"An investigation into the area of oral language conventions in communication; with an explicit focus on the importance and development of prosody for primary school students."

Human communication is based on a set of symbols created from social conventions and ranges from gesture and body language to its written form. One specific area is known as linguistic communication or oral language and this forms a significant component of the communication process. All human cultures have an oral tradition but may not have other features of communication. Children are expected to have acquired some degree of oral competency, before they reach formal schooling, and yet it is one of the most complicated tasks facing them. "A linguistic construction is protypically a unit of language that comprises multiple linguistic elements used together for a relatively coherent communicative function, with sub-functions being performed by the elements as well. Consequently, constructions may vary in their complexity depending on the number of elements involved and their relationship." (Tomasello 2006)

Every language is governed by a specific set of rules called conventions. A feature of the conventions governing oral language is prosody. "Prosody... is the study of rhythm, intonation, and related attributes in speech. It describes all the acoustic properties of speech... Qualitatively, one can understand prosody as the difference between a well-performed play, and one on first reading... Syntactically, the term generally covers intonation, rhythm and focus in speech. Acoustically, prosody describes changes in the syllable length, loudness, pitch and format structure of speech sounds... Phonologically, prosody is described by tone, intonation, rhythm, and lexical stress". (thefreedictionary.com 2009) Unfortunately, fluency often replaces prosody in metalanguage used to describe both reading and speaking and yet they are subtly different. "Reading fluency is more than just the ability to read fast; it includes an understanding of the message being conveyed by the text. Prosody is a sign or an index that the reader is actively constructing the meaning of the passage as the words are being identified and pronounced. While automatic word recognition ensures that fluent readers can accurately and effortlessly decode text, it does not account for their ability to make oral reading sound like spoken language (Stahl & Kuhn, 2002). In other words, fluent reading incorporates prosodic features such as pitch, stress and the use of appropriate phrasing." (Jennings, Morin, and Bell 2009) One difficulty in achieving a consensus among researchers of a definition encapsulating prosody is that prosodic features change, depending on the specific language.

There are three major conventions of any language: phonological, grammatical and genre conventions. Those who are able to control phonological conventions have the knowledge and ability to say and recognise the sound patterns of their language. They will have had sufficient experiences to enable them to successfully pronounce words in their language or dialect. Those who have control of the grammatical conventions have the knowledge and ability to form sentences and discourse, by placing each element of grammar into the specific sequential order as determined by the rules of their language or dialect. Simultaneously the effective language user is able to use language appropriate to the genre of their language and the conditions, which govern their use and are able to make appropriate selections.

Children must learn the set of language conventions specific to their environment. Beginning in the 1960's and 1970's, there were several attempts by researchers to identify how children acquire language. These had limited success. One early theory was the Semantic Relations approach of Brown (1973) and others, which used the semi cognitive basis outlined by Piaget (1952). However, this failed to show how children went from the semantically based stages to the more abstract synthetic stage of an adult. Chompskian generative grammar, used by Pinker (1984) and Chompsky (1968, 1980) believed that humans possess the same basic linguistic competence throughout their lives. Their theory, based on a set of abstract rules and principles, believed that children acquired all the words and then applied the rules to their use. This theory failed to take into account the variation between the language of adults and children.

Conversely, the Cognitive- Functional Linguistics emphasized that language structure emerges from language use. "Children are thought to acquire the more regular and rule based constructions of a language in the same way that they acquire the more arbitrary and idiosyncratic constructions: they learn them. ... then they construct abstract categories and schemas out of the concrete things they have learned." (Tomasello 2006) This group claim that children construct their language and abstractions gradually and in a disorganized manner, using two cognitive processes "intention reading and pattern finding". (ibid.) Cognitive- Functional Linguistics recognizes that grammar is subject to change over time and influenced by history, which accounts for the addition, deletion and changes to words, phrases and meanings.

The foundation of a child's listening, speaking and communication skills occurs within the early childhood environment and this is predictive of future language acquisition. There is little research into the variables related to a child's acquisition of grammar. Some children may be more efficient in their learning. There appears to be evidence that girls tend to score higher in language related tests and children with larger working memories seem to learn and process language more efficiently. (Adams and Gathercole, 2000) cited by Tomasello.

