

A Case Study:

Why Are Some Students With Autism Able to Read, and Others Are Not?

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Question/Rationale

Special education requires teachers to provide individualized services and adaptive education to special needs students. However, even within special needs groups, students learn differently and at different rates. There is no one way to help all students master a skill, or there would not be a need for individualization. The students I teach are autistic or developmentally disabled. Broadly, my students need to master skills in similar areas; however, like all children, they are at various stages of learning. The most popular teaching method used in my school is Applied Behavioral Analysis (ABA) which is a behavior shaping approach. Ivar Lovaas and Montrose Wolfe were among the first to research the effectiveness of ABA principles in learning basic skills and language (Thompson, 2007).

ABA takes a single, complex skill and breaks it down into steps a student would need to master in order to attain the skill. Progress is graphed each day, and students are taught numerous skills at a time. As each skill is mastered, students move on to a more difficult step, or another related objective. ABA is used to teach acceptable behaviors as basic as waiting, social skills, how to answer 'how are you?', and academic skills. Each staff member teaches through ABA programming, but the teacher, speech pathologist, and related service providers manage how the programs should be used with each student.

Each classroom at my school is comprised of a teacher, teacher's aide, speech pathologist (shared between two rooms), a rotational aide (shared between two rooms) and 1:1 aides necessary for a child according to their Individualized Education Plan (IEP), all for six students with autism. The age range of my students is eight to ten-years-old, equivalent to the third and fourth grade level. Out of my six students, only one student is able to functionally read. That is, she is aware of print concepts, and knows some sight words. According to recent research,

students with autism are not expected to achieve at the same level as other students, and may not receive the same opportunities (Erickson & Koppenhaver, 1995; Koppenhaver & Erickson, 2003; Mirenda, 2003; Vacca, 2007).

Most of my students have been taught at my school during their entire school careers. Knowing that all of my students have had the same programming and team-based approach to their education, I wonder why reading skills have been acquired by only a few students. Is reading development ignored while other basic and functional skills are taught? Do teachers have lower expectations for students who are autistic? What have those students who are able to read, learned previously and were these skills acquired through the ABA teaching process? Lastly, what are reasonable reading expectations to expect from a student with autism? I hope to answer these questions by comparing a student in my class who is reading to a non-reading student, also in my class.

By comparing and studying these students in my classroom, it is my goal to better understand the effectiveness of ABA teaching principles when teaching literacy skills, as well as teacher expectations on how much my students have learned. If it can be shown that one student was taught more literacy related skills than another student, then I will focus more direct instruction in literacy areas to help promote more independence in my students.

Literature Review

Reading is a functional as well as a leisurely skill, as necessary for ordering from a menu or reading the mail as reading a book for pleasure. Although it is necessary, it does not always receive as much attention as it should, especially for students who have disabilities and who may not be at the same developmental level as their non-disabled peers. Reading development is related to cognitive development. Students cannot be expected to answer abstract questions and make inferences when they only understand text at a concrete level. Reading skills should be taught so they match the developmental stages of reading and cognition. Teachers need to assess students to meet them at their current reading phase and help them learn the necessary skills in order to help them progress to the next phase.

Theoretical Framework

Jean Piaget stressed the uniqueness of children's thinking and cognitive development, as well as the difference between children's thinking and adult thinking. According to Piaget, learning occurs through direct experience and with the environment. Piaget hypothesized children pass through four stages of development and engage in similar activities for each stage (Gunning, 2000). These stages are sensorimotor, preoperational, concrete operations and formal operations.

The sensorimotor stage lasts for about two years. During this stage, children's thinking is limited to what they can sense or physically explore. Most learning takes place through the senses. The preoperational stage may last from about age two to age seven. Children are capable of representational thoughts, such as symbols or words, but imagine a situation or object before a change occurs. Another important aspect of this stage is egocentrism; children tend to believe everyone sees the world the same way they do. The concrete operations stage occurs

from about age seven to eleven. Children are able to focus on several aspects of a situation in this stage and are able to think more logically. In the formal operations stage, which begins around age twelve, children are capable of abstract thoughts and are better able to organize information (Gunning, 2000).

Similar to Piaget's theory of cognitive growth, Ehri and McCormick (1998) explained that word learning processes, which take place in a series of five, sometimes overlapping, phases of development. The final goal of instruction focused on the five stages of development is to have readers read words in all of the following ways: decoding, analogy, prediction and sight. These processes are acquired through five phases of word learning: pre-alphabetic phase, partial-alphabetic phase, full-alphabetic phase, consolidated-alphabetic phase, and automatic-alphabetic phase.

The pre-alphabetic phase is characterized by students who do not use alphabetic knowledge to read words, and have very limited letter knowledge, as well as knowledge of phonetic relationships. Pre-alphabetic learners mainly use sight reading or guess words from context or pictures. In the partial-alphabetic phase, students begin to use guessing strategies to read words because they begin to detect letters in the words. However, they are still weak in areas of decoding and analogy (Ehri & McCormick, 1998).

The next phase, full-alphabetic, contrasts with the previous two phases because it is essentially the beginning point for readers to build the foundation for acquiring mature reading skills. Readers at this phase begin to slowly decode words and have more knowledge of grapheme-phoneme correspondences. The consolidated-alphabetic phase begins in the full-alphabetic phase, but is characterized by awareness of spelling patterns and word chunks. The last phase is the automatic phase, where readers are proficient in reading and are able to quickly

identify unfamiliar as well as familiar words while reading. Most words encountered at this phase are sight words and are easily read in or out of context (Ehri & McCormick, 1998).

Not only does learning take place in phases, it also needs to be facilitated in order for students to learn the most from their environment. Vygotsky theorized a “zone of proximal development” where teachers need to meet students at their present performance level in order to push them to the next level of performance. Vygotsky’s theory also stressed the importance of interactions with society and culture in order to promote development (Ormrod, 2000). Social construction of knowledge may be inhibited to students with autism, as the social realm is a key area affected by autism.

Although students with autism have difficulty with social skills, they are able to demonstrate literacy-related skills, such as print awareness or sight word recognition. However, their cognitive impairments mask their ‘readiness’ for instruction in literacy (Mirenda, 2003). Often, their severe cognitive impairments usually only qualify students with autism for a ‘functional literacy’ approach, limiting their literacy skills acquisition. If students are seen as unable to acquire literacy skills, then they would be presented with fewer opportunities, fulfilling the low expectations initially expected from them (Mirenda, 2003). However, students with autism may progress through reading stages, just as typical students, though perhaps at a slower rate.

