

Our Turn to Talk:
Oral Language Intervention for At-Risk Primary Students

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Abstract

This study investigated the effectiveness of the Our Turn to Talk Intervention Program (OTTT-IP) for seven language-delayed Grade 1 students in improving oral narrative skills and vocabulary development. Pre-intervention data was collected by first examining the students' Peabody Picture Vocabulary: Third Edition (PPVT-III) scores and conducting and analyzing an oral narrative task in which students each told a story based on a sequence of pictures. After the designated nine-week intervention, students were reassessed. Improved oral narrative skills, as measured by the number of words and story features (e.g. story starter, descriptive words, inferences) used, were found for all seven participants in this research. The students' percentile scores on the PPVT-III were inconsistent: five students increased percentiles, one student stayed the same, and one student scored lower. The OTTT-IP improved oral language skills for these seven at-risk students.

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Chapter One

Young children starting school with limited expressive and receptive language skills are at a disadvantage in the language-dense and language-specific environment of schools. Educators explain, instruct, question, correct, redirect, and discuss throughout the day. Taking turns, lining up, and waiting may be unfamiliar expectations. The explanations for waiting or turn-taking may contain unfamiliar vocabulary. What is a washroom, a letter, a number, or a season? A student's limited vocabulary affects learning and social competence. If a child does not know the names for items in the classroom or playground, it is difficult to follow instructions. If a child does not have the vocabulary to ask for help and is being treated unkindly, what is the outcome? Withdrawal, tears, frustration, fear or aggression are some expected behaviors when children are lost in a tidal wave of incomprehensible language. When the language-delayed child attempts to explain an incident or tell a story and the adult or peers do not understand, then the child may become discouraged and give up. Family members may understand but educators and classmates do not.

The foundation for early language development is built at home but the focus of this research project is on what can be done at school. What can be done to help young learners with language delays improve language skills? The purpose of this study was to analyze the effectiveness of the *Our Turn to Talk Intervention Program* (OTTT-IP), a nine-week collection of language lessons. The OTTT-IP is an a component of the Our Turn to Talk (OTTT) manual which also includes sections describing the guiding principles for language learning, classroom program pre-requisites, classroom program skills, teaching English as a Second Language, and information concerning some First Nations issues. OTTT was developed in North Vancouver by a group of educators for at-risk primary students.

Developers included Speech Language Pathologists, an ESL coordinator, a First Nations early intervention facilitator, and a group of teachers.

A small group of kindergarten teachers, of which I was part, from School District 91 were sent to North Vancouver to receive training in the *Our Turn to Talk* (OTTT) program. OTTT is a multi-faceted program that may assist teachers and support staff in helping language-delayed students.

The Problem

This research project is a pragmatic investigation of the effectiveness of the nine-week OTTT-IP for language delayed kindergarten students. Some students come to school with language delays that adversely affect learning and social competence. Within the limits of the school day, educators must find the time to support and teach verbal communication skills to language delayed learners. *Our Turn to Talk* is a promising intervention program developed by British Columbia professionals. Teachers are not trained Speech Language Pathologists with the extensive specific knowledge needed to plan and implement successful and comprehensive language interventions. School District 91 does not have a Speech Language Pathologist (SLP); but, not for lack of trying. District 91 has advertised world-wide and has been unable to attract anyone to this rural area. The pressure is on teachers and district staff to provide effective interventions for large numbers of speech and language-delayed students. Some kindergarten classes in School District 91 have more than 50% language-delayed students. The delays range from severe to mild with some delays related to multiple disabilities. Cognitive and physical disabilities may complicate effective intervention. Students are assessed using the Peabody Picture Vocabulary Test III (PPVT-III), School District 91 Kindergarten Assessment and observations by teachers. Aboriginal

students given *the English as a Second Dialect* (ESD) designation are funded by the province to receive small-group language instruction. At present, some schools use the *Language for Learning Program* which uses a direct-instruction method. I propose adding OTTT to the language intervention tool box.

Can OTTT provide critical learning opportunities that improve the oral language of at-risk students? In my professional opinion as a primary teacher for 19 years, if students are taught in a safe environment using techniques that are specific, developmentally appropriate, and enjoyable with many opportunities to practice language skills, learning will increase. The OTTT manual suggests administering an oral narrative task before and after an intensive nine-week intervention program. Students are shown a set of pictures and asked to tell what is happening in the story. I expected to see improvement in the total numbers of words used with improved story conventions. Secondly, I expected to observe improved classification of items, improved grammar and vocabulary, and subsequently, improved learning.

Delimitations and limitations of the study

Limitations that can influence the results of this study include natural growth in language skills that could occur without intervention, ineffective implementation by the teacher, and an inability to separate other interventions from the study. One strategy that could address the influence of other factors would be to drop all other interventions for a nine week period while implementing OTTT; however, I understand that the effects of the other interventions may influence the results of the nine-week OTTT intervention. Another important limitation is the readiness of the student for the intervention program. If the functional language level of a child is two years old, the intervention may not be accessible to that child; however, scaffolding strategies should help severely delayed language students

learn to use some of the OTTT activities. A child's needs must come before the needs of the researcher; therefore, a limitation of this project is that if OTTT is not working for a child then the program changes and those data are not used.

Assessing language skills is especially difficult for students with articulation problems and can complicate the language-delayed designation. Students might have developmentally appropriate language skills but could not be understood. The PPVT-III is a picture identifying test which screened out students with articulation, not language, delays; however, a decision had to be made regarding the benefits of small-group instruction to the speech-delayed child. Again, the child with speech problems might have received the intervention without being included in the data analysis.

The effectiveness of the teacher may be a limitation when attempting to show validity in the research. The failure or the success of the intervention may lie in the teacher. According to Guiding Principle number six of the OTTT program, "The success of the program lies with the teacher" (p. 8). If no growth is found, it will be difficult to separate teacher effect from program effect. If growth is found, again, it will be difficult to separate teacher from program. Teacher experience, interpretation of the OTTT-IP lessons, and the strength of relationships between teachers and children are factors that can influence the impact of the OTTT-IP. However, the OTTT-IP includes suggestions to support learning, specific games and materials in thirty minute lessons bi-weekly combined with organizational strategies which assist consistent implementation and lessen the influence of teacher effect.

Finally, the small sample size (seven) limited the research from demonstrating statistical significance as there were seven Grade 1 students involved in this research.

Delimitations include the scope of the research. As the researcher, I focussed only on Grade 1 students with language delays. Also, I did not include the classroom or home components of the program for study. The classroom component ran throughout the school year which went beyond the allotted time for this project; secondly the classroom intervention was aligned with a typical language-rich primary class. There were; however, novel activities to add variety and enjoyment to classroom language learning which I recommend primary teachers examine. My project plan was to implement the nine-week intervention program, the narrative task assessment, and teaching strategies found in the intervention section.

Definition of terms

Cohen (2005) described *language* as having two domains: *pragmatic communication* which is the social language of conversational turn-taking, appropriate gestures and eye contact and *structural language* which refers to vocabulary, grammar, talking and understanding what is said. Children must be able to understand what is said and express their thoughts so they are understood. OTTT addresses both pragmatic communication and structural language.

The *Language for Learning Program* is a direct-instruction language development program developed by Siegfried Engelmann and Jean Osborn (1999). Language for Learning is an updated version of the old Distar Language I Program from the 1960s. This new version is accelerated and colourful with some changes in presentation; however, the scripted format is a key component of both programs. Instructors are told exactly what to say; for example, “Get ready to do some actions. Everybody, touch your ear. What are you doing?” Language for Learning (1999) focuses on actions, descriptions, information and background

knowledge, instructional words and problem-solving concepts, classification and problem-solving strategies and applications (Teacher's Guide, p. 8).

Peabody Picture Vocabulary Test, Third Edition (PPVT-III) is a language test administered by school counselors and psychologists to provide a snapshot of a child's general vocabulary knowledge. Specific instructions are given to all participants of the PPVT-III assessment that include, "I have some pictures to show you. I want to find out if you know the names of some pictures." Participants are told if they have responded correctly. The PPVT-III is used for children aged two to eleven years old. An example of an early test item is a child is asked to point to a bus when shown a page with pictures of a *bell*, *elephant*, and *school bus*. The tasks gradually become more challenging. Items include nouns, verbs, adverbs, and adjectives. A participant may be asked to identify a *parachute* or *horrified*. The information collected is analyzed using the raw score and age of the child to obtain a stanine score.

Specific instructions are given in the PPVT-III for administering and scoring the test items. The examiner begins by administering the training items.

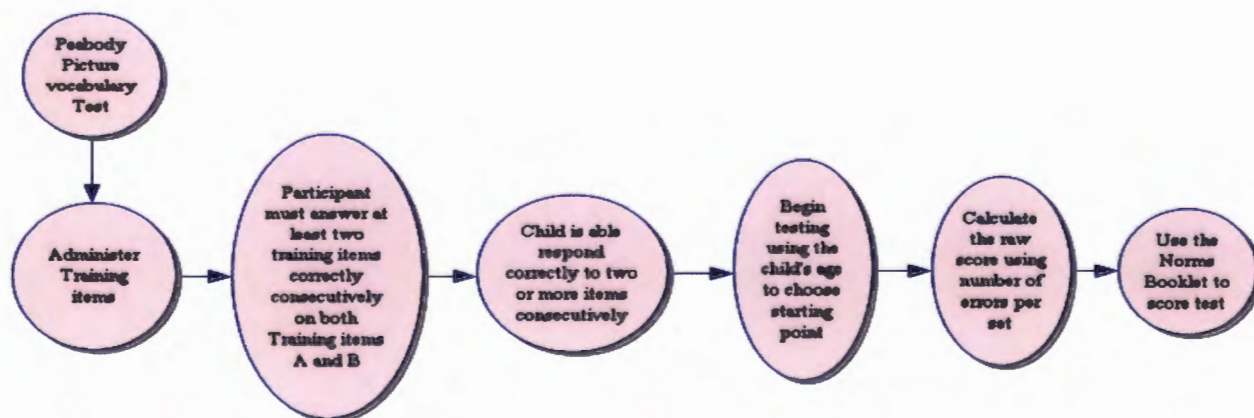


Figure 1. The steps for administering the PPVT-III

The PPVT-III is an efficient assessment that provides some information about an examinee's receptive language skills. The test is individually administered, untimed, and norm-referenced. PPVT-III can be administered to a broad age-range population. The test is used with children two years of age up to elderly adults. Some PPVT-III features described by Pearson Assessments (2008) include:

- Objective and quick scoring
- Quick administration time of 10 to 15 minutes
- No reading or writing for examinee
- Items reviewed by a multicultural panel
- National norms that include ages 2-6 to 90+ years
- Clear black and white line drawings

The Peabody Picture Vocabulary Test was developed by Dunn and Dunn (1959) with the first revision in 1981. The PPVT-R was revised in 1997 and renamed the PPVT-III. After Dr. Leota Dunn's death in 2001, PPVT-IV was revised and published in 2007 by her husband and son, Dr. Lloyd Dunn and Dr. Douglas Dunn. This most recent revision included larger colour pictures along with some content changes. For the purpose of this research project only the PPVT-III was used for assessment of receptive vocabulary.

Language delays refers to students in this research who score at stanine 3 or less on the PPVT-III or children who score stanine 4 with other delays or issues that affect learning at school. Students may also have difficulty repeating simple phrases. Lastly, language-delayed students will not be able to complete the OTTT narrative task using detailed language, logical sequencing, grammatically correct sentences, and inferences. These

language delays refer specifically to oral language delays. School principals can use the data from the PPVT assessment to receive extra funding to support language learning.

Receptive and expressive languages are two broad areas of language development. Receptive language is language that is heard or read and expressive language is language spoken or written. Following instructions is an example of a receptive language skill; whereas, asking for help or pointing at a dog and saying, “Look, a brown dog” are examples of expressive language skills. Normal language development usually begins with the acquisition of receptive skills. A child may be asked to put his cup on the table and follow through with that instruction but be able to only say “mommy, daddy, and no.”

Specific language impairment (SLI) is described by Leonard (2000) as meeting the following criteria:

- Language abilities that fall -1.25 SD or lower
- Non-verbal IQ falls at 85 or higher
- No hearing loss or ear infection
- Normal oral structure
- Normal physical and social interactions (p. 10)

Social competence is the ability to interact successfully with others. It refers to the ability to read social cues, communicate appropriately and get along with others. Social competence is subjectively measured through observations.

