunction/Preposition (for, since, to, because)
Position (beginning, middle, and end of sentence)

15. Think/Say Steps in a Process

Given the name of a process, John will say steps involved in that process in order from beginning to end at a rate of 90-100 syllables per minute with no more than 1 error across processes he practices frequently, processes he practices infrequently, and processes he has never practiced but are similar to ones he has experienced.

16. Think/Say Steps in a Process Forward and Backward

Given the name of a process and a step within it, along with a question requesting he name the step preceding or following, John will name the correct step at a rate of 70-90 syllables per minute with no more than one error. He will do this across at least 10 untaught but thoroughly familiar processes.

17. Hear Statement with Conditional Discrimination and See a Picture/Touch the Picture that Fulfills the Discrimination and Say Words that Explain

Given a statement containing a 2 step conditional discrimination and at least 2 pictures showing various scenarios that do and do not meet the specified conditions, John will accurately touch the picture that does meet the specified conditions at a rate of 20-25 pictures touched correctly per minute with no more than 1 error. He will explain why the picture meets the specified condition at a rate of 60-70 syllables per minute with no more than 1 error. He will do this across at least 20 different pictures and using the subordinating conjunctions, "if", "as long as", and "until".

18. See Pictures/Say "if-then" Rule

When presented with a series of pictures and asked to observe the features in the pictures, John will construct an if-then rule based up the details of the picture at a rate of 60-70 syllables per minute, with 0-1 errors, across 2 adults, and 10 untaught examples.

19. Hear Statement and Related Statement/Say "true" or "false"

Given a spoken statement and a series of subsequent statements that do and do not accurately reflect what he heard, John will say "true" or "false" to each subsequent statement and, if false, explain why. He will do this at a rate of at least 15 statements correctly identified as true or false per minute while explaining false statement at a rate of 60-70 syllables per minute with no more than 1 error, across at least 20 untaught statements.

20. Hear 2 Items/Say How they are the Same or Different

Given the spoken names of 2 items, John will say how the 2 items are the same and how they are different by describing the items' features, functions, and classes at a rate of 60-70 syllables per minute with no more than 1 error, across at least 20 sets of untaught items.

21. Hear 2 items/Say Analogy Statement

Given the spoken names of 2 sets of items, John will say how the 2 sets are the same by constructing an analogy statement involving the items' features, functions, or classes at a rate of 60-70 syllables per minute with no more than 1 error, across at least 20 sets of untaught items.

Examples:

Comparison items: seed/flower & caterpillar/butterfly

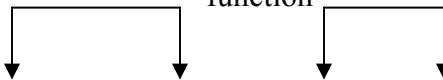
Analogy based on common
feature



Analogy Statement: A seed becomes a flower. A caterpillar becomes a butterfly.

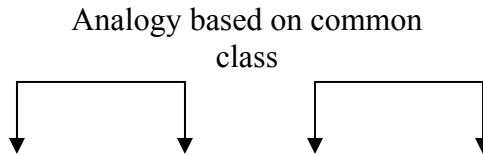
Comparison items: bake/oven & ride/car

Analogy based on common
function



Analogy Statement: You bake in an oven. You ride in a car.

Comparison Items: dog/animal & flower/plant



Analogy Statement: A dog is and animal. A flower is a plant.

22. Hear sentence/Say Sentence with Alternate Words

Given a spoken sentence, John will restate the sentence substituting a word for a clause or a clause for a word at a rate of 10-25 sentences per minute with no more than 1 error across at least 100 substitutions of previously unknown words contained within untaught sentences.

Area VII: Pragmatic Language and Social Skills Development

1. Hear a story/Say What Characters Within the Story are Feeling and Why

Given a spoken story and a question regarding the emotional state of one of the story's characters, John will say what the characters are feeling and why they are feeling that way at a rate of at least 30-40 syllables correct per minute with no more than one error across at least 3 different people asking the questions and at least 3 untaught stories.

2. See a Character in a Movie/Say What the Character is Likely to be Feeling and Why

Given a movie and a question regarding the emotional state of a character within the movie, John will say what the characters are feeling and why they are feeling that way at a rate of at least 30-40 syllables correct per minute with no more than one error across at least 3 different people asking the questions and at least 3 untaught movies.

3. See a Peer/Say What the Peer is Feeling and Why

Given a range of environments containing typically developing, age-appropriate peers, John will say what various peers are feeling and why they are likely to be feeling that way at a rate of 15-20 words per minute with no more than one error across at least 10 different peers within 5 untaught environments.

4. See Peer/Say Request for Joint Attention

Given the presence of typically developing, age-appropriate peers and an ongoing activity in which John is engaged, he will speak directly to his peers to request their attention at a rate of 3-5 requests per day across at least 5 different peers and 5 different activities.

5. Hear a Greeting from a Peer/Say a Greeting to the Peer

Given the presence of typically developing, age-appropriate peers, John will independently return their greeting upon hearing it at a rate of 5-10 greetings returned per day with no more than 1 error, across at least 10 different peers and 3 instructional days.