Despite the incredible odds students who are autistic face when learning to read, there are still students who show a remarkable ability to learn, use, and enjoy these skills. In order to understand the overlooked abilities of these students, teachers must first understand the complexities of Autism Spectrum Disorder (ASD). Their understanding of how students learn to

read must be applied to differing expectations for autistic students without discounting their abilities or avoiding teaching them necessary skills for literacy.

Defining Autism

Autism was a term first used by a Swiss psychiatrist, Eugen Bleuler in 1911 in order to describe schizophrenic adults, and later in 1943 by Leo Kanner with 'infantile autism' who described a group of children who were "socially isolated, behaviorally inflexible, and who had impaired communication" (Brock, Jimerson & Hansen, 2006, p. 3). Autism is a 'spectrum disorder' encompassing impairments in social skills, communication and behaviors, and actually refers to five more specific diagnoses: Autistic Disorder, Asperger's Disorder, Rett's Disorder, Childhood Disintegrative Disorder and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS) (Brock, et al., 2006).

Autistic Disorder is characterized by impaired social skills and communication development, as well as narrow interests in activities, stereotyped movements, such as hand flapping or rocking, resistance to change in environment or routine, and unusual responses to sensory experiences. Asperger's Disorder is similar to Autistic Disorder in regards to social skills and narrow, repetitive interests; however there is not usually a delay in language use. Rett's Disorder is a condition occurring primarily in females. Distinguishing characteristics of Rett's Disorder include head growth deceleration, a loss of hand skills and an awkward gait. Childhood Disintegrative Disorder is also known as Heller's syndrome and is very rare. This disorder is identified by its unique regression pattern, as children will develop normally for at least two years, then regress. A number of skills children acquire are lost, some even begin speaking, then lose their speech ability. PDD-NOS is characterized by students who have

Autistic Disorder symptoms, but do not meet the diagnostic criteria for any other pervasive developmental disorder (Brock, et al., 2006).

Characteristics of autism usually become evident within the first three years of life, and occur in about 1 in every 150 American children, and about 1 in 94 boys (http://www.autism-society.org/site/PageServer?pagename=about_home). The cause of autism is unknown, but it is generally accepted that autism is a result of abnormal brain development, structure and function (Brock, et al., 2006). Initially, inadequate nurturing from parents was suggested as the cause of autism, however, it has long been clear that autism does not result from 'bad parenting.' Another theory proposed a link between autism and the measles-mumps-rubella (MMR) vaccine since signs of autism begin to show at or around the same time the vaccine is received. However, research conducted by the Institute of Medicine (IOM) did not show a causal relationship between the MMR vaccine and autism (Thompson, 2007).

Although the causes and potential prevention of autism are unknown, it is a treatable condition that can improve with appropriate treatments and early identification. Evidence-based programs show an improvement in the learning and behavior of autistic children when they are used appropriately (Thompson, 2007). Children with autism should not be treated as if they are unable to learn, they simply learn differently. A common method used for teaching students with autism appropriate behaviors and academic skills is Applied Behavior Analysis (ABA).

Defining Applied Behavior Analysis (ABA)

The National Academy of Sciences National Research Council (NAS-NRC) issued a report in 2001 stating that effective treatment programs for children with autism start early, at least by two or three years of age, at 25 hours per week, five days a week, 12 months a year until the child enters kindergarten or first grade (Thompson, 2007). According to the effective treat

program characteristics stated by NAS-NRC, ABA is an effective form of treatment, as well as educational practice for children with autism. Early treatment is also known as early intervention, which are services children qualify for if they show delays in developmental areas, regardless of whether they are identified with a disability.

ABA methods can be used in an early intervention setting, as well as in a school age setting and it is applicable to students of all ages and is applicable to students with severe cognitive disabilities to above average intelligence (Simpson, 2005). Ivar Lovaas and Montrose Wolfe were among the first to research the effectiveness of applying behavioral learning principals in order to teach language and other basic skills to children with autism in the 1960s (Thompson, 2007). Their methods were based on behavioral theories of Pavlov, Thorndike, Watson and Skinner (Simpson, 2005). The Cambridge Center for Behavioral Studies (2008) defines ABA as a way to study a person's behavior is "through observations focusing on exactly what that person does, when the person does it, at what rate, and what happens before (antecedents) and what happens after behavior (consequences)" (<http://www.behavior.org/autism/>).

When using ABA to teach, skills are broken down into smaller steps and children are taught in those steps in order to shape the behavior. The learner is given many opportunities, or trials, to master each step, and eventually all the steps are combined to achieve the desired skill. Responses to instruction are recorded during each teaching session, and the data is used to modify instruction, determine if the student is ready to move on to the next step, or to determine if the skill has been mastered (<http://www.behavior.org/autism/>).

Literacy Instruction for Students with Autism

Students with autism are often discounted in the classroom and they do not receive the same opportunities or are not expected to achieve at the same level as other students (Erickson & Koppenhaver, 1995; Koppenhaver & Erickson, 2003; Mirenda, 2003; Vacca, 2007). Their behaviors are frequently seen as unmanageable or inappropriate, and autistic children are often not given the same literacy opportunities as their typically developing peers (Koppenhaver & Erickson, 2003; Mirenda, 2003). Teachers see children who are autistic as “too cognitively impaired” or “not ready for” instruction in literacy (Mirenda, 2003).

A “functional” or “sight word recognition” approach became popular in the 1970s and 1980s when there was evidence showing some individuals with autism were able to learn associate printed words and their meanings. However, this approach does not offer students the same opportunities as their typical peers, dismisses other possible skills students may have, and sets lower standards for the achievement of students with autism (Mirenda, 2003). This is alarming, as more students are being identified with autism who may not be getting the education most beneficial to them, and to which they are entitled by law.

Between 1994 and 2003, the number of individuals with autism served under the Individuals with Disabilities Education Act (IDEA) increased more than 600 percent (Thompson, 2007). IDEA also “requires schools to provide students with disabilities access to the general education curriculum, as well as to help those students achieve the academic standards specified in that curriculum” (Lanter & Watson, 2008, p. 33). One may argue that autistic individuals may have difficulty in gaining full access to the general education curriculum, and most parents and educators of students with autism are more concerned about medical, therapeutic and basic care skills and services. Literacy is thus put off as teachers and therapists focus on helping the

students learn how to be more independent; however, literacy skills are also essential for becoming more independent (Erickson & Koppenhaver, 1995).