Telegraphic speech is used to describe the first sentences spoken by a young child. These early sentences miss many connecting words, word endings and other grammatical conventions. Some examples of telegraphic speech are: “Me go. I see dog.” The meaning is maintained without the conventions of more developed language.

Summary

The OTTT intervention program is designed for young learners to expand vocabulary, semantic skills, and grammar usage. Speech-sound development is not a component of OTTT but may be built into a lesson with input from a speech-language pathologist. Correct articulation is modeled throughout each lesson.

The OTTT intervention program suggests using puppets to model the turn-taking and personal interest of conversations: Using the person's name when talking to him or her, asking a personal question, listening to the reply, and responding to his or her answer.

The *Our Turn to Talk* intervention program includes many opportunities for children to talk and learn in a stimulating environment with adult support and enjoyable materials; however, the OTTT intervention program is limited by the lack of concrete experiences. Students do not fly in an airplane, visit a zoo, or see the ocean. Students see pictures and models but do not have these concrete experiences. OTTT uses play to develop language and intellect. Students re-tell *Rosie's Walk* by Pat Hutchins and use variations of the pattern from *Brown Bear Brown Bear* by Bill Martin Jr. to build language skills in the OTTT program. The OTTT intervention program uses high-interest topics such as bugs and animals for teaching categories and telling stories.

OTTT is an early intervention program that helps the developing brain build connections for language learning.

Guiding Principles of the Our Turn to Talk Program:

- Oral Language is the foundation for literacy success
- Early identification of language difficulties is crucial
- Early intervention accelerates language learning

- The language of instruction in the classroom differs from the language of interaction at home.
- The success of the program lies with the teacher.
- Home conversations build language (p. 8)

The guiding principles found in the OTTT manual summarize the importance of effective language intervention. My plan was to implement the OTTT intervention program for a nine-week block and to assess student language growth.

Chapter Two - Literature Review

School success is built on strong language skills; therefore, it is essential that children with language delays receive support. The Our Turn to Talk intervention program was developed using research-based techniques and teacher expertise. Teachers included speech-language pathologists and classroom instructors. In my review of the literature I will demonstrate why language skills and early intervention are important and how the OTTT intervention program uses research-based techniques to advance language-learning for primary students. I will also discuss strengths and limitations of the program.

Tough (1981) argued that “talk is the most important means through which children are enabled to think in ways needed to support learning in all areas of the curriculum, to overcome their personal problems and to persist with learning” (p. 111). Tough discussed the connection between talk and intellectual development. Without adequate language, children enter school with a significant disadvantage. These language-delayed students do not have the words to express their thinking or to solve personal problems. Intellectual capacity is impacted by language skills, which, in turn, are impacted by a child’s experiences and interactions. The importance of interactions to expand thinking, clarify, re-state, engage, and stimulate language cannot be overstated. Children and adults need to talk; however, the quality of the language is also important.

Language Delays and the Home

In an earlier study, Tough (1977) found that the differences in language usage were affected by the educational background of the parents. Educationally-advantaged parents were parents with higher education and professional occupations. Educationally-disadvantaged parents had minimal schooling and worked in unskilled or semi-skilled

occupations. Children of educationally-advantaged parents were found to use language to reason, to find alternate solutions to problems and to discuss the past and future. Children of educationally-disadvantaged students used language to talk about the present. These advantaged students surpassed the children of educationally-disadvantaged parents in language usage, intellectual development and school success. Tough (1977) stated that these two groups were “comparable on IQ at the start and were friendly, talkative children” (p. 10). The school experience was influenced by the children’s home experiences. Interventions to help all children learn are necessary.

According to Tough (1981), three important considerations when teaching language are:

- Children need to be engaged in language learning activities that stimulate thinking.
- Children gain language skills from concrete experiences.
- Experiences need to be stimulated by talk from adults. Adults expand on children’s thinking.

Recent research on language disabilities or delays examined genetics and environment. Spinath, Price, Dale and Plomin (2004) selected 6,963 pairs of twins and compared identical (monozygotic), fraternal (dizygotic) pairs, and also separated the data into boys and girls. The MacArthur Communicative Development Inventory: UK Short Form was used to measure verbal performance. Spinath et al. (2004) concluded that their study “unequivocally demonstrates the importance of genetic influences in the development of early disorders of spoken language, confirming evidence from four previous twin studies of substantial genetic influence on language disability” (p. 452). However, they also

demonstrated that a shared environment has the greater impact on language development. The study also found almost twice as many boys belonged to the “low-language-ability” (p. 450) group. The Institute of Education Sciences in the United States (1995) described five critical reasons for language delays in kindergarten.

The accomplishments and difficulties that children bring with them when they arrive at kindergarten are correlated with sociodemographic risk factors that have been found to be associated with learning difficulties after children start school. Five family risk factors are examined: The mother has less than a high school education; the family is below the official poverty line; the mother speaks a language other than English as her main language; the mother was unmarried at the time of the child's birth; and only one parent is present in the home. Half of today's preschoolers are affected by at least one of these risk factors, and 15 percent are affected by three or more of them.

Specific language impairment (SLI), sometimes referred to as developmental dysphasia, is used to describe children with language delays without other issues such as cognitive impairment, autism, or deafness (Berko Gleason, 2005; Hoff, 2001). Hoff (2001) described a number of hypotheses about why some children are language impaired. The SLI may be caused by an undiagnosed non-linguistic cognitive deficit such as difficulty drawing inferences (Hoff, 2001). The SLI may be a result of slow processing or poor memory (Weisman, 1985, cited in Hoff, 2001). Children with SLI have unexplained language delays in common; however, these children are all unique individuals with varied needs. Understanding the origin of language learning difficulties may help educators and parents successfully intervene and avoid long-term language impairment; however, the origin of language-delays was not be analyzed in this research.

Critical Periods for Learning Language

Bruer (1999) challenged the belief that the effect of the first three years of a child's life is the key to becoming a successful person. A very rich first three years of life will not ensure success and conversely a difficult deprived first three years does not guarantee a lack of success. Bruer (1999) concluded that grammar and early speech sounds may have critical periods for normal development; however, vocabulary and semantic development is ongoing and not dependent on critical periods. The implications for children, who begin life with little exposure to language, may include difficulties with grammar, speech sounds and vocabulary in the school system; however, vocabulary development is an ongoing process that can be improved through exposure to new language (Bruer), so that the opportunity is still present for grammar and speech development in the early years of school. Bruer described the process as a slowly closing door rather than a critical period. The younger the child is when intervention and language support is provided, the better the chance for that child has to develop adequate language. Intervention needs to be early, intensive, and appropriate for the learner. Bruer offers hope to elementary educators planning and implementing instruction to improve language skills. Vocabulary and semantic development can improve over our lifetime but grammar and speech-sound interventions must occur pre-puberty for most learners.

Language delays have both a biological and environmental base in that "the capacity for language is served by physical structures (in the vocal tract and in the brain) that seem, to a certain extent at least, to be specifically dedicated to their linguistic functions" (Hoff, 2001, p. 89). The first sounds heard in the first six of months change the infant's brain. At birth, infants have the capacity to hear all speech sounds from all languages; however, as the infant

hears language, this capacity decreases to the sounds of the language to which he or she is first exposed (Bruer, 1999). This first exposure to language builds the foundation for language learning (Hoff, 2001). Certain language deficits appear to run in families. Regardless of the origin of the speech and language-delays, early intervention is critical.

Social Communication

Vygotsky (1934) argued that, “the primary function of speech is communication, social intercourse” (cited in Kozulin, 1986, p.6). Conversation skills demonstrate competence in communication skills. Turn-taking and cooperation are two important components of a conversation (Hoff, 2001). Initially responses are encouraged by questioning the child and encouraging a response. The adult is showing an interest in what the child is doing or thinking. This supported conversational practice helps children learn cooperation and turn-taking. Conversations can encourage children to develop narrative skills. For example, “Tell grandma all about our trip to the zoo.” Then the adult might interject to provide hints or reminders of the events. This development of narrative skills builds language skills and understandings about stories. Listening and recording a child’s narrative informs educators about that child’s vocabulary, grammar, articulation, or story-telling skills. Key questions are answered such as: How long are the sentences? Does the story have a beginning, middle and end? Does the child use descriptive words or connecting words? The OTTT intervention program begins and ends with a narrative assessment task that is recorded, transcribed, and assessed. Hoff (2001) suggested collecting speech samples of approximately 100 words before assessing a child’s language skills. The OTTT narrative task is used primarily to assess growth in very specific skills. The total number of words used is recorded plus applied story features.

Interaction, Play, and Language Development

Play develops intellect (Piaget, 1962 cited in Labinowicz, 1980). Play provides children with opportunities to experiment and learn about the world. Building towers out of blocks, pouring water from one container to another, pretending to be a dog, and playing games all contribute to children's intellect. Work and play are connected and interchangeable to the young child; therefore, it is important for educators to encourage playful learning. If children are engaged in the learning activities because they are playing, they are also learning. The OTTT uses play-based activities to stimulate language development; however, the play is initially teacher-led, not student-led. Therefore, teacher-led intervention should provide opportunities for students to play with the materials freely before, after, or during the intervention. The teacher models some ways to interact with the materials; for example, a magnetic board with many different kinds of bugs is used to tell a story sequence. Students then choose their own bug and tell a story.

Piaget emphasized the importance of learning by doing and experiencing, not by telling alone. Children may be able to say metamorphosis, sing the metamorphosis song, and repeat a definition without having any understanding of metamorphosis. Observing butterflies emerging from cocoons and tadpoles changing into frogs will help develop true understanding. Children construct meaning through play, experiences, observations, and conversation with adults and children. Piaget does not believe it is possible to teach a whole class of students at one time effectively and expect that all the students will learn what is being presented. Piaget (1962, cited by Labinowicz, 1980) found the following:

Language plays an important role in refining structures of thought, particularly in the formal stage of thought development. Without language, mental frameworks would be

personal and lack social regulation through interaction. In this sense, language extends logical thinking to its highest level. (p. 119)

Play develops intellect and language, language refines and develops intellect; therefore, play, language, and intellect are interactive, interconnected, and interdependent. “Children’s ability to both produce and appreciate verbal humor develops over time and is closely associated with their growing mastery of all aspects of language” (Berko Gleason, 2005, p. 400).

Pinnell (1980) purported the importance of teaching the language of books through listening and interacting with stories. Re-telling familiar stories or chiming in to repeated lines such as “Fe Fi Fo Fum, I smell the blood of an Englishman” help children learn about written language. Pinnell (1980) suggested using re-telling of a familiar story to assess student awareness of book language. Booth (1994) suggested using thematic units to help students make connections to learn.

Brain Research and Early Language Development

The human brain consists of two hemispheres surrounded by a layer called the cerebral cortex. The cerebral cortex is used for higher functions such as reasoning and planning. The left and right hemispheres are joined by nerve fibers called the corpus callosum. If this connection is severed, the hemispheres are unable to work together. Research on individuals with a severed corpus callosum but otherwise undamaged brain found little impact on language unless information was provided to only one hemisphere of the brain. These split-brain patients were shown pictures and asked to identify them. What the researchers found was that if the picture was processed by the right side of the brain of the patients, these patients were unable to state the name of the object but could draw the

picture with their left hand. It appeared that the patient's right side of the brain identified the picture but was not able to verbalize without interaction between the left and right hemisphere (Hoff, 2001). Other research looked at the effect of brain lesions and language. Broca (1861, cited by Hoff, 2001) found that injury to the left-side of the brain interfered with speaking. Aphasia is a language disorder associated with left-brain damage. Brain imaging techniques (Hoff, 2001) have been used to identify the parts of the brain that are active during different tasks. Magnetic resonance imaging (MRI) has been used extensively in neurolinguistic research and has shown that, "the job of supporting language is not evenly distributed across the whole brain; rather, it is concentrated in the left cerebral hemisphere" (Hoff, 2001, p. 47). Left hemisphere damage affects language in adults and children; however, if the damage occurs in very young children the impact may be limited due to the neural plasticity of their brain. The right side of the brain can become the language center for children with left-side brain injuries; though, with some limitations (Hoff, 2001). This neural plasticity opens the young brain for learning. Brain research supports the belief that early intervention in language development is essential.