6. See a Peer and a Desired Item/Say Request to the Peer for the Item

Given contrived situations containing at least 1 other typically developing age-appropriate peer who has an item John needs or wants, John will independently request the item from the peer or ask the peer to share the item at a rate of 5-10 requests per day with no more than 1 error. He will do this across at least 10 different peers.

7. Hear a Request from a Peer/Comply with Request

Given contrived situations containing at least 1 other typically developing age-appropriate peer and upon hearing a peer request that John share an object with them, John will independently comply with the peer's request to share at a rate of 5-10 requests per day with no more than 1 error. He will do this across at least 10 different peers.

8. Free/Do Take Turns with Peers

Given the presence of age appropriate, typically developing peers (at least 1 other peer) and a range of leisure activities that each require turn taking, John will independently engage in the activity with the peer at turn taking rates that range from .5 per minute to 4 per minute with no more than one error. He will do this across 5 different peers, engaging in at least 2 different activities with each peer.

NOTE: We specified a frequency range for this objective to call attention to the need to wait for varying period during interactive play requiring turns. If John demonstrates he can take turns at a rate of 4 per minute (once every 15 seconds) and .5 per minute (once every 2 minutes), this should indicate he is willing to wait for periods sufficient for a wide range of activities.

Area VIII: Group Instruction and Classroom Routines

1. Hear Speaker/Look at Speaker

Given a range of group instructional conditions, John will independently look at the speaker within the group (teacher or peer). He will do this at a rate of at least 2 attention shifts per minute with no errors across his teacher and at least 12 different typically developing, age appropriate peers, in group settings ranging in size from a 1:4 to a 1:16 teacher to student ratio, two different teachers, and at least 5 different instructional topics, across at least a 20 minute observation period.

2. Hear Speaker/Say What Speaker Just Said

Given a range of group instructional conditions and the question "John, what did [proper noun] just say?" John will repeat or paraphrase what the speaker said (teacher or peer). He will do this at a rate of at least .5 correct statements per minute with no errors across his teacher and at least 12 different typically developing, age appropriate peers, in group settings ranging in size from a 1:4 to a 1:16 teacher to student ratio, two different teachers, and at least 5 different instructional topics, across at least a 20 minute observation period.

3. Hear Teacher Direction to Look/Look

Given a spoken direction to look at a given object or location from his teacher delivered to a group of at least 16 typically developing age appropriate peers and John, John will independently look at requested item or location at a rate of at least 2 attention shifts per minute with no more than 1 error across at least a 20 minute observation period per day, and at least 5 consecutive school days.

4. Hear Request from Teacher Not Directed at Him/Follow Request

Given a teacher and age appropriate, typically developing peers, and a direction given to the group and not containing John's name, John will independently begin to comply with the direction with a latency of no more than 5 seconds at a rate of at least .5 per minute with no errors. He will do this for 5 consecutive school days, across both small (1:4) and large (1:16 or more) instructional groups, and at least 30 different group directions ranging in complexity from 1 to 4 steps.

NOTE: John's IEP team may need to add a remedial instructional objective to support John meeting this one. He may need to be taught to hear a group direction and mark that he heard it.

5. Hear Request for Participation/Raise Hand

Given a teacher and age appropriate, typically developing peers, and a request for participation given to the group and not containing John's name, John will independently raise his hand to participate at a rate of at least .2 per minute (once every 5 minutes) with no errors. He will do this for 5 consecutive school days, across both small (1:4) and large (1:16 or more) instructional groups, and at least 20 minute long observation periods.

NOTE: For this objective, a correct should be counted only if John raises his hand to answer a question he should know, he is called upon, and then correctly answers the question. "Guessing" should not be counted as correct (or reinforced) unless the teacher is requesting such from the class (e.g., during a predicting activity in language arts).

6. Free/Do Request Help from Teacher

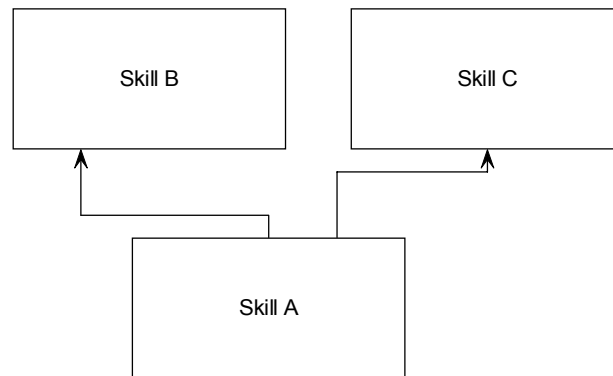
Given independent work assignments during a group activity, John will independently raise his hand and request help from his teacher at a rate of at least .10 per minute (once every 10 minutes) with no errors, across 10 minute observation periods and 5 consecutive school days.