Some verbal individuals with autism show an unusual ability to read words without direct instruction, but often have poor reading comprehension skills, this is called hyperlexia (Colasent & Griffith, 1998; Gately, 2008; Mirenda, 2003). However, the unusual word recognition ability is often seen as a “splinter skill,” or a skill that is normal or highly developed among the delayed areas, and students with autism are still discounted from the reading world (<http://www.autismsocietypgh.org/definition.htm>). This causes instructors to focus only on sight words instruction and ignore the important benefits of promoting emergent literacy skills (Koppenhaver & Erickson, 2003; Mirenda, 2003). This is evident in the lack of literacy-related goals on individual education plans (IEPs) and descriptions of students as ‘nonreaders’ on IEPs (Colasent & Griffith, 1998; Koppenhaver & Erickson, 2003).

Koppenhaver and Erickson (2003) introduced print and writing materials and experiences in a preschool classroom for seven children with autism, ages 3-5, where there were limited experiences with print and writing before their intervention. The researchers focused on three children in the class with severe communication disorders. During baseline studies, they found a disturbing lack of print and writing materials available for students to use. Reading and writing materials were not present in the play center, writing and drawing materials were kept out of reach, and books were not easily accessed or supplemented in the first four months of their study. According to the researchers’ observations and analysis, the teachers also assumed children could not or would not engage in any writing activities and the students’ IEPs reflected little or no expectation for progress in literacy skills.

Obviously, students cannot engage in literacy activities if they are not given appropriate opportunities. Koppenhaver and Erickson (2003) studied the literacy activities of three children in the preschool classroom with severe communication disorders. When they were given opportunities to engage in literacy activities, two of the students chose literacy or writing activities in more than one-third of available opportunities, and one student chose literacy or writing activities in 96 percent of all opportunities. The researchers provided a print-rich environment with a wide variety of reading and writing tools, free time to use those tools, an electronic writing center, a video-painting toy, new and various reading materials, and integrated text into structured and free time activities whenever possible (Koppenhaver & Erickson, 2003). When functional literacy tasks are built around routine events in the classroom, such as “signing in,” students get multiple opportunities to practice and apply skills in a meaningful way. This helps student improve book handling, alphabet knowledge, written language attempts, and oral language skills (Koppenhaver & Erickson, 2003). According to the study it seems that the autistic students were missing out on engaging and potentially beneficial learning opportunities only because their teachers thought they could not engage in, or were not interested in literacy-related activities.

Colasent and Griffith (1998) also performed a study in a classroom for children with autism at the middle school level in the large metropolitan area located in the U.S. Students ranged from 12 to 15 years old and were in a class consisting of seven students. These students were in a classroom with a functional curriculum, which focused on daily living skills, and domestic and community living. They were exposed to reading lessons, but these lessons often were focused on reading functional items such as labels, schedules, or recipes. The students’ IEPs also reflected no reading goals and they were described as “essentially nonreaders.” The

purpose of their study was to describe how children with autism respond to a series of related stories when they are read to them, and see if they could improve their recall skills. Their overall results showed gains in oral retelling skills, which were even better after the students wrote and drew about the stories. Colasent and Griffith (1998) also documented improvements in behaviors as far as reduced verbal outbursts, minimal stereotypic behavior, relevant verbalizations and relevant emotional expressions. Normal speech patterns were also present in retellings and students showed an increased ability to sustain a conversation.

According to Quill (2000), these gains are impressive as students with autism have difficulty “integrating language, social understanding and emotional intent of messages to understand their social world.” Comprehension is difficult for students with autism because of the various cues they need to interpret. They need to understand the “author’s vocabulary, style of writing, and story structure as well as characters’ social experiences and how these contribute to the development of motivations, goals, and actions within a story setting” (as cited in Gately, 2008, p. 40). Comprehension is not an easy task.

Repeated Storybook Reading (RSR) was an approach used to help develop language in students who are autistic, but also had a positive affect on comprehension. Bellon, Ogletree, and Harn (1999) conducted a study on one verbal student with high-functioning autism using the RSR approach, which has roots in ABA theory. Although this study only involved one student, it did show that the student was able to reduce repetitive verbal behavior, which allowed him to have more typical dialog with the clinician. Researchers provided scaffolding in forms such as cloze procedures, binary choices, and ‘WH’ question extensions not only increased language use, but also facilitated comprehension in the student.

Although it is difficult for students with autism to comprehend reading material, they are able to learn and use reading skills. Although reading skills associated with hyperlexia seem to have an onset without direct instruction, those skills could be used for further instruction. According to Calhoon (2001), students with autism are able to develop phonological awareness and can be taught to use rhyme or onset/rime knowledge when reading words. This also suggests that analogy-based instruction for students would be especially helpful in order to assist with decoding while reading.

Obviously, students with autism face challenges when they are learning to read, as the complex nature of autism interacts with the complex nature of reading. According to Mirenda (2003), “Reading in particular is seen as a complex, interactive process that involves attention, memory, metacognition, motivation, and strategic action” (p. 275). Students with autism would need to master the complex interactions in reading, as well as find ways to compensate for any social, communication or behavioral disabilities caused by autism.

Students with autism would only benefit from high expectations from both teachers and parents. Homes rich with communication, access to print materials, and models for literacy learning support all readers and would benefit autistic children as well. Often, students with autism persevere on a specific item or subject. Even if the perseveration occurs with a certain book or subject, this does not constitute a reason why their interest in reading should be discouraged (Mirenda, 2003).

How Teachers Can Encourage Literacy Development for Autistic Students

Teachers need to be aware of how students in reading development phases may interact with print. Students with autism would “benefit from literacy instruction that incorporates the use of multiple instructional strategies that are carefully matched to the stages or phases of

development (Mirenda, 2003, p. 275). Teachers should have reasonable expectations for each phase in order to help scaffold and move the reader onto the next phase of development.

Knowledge about the stages of literacy development can help teachers,

Understand and interpret the word reading behaviors they see in delayed and disabled readers. Behaviors that might be regarded as bizarre, atypical reactions to print are in most cases just behaviors that typify less mature readers who are at an earlier phase of development. Information about development can help clarify the reading processes used by students in a particular phase and also the constraints that limit their word learning (Ehri & McCormick, 1998, p. 136).