Phonological Awareness

Phonological awareness is a first step towards language acquisition. Children begin with babbling and by the age of four to seven years old can produce all the speech sounds of their language (Hoff, 2001). Playing with language through rhyming books and nursery rhymes helps children develop phonological skills. Producing speech sounds, rhyming, segmenting words into syllables, identifying beginning, middle and ending sounds in words, and deletions (e.g. Say "butterfly", now say it without "fly") are some examples of phonological skills. Hoff (2001) described phonological development as a problem-solving

process. Phonological training is not part of the OTTT intervention program; however, it is a large part of many kindergarten programs. Nursery rhymes are part of several OTTT lessons which provide some experiences with rhyme.

Vocabulary Development

Vocabulary development is the next step in language acquisition. By 18 months, the average child knows around 50 words and by 6 years of age approximately 14,000 words (Templin, 1957 cited in Hoff, 2001). The language-delayed child will know significantly fewer words and will be at a disadvantage in school. The gap widens between children with large, rich vocabulary and those with limited vocabulary (Berko Gleason, 2005). A rich vocabulary also helps children read which in turn helps children build vocabulary. This snowball effect of vocabulary helping reading and reading helping vocabulary further widens the gap. The OTTT-IP focuses on vocabulary development through a variety of games, stories, and activities. Students sort pictures and toys into categories, listen to and re-tell stories and describe objects. Small groups provide students with many opportunities to practice and build skills. Prepositions are learned through dramatic re-enactments of *Rosie's Walk* by Pat Hutchins. Children develop words, sentences, and grammar together with the help of teachers, parents and other children.

Language and Literacy

Good literacy and oral language skills are at the base of school success with the effects building upon each other. Successful students continue to be successful and unsuccessful students often continue to be unsuccessful (Jamieson & Tremblay, 2005). Warwick (2005) described three key skills needed to learn to read: phonological processing, print knowledge and oral language. Fielding-Barnsley, Hay, and Ashman (2005) described

reading as a “dynamic process where the elements of language, thinking (metacognition), and phonological skills form an interactive relationship and any weakness in one of these elements inhibits the child’s reading development” (p. 1). Oral language is the foundation for learning and impacts all areas of the curriculum (Kirkland & Patterson, 2005). Reading fiction and non-fiction, writing, math, social studies, science, problem-solving, and social understandings are affected by language skills. If a child does not have the language to understand, the information has no meaning. Justice (2005) stated that the view of many scholars is that “the integrative relationship between language and literacy as reciprocal” (p. 2). Reading improves language and language improves reading. There is a strong connection between language delays and poor achievement at school. Justice (2005) stresses the importance of early intervention and prevention of reading problems over the remediation path. Once a child has a reading delay the delay is likely to continue. Home, preschool and kindergarten settings are the places to begin intervening: before intensive reading instruction begins. Beitchman (2005) argued, “Children with language impairments at age five were about eight times more likely to have age-19 learning disabilities than children without language impairments” (p. 3). The message is very clear that language delays can negatively affect children’s futures. Molfese, Molfese, Modglin, and Walker (2004) found the vocabulary skills element of oral language to be the most important influence in reading performance.

Language and Social Competence

According to Beitchman (2005), “impaired language development in childhood increases the risk for concurrent and later problem behavior” (p.1). An inability to communicate adequately and understand others puts language delayed children at risk for not

only learning delays but also social and “psychiatric disorders” (p. 4). Tomblin (2005) concluded that good oral language skills are important for academic success and social competence. Speech-Language Pathologists (SLPs) increased awareness of the link between language disorders and social competence has been demonstrated in the amount of research generated about this topic. Nungesser and Watkins (2005) described the connection between language delays, social competence and challenging behaviors. Challenging behaviors are described as aggressive, antisocial, disruptive or disturbed. A child who is confused may react inappropriately because of language delays and communication difficulties; however, separating systemic social disadvantages from language delays is complicated. If a child comes from a disadvantaged environment where problems are met with yelling, violence, or withdrawal combined with low language, it is difficult to separate the effects. Are the challenging behaviors and lack of social competence the result of the child’s low language or the child’s environment? Language interventions are one part of the solution only.

OTTT Strategies and Research

Leonard (2000) described treatments for specific language impairment (SLI) which included (a) imitation-based approaches where the child imitates sentences and phrases, (b) modeling approaches where the model repeats utterances or provides a model for the child to copy without expecting imitation, (c) focused stimulation which involves “arranging situations to promote target utterances” (p. 198) with a large number of examples or trials, (d) milieu teaching which is play centered, (e) conversational recasting where children’s statements are recast into grammatically correct statements (e.g. “He go home.” Recast to,

“Yes, he went home.”), (e) expansion (For example, a child points to a dog and says “dog,” the intervener may respond with, “Yes, it is a big dog.”), and (f) picture identification.

Conversational Recasting was found to be superior to imitation which Leonard (2000) found surprising given that children were not expected to repeat utterances. Recasting is a very natural expansion on a child’s language and is used widely by parents and SLP’s and is suggested in the OTTT manual. The “Tell Me” strategy in OTTT is a modeling approach which may preempt the need to recast. “Tell me where you went” includes the correct verb tense for the child to imitate which may result in a correct response. The OTTT manual suggests using a Match-Plus-One strategy (p. 164) to improve expressive language. For example, if a child says, “A dog” we might add “A black dog.” Match-Plus-One is sentence expansion. Students in the intervention program use cards, pictures, games, actions, and toys that are often very play based (Milieu Teaching). It is clear to me that the treatments described in Leonard’s (2000) book align well with the treatments in the OTTT program.

Summary

Language learning is a miracle of learning that is both explained and not explained. Environment and genetics both have an effect on language learning but the uniqueness of each individual’s life experiences ensures that there is not one solution. Language, intellect and social behaviors are intertwined in such a way that it is difficult to separate them. Language is a tool used to demonstrate and develop understandings, and make connections with others. Language is the base for school learning. Language is getting to know people and learning how other people think and feel.

Language-delayed children begin school at a disadvantage that grows with each year unless something is done to help them. Strong language skills build better readers and better

readers develop stronger language skills. Children with weak language skills have trouble reading, they read less, and they do not gain reading or language skills. Children with weak language skills may also have trouble solving problems and asking for help. If a language-delayed child is being bullied by another student and cannot explain to supervisors what is happening, then that child may avoid school, strike back, or withdraw into him- or herself. The OTTT intervention program may be one step towards improved language for language-delayed children. The program provides ideas for teachers to support these young learners. Students re-tell stories with support, sequence pictures and tell a story, categorize pictures, ask and answer questions, take turns, and many other activities in an environment that encourages conversation.

Chapter Three - Research Design

Using both qualitative and quantitative methods with Practical Action Research procedures, I analyzed the effectiveness of the OTTT intervention program in improving the language skills of a group of language delayed kindergarten students. This teacher-as-researcher approach is a frequently used design that I found appropriate for my study. Evaluation was also a part of this research. I expected the OTTT intervention to help improve oral language skills. This study on oral language development and OTTT interventions allowed me to make decisions about the usefulness of this program based on the data. Did the students make gains and if so how much? Based on the literature reviewed in the previous chapter and on my own experiences, my expectation was that by the end of the nine-week intervention most students would be able to tell an ordered story from a set of sequenced picture cards using a story starter, characters, correct pronouns, some descriptive words, conjunctions and a story ender. I expected students to use grammatically correct sentences. Information gained from this research helped me make instructional decisions for my students and contributed to the body of knowledge that examines effective interventions for language delayed children in kindergarten.

Pilot

To learn the strengths and weaknesses of the program, the OTTT intervention was implemented in January 2008 with a group of ten language-delayed kindergarten students. These children received intensive language support with Language for Learning (1999) lessons, phonological development lessons, and the Our Turn to Talk (2007) intervention program along with full-time kindergarten attendance. These children were placed in small groups of three or four students and rotated through these three instructional sessions for 20

to 30 minutes two or three days per week. Two teaching assistants worked with me to implement this language support. We each saw two groups per day. At the start of the OTTT intervention each student was asked to tell a story based on a set of four pictures. The stories were assessed according to the number of words used and eight story features.

Table 1

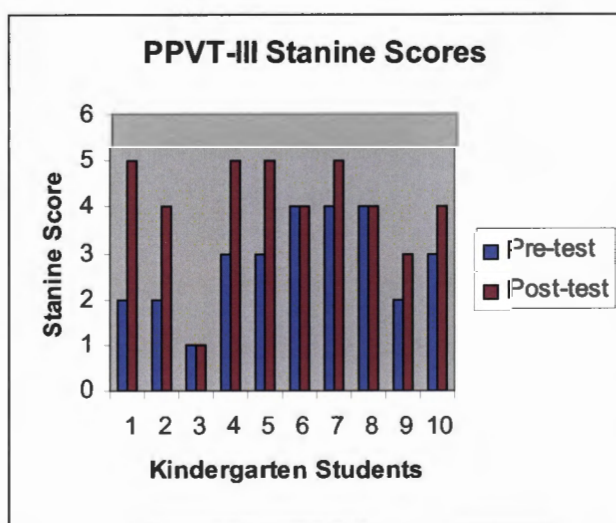
Data for Jane's (pseudonym) OTTT narrative task

Pre-test	Post-test
Used 22 words to tell the story	Used 29 words to tell the story
Used two story features	Used three story features

Note. Story features include a story starter, introduction of characters, pronouns, descriptive words, and complete sentences.

I did not have oral narrative data for all students involved in the pilot; therefore, I used PPVT-III stanine scores. All of these ten students scored a stanine 4 or less on the PPVT-III assessment. A kindergarten assessment administered at the start of the year was also used to choose students requiring assistance. When re-assessed in June, seven out of ten students showed improved stanine scores. Four students with scores of stanine five were found to no longer require extra language support. These students were followed up on to ensure they were learning. I was excited to see the growth shown by seven of the ten participants in this focused language intervention. Three students did not show growth on the PPVT-III; however, Gerry (pseudonym) who scored stanine one at the beginning and at the end of the school year did show improvement on the kindergarten assessment. At the start of the year Gerry could not say what he would do if he was cold. At the end of the year he answered, "I put a coat on." *Language for Learning* and phonological intervention have been

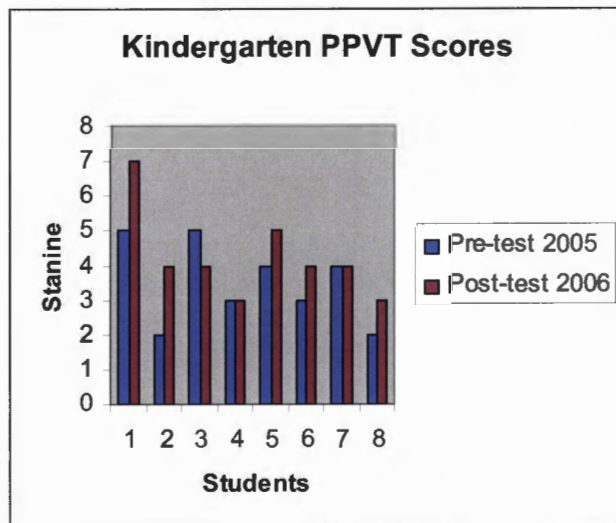
part of the kindergarten program for several years. The OTTT intervention was new to this kindergarten group. I believe the growth shown by many of these students was a result of a sustained focus on language development in conjunction with a new effective program. My decision to conduct research on this program was influenced by the success of this group of kindergarten students. The data in Figure 2 show the 2007/2008 OTTT group started lower and showed greater gains than the 2005/2006 group (see Figure 3) which did not receive OTTT intervention. These are two very different groups, the samples are small, and the differences are small; however, I believe the difference supports the decision I made to further examine the OTTT intervention program. A third group (see Figure 4) of three language-delayed students shows very little growth over the kindergarten year. This small group attended full-time kindergarten as did the 2007/2008 group.



PPVT-III	Pre-test	Post-test (2008)
Stanine Scores	(2007)	
Mean	2.8	4
Mode	2	5
Median	3	4

Figure 2. Pre-test (September 2007) and post-test (June 2008) PPVT stanine scores of language-delayed students who participated in OTTT-IP including mean, mode, and median data.