7. Free/Do Complete Independent Work

Given work for which John has already demonstrated mastery, John will independently complete the work at a rate of .05 independent work sets per minute (1 set of independent work in 20 minutes), across at least 10 different independent work sets and 10 consecutive school days.

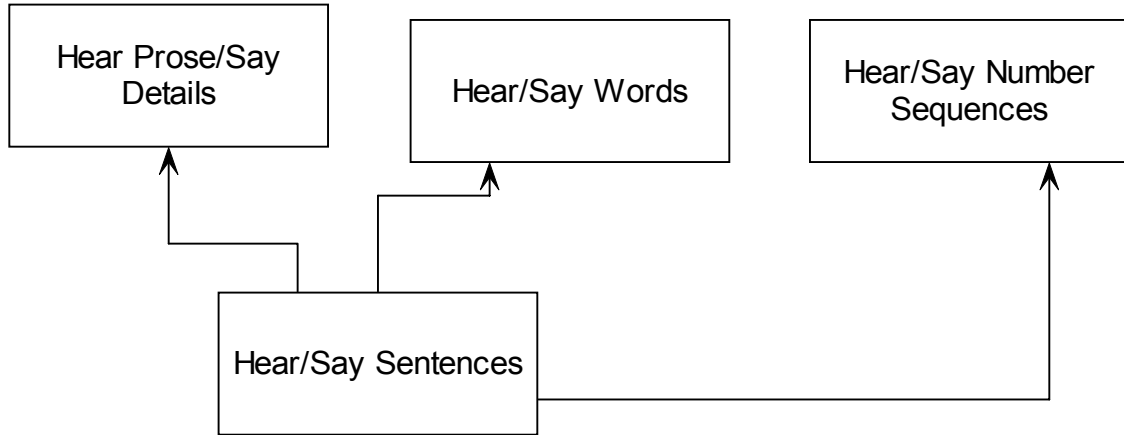
Teaching Scope and Sequence Charts

The next several pages present sample scope and sequence charts that John's team may use to assist in planning sequences of instruction for the objectives outlined in this report. The scope and sequence charts are organized graphically, by the name of the objective. Arrows pointing from one objective to one or more other objectives indicate the component/composite relationship between the skills. For example, the figure below shows a portion of a scope and sequence chart. The chart indicates that Skill A is a component skill needed for Skills B and C.

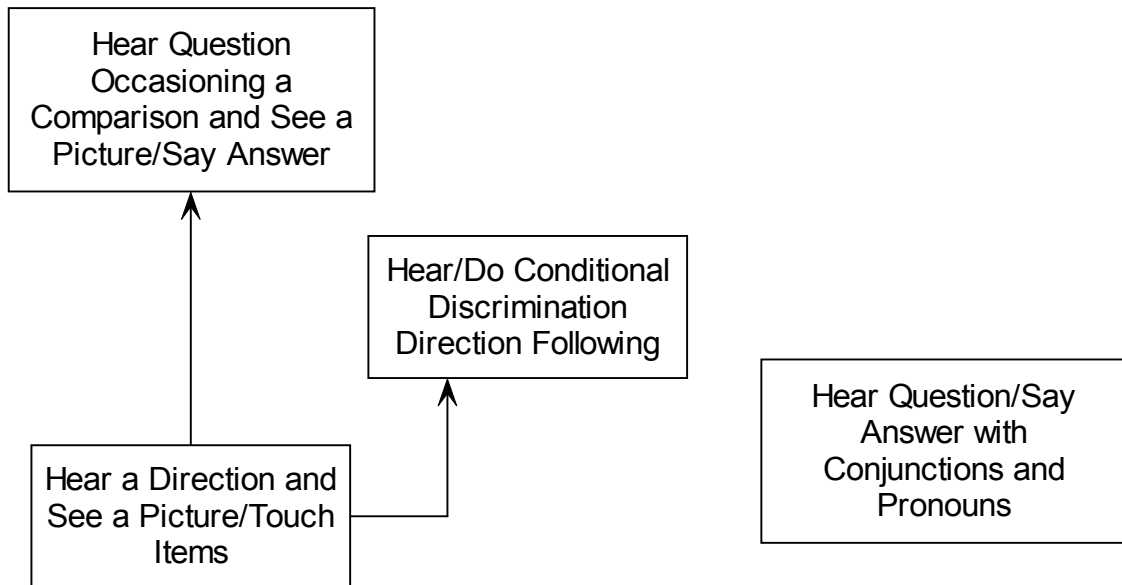


While component/composite relationships should generally be respected, we do not recommend that John's team wait until he completely masters all of the needed component skills before starting instruction on the composite skills they affect. Rather, we recommend that his educational staff begin working on component skills before composite skills, and that they add composite skills to his program once he is well on his way to proficiency with the component skills. Above all else, data collected daily on John's performance on each implemented objective should lead his educational staff in their decision making regarding the ordering and pacing of the objectives.