According to Lanter and Watson (2008) students with autism should not be limited to a functional curriculum. Independent living skills are important for children who are autistic to learn, but reading skills should not be ignored or put on hold until they are able to speak or show they are ready for literacy instruction. Children with autism may benefit from authentic literature use and experiences with multiple texts just as other children do. Teachers who should modify instruction to meet the needs of typical learners, should modify instruction to meet the developmental phases of their learners with autism, also. Children with autism are able to learn literacy skills through different approaches, such as ABA, scaffolding and through instructional support strategies. Teachers and reading specialists should first assess the skills students have, and scaffold toward more complex literacy skills to help them achieve the highest possible level for literacy learning. After researching the expectations for reading achievement in students who are autistic, I am interested to see the previous experiences my students had that may have contributed to their reading development and to investigate what may support literacy development for those students who appear to be nonreaders.

Project Design and Implementation

Context

This study was conducted in a private school, located in a suburb of Buffalo, New York. The school services children who are developmentally disabled from age 3-21. There are approximately 325 in the school in three different programs: pre-school, school-age, and rotational classrooms.

This study focused on students in the school-age program. Students in the school-age program are in a 6:1:1 classroom; six students with one teacher and one teacher's aide. Additionally, students also receive services from a speech pathologist, occupational and physical therapists as necessary, and a 1:1 aide if it is appropriate for the student to function in the classroom. Each student has an individualized education program (IEP) and is taught skills through applied behavior analysis (ABA) principles.

Two students from my classroom were used as participants in this study. Both students are able to read, but not to the same extent. Andrea (a pseudonym) is a 10-year-old female and Adam (a pseudonym) is a ten-year-old male.

Andrea was diagnosed with autism at two-years-old. She can occupy her self appropriately during unstructured activities. She often chooses to read a book, complete puzzles, or play a computer game. Andrea has the ability to read low-level texts fluently, but has limited comprehension. Her instructional level for oral reading only extends up to a fifth or sixth grade level, depending upon the reading material, but she does not comprehend the text. She has good phonemic awareness for consonants, and attempts to decode unfamiliar words. Andrea needs frequent prompts to attend, especially in a group setting.

Adam has attended Summit since the 2004-2005 school year. He was diagnosed with PDD, a form of autism, when he was three-years-old, but is also identified as having multiple disabilities. He shows an increasing sight word vocabulary each year and also is beginning to use picture and contextual cues to read short stories. He is usually cooperative, but does engage in non-compliant behavior, self-stimulations, and verbal perseveration, which negatively impact his performance.

He is an active participant in group and will often spontaneously answer questions and ask for a turn. Adam exhibits severe deficits in expressive and receptive language and pragmatics that impact his ability process and relay information and acquire new academic concepts.

I also interviewed Adam and Andrea's mothers. Adam's mother, Theresa is currently working on obtaining her doctorate degree from the University of Buffalo in human psychology and behavior. She requests homework to do with Adam two nights a week, when he does not have extra-curricular activities to attend. She is a single mother and lives alone with Adam.

Andrea's mother, Jessica, was also interviewed. She currently works for Erie I BOCES and is an aide in a special education classroom servicing children with severe health disabilities. She is a mother of three children, including Andrea. Andrea is a middle child, and she also has an older sister (12) and a younger brother (7). Andrea lives at home with her family and her father, who is in the military. There are times when Andrea's father is stationed in different parts of the world and cannot be home. Last year he was in Iraq for six months; however, he is currently home with the family.

Sally is a teacher at Summit who taught both Andrea and Adam: Adam for three years, and Andrea for two years in the same classroom, at the same time. She taught at Summit for 30

years and also teaches classes in special education at a local university. She has a master's degree in special education.

Procedures

IEP analysis. I spent a week reviewing previous IEP goals. I pulled the records Summit has filed for each student to look at the students' previous IEP goals and analyzed each student's progress on their proposed goals for each year. In order to determine which skills received the most attention, I only focused on goals on the students' IEPs, since these are the goals that would most likely have received the most instruction and attention throughout the year, even though other skills may have been taught in the classroom. I also considered teachers' records of when the goal was achieved in order to see if the goals written were the most appropriate goals for Andrea and Adam. If a goal was achieved in the first or second marking period, then the goal may indicate low expectations for the student's achievement. Conversely, if a goal was not achieved, then the goal may indicate higher expectations for the student's achievement. I took each IEP on record and transferred the goals onto a chart (see Appendix A). Then I determined if the goal was literacy related, behaviorally related, or focused in another area. After the basis for the goal was determined, I looked at the marking period in which the student mastered the goal. Mastery would indicate the child completed all objectives pertaining to the goal on the IEP. If any part of the goal was not mastered, I labeled it as unachieved.

I determined which percentage of goals throughout the student's school career at Summit focused on literacy skills and behavioral management skills. After transferring the goals to the chart in Appendix A, I determined the total number of goals from all the IEPs on record, and then computed the percentage related to behavioral goals, as well as literacy-related goals. I computed the percentage of literacy- and behaviorally-related goals that were achieved and

unachieved. I did not use the goals for the 2008-2009 school year for the achieved and unachieved data, as the year has not been completed. Appendix A shows a sample of a chart analyzing IEP goals, their academic or behavioral focus, and when in the school year they were achieved. It also shows my analysis of each type of goal and the percentage of each subject area where the goals focused.

Interviews. I conducted interviews with both students' mothers. They both had appointments for parent-teacher conferences, and their interviews were conducted in the time period after their conference. Each interview was completed in times ranging from 30 minutes to 45 minutes.

Both parents were asked questions regarding the reading behaviors their children engage in currently, and any behaviors they saw when they were younger. Both participants were asked if their child's reading resembled an obsessive behavior, and therefore was discouraged in order to develop interests in other areas. Often, students with autism persevere on a specific object, causing them to ignore their surroundings, or engage in inappropriate behaviors that may seem odd to others. Sometimes these obsessions are discouraged in order to promote more appropriate behaviors and develop different interests. Both parents also answered questions about medications their child takes, as well as how they felt about goals suggested for their children on their child's IEP. I asked parents questions related to their child's reading behavior in order to see if reading is a preferred interest and activity Andrea and Adam choose during their time away from school. Questions asked during the parent interview can be found in Appendix B.

I interviewed Andrea's mother, Jessica, first. Due to a sudden change in her schedule, she arrived at school to pick up her child, but decided to have the conference at the same time, instead of returning later. Her interview began at approximately 1:00 p.m. Jessica and I were

alone during the interview. I asked her prepared questions throughout the interview, and any necessary clarifying questions. I recorded a short version of her answers on my interview sheet with the questions, as well as recorded her answers with a tape recorder to ensure accuracy. There were times when Jessica became emotional when she recounted the events leading to Andrea's autism diagnosis, but she was willing to answer any and all questions. The interview lasted approximately 45 minutes.