The data found in Figure 2 show a mean pre-test score of stanine 2.8 and a post-test mean of stanine 4. The mode is two in the pre-test and five in the post-test. These students attended full-time kindergarten. Four out of ten students reached a stanine score of five by June, 2008. The improved stanine scores encouraged further research into the effectiveness of the OTTT-IP



PPVT-III	Pre-test	Post-test (2006)
Stanine Scores	(2005)	
Mean	3.5	4.25
Mode	5	4
Median	3.5	4

Figure 3. Pre-test and post-test PPVT stanine scores of language-delayed kindergarten, mode, and median data.

As shown in Figure 3, the data show a mean pre-test score of stanine 3.5 and a post-test mean of stanine 4.25. The mode is five on the pre-test with a drop to four on the post-test. These students did not attend full-time kindergarten and did not participate in the OTTT-IP. Students' One and Three received language service even though their stanine scores were above four. These students participated in the *Language for Learning* program. The limited increase in stanine score may be a result of half-time kindergarten, the language program used, or other unidentified factors.

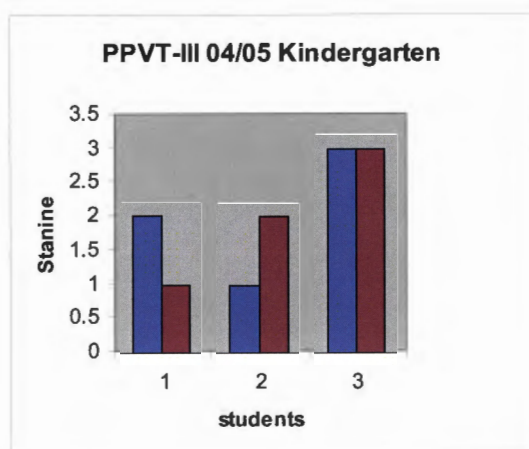


Figure 4. PPVT-III stanine scores for full-time kindergarten students (2004/2005) who did not participate in OTTT-IP.

The data in Figure 4 show a mean pre-test score of stanine two and a post-test mean of stanine 2. The small sample size limits the information provided by this graph; however, only one student showed an improvement in stanine score. These students did attend full-time kindergarten and did not participate in the OTTT-IP.

Summary

The information found in this informal pilot study indicated that the OTTT-IP appeared to positively impact the oral-language development as shown by the PPVT-III. Past PPVT-III stanine scores, as shown in Figures' Two and Three, did not show the gains made in 2007/2008; therefore, further analysis was warranted.

OTTT-IP Research Procedures

Quantitative analysis included examining descriptive statistics: Mean, median, mode, standard deviation, and correlation. Statistical significance was measured; however, because of the small sample size, significance would have to be interpreted cautiously. The

qualitative part of the study included a narrative description of what was found regarding the effectiveness of OTTT-IP.

Specific procedures followed. First, language-delayed students were identified using school counselor administered PPVT-III scores and teacher referrals. Students with PPVT scores of stanine 3 or less or with a stanine of 4 with other learning concerns as decided by school administration were selected for intervention. Secondly, a pre-test was conducted using the OTTT-IP assessment task. The session was taped and the information recorded on the data collection form from the OTTT manual followed by the nine-week intervention program laid out in the manual.

Students were placed in groups of three or four participants at a time for OTTT-IP. Intervention lessons were 30 minute sessions twice a week. Each lesson began and ended with a song. Students acted out nursery rhymes, re-told stories, sorted and labeled picture cards, and asked and answered questions using a puppet in a playful safe environment. Before intervention began, students were first taught respectful listening through a concept attainment lesson: a listening with your eyes, ears, and heart lesson which included a story about a young girl with an unusual name, and direct teaching of respectful listening. These lessons prepared the environment for learning.

After the intervention, a post-test was conducted again using the oral narrative task and PPVT. The results were analyzed comparing pre-test and post-test information using descriptive statistics. Qualitative data were collected and analyzed to identify themes. Lastly, a decision was made regarding the usefulness of the OTTT-IP for future use for language-delayed young learners.

Research population or sample

The research population used in this research project was language-delayed students in Grade 1 in September 2008. The data were tested for significance; however, because of the small sample size statistical significance was not expected. To show significance the gains needed would be very difficult to attain. The probability of a Type II error was high.

Instrumentation

The instruments included were the PPVT-III, the assessment task from the OTTT manual, and a tape recorder. Materials needed for implementation were found manual. The materials included a variety of card sets, magnetic board games, puppets, and figurines.

Summary

Language delays have a significant impact on student learning in kindergarten and later years. Reasons for these delays have been studied extensively as have the serious effects on children's future. My goal was to closely examine one intervention which may assist other educators making decisions to support learners. Is the intervention component of *Our Turn to Talk* a quality resource that will increase the language skills of my students? Will that knowledge help other educators? I was excited to begin this project. I could not change the past for my students but my goal was to help my language-delayed students avoid the path of reading remediation, learning difficulties and behavior problems. My part was small but it is a start. If OTTT did not do what I hoped, then I would use the knowledge I have gained from this experience to improve my teaching practice.

Chapter Four - Findings

Chapter Four focuses on the individual stories and the data collected for each of the seven students involved in this research. Pseudonyms are used for all students in this research. The data are then merged to identify trends, areas of growth, and areas for growth. The data illustrated what worked and what did not in the OTTT-IP.

Section One

Every child comes to school with a story that is unique. These stories shape understandings based on experiences, family history, and physical strengths and limitations. As discussed earlier in this project, children who enter school with language delays are at a disadvantage in the unfamiliar and extensive language of school. These children may not have the background knowledge to adapt well to school experiences and unfamiliar social situations. What is expected and accepted at home may not be the same at school. Families understand the nuances of communication in the home environment; however, the language of school may be very different.

The OTTT-IP was used with this group of language-delayed Grade 1 students to build oral language skills in a playful and engaging approach. Each child's story is briefly presented to demonstrate some of the strengths exhibited and challenges encountered by the children and is followed by an analysis of the information collected about the successes and surprises based on the Oral Narrative Task of the OTTT-IP and the PPVT-III scores. This examination of pre-intervention and post-intervention receptive and expressive language provided some information about the language growth of each child and of the group of children engaged in this research. Seven Grade 1 students were involved in this study; however, only six students' expressive language scores were included in the graphs and

analysis of the group because one student was not present for the initial assessment. All seven students' PPVT-III scores were included in the data analysis. These seven students were divided into two groups of four and three students for the OTTT-IP lessons. I have been privileged to work with each of these students and I share their stories with hope and caring for their future.

Andrew's Story

Andrew is a six-and-a-half-year-old Grade 1 student with a shy smile and a touch of mischievousness. He thrives on success and smiles as he looks down at his work. If the work is too difficult, he stops responding and looks for a way out of the situation. He will get up and leave, hide under the table, or start teasing a classmate. It is important for Andrew to feel successful quickly and to know what is going to happen next. Routines are necessary for Andrew. Andrew works best in small group situations with materials and activities developed to his needs. In a large group Andrew disappears unless he feels knowledgeable about the subject. If the large classroom group is discussing local wildlife, then Andrew is engaged. He knows about moose, deer, beavers, and wolves. He loves to share his experiences. However, if the topic is unfamiliar to him he is not involved. Andrew finds school difficult but when he learns a new skill he quietly shows his feelings with a quick look and a smile.

Oral narrative task. The OTTT nine-week intervention needed to be adapted slightly to meet Andrew's needs. He was introduced to the OTTT intervention activities in kindergarten; therefore, it was necessary to make a few adaptations to the program. The Oral Narrative Task was changed to a new set of pictures: Not the set of four pictures provided by the OTTT manual but a set of six pictures from Joan Tough's (1976), *Listening to Children Talking*. The pictures of cats and people were familiar items to Andrew.

The improvement in Andrew's story-telling from September to December was exciting. In September, Andrew told me a story that had a kitten in it but the story was not connected to the picture sequence. However, in December his story was connected to the pictures with more developed sentences. He put himself into the story and used "me" instead of "I." He used a single word to tell everything that was happening in the last picture of the Oral Narrative Task. A family is sitting around the table eating and the kitten is drinking from a bowl on the floor. Andrew said, "Eating." He connected three components of his story with "and" which expanded one of his sentences to nine words. The rest of his sentences were three words or less. In December, Andrew started his story with the story starter, "One day" and ended his story with "The End." His story was connected to the pictures and he describes events from five out of six of the pictures. He ignored the events in picture one which showed many kittens making a mess in a woman's home and one black kitten walking out of the door. Andrew started his story with the picture of a dog chasing the cat down the road. The OTTT intervention program focuses on the use of prepositions and is apparent that Andrew wanted to use prepositions in his story but got mixed up. For example, Andrew starts with, "the dog chasing the cat over the road" and corrects himself to say, "on the road." His story was still missing some connecting words and is very simple; however, the beginning of his story-telling skills is apparent. After he ended his second story he noticed the cat drinking water so he added that detail and then repeated, "The end." In his first story-telling task Andrew used 16 words "Me going town. Me going town" is only counted as three words and in his second task he used 29 words. He almost doubled the number of words used. More importantly he told a story that was connected to the pictures and included details from most of the picture sequence (see Table 2).

Table 2

Transcribed oral narrative tasks pre-test and post-test for Andrew

September 19, 2008	December 18, 2008
Me going town. Me going town and drive and get a toy. Me see kitten. Pick up kitten. Eating.	One day the dog chasing the cat over the, on the road back of the, by a road, by a man, by in the house but he take him home, the end. The cat drinking water. The end.

Andrew's expressive language is very delayed for a six-and-half-year-old child. He misses words when speaking (e.g., "One day the dog chasing the cat"). He does not consistently use grammatically correct language (e.g. "He take him home"). Linguistic competence which includes articulation of sounds, phonological awareness, vocabulary, grammar and communication is found in many four-year-old children (Hoff, 2001). Andrew does not appear to have the expressive language of a typical four year old.

PPVT-III analysis. Receptive language is the language understood when others speak. Andrew's PPVT-III scores are in the low normal range. He is within one standard deviation of the mean in percentile ranking and stanine score. His percentile ranking and stanine scores showed a modest improvement from October 2007 to December 2008 (see Table 3).

Table 3

PPVT Scores for Andrew reported by date, percentile, and stanine

Date	Percentile	Stanine
Oct. 24, 2007	21	3
Dec. 18, 2008	25	4

Andrew's expressive language is seriously delayed; yet, his receptive vocabulary is in the low normal range. This discrepancy between his vocabulary knowledge and his communication skills may be very frustrating for Andrew. Even in early kindergarten, Andrew could point to pictures in the PPVT-III assessment and correctly identify a *square*, *harp*, *camcorder*, *vehicle*, and *measuring*. He knew all the animals except the *penguin*. Some responses may have been guesses; for example, he correctly identified *luggage* and *squash* (the vegetable) in kindergarten but did not in Grade 1. It is difficult to know what he knows in classroom situations because he cannot often point to a picture to demonstrate his knowledge.

Andrew is a struggling learner with challenges that interfere with his school success. He has been diagnosed with a mild intellectual delay and, therefore, does not fit the profile of a child with specific language impairment (SLI). His non-verbal IQ falls below 85 which is more than one standard deviation below the mean. He also has some difficulty getting along with his peers. He interrupts and answers for other children. If the child being interrupted gets annoyed with him he will not stop. However, he fits some of the other criteria for SLI such as normal physical development, no hearing loss, and normal oral structure.

Summary. Andrew requires many opportunities to speak to develop his skills but most importantly he needs to feel safe, successful, and appreciated for his strengths. Opportunities to work in small groups and to work in places where he gets to shine are necessary for his oral language development and happiness at school. The OTTT-IP is one place where Andrew can talk, feel safe, and where he can shine. He knows about OTTT-IP topics such as animals, bugs, and school. Andrew has shown improvement in his oral language skills but will require continued intervention.

Pamela's Story

Pamela is a soft-spoken Grade 1 girl who watches and thinks before she decides to participate. Her shyness is demonstrated when she first refused to talk into the tape-recorder or when the *dance card* appeared in the sorting game and she stood frozen. The dance card is a WILD CARD that is part of the picture sorting sets. When the dance card appears everyone gets up to dance for one minute. Pamela just watched but after a few dance breaks she starting walking around the room and then moving a little to the music. By December she was dancing around the room. The dance card is a teacher adaptation to the OTTT-IP program to provide activity during lessons. Pamela enjoyed the break in routine and watching her exuberant classmates.