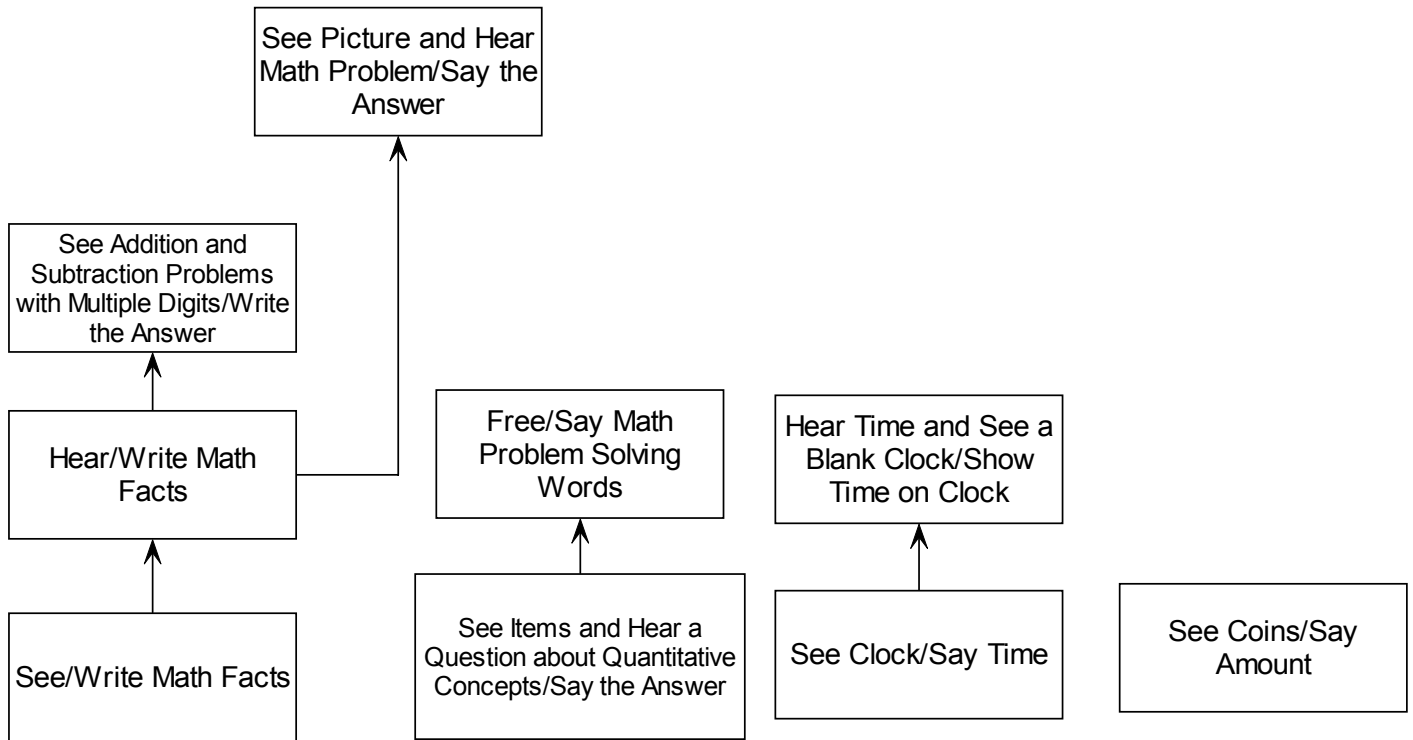
Area I: Auditory Memory Scope and Sequence Chart



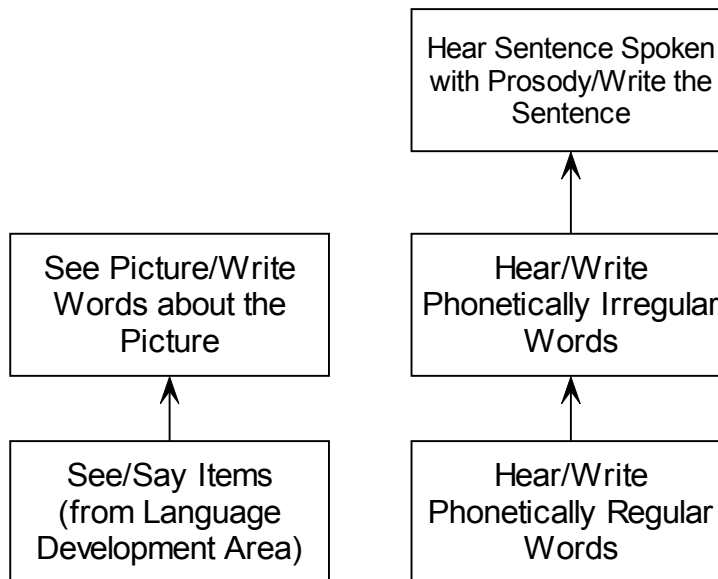
Area II: Auditory Processing/Direction Following/Syntactic Language Development Scope and Sequence Chart