However, there is research, which shows that the language-learning environment is a definitive factor in language acquisition. Young children learn the skills of oral communication within "a powerful environment that can either help or hinder children's gains in speaking and listening abilities". (Weigel, Lowman and Martin 2007) Huttenlocher et al. as cited by Tomasello, "found that children's mastery of complex constructions are strongly related not only to the frequency with which their parents at home use these constructions, but also the frequency with which their teachers at school use these constructions."

Research would tend to suggest that the quality of what a child hears is less influential than the quantity of language. There is little doubt that a child needs frequent exposure to the conventions of their language to become an efficient user of that language. They need to hear how other participants use words and phrases to enable successful selection, application and generalization of language conventions. One highly successful process is the use of recasting by parents, or caregivers when children mispronounce or misuse grammatical forms, providing the child with immediate feedback. This enables the child to make necessary adjustments to their speech. Children model their first attempts at language on these social interactions with significant adults or older siblings. In his research, Tomasello found a high proportion of statements, requests and questions were used when communicating with the very young child, all of which have distinctive prosodic patterns. Even when the child's approximations were not complete, they corresponded to the intonation of the speaker. Language development is dependent on the home environment providing positive social interactions in meaningful contexts. Children acquire language because adults use significant words to talk about significant events.

Research evidence demonstrates that from infancy, children are particularly receptive to prosodic features in oral language. Among the supportive body of research is that of Hirsh- Pasek et al. (1987) who noted that infants listened longer to prosodic speech. Further studies found in Millar and Schwanenflugel (2008) state that infants were "sensitive to prosodic cues and syntactic boundaries that correspond with phonological phrase boundaries." Mandela, Jusczyk and Kemler Nelson (1994) found that prosody played a significant role at the earliest stages of infant's language acquisition, enabling them to "organize and encode what they hear". Their research, supported by others, suggested that "prosodic organization of speech into clausal units enhanced infants' memory for spoken information". Infants were better able to remember information in a single well- formed prosodic unit, rather than when the same information was presented in non-prosodic format. There is a considerable body of research to support the notion of a strong correlation existing between grammatical structures and organization of language and the subject's memory and ability to recall or retrieve information. Shukla, Nespor and Mehler (2006) support the notion that encoding and recoding is more effective when used with a variety of prosodic elements. Koriat, Greenberg and Kreiner (2002), cited in Miller et al, also support the idea that prosody helps to retain information in working memory so that it can be subsequently processed. Mandela et. al. further suggested that the prosodic structure acts as a kind of "perceptual glue" which keeps spoken information together and which may be helpful when acquiring important grammatical properties during these initial stages of language acquisition. It would appear that even very young infants, with limited language experience, benefit from prosodic organization of speech and use it to clarify lexical items and that from a very early age infants are approximating the prosodic elements of their environment. . Prosodic structure is a significant element enabling complex syntactic acquisition.

However, while prosody appears to serve an important function for the infant beginning the process of grammatical organization, it does not offer the complete solution. Infants use additional sources of information as they trial words and sentences in different circumstances. This ability helps the early learner to cope better when the prosodic organization does not directly correspond with the underlying syntactic organization. Children who rely solely on prosodic cues are more likely to make syntactic errors because they can be misled. Research by Schreiber (1987) as cited in Millar and Schwanenflugel suggests that young children are more likely to rely on prosodic elements. Older children and adults are more likely to use a variety of cues from other sources, including semantic (Pinker, 1987) and syntactic properties (Gleitman, 1990; Landau & Gleitman, 1985; Morgan et al., 1987; Naigles & Kalo, 1993) as cited by Mandela et al. Successful communicators use each of these sources as they move through the continuum from motherese/ parentese to proficient communicators.

The acquisition of oral language may be delayed in some children because of either physical, mental or environmental issues, or sometimes a combination of these factors. Several disorders adversely affect language acquisition. These include children on the autistic spectrum, who have difficulty with social cognition and social relations. Impaired prosody appears to be an integral part of autism even for the high functioning. These children usually exhibit difficulty with the pragmatics of language and their sentences are significantly less complex syntactically. They may fail to develop effective prosody in the major areas of intonation, timing, stress and focus. Children with autism are usually repetitive in their speech and often imitate adult speech. This can give a false impression of their language capabilities. Other children with difficulties in oral language may have a specific language impairment (SLI) or delay. These can range from issues with pragmatics to expressive or receptive language, resulting from issues with cognitive, perceptual or memory difficulties. Hearing problems in early childhood can result in ineffective receptive and expressive abilities in the child and subsequent delays in successful language acquisition. They may have issues with articulation or inappropriate prosody.