Pamela did not have any language intervention service in kindergarten and was not introduced to OTTT-IP until Grade 1. She was chosen to participate in the OTTT-IP because her classroom teacher asked that she be assessed with the PPVT-III due to suspected vocabulary delays. Pamela scored at stanine three on the PPVT-III which placed her in the low-average to moderately-low range. The teacher recommendation and a stanine three PPVT-III score were the two deciding factors for including Pamela in the OTTT-IP.

Oral narrative task analysis. Pamela showed a gain of more than 100% in the number of words used in her oral narrative task. She used 32 words in September and 65 words in December. She used two story starters in September and five in December. She demonstrates some understanding of correct word tense except she used “runned” for “ran” in both narratives. Her second narrative is longer and more detailed but she missed a few words; for example, she wrote, “Then this dog running after the cat.” In both narrative tasks she starts

all the sentences except the first with “then.” There are similarities in both tasks with the largest difference being length of narrative in task two and the number of story features used.

The OTTT-IP focuses instruction on the use of a story starter, story ender, conjunctions, story sequence, descriptive words, pronouns, and introduction of characters. The use of inferences are not focused on but are included as part of the oral narrative task. Pamela used a story starter and story ender in the second narrative and she correctly used pronouns. In both narratives she followed the picture sequence and used conjunctions. Pamela did not use descriptive words, inferences, or character development in either of her narratives.

Table 4

Transcribed oral narrative tasks pre-test and post-test for Pamela

September 19, 2008	December 18, 2008
The cat was eating out of a bowl. Then a cat runned away into the traffic. Then the kitty met a man. Then this man showed these kids. Then they had dinner.	One day this cat jumped on the table and drank out of the cup. Then this other cat's sitting and going out the door. Then the cat runned away. Then this dog running after the cat. Then the cat went across the road. Then this guy picked the cat up. Then put the cat back where he belongs. Then back home for dinner. The end.

PPVT-III analysis. Pamela's stanine score improved from three to four with an eight point increase in percentile rank over a three month period. This improvement in receptive language score can be interpreted in several ways. She could have felt more comfortable as the school year progressed, she may have remembered the test items three months later, or she learned new vocabulary. In the post-test assessment, Pamela correctly identified 11

words that she did not identify in September. These words were, *tearing, rectangle, group, calculator, island, heart, wrench, surprised, interviewing, exhausted, and pitcher*. I don't believe she remembered all of these words because of her pre-existing language delays. If she learned new vocabulary after hearing new words identified once, then she would, in all probability, have a well-developed vocabulary set. As for her comfort level, she did not know the PPVT-III examiner in the pre-test and the post-test was Pamela's second time meeting the examiner. Therefore, Pamela's receptive language showed improvement over the three-month intervention period and that is reflected in her improved PPVT-III score.

Table 5

PPVT Scores for Pamela reported by date, percentile, and stanine

Date	Percentile	Stanine
Oct. 24, 2008	19	3
Dec. 18, 2008	27	4

Pamela fits some of the characteristics of a child with specific language impairment (SLI) as described by Leonard (2000). She does not have an identified intellectual or social delay. She fits some of the other criteria for SLI such as normal physical development, no hearing loss, and normal oral structure. She also developed language late according to her mother. However she scored in the low average to moderately low average range in the PPVT-III pre-test which may not show a severe enough language impairment to warrant a SLI designation.

Summary. Pamela showed improvement in both her expressive and receptive language tasks. The oral narrative task analysis showed improvements in number of words

and story features used. She made grammar errors in both the pre-test and post-test. Her PPVT-III scores showed modest improvement. This modest increase over a three-month period offers some hope that with continued intervention Pamela's language will continue to show growth.

John's Story

John is a charming, kind-hearted, and very well-behaved Grade 1 boy. During the OTTT-IP he could be counted on to quietly wait his turn and to participate fully. He demonstrated an interest in learning and was uninhibited in his responses. He enjoyed telling stories into the microphone and he smiled as he listened to his story when it was replayed for him. He also demonstrated enjoyment when listening to the stories told by others' in his group of four OTTT-IP participants.

John did not participate in the OTTT-IP in kindergarten; therefore, the whole program was new to him. He attended kindergarten in another community. John was chosen to participate in the OTTT-IP because of identified language delays by his classroom teacher. John scored at stanine two on the PPVT-III which placed him in the moderately-low range. Teacher recommendation and a stanine two PPVT-III score were the two deciding factors for including John in the OTTT-IP.

Oral narrative task analysis. John used 41 words in his first oral narrative task in September and increased to 58 words in December. He used two story features in the first task and five in the second. John's first task, as shown in Table 6, demonstrated grammatical errors: "Outed, runned, someone is picked:" He correctly used "went" and "came." John's second narrative demonstrated consistent, correct use of verb tense and an over-use of prepositions, for example, "he went out the door around and then he went out and then he

went across...” The OTTT-IP uses the story *Rosie’s Walk* in several lessons which describes Rosie the Hen walking across the yard, around the pond, and over the haystack. John applied this new skill but in the process lost some of the details included in his first narrative task which included “the cat by the highway and a person came down and pet the cat.” It appears that John focused more on what was happening in the pictures in the first narrative and applying his new skills in the second. The first narrative had more errors but more specific details. Both narratives do not have developed or named characters, descriptive words or inferences.

Table 6

Transcribed oral narrative tasks pre-test and post-test for John

September 19, 2008	December 18, 2008
A cat went out the door and it runned down the road and the cat went by the highway and a person came down and pet the cat. Someone is picked up the cat and the cat came in their house.	One day the cat he went out the door around and, then he went out and then he went across the road and then he went up and then he went to a house and stayed there. The cat and the guy went to a house and stayed there and then they got back for dinner. The end.

PPVT-III analysis. John showed an increase in percentile rank of 26 points and stanine score of two to four on the PPVT-III. This improvement in receptive language vocabulary represents an important improvement that may be attributed to the OTTT-IP program, and a language rich grade-one classroom. John was ready and willing to learn. His behavior did not inhibit his learning. His interest and participation in all activities contributed to his improved receptive language scores. His pre-test percentile ranking of eight placed him in the moderately low score range (see Table 7). This score placed him 1.5 standard

deviations from the mean which combined with his flawed expressive narrative task points to a child with a language delay that fits the SLI profile; however, the improvement he showed over a three-month period may indicate other factors. What were his home and kindergarten experiences before he moved? John scored in the low normal range in the post-test. His improved language scores have coincided with his improved reading and writing skills. With sustained intervention John will continue to improve his oral language skills and subsequently will experience more success at school.

Table 7

PPVT Scores for John reported by date, percentile, and stanine

Date	Percentile	Stanine
Oct. 24, 2008	8	2
Dec. 18, 2008	34	4

Summary. John's interest in learning sets him up for success. His desire to please his teachers makes him easy to work with; however, with this desire to please comes a great responsibility to all that work with John. If John is asked to use prepositions in his re-telling, then he will. If he is asked to start a story with "One day" or "Once upon a time," then he will do that too. John's oral narrative tasks demonstrate an increase in the number of words used and an increase in the story features specifically taught and practiced. Unfortunately, some of John's voice was lost in the experience. The challenge is to build his confidence in his skills so that he will go beyond following direct, specific instructions

Brent's Story

With sparkling dark eyes and a big smile, Brent leans in closely. He feels safe and cared for. Brent is well-loved in a troubled home. Where will he sleep tonight? Who is picking him up? His complicated life leads to huge emotional response to difficult situations. Howling cries, big tears, and angry shouts start and end quickly. His low receptive language skills make it difficult for him to understand and follow instruction, problem-solve, learn, or understand his problematical world. His low expressive language interferes with his relationships with his peers and the adults in his life. If someone hurts his feelings it is difficult for him to explain what has happened. Regardless of his language issues and troubled home, he is a loving, playful, and affectionate little boy.

The OTTT-IP provided Brent with many opportunities to learn. The visual schedule helped him know what came next and what to look forward to. The repeated stories and activities helped him build vocabulary and understanding. The open-ended activities ensured he would be successful. If he was asked to choose an animal and tell a story using the zoo background, he could do it. He might leave out some words or need to ask the name of the animal again, but he could do it. By building on his knowledge he gradually improved his story-telling skills.

Oral narrative task analysis. Brent used 53 words in the first oral narrative task and 56 in the second. This small change does not provide much information; however, the second task showed improvement in the number of story features used. In task one, Brent followed the sequence of pictures and used the conjunction “and” many times. He was able to infer that if the cat was running around traffic that, “The cat almost hit.” Interestingly, Brent demonstrated a better understanding of the pictures than was expected when grammar and

sophistication of language is examined rather than meaning. In narrative task one, Brent missed many words, made grammatical errors, and used incorrect vocabulary. Brent referred to the kittens in the first picture as kids and he called the sausage the kittens were fighting over, “the rope.” Brent is beginning to use some sentences as shown in Table 8. These sentences are imbedded in long run-on sentences.

Table 8

Transcribed oral narrative tasks pre-test and post-test for Brent

September 19, 2008	December 18, 2008
The cat’s sleeping and the kids fighting the rope and the cat’s getting out of the house and the cat’s with that ball and that dog and that cat and the dog chasing and the cat cat and and the man is stop. The cat almost hit and the dad is bringing the cat and this is the cat is drinking milk.	The cat’s sleeping and the kids fighting the rope and the cat’s getting out of the house and the cat’s with that ball and that dog and that cat and the dog chasing and the cat cat and and the man is stop. The cat almost hit and the dad is bringing the cat and this is the cat is drinking milk.

The December, 2008 narrative task shown in Table 8 illustrates some of the improvements in Brent’s story-telling and his application of some of the skills taught in the OTTT-IP lessons. He used three story features in task one and six features in task two. In both tasks he followed the sequence of pictures, made an inference and used conjunctions; however, in task two he included a story starter, story ender, and pronouns. Brent attempted to describe the children’s reaction to seeing the cat by saying, “the kids say and (laugh).” He laughed instead of saying the word “laughed.” Brent also used some prepositions in task two. This use of prepositions reflects an application of a skill taught in the OTTT-IP which is not measured in the OTTT oral narrative task.

PPVT-III analysis. Brent's PPVT-III scores were very low in both the pre-test and the post-test. His percentile ranking showed a small improvement; however, his stanine score stayed at one. Brent improved his vocabulary score by correctly identifying, "going, harp, astronaut, tearing, diving, target, writing and drilling" in the post-test which he did not do in the pre-test. He was also able to complete another set of tasks before making eight or more errors. Brent scored three standard deviations from the mean on the PPVT-III pre-test and two standard deviations from the mean on the post-test; however, both scores place him in the extremely low range.

Table 9

PPVT Scores for Brent reported by date, percentile, and stanine

Date	Percentile	Stanine
May 28, 2008	<0.1	1
Dec. 18, 2008	1	1

Summary. Brent fits the profile of the SLI child. He does not have a cognitive deficit, hearing difficulties, or physical abnormalities; however, his language delays are severe. It is difficult to identify the reasons for Brent's language delays but family stress and very little oral language at home may be factors. He exhibits some behavior problems which may be connected to his poor oral language skills. Problem-solving, requesting help, and understanding instructions are problematic for Brent. Brent's very low receptive language scores illustrate his need for short simple requests, visual cues such as pictures or objects he can see and touch, and many opportunities to listen to stories at his level of understanding.

Brent needs many chances to talk and listen to his peers. The OTTT-IP provided some these needed experiences. Continued support is critical to Brent's success at school.

Teddy's Story

Teddy is a small boy with a worried expression. Life has not been easy for him and his faith in the world has been shaken. He does not expect things to turn out well. Teddy likes to be in charge. He wants to be first to answer, play, build, organize and line up. He gets annoyed quickly but can be diverted if the distracter is strong enough. Humour, action games or, an opportunity to help will sometimes cheer him up. Extra care must be taken to ensure Teddy feels safe, cared for, and important in the safe-haven of school.

Teddy enjoyed the OTTT-IP story-telling activities with magnetic bugs and animals. He was very good at sorting picture cards into categories and could easily explain his reasons for placing a card in a category. He loved when the "dance card" appeared and looked forward to finding it. Teddy did not dance but enjoyed running in circles. This lizard-loving little boy has shown limited growth in his oral language skills.