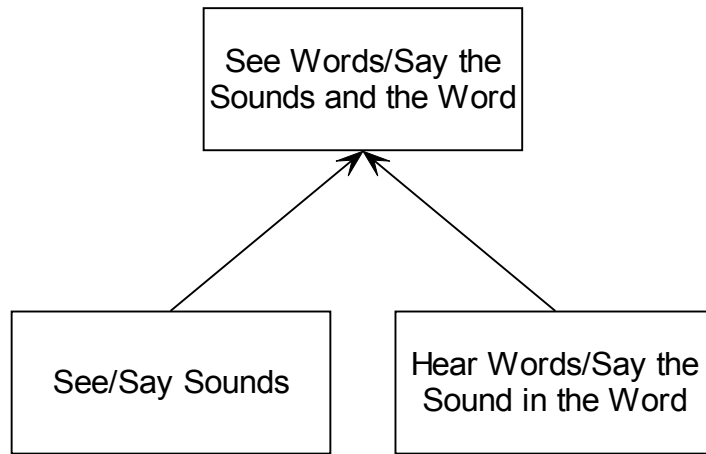
Area III: Mathematics Scope and Sequence Chart



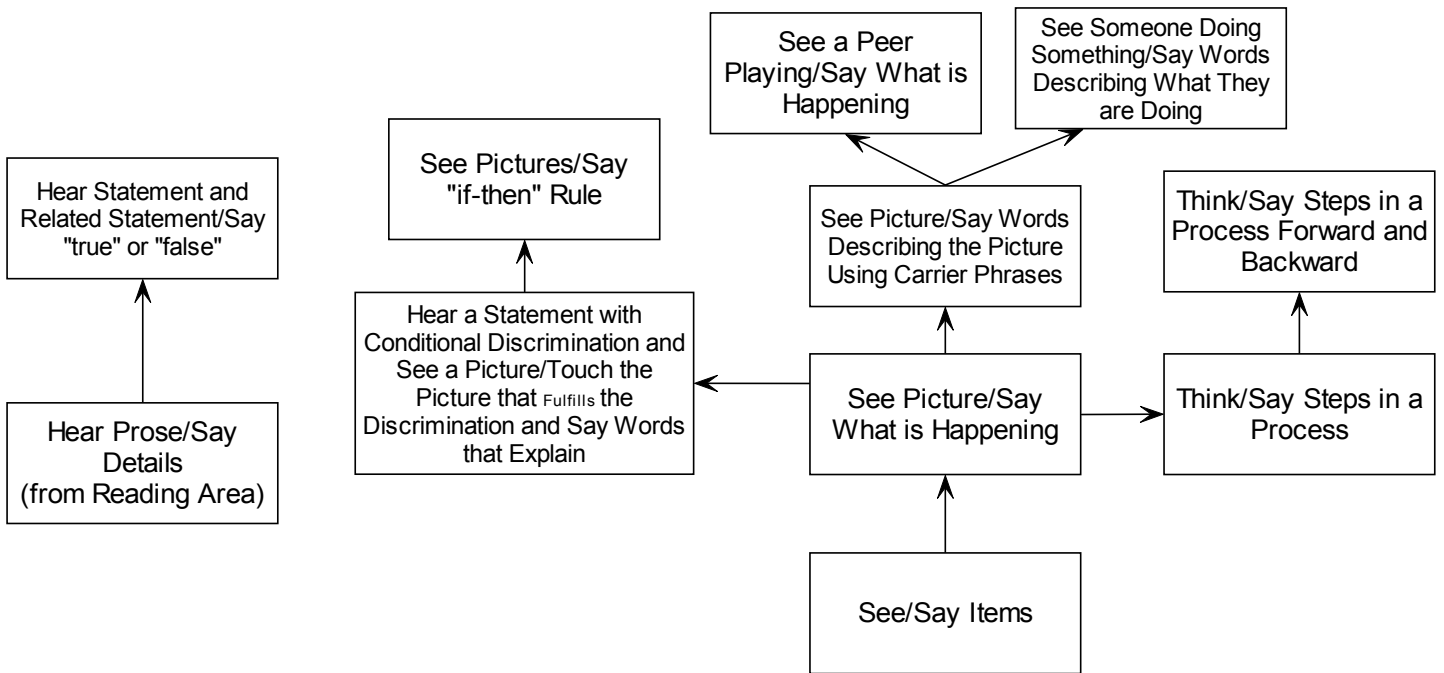
Area IV: Written Expression Scope and Sequence Chart