I interviewed Adam's mother, Theresa, on the same day, at approximately 3:00 p.m. Her interview also followed her conference. Theresa and I were alone for the interview. Theresa was also asked prepared questions throughout the interview, and any necessary clarifying questions. I recorded a short version of her answers on my interview sheet with the questions, and I also recorded her answers for accuracy.

Sally, who taught both Adam and Andrea, was interviewed to better understand the decisions made for Adam and Andrea regarding the percentage and order of goals relating to behavioral and academic skills. In my interview, I asked Sally to explain how she decided which goals were most important to focus on for each child. Sally was interviewed on a Tuesday afternoon at 3:00 p.m. The interview took a period of about twenty minutes. Teacher interview questions can be found in Appendix B.

Anecdotal records. As their current teacher, I kept anecdotal notes at the end of each day in a three week period. I noted literacy-related behaviors I saw the students independently choose, as well as their progress on their literacy-related goals. I specifically observed the students in the morning when they arrived in school and during their journal time, during their individual instruction time (ABA), during free time after lunch, and observed the activities they chose after school while waiting to go home. Appendix C shows an example of a lesson written

in an ABA format and a sample script of how an ABA teaching session would sound with the lesson. Appendix D shows how the student's performance is tracked during the lesson (using a series of '+' or '—' signs) and then graphed to show daily progress. The graph shows how a student's success is tracked and then recorded. I recorded my anecdotal notes at the end of the day in a Word document I created for each participant.

Data analysis. In order to analyze the data, I entered information I obtained regarding the students IEPs into a chart and computed percentages relevant to literacy and behavioral goals. I organized my notes from the interviews in order to draw conclusions based on the questions I had for my study by reviewing the recorded tape and transferring information into appropriate places relevant to each question. I also reviewed my anecdotal records to determine reading behaviors shown voluntarily by my students, and which ones needed to be encouraged. Finally, I compared the data from each portion of the study under each student to determine which of the participants' experiences led him or her to be a "stronger" reader. Both students have weaknesses in reading comprehension, so word recognition skills were used to determine the "stronger" reader.

Results

IEP analysis. I analyzed information from both students' IEPs in order to determine what skills were focused on the most, as well as what skills were obtained through the ABA teaching process. The results from the IEP analysis were similar for both children when compared to each other, even though Andrea has spent one less year at Summit than Adam. In Andrea's four years of experience at Summit, she has been exposed to 40 IEP goals. Seventeen of these goals are literacy related, which is about 43%. About 13% of her goals were behaviorally related. Of her literacy related goals, she achieved 67% of them, while 33% were

unachieved. Approximately 39% of her goals were achieved early, and of these goals almost half of them (43%) were literacy-related.

Adam has spent five years at Summit. He has been exposed to 51 goals during his Summit school career. Twenty-one of his goals were literacy related, which is 41%. About 16% of his goals were behaviorally related. He achieved 63% of his literacy-related goals. Approximately 37% of his goals were achieved early, and of these goals almost half of them (43%) were literacy related.

Parent interviews. In order to better understand which skills parents wanted to focus on in the home, as well as reading behaviors that were encouraged or discouraged, I interviewed the students' parents. Andrea and Adam both had reading skills encouraged in the home before they came to school, and it is still emphasized. Although they were both diagnosed with Autism at a young age (Andrea at two-years-old, and Adam at three-years-old) their parents not only arranged appropriate therapy for them in their homes as part of early intervention services, but they also continued to focus on encouraging reading. Both students received speech therapy in their homes, as both parents were concerned about their children's communication ability, but reading was still encouraged in both homes, as well as used as a point to connect with their child and promote language.

Andrea's parents began labeling their entire home with pictures, so she could communicate her wants more clearly. She was able to find pictures of the foods or items she wanted and hand them to her parents to indicate what she wanted. Andrea's mother stated that Andrea loves to read. She has a large collection of books at home, and also shows interests in books above her comprehension level, such as *Harry Potter* books. Her interests range from *Teletubbies* to *Clifford* to *Junie B. Jones*. Although she is ten-years-old and chronologically 'too

old' for the *Teletubbies*, her parents see them as an interest she has, and only use this interest to further encourage her to read. She will read with her sister, and she will also read with both of her parents. She chooses two or three books to take with her on the bus in the morning, and she reads them on the way to school, as well as on the way home. These books do not even go into her schoolbag because she likes to hold them on her lap and have them available.

Similar to Andrea, Adam also reads with his parents. His mother will ask him if he wants to read, and he will often consent. He will choose a book and they will read together. She respects his boundaries and his decisions. When he expresses an extreme dislike in something, she tries to find another activity he might like instead. If he should choose not to read, she does not make him engage in the activity before he is permitted to choose another activity.

Adam is highly motivated by computer games, but finds it difficult to play some role-playing games, as there is a lot of reading involved with the characters. His mother will often help him play the game, but she can see how motivating it is for him play, so she uses it as motivation to encourage him to try very hard in reading school, so he can play more of his favorite games by himself at home. He shows interest in a variety of books, but often likes picture books that help tell a story, predictable stories, and books about animals. Adam shows interest in what he reads by telling his mother about the books, or asking about unknown words. Theresa also encouraged language development by getting Adam to expand upon what he is looking at in a book. She will ask him what he is looking at, and he may respond with a one-word answer, but Theresa continues to talk to him to get him to elaborate upon his subject of interest.

Teacher interview. In order to gain insight about teacher expectations for students who are autistic, I interviewed Sally. Sally taught both Adam and Andrea at Summit. She explained

that she determines goals for her students based on the obvious needs they display in the classroom. Before any goal is decided upon, she does preliminary testing with the child to see if this is a skill they already have in their repertoire or if it's something that would benefit them as a goal on their IEP. For example, if a goal was determined such as counting to five, and the child masters it immediately, then it is inappropriate to focus for a year on this skill as an IEP goal, as other skills can be taught that would be more beneficial to the student. She felt that it is the teacher's responsibility to determine appropriate, yet challenging goals for her students.

The literacy goals she determined for Andrea and Adam were based on observations she made in the classroom, as well as results from educational testing done in the classroom. Students who are autistic are difficult to test, so she added that it was difficult for her to determine their reading level when they entered her classroom. She often tested for certain aspects of reading (phonemic awareness, sight word knowledge from the Dolch word list, etc.) in order to determine which skills needed attention.