Oral narrative task analysis. Teddy used 52 words and four story features in his first oral narrative task and 55 words and six story features in his second task. He followed the sequence of pictures and used pronouns and descriptive words in both narrative tasks. He used conjunctions, a story starter and story ender in task two. Teddy made fewer verb errors in his second narrative task. In task one Teddy wrote, "A cat are..." and "The cat are..." but later used, "A dog is..." and "the cat is going..." in the same story. He missed a few words when telling his first story. In his second narrative task, Teddy's use of conjunctions gives the story a better flow; however, he still makes grammar errors.

Table 10

Transcribed oral narrative tasks pre-test and post-test for Teddy

September 19, 2008	December 18, 2008
A cat are making a mess—The cat are making lots of mess in the house. A dog is chasing the cat. The cat is going to get hurt. The cat is scared. Still running. He wanted to grab the cat to keep it. Is bringing to this house to live with. The cat is drinking and eating.	One time there's lots of cats. They're fighting in the women's house and the dog was chasing it. The cat went all the way through town. A man came. He grabbed it and he put a cat to home and they had supper and the cat had something else. He had baby milk. The end.

PPVT-III analysis. Teddy increased his percentile ranking from 23 to 32 points in three months; however, his stanine scored stayed the same. Both percentile rank scores fall in the low average range and are less than one standard deviation from the mean. He knows what a *reptile* and a *flamingo* are and what *horrified* looks like. He was not able to identify *surprised* or *canoe*. His receptive vocabulary is improving but gaps in his understanding continue to interfere with his learning.

Table 11

PPVT Scores for Teddy reported by date, percentile, and stanine

Date	Percentile	Stanine
Sept. 18, 2008	23	4
Dec. 18, 2008	32	4

Summary. Teddy's receptive and expressive language skills have shown some improvement from September to December. His story-telling was more connected and grammatically accurate but continued to have some errors. His receptive language skills

improved nine percentile points. Teddy requires continued support in his learning to build his confidence, develop improved social relationships and problem-solving, as most importantly, help him have hope for the future. The structured turn-taking of the games, the scripted conversations, the playful learning, and predictable routines of the OTTT-IP contributed to Teddy's oral language learning and his enjoyment of school.

David's Story

David looks around with huge dark eyes. He wants to please and if a teacher is watching, he is behaving perfectly. David is a contradiction: He can be impulsive or thoughtful, unkind or very kind, and focused or distracted. He has a very loving relationship with his grandmother and snuggles in close to her when she visits the school. Extended family is the foundation of David's life. David is comfortable with adults but has trouble getting along with his peers. His pre-school years were spent mainly with adults and older cousins; therefore, his time with children his own age was limited. When he is spoken to about his inappropriate behavior with his classmates, David appears genuinely contrite. He knows what to say and what the rules are; however, consequences do not seem to change his behavior. Supervision and practicing appropriate behaviors has the best impact. In a small group setting David is generally well-behaved, kind, and helpful. His ability to focus during these lessons is task-dependent. The OTTT-IP setting of four students is ideal for David's learning. He learns about turn-taking, listening to others, responding appropriately, and he develops important oral language skills. Social language and behaviors are areas that David needs to practice.

Oral narrative task analysis. David uses language very efficiently and is able to state the main ideas of the narrative task in very few words. “Once upon a time the cats played” describes a picture of kittens on the table drinking from a pitcher and knocking over dishes, kittens on the floor playing tug-o-war with sausages, a kitten playing with yarn, and another kitten going out the door. David used 35 words for his first narrative task and 41 in the second task. In his first story he missed the cat walking out the door, he missed the dog chasing the cat in picture two of the sequence, and then he succinctly wrapped up the story. He incorrectly used “from” for “to” in his final sentence. Lastly, David incorrectly stated that, “the mother got them to play” when is obvious from the picture that the women in the first picture is not happy with what is happening in her kitchen. In his second story, David noticed the cat exiting the home and the cat running away from the dog; however, he incorrectly said the cat was chasing instead of the dog. David made two grammar errors in task two: he used “bringed”, and said “he went out the street.” David included information from all six pictures in his second story-telling task.

In David’s first oral narrative task he used three story features and in his second task he used five features. His second task included a story ender and information from all six of the pictures. David did not introduce his characters, use descriptive words, or make relevant inferences; however, he did use a story starter, pronouns, and conjunctions.

Table 12

Transcribed oral narrative tasks pre-test and post-test for David

September 19, 2008	December 18, 2008
Once upon a time the cats played. The mother got them to play and then one guy found a cat and took it with him. To show him from his family and then they ate.	Once upon a time a cat went out the door and the cat was chasing him and he went out the street and someone found him on the road and the guy bringed him home. And they ate dinner. The end.

PPVT-III analysis. David did not show any change in percentile ranking or stanine score from May to December. His scores fell in the low average range and are less than one standard deviation from the mean. Though this lack of improved PPVT-III scores is disappointing, it is not unexpected.

Table 13

PPVT Scores for David reported by date, percentile, and stanine

Date	Percentile	Stanine
May 28, 2008	27	4
Dec. 18, 2008	27	4

Summary. The social aspects of the OTTT-IP provided David with experiences to help him develop pro-social behaviors. The structure, predictable routines, and high behavioral expectations combined with age-appropriate and engaging activities provided David with opportunities to learn use language more effectively and to get along with his peers. Development of a healthy curiosity about the thoughts and feelings of his peers is

nurtured through highly structured questioning using puppets. This supervised practice helped David develop social language skills.

David showed some improvement in his story-telling skills from September to December 2008. His second narrative task included information from all six pictures which his first task did not. David did not show any improvement in his receptive language scores.

It is disappointing to see the minimal improvement in expressive language skills and the lack of improvement in receptive language skills after intensive intervention. It is difficult to say why improvement was not seen. Maybe more time was needed. Maybe David was not engaged enough. Maybe the assessment did not delve deep enough into his thinking and knowledge to provide an accurate enough picture of David.

Mark's Story

Mark's sense of humour, big smile, and teasing personality characterize him. His unique voice and thinking can endear him to others but can also get him into trouble with his peers. He likes to tease but does not like to be teased in return. His laugh is deep and contagious as long as it is believed there is no malice behind his remarks. He has a very deep affection for his friends and wants them to be happy. Mark answers slowly and loves to have center-stage: Telling stories and making his audience laugh is key. Mark's moods can change quickly. He can feel very angry and upset one minute and laugh and forgive in the next. This volatile, fun-loving child is full of surprises.

Oral narrative task. Mark's oral narrative task was made up of 65 words and demonstrated some unique qualities. His story contained dialogue which he spoke in an altered voice. Listening to him tell his story was entertaining. Mark did not have a pre-test oral narrative task; therefore, there can be no comparison to show growth. However, it can be

seen that Mark can tell a story. He tells us that the cat is his and is making a mess in his mom's kitchen. Mark is connected to his story. It is important to him that the audience knows that the man who finds the cat is nice. Mark missed using a story starter and did not include much about the characters in the story; however, he included six of the other story features. He followed the sequence of pictures, he used pronouns, conjunctions, and descriptive words, and he made inferences and used a story ender. He missed a few words in his story-telling: "I have cat..." and "Look what I got."

Table 14

Transcribed oral narrative tasks post-intervention for Mark

September 19, 2008	December 18, 2008
No information available (student missed initial assessment).	I have cat and he's making a mess in mom's kitchen. And that dog chased that cat and that cat almost go to the road. And that man save him. He said, "Cat want to come with me?" "Look what I got." He's calling a cat but he's nice and when we feed him with his....He's hungry. We buy him cat food. The end.

PPVT-III analysis. Mark's PPVT-III stanine score went down from three to two and falls in the moderately low range which is between one and two standard deviations from the mean. His percentile ranking dropped from 19 to 9. He knew a few more words when tested in December but the gains were not enough to maintain his standardized scores. Both assessments occurred before holidays. Both assessments were completed by the same examiner. It is difficult to know if he had some lucky guesses on the first assessment which helped his score or if the test is too small a snapshot to show his receptive language learning. Mark is learning but that is not reflected in the PPVT-III assessment tool.

Table 15

PPVT Scores for Mark reported by date, percentile, and stanine

Date	Percentile	Stanine
June 4, 2008	19	3
Dec. 18, 2008	9	2

Summary. Mark's expressive oral language skills exceed his receptive language skills. If given enough time, he can respond appropriately, tell stories, and explain his thinking. Listeners must be patient when Mark is speaking. His humour, imagination, and playfulness are some of his strengths. His volatility, slow responses, and language-delay are some of his challenges. He likes to talk and he loves to be listened to which is a great start to improved language. The OTTT-IP provided him with many opportunities to contribute to discussions, tell stories, explain his thinking, take turns, share materials and ideas, and play with others in a structured environment. Continued support is recommended for Mark to further develop his language skills.

Section Two

Merging the Data

The Institute of Education Sciences in the United States (1995) described five risk factors for language delays in kindergarten as including limited maternal education, poverty, the mother's primary language is not English, a single parent home, and, lastly, the mother was unmarried at the birth of her child. In my experience as a primary teacher for nineteen years, I find these factors to have validity. Of the seven students engaged in this research all have been affected by some of the five risk factors described. Limited maternal education is

the single common factor combined with five of the seven children being born to young unmarried mothers. Three of the students live in single family homes. One of the students lives with both his parents with the other six living in a variety of home arrangements: Single fatherhood, single motherhood, grandmother care-giver, and step-parent relationships. Maternal substance abuse was also a factor for several of these students. Complicated lives can hinder learning; however, it is important to say that all of these children are loved by their care-givers. The families desire happiness and success for their children.

Spinath, Price, Dale and Plomin (2004) found almost twice as many boys fall in the language-delayed group. Six out of the seven language delayed students involved in this OTTT-IP research are boys which exceeds Spinath et al (2004) findings; however, this sample is very small. My experience has been that at least twice as many boys are involved in oral and written language intervention. Environment, expectations, and gender differences may be contributing factors for this difference in language acquisition skills.

Each student participating in the OTTT-IP experienced varying degrees of improved oral language development as shown by the oral narrative task, PPVT-III, and my professional analysis. Six out of the seven students involved in the study showed an increase in the number of words used to complete the narrative task. One child did not complete the September 2008 narrative task and, therefore, growth could not be shown. Three out of seven students showed an increase of stanine score on the PPVT-III assessment. Pamela and Andrew showed an increase from stanine three to stanine four. John showed an increase from stanine two to stanine four. Five out of seven students showed an increase in percentile ranking. One student's percentile ranking stayed the same and one student's went down. Figure 8 provides more information about PPVT-III scores.

Oral Narrative Task Group Analysis

All students participating in this OTTT-IP study showed an increase in the number of words used, and, more significantly, all students improved the quality of their stories. Figure 5 illustrates the differences in the number of words used with Pamela (Student Two) showing an increase of more than 100% and Teddy (Student Six) showing an increase of only a few words. Andrew (Student One) and Pamela (Student Two) started with the fewest number of words and showed the greatest increases. Students with the highest number of words used in the September task showed the smallest increases in number of words used in the December task. Number of words used is a good starting point to analyzing expressive language; however, quality of expressive language must also be examined. This snapshot of expressive language provides limited information and must be examined critically. Hoff (2001) suggested collecting speech samples of 100 words before assessing a child's oral language skills. More samples of oral language experiences in a variety of settings would provide a richer picture of each of these students; however, this snapshot is not without value. Over-generalization of grammar rules, pronoun use, telegraphic language, and use of conjunctions were evident; however, longer passages may have shown more use of description, inferences, and character development. It is not possible to say a student does not have skills such as the ability to make inferences or use descriptive vocabulary, but only that the evidence was not seen in this specific example.

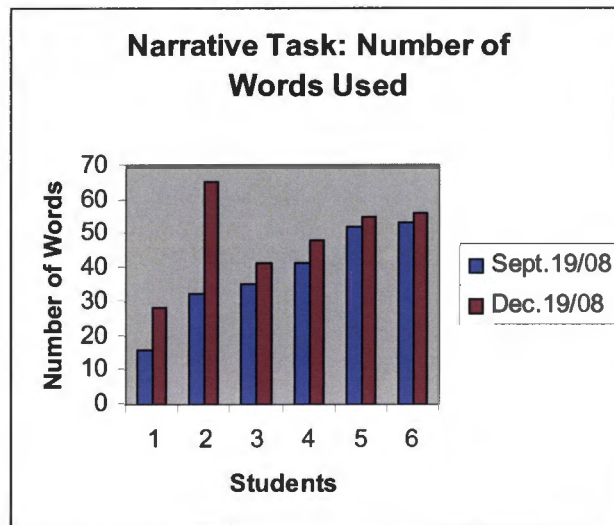


Figure 5. Total number of words used when telling a story based on a sequence of six pictures.