Unfortunately, not all children have the opportunity to have the sufficient quantity or quality of social interaction during the vital years of early childhood. "The interaction between infants and their caregivers lays the foundations for later learning." (McLaughlin, 1998) quoted by McLeod and Bleile (2003). Research suggests that several aspects of the home can affect the child's language development. Several studies cite the mother's level of education as a significant factor in the development of a child's receptive and expressive language. However, this depends on the degree to which parents engage their child in social interaction and provide them with the opportunity to participate in these conversations. Socio economic status (SES) can also affect the type of language modeled in the home. "Mothers in poverty tend to use more directive speech, which is less complex" (Snow et al. 1982; Hoff-Ginsberg, 19991, as quoted by Weigel et al., 2007). There is a tendency in low SES families for less conversational talk, use of negative imperatives and less supportive language, which fails to provide the child with adequate exposure to conceptual development. There seems to be a strong correlation between parents who believe in the importance of providing optimum language experiences with their children and the skills that these children subsequently develop. Additional research supports the significant role that the educational level of the childcare provider has in the child's acquisition of language. For some children, who spend considerable hours in less stimulating childcare provision, language and conceptual development are delayed, with similar results to that of low SES families.

Recognising that some children come to school with an inefficient or delayed network of language development, the ICPALER model (Munro 2009) provides a framework in which teachers can observe and determine the proficiency of a child's oral language development. The ICPALER acronym stands for Ideas, Conventions, Purpose and Ability to Learn in both the Expressive and Receptive domains of oral language. A focus is placed on the quality of what the child expresses and comprehends, how well the child uses language conventions, how well they show the purpose for engaging in the communication, their capacity to learn how to use language and the confidence that they show while communicating. Each of these areas is a vital component in the child's capacity to be an effective communicator and is subtly linked to another.

Children who have difficulties in their expressive or receptive conventions of language often have associated areas of communication difficulties. Prosodic

disorders are usually a problem of expression. However there can also be an associated problem of receptive impairment. Prosodic disorder is described as prosody that is "well or ill formed, and whether it is well or ill used. *Ill- formed* or *atypical sounding* are thus terms that can be applied to prosody that sounds odd or unusual or bizarre, regardless of how effective or functional it is; conversely prosody may sound well formed but not be used in an expected way and thus be described as *ill used* or *atypically used*." Peppe (2009)

Children with prosodic disorder may present with articulation difficulties. They may speak in an unusual voice quality or tone. They may use a singsong voice, which can be either wide or narrow in its pitch span. Conversely they may speak in a monotone voice, consisting of the one tone or give equal duration to each syllable. It may be that their grammar has been affected by a prosody disorder known as agrammatism. "One of the manifestations of agrammatism is the loss of function words (articles, pronouns, verb inflections) that typically carry no stress: a condition that is also seen in children with specific language impairment (SLI)." Ibid. Typically, these children produce a succession of stressed words which results in unusual rhythm in speech. Children may also have difficulty in the correct stress that they place on syllables, words or phrases, which affects the ability of the listener to understand them correctly. Children who have had limited social experiences may have additional difficulty determining visual prosodic cues, gestures or body language, especially if this is opposed to the actual context of the utterance. "Deficiencies in prosodic competences are likely to have negative repercussions for a person's abilities to communicate to others. People who do not master the prosodic rules of a language, experience problems to express themselves in a linguistically or socially acceptable way, or may find it difficult to interpret prosodic expressions as qualifiers of another person's messages." Swerts (2009)