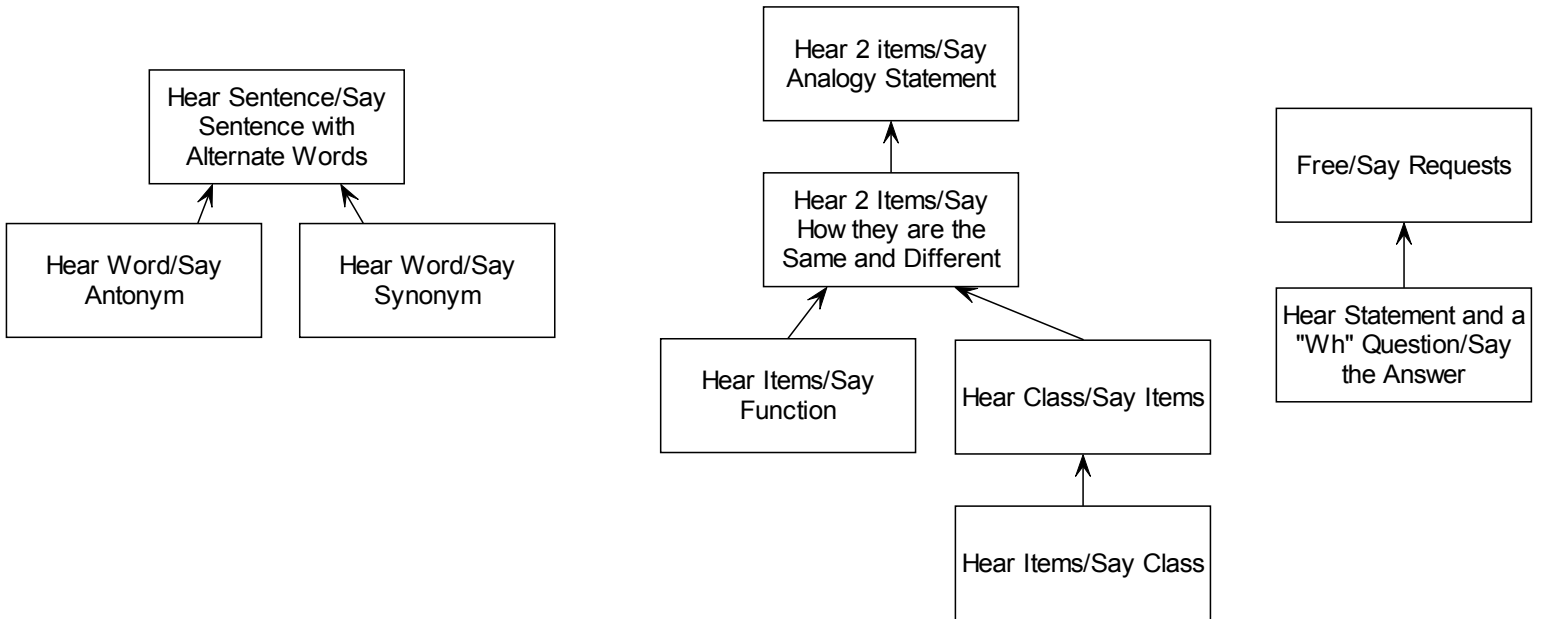
Area V: Reading Scope and Sequence Chart



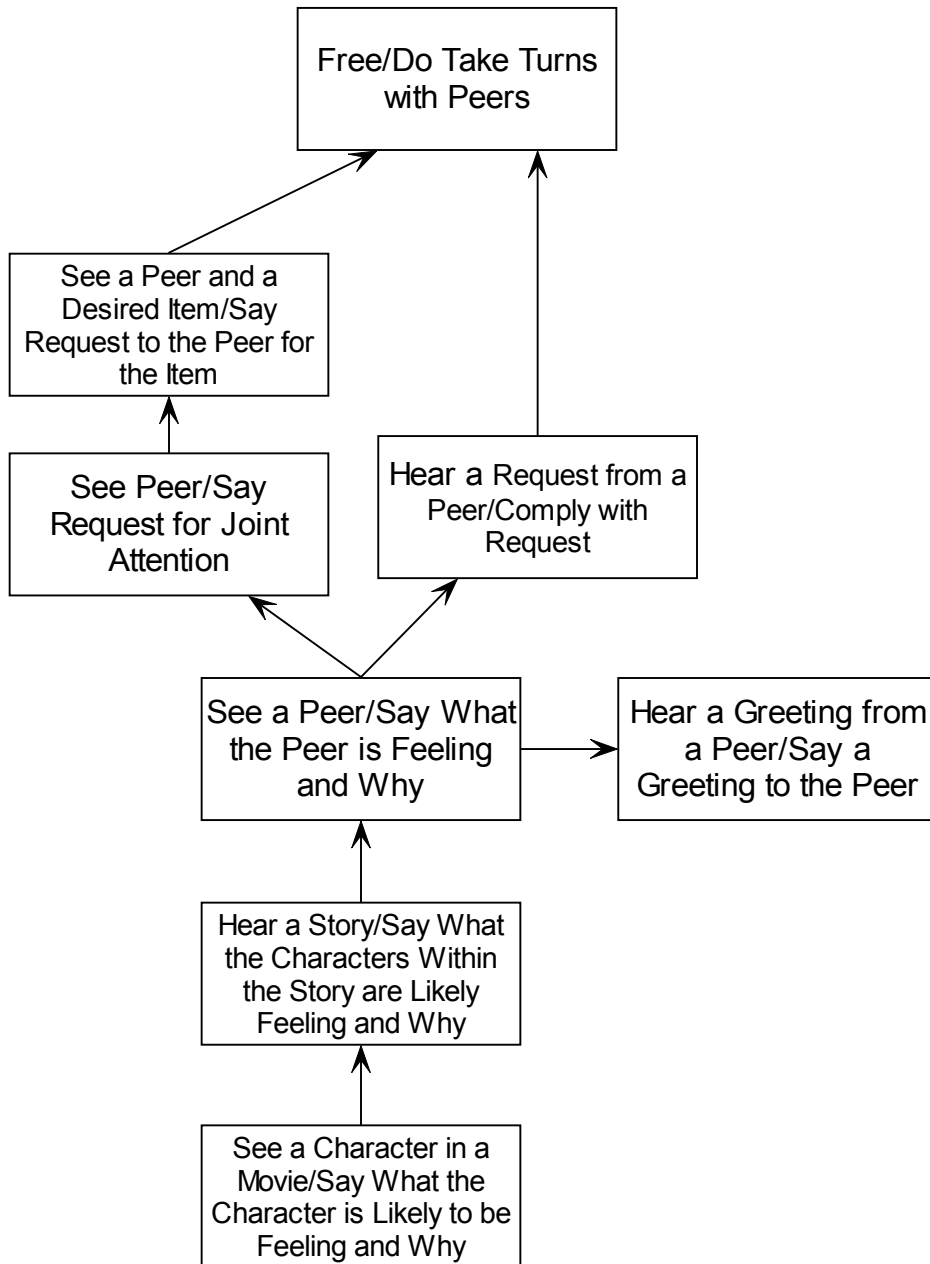
Area VI: Language Development Scope and Sequence Chart #1