If she had behavioral concerns for a student, then she also determined an appropriate behavioral goal in order to teach her students more appropriate ways to behave. Adam and Andrea both have or had behavioral goals. Adam had trouble with non-compliance, as well as perseveration with people or objects when he got agitated. If he is not cooperative, then he may not be able to learn to the best of his ability. Andrea also had trouble transitioning from one activity to another, as well as accepting correction. When she was not ready to transition or when she was corrected, she would have severe temper tantrums involving screaming and removal of clothing. Sally stressed the importance of addressing behavioral needs in order for students to function better in school, as well as in the home.

Anecdotal records. The students were observed in the classroom to record their behavior with reading material, and to note how motivating reading was to Andrea and Adam. Andrea entered the classroom daily with her books from the bus in hand. She carefully put them in her locker; however she did not share much about them other than the title or who the main character was in the book. When she worked with a teacher during ABA time, she often would wait for the teacher's response, regardless of what skill she was practicing, and try again, asking the teacher to 'wait, wait' if she thought her answer was wrong. She was aware of how teachers track progress on her ABA programs with a '+' or '-' and often asked the teacher to 'wait' when she saw a '-' on her tracking sheet. She was working on pointing out answers to comprehension questions in the text, identifying rhyming words, and increasing her spelling ability. Andrea often sat at the table with another student during ABA time, and she would look at the basket of *Berenstain Bear* books when it was not her turn to work.

Andrea also chose to look at the basket of *Berenstain Bear* books during quiet time, a 30-minute time period after lunch; however, she often falls asleep after the first 10 minutes, and may sleep for 20 minutes. According to my observations, Andrea most often chose to play on the computer, and the program she played with most was *Dr. Seuss's ABC* which is a software program based on the book of the same name. The program will read 'pages' from the book aloud and ask her to identify portions of the story on the page. Computer use was highly motivating for Andrea, and she was encouraged to behave appropriately throughout the day in order to earn time to use the computer. Occasionally Andrea would engage in inappropriate behavior, and was not permitted to use the computer.

When she was not permitted on the computer, and no one else was using it, she often chose to look at a variety of books from the book center. She chose the *Berenstain Bear* books,

Dora, Little Critter, Dr. Seuss, or seasonally and theme-related books showcased at a smaller book center. If another student was playing on the computer, and she was waiting for her turn or not permitted to use it, Andrea usually chose to stand near that student and watch. If her classmate was playing a game highly motivating for her, she was usually inclined to touch the screen and/or tell them how to play the game. Sometimes she showed frustration with others who were using her favorite games.

Both Andrea and Adam earn time on the computer at the end of the day as a reward for their appropriate behavior throughout the day. If their behavior was inappropriate, then they lost their time on the computer for that day. Similar to Andrea, Adam most often chose to play on the computer when given the opportunity. Unlike Andrea, Adam often did not watch others play, unless they were playing a game in which he was highly interested. When interested, he was similar to Andrea because he would often tell the other student how to play, or exhibit frustration if he/she did not listen to him. If he was not watching them, he often chose a small car or toy and carried it around the room with him. When he did choose to read, he chose books about dinosaurs and animals. He also favored *The Little Old Lady Who Wasn't Afraid of Anything*, and *The Great Pumpkin* around Halloween. He had most of both books memorized and would often begin telling the story without the book being open or near him. He would begin reciting one or both books at least once daily.

During Adam's ABA time, he struggled most with spelling. He was shown a word, and then asked to read it and spell it. If he did not know the correct spelling, he would still try, but he asked to try again after he was shown the word with the correct spelling. He also did not use many phonetic cues when spelling, but relied mainly on remembering how the word looked. For example, he would be shown the word 'went,' and would begin with 'w-e-...' then would pause

before attempting to finish the word with 'm-i-...'. Visually the letters he guessed looked similar to the letters from the word; however, when given the sound of the letter, /n/, or /t/, he could not identify the correct letter.

Both students, along with the whole class, sat at the circle area and listened to books on tape for about fifteen minutes each day before lunch. Andrea showed concern about when the page was turned, and watched to make sure it was turned in time with the story. Adam was very engaged and needed reminders to let other students answer questions asked about the books. Both Andrea and Adam were able to answer lower-level literal questions about the text (who, what, where). Adam would often just say an answer immediately after a question was asked, regardless of whether it was directed to him, whereas Andrea waited to be specifically asked before she offered her input.

Conclusions/Implications

This study allowed me to take time to consider the appropriateness of the goals my students are currently working to achieve and helped me design appropriate instruction as the year progresses. I began this study in order to determine why reading skills are only acquired by a few of my students, and not all of them. According to the data gathered, both students had similar experiences and encouragement in their homes to promote reading skills, as well as a similar high percentage of literacy- to behaviorally-related goals on their IEPs. Both students had the same teacher for multiple years at Summit, Adam for three and Andrea for two, which may explain the similarity for their IEP goals. Both students also grew up in encouraging environments that promoted reading as a leisurely and important skill.

When I began my study, I theorized that Adam, since he did not read as well as Andrea, had more behavioral goals that needed to be acknowledged before his academic goals throughout

his school career. According to my research, both students have a similar percentage of goals related to behavior and literacy, and they have also had similar home experiences where reading was an encouraged part of their lives.

Is Reading Development Ignored While Basic Functional Skills Are Taught?

The data gathered does not indicate why Andrea is currently a better reader than Adam. However, the data does support the claim of how early intervention services and early identification could have a positive impact on the child (Thompson, 2007). Both students were identified with autism before they were four-years-old, and they both received services inside their homes to encourage speech and language development. Therefore, the data does suggest that reading development is not necessarily ignored in students who are autistic, but the acquisition of reading skills may be embedded in the acquisition of other language and communication skills.

According to Vacca (2007), children with autism are often dismissed from the literate community, however Andrea and Adam's experiences do not match this claim. Both students had similar supportive environments at home and in school that contributed to and encouraged their reading interests. According to their current academic success, these experiences have only helped them retain more and achieve more complex skills as they have grown older.

Data gathered from anecdotal records indicates that students have multiple opportunities throughout the day to develop, and practice and increase their reading skills. Observations also indicated the ability to generalize reading as a source of enjoyment in school, as well as in the home. Books were constantly available in the classroom in the form of picture books, books on tape, both fiction and nonfiction, as well as computer games and talking books on the *Leapfrog*

systems. Although other skills are taught in the classroom, such as social skills, reading skills and development are still encouraged.