" A history of speech – language problems places (children) at risk for reading difficulties that are four to five times greater than those of children from the general population (Catts, Fey Zhang and Tomblin 1999). In the reading process, children with prosodic difficulty tend to place equal emphasis on every word and the reading sounds "robot – like". They tend to read text as if it were a list of words, with infrequent use of two or three word phrasing, often ignoring punctuation. The reading may be excessively slow or fast, without any indication of prosodic boundaries marked by appropriate pauses, thus destroying the syntax and making comprehension difficult. The rubric, developed by Rasinski and adapted by others (see Appendix 1), shows how teachers can assess some aspects of a child's prosody in the reading process. In learning to read the child "transfers syntactic knowledge previously embedded in production routines to new routines for comprehending written language." (Read et al. 1979, as guoted by Witte 1980.) Read et al. suggests that children not only need to learn "lettersound correspondences, they also might need to learn to associate the correct prosodic cues with the printed text or to compensate in some way for the lack of them." However, the child without these embedded prosodic cues does not have the experience or ability to make the necessary transfer of knowledge, while the good reader is able to adapt and revise their reading because they are using their prior knowledge of the conventions that govern that language. This research also serves to remind teachers that if children rely on prosodic cues to inform them about the syntax of the text then they need to learn words in the context of the text and not as isolated words.

There are a number of diverging views regarding the importance of prosodic cues in written communication. Although Vygotsky (1962) claimed that "written language cannot be equated with oral language development", Dyson (1990), "Weinert (1992) suggested that a specific impairment in the ability to benefit from the prosodic organization of fluent speech might delay, if not prevent, children's acquisition of important grammatical competencies." as cited in Mandela et al. Simply put by Chafe(1978), "prosody and grammar support each other". Children with fewer experiences of language acquisition come to school with a smaller number of words, phrases, concepts and structures within their repertoire, which can be used in oral and written communication. Writing reflects a person's capacity to communicate effectively. Whilst there is no doubt that the act of writing is a complex function, it becomes even more difficult for the child without control of the conventions governing their language and even more difficult for those children who have not experienced language through effective social interaction. It is "through dialogue with others, children enter into "the social history of imagination". Through dialogue, they come to realise the functional potential of the varied symbol systems valued in their society." (Vygotsky, 19978 as quoted by Dyson 1990) Children in the early years learn the discourse conventions they ultimately use as writers. They have experiences of reading the words written by other authors and learn what is known as "concepts about print". Children with prosodic difficulties struggle to communicate effectively in written form. "Good writers ... listen to what they write. They listen while they are writing, and even more importantly, they listen while they are reading what they wrote in order to make changes. "(Chafe 1987) It is by listening to what they wrote that writers can modify conventions to ensure effective discourse. Some writers have difficulties in both selecting and maintaining all the elements of the discourse and having sufficient experience to make necessary changes to ensure effectiveness.

"If children have been slow to acquire speech or have been offered few opportunities to hold conversations... there can be limitations in the grammar they control, which might mean they have difficulties with comprehending oral and written language". (Clay 1991, as quoted by Kirkland and Patterson 2005).One test used in the primary school to ascertain the child's level of oral language ability is the Record of Oral Language developed by Clay (2007) Administration of this test shows the child's ability to manipulate language from simple sentences to compound and complex level. Whilst there is debate as to what exactly is being tested, it enables an observation of prosodic features: including articulation, intonation, pace and phrasing of the discourse. Children do show an understanding of the text in their reply.

For most children with minor issues in prosody and oral language implicit and explicit classroom instruction can achieve excellent results. They hear explicit language used for explicit situations. They have the opportunity of practising both the conventions of language and using its prosodic cues, within a supportive environment. They have the opportunity to practise the social conventions of that language in authentic situations with a high degree of scaffolding, which can be withdrawn as required.

A classroom provides the perfect opportunity to develop rich oral competencies along with opportunities for the development of both reading and writing. "Displayed realia and artifacts related to topics of study in the classroom provide the opportunity for critical dialogue". (Gentile 2003 as quoted by Kirkland and Patterson 2005) This also applies to class pets and special events. If children are coming to school with insufficient oral language skills and strategies, then