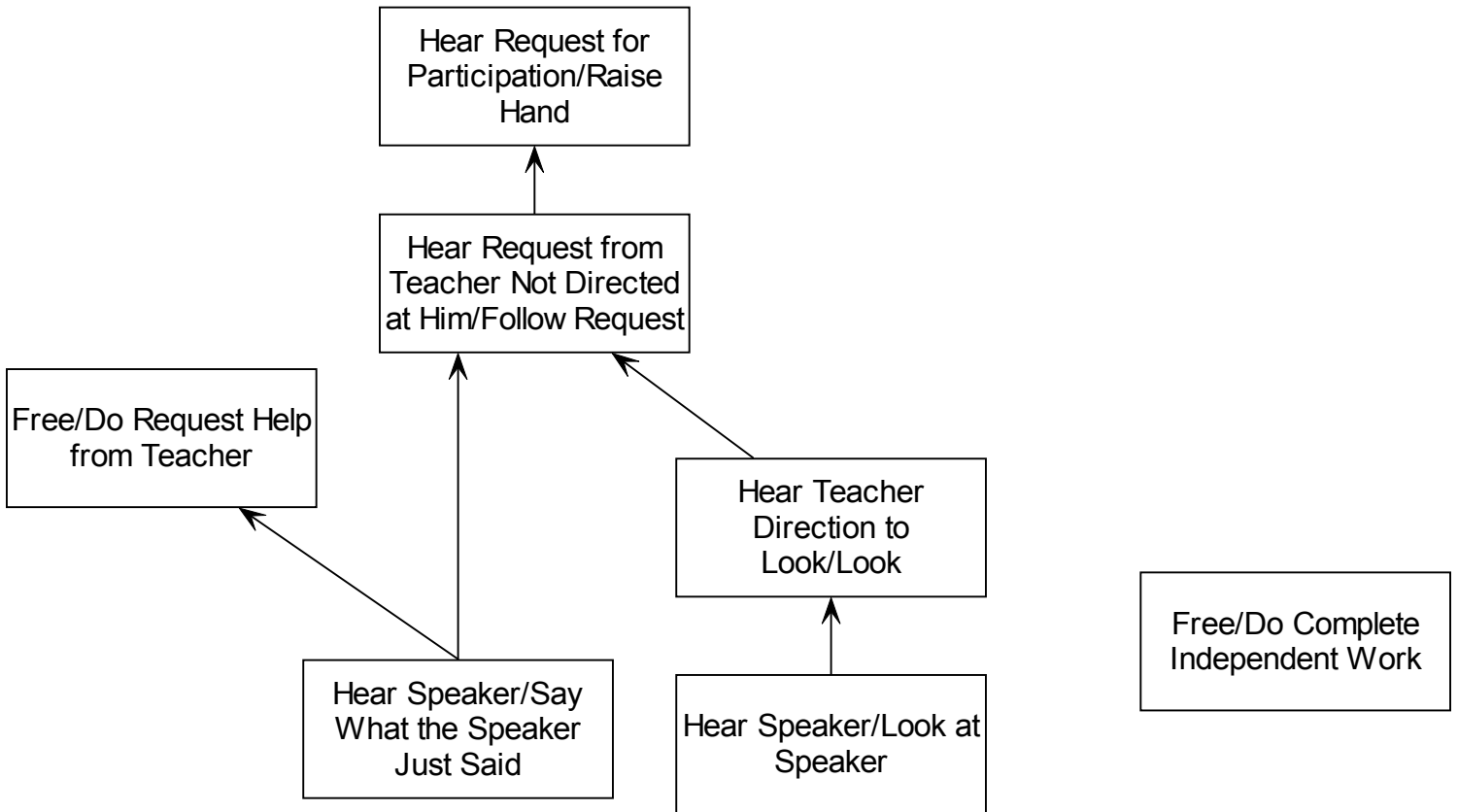
Area VI: Language Development Scope and Sequence Chart #2