Do Teachers Have Lower Expectations for Students with Autism?

The data gathered from the teacher interview and IEP analysis did not indicate low expectations for either child. According to the IEP analysis, reading development was not ignored while other skills were taught. Both students were taught other skills in areas of occupational therapy, mathematics and social skills, but they were still able to work on literacy goals, as well as achieve them. According to Vacca (2007), the sight word goals may have indicated a lack of exposure to meaningful literature, as well as low reading expectations, but this was not evident for Adam and Andrea. The literacy related goals on their IEPs and use of literature regularly in the school day were not restricted to word recognition activities.

The progress each student made on their goals did not indicate teachers' low reading expectations. A little over one-third of both students' goals were achieved early and about one-third of each student's literacy goals were not achieved. This indicates a reasonable expectation for each student to accomplish their goals, as well as a push for possible higher achievement.

The goals for each child were appropriate and attainable. If a goal was not achieved, it was still addressed throughout the year. A reasonable percentage of goals unachieved could simply indicate higher expectations for a child, rather than an overabundance of goals achieved too early and thus too easily. Goals achieved in the first or second marking period may indicate lower expectations for the student's achievement throughout the year, or a higher instance of addressing these goals throughout the school day, or at home. According to the data obtained from Sally's interview, she was concerned about progress students made both behaviorally and academically. She expressed an understanding of the importance of academics, but knew

students would not be able to progress academically if they could not control their behaviors, whether at Summit or in a school with an integrated setting.

What Have Reading Students Learned Previously and Did They Acquire Skills Through ABA?

Both students received ABA instruction at Summit, so all the skills they mastered on their IEPs were affected by ABA teaching. The literacy skills specified most in their IEPs were comprehension and increasing sight word knowledge, answering 'WH' questions (Who what, where) following a story after reading or listening, pointing to areas in the text where they found the answers to questions, increasing writing skills, reading accuracy, comprehending simple instructions, and spelling.

Adam had goals in his IEPs addressing numerous literacy skills. Some of his goals focused on sight words, listening and reading comprehension, reading accuracy, writing skills and spelling. His sight word goals indicate a need to learn more words in order to read with more accuracy, which suggests some of his sight word knowledge may have been obtained from the ABA process, but does not consider words he learns through other skills practice in school or at home. It would be most accurate to test Adam with a series of words at the beginning of the school year, including the words he will be learning, and then test him again with the same list at the end of the year. This would tell me if all the words he learns are strictly from his ABA programs, or if they are learned incidentally through activities in the classroom or in his home. Adam has better listening comprehension skills than oral and silent reading. He is able to listen to passages from a picture book at the third grade level and answer literal questions, but he is unable to independently read a passage at the pre-primer level, orally or silently, and accurately answer literal comprehension questions. Since he has worked on comprehension on his IEP, this

suggests that his goals helped improve his comprehension skills, although they need further attention.

Andrea also has comprehension goals on her IEPs in the reading and listening area. She is currently learning to look for the answer in the text she reads, which was not a skill she possessed before she worked on this goal. When initially tested for this skill, she was mainly dependent on picture cues and listening skills to answer questions, as she did not refer back to the text, but only looked at the pictures. The lack of goals for increasing Andrea's sight words, however, suggests her mastery of many sight words, nullifying the need for a specified goal focusing on sight words. Since the goal is not mentioned on the IEP, it is not likely she gained her sight word knowledge from an ABA program.

It is apparent that both students acquired or strengthened skills through ABA programs, as indicated by their IEPs, but since not every skill was included on an IEP and not all literacy skills are directly taught by ABA, it is also apparent that students with autism learn skills without the ABA process. Both students received early intervention services. Goals for these services could not be obtained, so it is possible that early language skills were learned through an ABA process in the home. However, according to the parent interviews, both students had active parents, immersion in literacy and focused instruction, which would also have benefited the students in the learning acquisition.

What Are Reasonable Reading Expectations of a Student with Autism?

Both students have the ability to read at some level. The high expectations and early intervention services both student received may have helped support their literacy skills acquisition. According to Mirenda (2003), students need appropriate models of literacy in the home to support literacy skills. The early intervention and parent involvement indicate high

expectations for each child from their families, and helped provide them with these important models at a young age.

Although data was not collected regarding the free time choices students made, highly motivating activities for the students were literacy-related. Andrea and Adam both often chose to look at books or play literacy-related computer games. These responses support data collected in the study conducted by Koppenhaver and Erickson (2003). Similar to the students in their study, Adam and Andrea will choose leisurely literacy-related activities if they are given the opportunity. These activities may support students as they progress through phases of reading development.

According to Ehri and McCormick's (1998) phases of reading development, Adam shows indications of the pre-alphabetic and partial alphabetic phase. His IEP focuses on sight word learning, which draws on a strength he has. He also uses pictures to guess unknown words or to assist him in retelling a story. He does know his letters, and consonant sounds, but has limited knowledge of digraphs, word families, onsets/rimes, etc. Andrea does have a higher ability to read than Adam, and this is evident in her phase of reading development. She seems to overlap in two phases also; the partial-alphabetic phase and the full-alphabetic phase. Andrea also uses sight word knowledge, but has some knowledge for decoding words, which allows her to attempt unknown words.

Since both students show signs of reading at these stages, this is where they should be met, and scaffolded to the next level. Adam could use more instruction in decoding unknown words, and Andrea could use further instruction on decoding, as well as beginning instruction on spelling patterns and word chunking. As with all readers, strategy instruction should serve to

strengthen skills already evident, introduce skills that build on those mastered, measure response and adjust instruction accordingly.

Limitations

A limitation of this study was the teacher interview. Both students have had more than one teacher, but previous teachers could not be located, due to time constraints and relocations, in order to ask questions related to their expectations in skills for Adam and Andrea to learn. One of the limitations from the IEP method is that other skills are also addressed throughout the school day; however they cannot all be recorded on the IEP. The IEP is a focal point for essential skills the child should learn in a school year, but students may work on other literacy-related programs during ABA time, or they may work on additional skills, such as reading with a group of students, throughout the day. A student may only need a few examples or demonstrations to learn how to use a certain game on the computer, or understand that the words on the page are the same words spoken when they are read aloud. Therefore, these skills may have been promoted in the classroom, but were not recorded. Skills that were not specifically on the IEP were not measured, and therefore Andrea and Adam could have had different experiences with learning not documented or measured on IEPs.