schools can provide meaningful and engaging social interaction to elicit greater degrees of proficiency. Classrooms should be rich sources of social communication, with displays, posters, texts, libraries, computers, interactive whiteboards, working areas and quiet reflective areas. Children's work should dominate the surfaces to demonstrate their ability to communicate with each other and the world. By using the interactive whiteboard and marking their attendance each day, the child is seeing the purpose and functionality of language. The logos used on the task board help the child to connect to symbols used in the world. Show and Tell is the opportunity to practise both expressive and receptive skills and strategies. The classroom should provide the opportunity for child-to-child discussion about significant topics, which may need to be clarified and shaped for the audience. The use of Reader's Theatre, and the dress up box, enables retelling, social interaction and sometimes discourse to an audience. Reader's Theatre is an excellent way of improving prosody. By practising a prepared script, the children improve fluency, phrasing and expression. Plays transform "their own texts into dramas (which) allows children and teachers to find words for unarticulated ideas" Dyson (1992) As the child moves towards greater independence in his/ her speech, the support offered by teacher's scaffolding is decreased. The teacher has taken the role of the significant adult, who is able to recast incorrect attempts at communication, to model and explain the significance of conventions, including the prosodic features, and expects high standards.

Mindful of individual learning styles, teachers should use a variety of instructional strategies. Shared reading improves prosodic elements by rereading the text several times to improve comprehension and prosody. Because the child learns in meaningful contexts, stories and poems provide the opportunity to not only develop the child's vocabulary, but also to enrich their understanding of how prosodic features of language affect the way a text is read and comprehended. Picture storybooks without words, and picture chats, stimulate levels of comprehension and communication, eliciting the child's understanding of the topic. Skilful teacher questioning remains a valuable tool in encouraging recasting of ideas, and connecting the text to the child, other texts and their world. Guided reading is another area where the teacher enables the child to draw from their personal experiences, make connections with the text, and be able to articulate their understanding to other group members. Repeated readings are one of the most powerful tools in the development of prosodic structures and confidence and there has been significant research to show the improvement in rate, accuracy and comprehension. (See Jennings et al. 2009) Some children will require additional support to enable them to develop the confidence to become effective language users. They may require emotional support to become risk takers, or to improve their self- efficacy. "All of these activities serve as catalysts for propelling inexperienced readers into prosodic development and ultimately comprehension which is the goal of all literacy instruction." (Jennings et al. 2009)

Teachers can facilitate a variety of language enrichment strategies for those children who come to school with prosody and convention difficulties will improve the effective communication of all students. The risk is that "children who do not develop fluency early on in the schooling process are likely to experience difficulty learning and comprehending important material from texts introduced in later grades (Chall, Jacobs & Baldwin, 1990: Lyon, 1997; Rasinski et. al., 2005)" as cited by Miller and Schwanenflugel (2008) Prosodic elements, language conventions and purposeful oral communication are embedded through successful social interactions with significant others. Sometimes it becomes the role of the school to provide positive social interactions in meaningful contexts. Sometimes it becomes the role of teacher is to use significant words to describe significant concepts. Children will acquire the conventions of language, including prosodic elements if the quantity of interactions and the quality of those interactions is significant. The ability to make significant progress though other areas of communication relies on the degree of mastery of linguistic constructions. It is essential that all children have mastery of the conventions of their language, if they are to become effective and efficient communicators.

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Appendix 1.

Oral Reading Fluency Scale

4. Reads primarily in larger, meaningful phrase groups. Although some regressions, repetitions, and deviations from the text may be present, these do not appear to detract from the overall structure of the story. Preservation of the author's syntax is consistent. Some or most of the story is read with expressive interpretation. Reads at an appropriate rate.

3. Reads primarily in three- and four-word phrase groups. Some smaller groupings may be present. However, the majority of phrasing seems appropriate and preserves the syntax of the author. Little or no expressive interpretation is present. Reader attempts to read expressively and some of the story is read with expression. Generally reads at an appropriate rate.

2. Reads primarily in two-word phrase groups with some three- and four-word groupings. Some word-by-word reading may be present. Word groupings may seem awkward and unrelated to the larger context of the sentence or passage. A small portion of the text is read with expressive interpretation. Reads significant sections of the text excessively slowly or fast.

Reads primarily word-by-word. Occasional two- or three-word phrases may occur

 but these are infrequent and/or they do not preserve meaningful syntax. Lacks
 expressive interpretation. Reads text excessively slowly.

A score of 1 should also be given to a student who reads with excessive speed, ignoring punctuation and other phrase boundaries, and reads with little or no expression.