Descriptive statistics show the mean number of words used in September 2008 to be 38.17 words and 48.83 in December 2008. The median was 38 in September and 51.5 in December. These statistics illustrate an increase in average number of words used and the mid-point of the data set. Because of the small sample it is important to recognize that the performance of two students positively influenced the central tendency statistics for the group.

Table 16

Story Features from the OTTT Manual

Story Features	
1	Story Starter (e.g. One day)
2	Followed sequence of pictures
3	Introduction of characters
4	Pronouns
5	Conjunctions (e.g. and, then)
6	Descriptive Words
7	Inferences (e.g. dog ate chips)
8	Story ender (The End)

The story features analysis section of the OTTT-IP provides richer understanding of the oral language skills compared with number of words used. This efficient method for collecting data provided some useful information. The improvement in story feature use is illustrated in Figure 6 which shows where instruction was effective and where it was not. The mean number of story features used in task one was 2.5 and in task two 5.33.

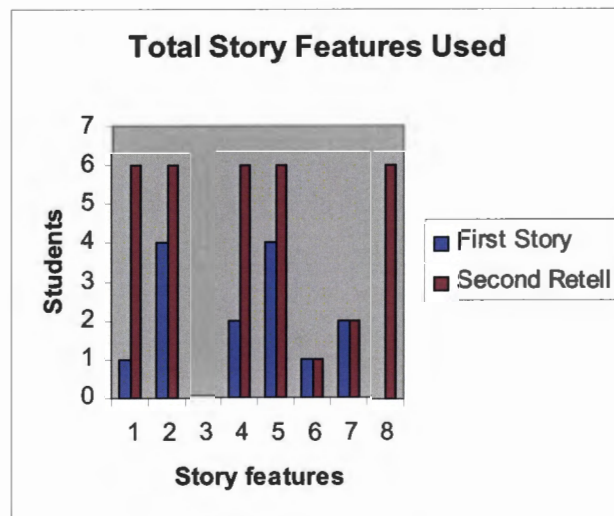


Figure 6. Shown is the story features used before and after instruction. The numbers at the bottom of the bar graph coincide with the numbers shown in Table 16, for example, number one is “Story Starter,” and two is “Followed sequence of pictures.”

All six children used five or six story features in the second story-telling task. No students introduced character development in the first or second oral narrative task. Students referred to the characters as the cat, the woman, the man, and the guy but did not expand on this descriptor and; therefore, credit was not given to them for the story feature introduction of characters. All students used a story starter and ender, pronouns, and conjunctions, and followed the picture sequence. Story starters and story enders were explicitly taught and easily attainable. Conjunctions, character introduction, and descriptive vocabulary were modeled and practiced. Figure 6 illustrates which story features were learned and which were not. Descriptive words, story feature number six, were used by only one student in the pre-test and the post-test. Inferences, story feature seven, were used by two students in the pre-test and the post-test. As the instructor I can see that features three, six and seven were not adopted and used by these students. Inferring is a complex skill that was introduced in week

nine using the card game, Understanding Inferences Fun Deck, which did not transfer to story-telling. More time building these undeveloped skills is necessary to increase transfer to independent use. This data regarding story feature use is useful for planning future lessons as add-ons to the OTTT-IP. Story features one, two, four, five and eight were used all by six students in the post-test story-telling task.

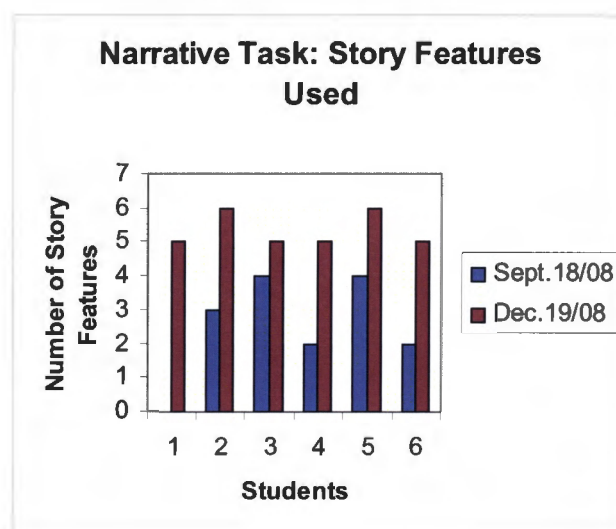


Figure 7. The total number of story features used pre-test and post-test by each student.

Figure 7 illustrates the increase in the number of story features used by each of the six students engaged in this study. Andrew (Student One as shown in Figure 7) used zero story features in September and five features in December. Student learning is apparent when examining Figure 7. The range between September story features used was four while in December the range dropped to one. In the December post-test all six students used five or six story features. This information about range infers that the knowledge gap between students was narrowed when examining story-telling skills.

Summary. Each student started the OTTT-IP with a set of skills and experiences unique to him or her with some of this variance shown in the starting point of the oral narrative task. Varying degrees of language delays were evident. The number of words used, and the number of story features used in both the pre-test in September and the post-test in December provided information about where a student began and what was learned. Focus was on skills gained not on deficiencies. All students demonstrated improved skills as illustrated by the number of words and story features used with some students showing greater gains. Andrew (Student One) showed an increase in number of words used from 16 to 28 and an increase of zero story features used to five. Pamela (Student Two) showed an increase from 32 words to 65 and an increase of two story features used to five. Andrew and Pamela demonstrated the largest increase in the number of words used in the post-test narrative task. The oral narrative task provided useful information about student oral language development.

The December oral narrative task was used, for the purpose of this research, as a summative assessment tool; however, it can also be used for formative assessment. The oral narrative task provided important information which can be used for future planning and instruction. Interventions must be developed to help these students introduce characters into their stories, to use descriptive words, and to build inferring skills.

The transcribed text of the oral narrative task included information beyond the scope of the OTTT-IP analysis. Verb tense, over-generalization of grammar rules, telegraphic speech, and thinking can be found in a child's story-telling. I was interested to hear one of my troubled students use the word "grabbed" for a man crouched down and picking up a kitten. He also noted that the kittens were fighting rather than playing. The information

collected can be an opportunity to understand and support a child. For example, this troubled child might be taught the difference between playing and fighting or grabbing and picking up gently. If other concerning behaviors were observed counseling may be offered.

PPVT-III Group Analysis

The PPVT-III analysis was not part of the OTTT-IP but was included because the test is used for English as a Second Dialect (ESD) funding in School District 91. Five of the seven students involved in this research are of aboriginal ancestry and meet the criteria for ESD funding and support: Aboriginal ancestry, a stanine score of three or less on the PPVT, or a PPVT stanine score of four with an explanation of need. Students were recommended by teachers for assessment if a language delay was present. Because the PPVT is straightforward and efficient to administer it was used as one tool to screen for receptive language delays. All grade-one ESD students were chosen to participate in this research, in addition, non-aboriginal grade-one students who scored three or less on the PPVT-III. Seven students were selected to participate in the OTTT-IP; however, one student was not included in the Oral Narrative Task data because of a missing September pre-test. All seven students had pre-test and post-test PPVT-III scores.

Teddy (Student Five, as shown in Figure 8) and David (Student Six, as shown in Figure 8) did not show an increase in stanine score; however, Teddy did show an increase in percentile. Three of the seven students showed an increase in stanine score, two stayed the same and one dropped from three to two. Andrew and Pamela (Students One and Two) moved from stanine three to stanine four. John (Student Three) went from stanine two to

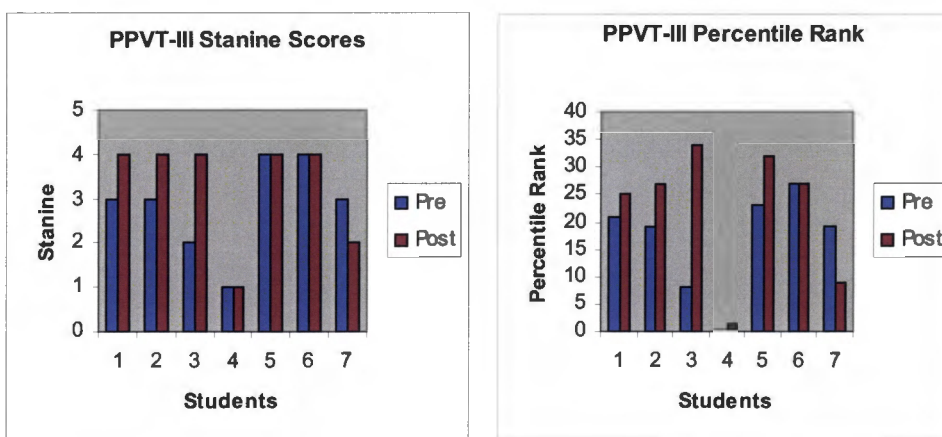


Figure 8. PPVT-III measures of receptive language of Grade 1 research participants for 2008/2009.

stanine four. The mean stanine score was 2.86 on the pre-test and 3.29 on the post-test. The median and mode were both three on the pre-test and both four on the post test. There was a small increase in stanine scores.

The mean percentile for this language-delayed group was 16.73 on the pre-test and 22.14 on the post-test. The median and mode were 19 on the pre-test and 27 on the post-test. The range was 26.9 in the pre-test and 33 in the post-test percentile scores. Figure 8 illustrate the PPVT-III gains in stanine and percentile scores.

Any improvements in receptive language skills as measured by the PPVT-III were not expected due the brevity of the intervention and the challenges of the language-delayed student; however, improved PPVT-III scores were optimistically anticipated and met for five out of seven students engaged in the OTTT-IP. Specific gains are shown in Figure 8.

Statistical Significance

Statistical significance was not expected due, in part, to the small sample size and the short intervention period; however, as a final step it was important to confirm that premise. A

Paired Sample t-Test was used to analyze the pre-test and post-test data for the number of words used in the Oral Narrative Task. I expected the number of words to increase; therefore, I chose to look at a one-tailed critical value for “t.” As expected the t-Test statistic was lower than the critical value which means the difference between the pre-test and post-test scores may have been a result of chance (“t” was -2.29, critical value was 2.01) . Secondly, an analysis of story features revealed no statistical significance (“t” was -5.22, critical value was 2.01).

Summary

The OTTT-IP began in September 2008 for seven Grade 1 students with oral language delays. This nine-week intervention included two half-hour sessions per week. Students were divided into two groups to limit the group size to three or four students. Each of the nine OTTT-IP lessons was repeated during the week resulting in 18 sessions. These lessons included a variety of play-based activities and stories which were enjoyed by the participants. Students completed a modified version of the Oral Narrative Task from the OTTT-IP manual. Secondly, PPVT-III scores were collected to provide further information about oral language skills. These measures of expressive and receptive language skills were administered again following intervention. The findings showed improved application of story features and increased number of words used in the oral narrative task. Improved grammar and increased use of prepositions were also seen. The PPVT-III showed increased percentile scores for five of the seven student participants. One student’s percentile score went down and another student’s score stayed the same. The expectation for the norm-reference PPVT-III was that the scores would not change; therefore, it was interesting, though not statistically significant, to note the improvement.

The complexity of oral language learning combined with the specific and problematical needs of the individual; and the limitations of interventions, teachers, and time guarantee that language intervention is a challenging process. The OTTT-IP provided a useful tool for addressing some of the challenges through research-based learning activities that are provided in a safe and nurturing environment.

Chapter Five - Conclusions and Implications

The Our Turn to Talk Intervention Program provided lesson plans, research-based instructional strategies, suggested materials, and guidance for teachers to develop quality instruction for oral language-delayed students to develop speaking and listening skills in a safe small-group setting. The predictable routines of the lessons pooled with high behavioural expectations, a variety of games and activities connected to student interests, small group instruction, and many opportunities to practice conversational turn-taking, story-telling, questioning, predicting, and categorizing; provided a rich language environment for learning. The topics, stories, and suggested materials were well-received by the students. The bugs and animals magnetic boards were favoured activities along with the sorting cards. The addition of the dance card in place of the wild card in the sorting activities added an element of fun and anticipation that increased engagement. Generally the OTTT-IP activities were well-chosen for this small group of students.