In order to conduct a more conclusive study, there are aspects about this study I would conduct differently if I were to try it again. Both Adam and Andrea showed the ability to read, but Andrea showed more advanced skills, especially when decoding unknown words and her awareness of word families. Perhaps this is simply because they are two different students who learn at different rates. However, by focusing on competent readers, I was unable to see if the incidence of problem behaviors may be a reason why some students are not able to read. To measure this, I would pick a different student who is at a much lower reading level, possibly

even an emergent reading level to compare with my higher functioning readers. Both students studied were not educated at Summit for their entire school careers, whereas many other students are. To understand the effects of ABA teaching principles on skills acquisition, I might pick two students who had been educated at Summit for their entire school careers. Having access to IEPs for their entire experience at Summit, including important preschool years when emergent reading skills may have been encouraged could provide more complete longitudinal data.

Whether teaching children without disabilities or focusing on the special needs of challenged learners, it is the teacher's responsibility to understand each child's developmental reading level, and to design instruction to scaffold their learning to move to the next stage of reading competence (Mirenda, 2003). Since there are many complex stages in reading, not every child will progress through each stage at the same time. Every child learns differently and the learning should be met with multiple strategies to address their interests and abilities. This is no different for children with autism.

As a special educator, my main responsibility is to work myself out of a job. I should teach my students to be independent enough to obtain future skills that would allow them to live without support. One of the most important skills my students could learn is how to read in order to learn. This study has made me more aware of reading stages and how I can assess and meet each student at their current stage of development to give me information that will help me design instruction and set learning goals that will help my students obtain the next level of development. As I learned how to understand the tremendous individuality of my autistic learners, I have gained greater respect for the process of assessment, the setting of informed learning goals and designing responsive instruction.

Finally, I have learned that students with autism progress through reading and literacy phases, just as any other student. I have learned that my students enjoy reading, and further instruction would encourage their skills. I should not just focus on making reading a tool to use for independence, but a tool for my students to use as a form of entertainment and an appropriate leisure activity, regardless of their age.

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Appendix Table of Contents

Appendix A: IEP Goal Chart

Appendix B: Parent and Teacher Interview Questions

Appendix C: Sample ABA Lesson with Script

Appendix D: Sample Tracking Sheet for Lesson with Graph

Name: Adam

Date: 2006-2007

Goal	Literacy	Behavioral	Other	When Achieved?			
				1	2	3	4
Will complete 80 lessons utilizing the Edmark Reading series	yes—sight words					A	
Will ID 4 coins, state their value and compute their value			math	A			
Will exhibit no more than 1 instance of non-compliance per day across 10 consec. days.		yes					NA
Will exhibit no more than 2 instances of verbal perseveration per day across 10 consecutive days		yes					NA
Will independently participate in group games and activities demonstrating the ability to stay on task during a 10			social			A	

min. period							
Will apply critical thinking skills to describe a problem and determine an appropriate solution w/o picture choices	critical thinking			A			
Will receptively and expressively identify temporal concepts (yesterday, tomorrow, before, after, this morning, this afternoon, tonight, now later)			functional and language				NA
Will develop the ability to answer 'yes/no' and 'wh' questions about events outside of current context			language				NA
Will provide single response answers regarding questions concerning the outcomes of situations			social				A
Will complete a journal entry using spelling words and reading sight words to form and copy 4 sentences and demonstrate uniform spacing between letters and words	writing						A
Improve organizational skills, will read the instructions and complete a 4 step fine motor art activity in the	reading comprehension and following directions				A		

correct order after instructions are given.							
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Parent Interview Questions

1. When was your child diagnosed with Autism?
2. What interests did he or she show at home during free time?
3. Does your child have any brothers/sisters? What are their ages? Does your child communicate and play with your other children?
4. How long have you lived in the area?
5. When did your child start going to Summit?
6. Did your child begin reading or indicate they had reading skills before he/she came to school?
7. What are your child's favorite games/computer programs/TV shows?
8. Was your child's interest in books ever discouraged because it became too distracting or seemed like it was an obsession?

Proposed Teacher Interview Questions

9. How long have you been teaching?
10. What is other experiences have you had?
11. Where did you graduate from?
12. How long was this child in your classroom?
13. How did you determine the goals to work on with this child?
14. What, if any, behavioral concerns did you have for the child that would have been detrimental to his/her learning?
 - a. Did these behaviors prevent the child from learning?
 - b. Did the behaviors need to be addressed first, before additional learning could be introduced?
15. How did you determine the reading levels of your students?

16. Sample ABA Lesson Script

17. (T) will indicate the teacher speaking, and (S) will indicate the possible student response. Please refer to the tracking sheet to how the student responses would have been accepted. A '+' indicates a correct response from the student, and a '—' indicates an incorrect response. These responses are also recorded within the script.
18. T: Time to read. Read this page.
19. S: Tommy likes oodles of noodles.
20. T: What does Tommy like?
21. S: Oodles of noodles
22. T: How do you know?
23. S: [Student points to words in the text] (+)
24. T: Nice job! High five! Let's read the next page.
25. S: He likes oodles of noodles in his bowl.
26. T: What are the noodles in?
27. S: His bowl.
28. T: How do you know?
29. S: [Student points to the words in the text] (+)
30. T: You are doing a great job! Yeah! Read the next page to me, please.
31. S: He likes oodles of noodles on his hot dog.
32. T: Where are the noodles?
33. S: Hot dog.
34. T: Nice job. Show me how you know.
35. S: [Student points at the hot dog picture]
36. T: Nice job pointing at the picture of the hot dog. Find the words 'hot dog.'

37. S: [Student points at the incorrect portion of the words] (-)
38. T: [Teacher points in the book to 'hot dog'] This says 'hot dog.' Where does it say 'hot dog?' [Teacher removes her hand from the book.]
39. S: [Student points at the correct words]. (This is a correction, so this is not counted as a correct answer).
40. T: Read this page.
41. S: He likes oodles of noodles on his ice cream.
42. T: What does Tommy like noodles on?
43. S: His ice cream.
44. T: Where does it say that?
45. S: [Student points to the words 'ice cream'] (+)
46. T: Nice work! One more question, then you can take a break. Read this page.
47. S: He likes oodles of noodles at home.
48. T: Where does he like oodles of noodles?
49. S: At home.
50. T: How do you know?
51. S: [Student points to words 'at home'] (+)
52. T: Yeah! Good job! Take a break.
- 53.