Area VII: Pragmatic Language and Social Skills Scope and Sequence Chart



Area VIII: Group Instruction and Classroom Routines Scope and Sequence Chart



It has been our pleasure assisting with planning John's education. We hope you find this report helpful. If we may be of further assistance to you, please do not hesitate to contact us.



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Board Certified Behavior Analyst (#1-00-0044)
Partner, Fabrizio/Moors Consulting



Sara Pahl, B.A.
Program Manager, Fabrizio/Moors Consulting

Appendix A:

Reference List for the Use of Frequency as a Measure of Performance With Children with Autism and Related Disabilities

1. Hursh, D., Weigle, K. & Fabrizio, M. (May 1993). Establishing conceptual behavior with a person with autism. Poster presented at the annual convention of the Association for Behavior Analysis, Chicago, Illinois
2. Fabrizio, M. & Moors, A. (May 1999). The use of fluency-based instruction to ensure skill generalization in children with autism. Poster presented at the annual convention of the Association for Behavior Analysis, Chicago, Illinois
3. Fabrizio, M. (October 1999). Celeration versus frequency as a predictor of the outcomes of fluency. Paper presented at the semiannual conference of the International Precision Teaching Society, Logan, Utah
4. Fabrizio, M. & Moors, A. (May 2000). Linking language assessment to treatment through precision teaching for children with autism. Paper presented at the annual convention of the Association for Behavior Analysis, Washington, D.C.
5. Ferris, K. & Fabrizio, M. (May 2002). Enhancing the auditory discrimination and articulation of a child with autism through precision teaching. Poster presented at the annual convention of the Association for Behavior Analysis, Toronto, Canada
6. Fabrizio, M., Zambolin, K., & Isley, S. (May 2002.). Developing intraverbal conversation component skills in a child with autism through fluency-based instruction. Poster presented at the annual convention of the Association for Behavior Analysis, Toronto, Canada
7. Fabrizio, M. & Pahl, S. (May 2002). Precision teaching money skills to a child with autism. Poster presented at the annual convention of the Association for Behavior Analysis, Toronto, Canada.
8. Fabrizio, M., Pahl, S., & Schirmer, K. (May 2002). Assessment on a larger scale: Measuring and evaluating the progress of children with autism through curricular sequences with precision. Paper presented at the annual convention of the Association for Behavior Analysis, Toronto, Canada
9. Fabrizio, M., Moors, A., Pahl, S., & King, A. (May 2002). Precisely evaluating learning outcomes in children with autism: Empirically validating instruction. Paper presented at the annual convention of the Association for Behavior Analysis, Toronto, Canada
10. Moore, A. & Fabrizio, M. (May 2002). When discrete trials are not enough: Embedding fluency-based instruction into a school and home program. Paper presented at the annual convention of the Association for Behavior Analysis, Toronto, Canada

11. Fabrizio, M. (Discussant) (May 2002). Enhancing applied behavior analysis services for children with autism using precision teaching procedures. Paper presented at the annual convention of the Association for Behavior Analysis, Toronto, Canada
12. Fabrizio, M. & Moors, A. (November 2002). Developing requisite language component skills for reading comprehension in children with autism. Paper submitted for presentation at the semi-annual International Precision Teaching Conference, Harrisburg, Pennsylvania
13. Fabrizio, M., Pahl, S. & Moors, A. (2002). Improving Speech Intelligibility through Precision Teaching. *Journal of Precision Teaching and Celeration*, 18(1), 25-27.
14. Moors, A. & Fabrizio, M. (2002). Using tool skill rates to predict composite skill frequency aims. *Journal of Precision Teaching and Celeration*, 18(1), 28-29.
15. Fabrizio, M. & Schirmer, K. (Under Review). Teaching visual pattern imitation to a child with autism. *Journal of Precision Teaching and Celeration*.
16. Fabrizio, M., Schirmer, K., & Ferris, K. (Under Review). Tracking curricular progress with precision. *Journal of Precision Teaching and Celeration*.