Students involved in the OTTT-IP demonstrated improved expressive language skills based on the findings. The oral narrative task assessment tool provided data that showed improved use of story features and increased number of words used; however, none of the students introduced and developed characters in either of the oral narrative tasks. The characters were “the man” or “the cat.” Students also demonstrated little use of descriptive words or inferences. Improved receptive language was found for five out of the seven students tested with the PPVT-III. The OTTT-IP provided a positive oral language experience that improved student learning.

Strengths of the OTTT-IP

The OTTT-IP visual schedule informed students about the lesson. Students enjoyed the routines, the predictability, but also the anticipation of new activities. This small step at the start of the lesson had a big impact on the quality of the interaction.

High behaviour expectations are clearly defined and explained in the OTTT manual. Activities to teach respectful listening and sensitivity are included. The importance of socially-acceptable behaviour in the group is emphasized and must be a part of every lesson. Turn-taking, listening, encouraging, and caring are skills that help students successfully interact with peers and adults. These social skills help the both the listener and the speaker become effective members of an interactive community.

The suggested picture books were appropriate for low-language children. The limited vocabulary of the suggested stories (*Rosie's Walk* and *Lunch*) aligns language skills with text. The pictures and connected activities support the students' understanding of the stories. The re-telling of the story *Rosie's Walk* using props consolidated student understanding of some basic prepositions. This understanding of prepositions was seen in their over-use in some of the students' second oral narrative task. The repetitiveness of the story, *The Great Big Enormous Rock*, combined with the actions encouraged students to engage with the story. Descriptive words such as *slithering, slithering, slithering* paired with a slithering action when the snake is going up and down the mountain are repeated several times and enjoyed by the students. Vocabulary is introduced with actions to contribute to understanding. Students are encouraged to repeat parts of the story with the teacher where they can.

Animals, bugs, transportation, and school are topics understood and enjoyed by many young learners. Add dice, game pieces, and cards and the game-like atmosphere encourages engagement. The classroom magnetic board provided students with a chance to use school vocabulary such as desk, shelf, chalkboard, puppet theatre, and student in a semi-abstract way. The objects are found in the classroom and are familiar but these items are not easily manipulated like the small, moveable, magnetic models on the classroom background. Students practiced using the school model to enrich their knowledge of school vocabulary. The play-like learning environment encourages engagement and contributes to the child's intellect (Piaget, cited in Labinowicz, 1980).

Opportunities for students with language delays to speak and listen in a small comfortable group provided experiences to help these students improve oral language skills which in turn will help develop intellectual capacity (Tough, 1981) and social skills (Vygotsky, 1934). In the small group environment children can speak and are listened to. Modeling of appropriate language and social behavior, encouragement, feedback and, expansion of utterances by the teacher provided rich opportunities for developing language. Socially appropriate behavior was modeled and reinforced through structured practice with puppets. The classroom activities suggested in the OTTT manual provided some positive language-learning experiences; however, the small group experiences gave these young learners with oral language delays many opportunities to develop language skills that were necessary for their chances for improved school success.

Ideally children with oral language delays would receive support before entering the school system to provide optimum opportunity for adequate language development; however, Bruer (1999) wrote that the language learning door is slowly closing but not closed for

school-age learners. Vocabulary can be improved over a life-time but grammar and speech-sound intervention must occur pre-puberty for most learners; therefore early intervention is essential (Bruer, 1999). The OTTT-IP helped support these learners along with a language rich classroom experience and a supportive school environment.

The OTTT-IP provides lessons, strategies, and other interventions that are based on the oral language component of the British Columbia Integrated Resource Package (IRP). Individual Education Plans (IEP's) with language goals based on the learning outcomes of the IRP can include the OTTT-IP as a suitable tool for supporting oral language development for primary students.

In conclusion, the strengths of the OTTT-IP point to the usefulness of this language-learning tool for primary students. Improved expressive language was seen in all seven participants in this research project. Improved receptive language, as measured by the PPVT, was seen in five out of the seven participants. The OTTT-IP was a useful tool to assist students with language delays.

Additions to the OTTT-IP

Teacher interpretation of the activities will vary the exact implementation of the OTTT-IP; however, the variations will provide oral-language experiences that enrich student learning regardless of teachers' understanding of the lesson plan instructions. Nevertheless, I would suggest it might be useful for lesson plans to have prescribed learning outcomes attached to the lessons to more clearly clarify lesson objectives for the instructor who may or may not be a certified teacher. The intent of the lessons based on the expertise of the OTTT-IP designers would be shared more effectively with specific, clearly stated outcomes.

The oral narrative assessment task employed at the beginning and end of the nine-week OTTT-IP could be improved by the inclusion of a better quality and up-to-date set of pictures for the oral story-telling. The simplicity of the pictures may challenge the story-teller which could result in a greater imaginative response; however, the quality of the pictures could be improved. Secondly, the addition of questioning techniques could delve into students' thinking and provide more detailed information. For example, in the first picture of Tough's "Black kitten gets lost" shows five kittens making a mess in the kitchen while being watched by an older woman and an annoyed looking mother cat. Students might be asked: "What is the lady thinking? What will that little black kitten do?" In the oral narrative task provided in the OTTT-IP questions might include, "What do you think is in the bowl? Where is the girl going? How do you think the dog is feeling in this last picture?" This delving into the thoughts of the story-teller provides the instructor with more information about the thinking and understandings of the child. If the questioning is scripted, then the pre-test/post-test information continues to be a useful assessment of learning and for learning.

The nine-week OTTT-IP was not long enough to repair the language deficits of the students involved in this research. Growth was seen but continued support throughout the year, and likely beyond, is needed. The starting point, attendance, individual learning differences, and emotional state of the student participants are factors to consider when analyzing the language growth of these students. The quality of implementation will also have an impact on the success of the OTTT-IP. Appropriate adaptations, re-teaching, guided practice, high behavioural expectations, enjoyable and nurturing environment, and sensitivity to the emotional and cognitive needs of the individual learner are some of the teacher factors that contribute to the successful implementation of the OTTT-IP.

Implications

The OTTT-IP is a useful tool that can improve language skills. With teacher time provided to implement small group instruction, funds to purchase the recommended materials, and the need for intervention, the OTTT-IP provides an excellent blend of strategies and activities that support student oral language learning. Some strategies include expansion, re-phrasing, questioning, modeling, visual schedule use, and effective use of wait time. Some activities include games, sorting, nursery rhymes, re-telling, and songs. The focus of this research was on the effectiveness of the OTTT-IP; however, the entire manual is an excellent resource for regular classroom use based on my professional experiences. The book includes many activities and strategies that include making connections to stories heard or read, interviewing ideas, barrier games, “Go Fish” with descriptive cards, and picture walks. The modeling by the class provides opportunities for children with language delays to hear skilled student voices. This mix of in-class and small-group instruction broadens language learning.

This research provides readers with a connection between the OTTT program and the research, a connection between B.C. Oral Language IRP’s and the OTTT-IP, an examination of the assessment tool, and a qualitative analysis of student growth and the OTTT-IP with minimal statistical information. Statistical significance was not found primarily, I believe, because the sample size was so small; however, the descriptive statistics did show increase mean and median scores in the post-test.

Recommendations

Implementation of the OTTT-IP to small groups of students with language delays provides an organized and enjoyable opportunity for improving communication and learning; however, some suggested recommendations for further research and adaptations include:

- To demonstrate a more complete picture of the effectiveness of the OTTT-IP a larger sample size and/or a longer intervention period is required. This expanded study would create an improved probability of statistical significance which would provide more information about the effectiveness of the program. The larger sample size would provide a richer understanding of the effectiveness of the OTTT-IP using the assessment tools provided; therefore, I recommend that the primarily qualitative data of this research project be seen as a positive step towards a more detailed analysis.
- Implementation occurring in a variety of settings with a variety of teachers. The increased implementation by different teachers in a variety of schools would address the issue of teacher effect. The effectiveness of teacher implementation is an area of study not addressed by this research but must be considered when analyzing a program that is implemented by individuals with unique qualities working with students also with unique skills and qualities.
- The addition of the Expressive Vocabulary Test (EVT) may be a supplementary tool for measuring language skills to provide norm-referenced data for analysis. The use of the PPVT-III provided norm-referenced data useful for a broader picture of each student's language gains which may be expanded by the EVT. Research began at the Asante Center for Fetal Alcohol

Syndrome (2007) compared PPVT-III and EVT scores and found that EVT scores for clients with an alcohol-related diagnosis to be significantly lower than their PPVT-III scores. Three of the students involved in this OTTT-IP research have an alcohol-related diagnosis which leads to a comparison of receptive and expressive language skills as begun by the Asante Center. An examination of the atypical language acquisition and usage of children with alcohol-related diagnoses is suggested to improve understanding and support for these disadvantaged learners. The use of any standardized assessment tool (e.g. PPVT or EVT) must be used only to measure the effectiveness of an intervention and is not seen as a measure of the child. These snapshots of students' language skills assist in planning and may provide information for improved resources. I recommend using these assessment tools with a belief that educators and researchers understand the limitations and ethical implications of standardized testing.

- Continued development of culturally-appropriate and research-based support must occur. The OTTT-IP is a step in this learning process for students and teachers which must be modified to address individual interests, needs, and culture. The OTTT-IP provides examples of quality interventions but individual needs are met through adaptations, modifications, and additions by a qualified instructor.

Research Summary

Following the practical action research design a problem was identified, data was collected and analyzed, and changes were made based on the findings.

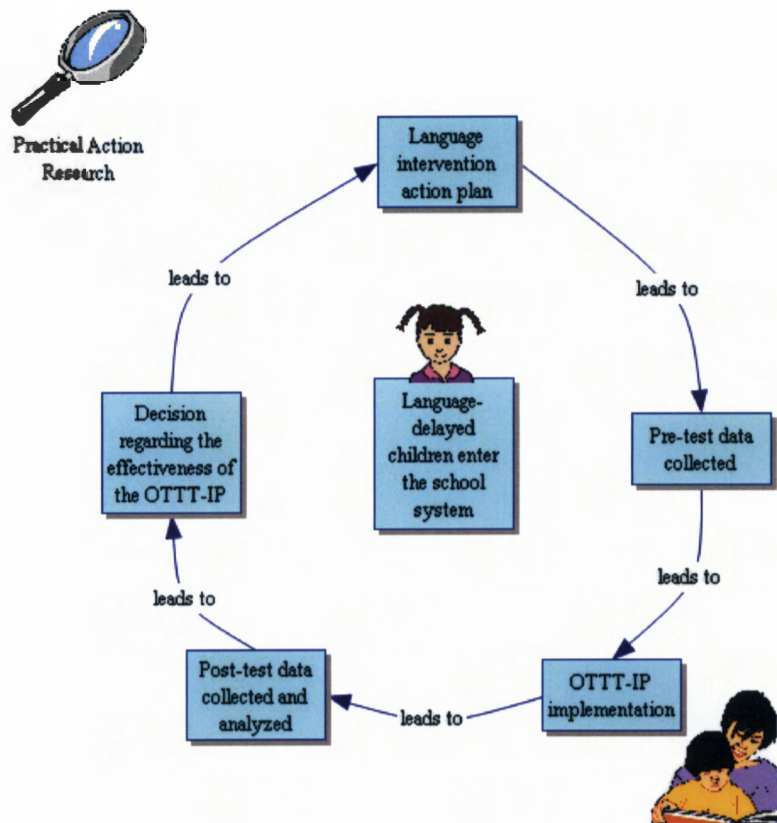


Figure 9. The OTTT-IP research design.

Language-delayed children are at a disadvantage in the school system; therefore, a plan for helping these learners was necessary. An informal pilot of the OTTT-IP showed improvements in PPVT-III scores and in story-telling skills. Data collected previous to the OTTT-IP showed limited changes in PPVT scores for language-delayed students. Further research into the effectiveness of the OTTT-IP for improving language skills was planned and implemented. The results showed improved use of story features and increased number of words used for all students in the oral narrative tasks. Five out of seven students showed increased percentile scores on the PPVT. Though statistical significance was not shown, I

believe the nine-week OTTT-IP improved language skills for these Grade 1 students based primarily on increased use of story features in the oral narrative task and the improved quality of story-telling.

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