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**Literature Review**

**Doctorate in Educational, Child and Community Psychology**

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# 2.0 Literature review

## 2.1 Introduction

Due to the relatively fluid nature of the research project, a more general review will be provided at this current stage of the research which will be refined as the research process advances.

As the current project is centred around language and communication, a limited discussion of a number of influential models of language acquisition will be discussed, along with predictions that each model may make with respect to the type and nature of linguistic improvements that could be made as a result of intervention.

As the central subject of this thesis is "communication" further discussion regarding the role of nonverbal communication and its relationship with spoken language will ensue in order to provide background to the project as a whole.

Section 2.3 provides a brief discussion of a number of language interventions, which ultimately looks to establish the effect of an immersive, rich communicative environment on language development in school age children.

Whilst the first half of this review focuses on language and communication with respect to the children, the second part of the review discusses current Government policy perspectives (section 2.6) and provides some further discussion relating to the way in which school culture and management structure enables communication to function in schools. The review ends with a number of tentative conclusions based on literature reviewed so far.

## 2.2 Three theoretical models of language acquisition

A critical issue for interventional studies which seek to bring about improvements in language in children is the definition of language held by the researcher/practitioner. Such an issue is important when attempting to establish the extent to which a child is able to develop an adult like competence in language.

Given the wide range of disagreement regarding this issue, and it's clear relationship with our ability to predict interventional success, it seems prudent to include a brief discussion of three particularly influential standpoints on language.

### 2.1.1 Generativism, Connectionism and Cognitive Linguistics

The Chomskian school of generative linguistics, adopts what is now considered to be a relatively extreme, nativist view of language. This position maintains, (in accordance with principles and parameters theory (Chomsky 1964; Chomsky 1967; Chomsky 1976; Chomsky 1980)) that principles of syntax are genetically pre determined and "set" according to structural cues from the language environment during infancy (Chomsky and Katz 1975; Chomsky 1976; Chomsky 1982; Chomsky 1991; Chomsky 2000). Syntax under this view is thought to be doubly dissociated from other aspects of cognition (Chomsky 1991; Chomsky 2007), which is in line with work by Fodor (1983) and adds weight and further description to the view of language as being a "modular" ability. Given this perspective, children's level of syntactic competence should be invariant across individuals, thus interventions seeking to improve a child's receptive syntax would logically fail. Improvements could potentially exist when examining performance based variables such as

(amongst others) productive syntax, lexical knowledge and pragmatics, which under what is sometimes termed the Modular-Generative model of language have links with other processes such as memory , motor skills, theory of mind and executive processing (Pinker 1994).

Alternative views of language may make alternative predictions regarding the extent to which it may be possible to improve language via intervention. Interactive connectionism (Rumelhart and McClelland 1986; Saffran, Asling et al. 1996; Saffran, Johnson et al. 1999) for example, adopts the opposite view to the Chomskian perspective. Proponents of this position assert that there is no innate or hardwired cortical structure associated with language[1], and that language is acquired directly based on the linguistic environment which exists around the child. This perspective would suggest that it is possible to improve and develop every aspect of language including receptive syntax. Implicit in the Chomskian perspective is the notion that a child's use of productive syntax may not reflect the child's receptive syntax, thus syntactical/grammatical errors made during oral communication do not necessarily imply a lack of understanding. In contrast, connectionism makes no particular assumptions with respect to a child's understanding of receptive syntax, which, like all other aspects of language are completely reflective of the environment around the child.

Particularly influential in this general area is the rise of probabilistic connectionism (Seidenberg 1997), which asserts centrally that people process language and grammar based on the likelihood of one particular aspect of language occurring after another. Likelihood ratios or probabilities can be affected and altered according to the surrounding linguistic environment, which is used to either reinforce or alter an

[1] Or indeed any other aspect of cognition

individuals likelihood estimates, and in turn would force change in the way in which an individual uses and produces language. The appeal of this position is that it provides a mechanism which can potentially account for variations in syntactic combinations used by individuals in everyday discourse. Opponents of this position however point out that we have yet to see complete model of acquisition, computational or otherwise which is able to account for this position (Pinker 1994; Pinker 2002). This general position additionally gives rise to the concept that language in every sense is variant across any given groups of individuals, given the variation in early and current language environments (Plunkett and Marchman 1991) and would correspond to socio-environmental differences between individuals. Interestingly a small number of language studies working within a probabilistic connectionist framework have reported relationships between SES and language and found a high degree of morphosyntactic, syntactic, lexical and phonological variation in groups of children and also in adults (see Chater and Manning 2006 for a review). Proponents of this position claim that these findings are contrary to claims made by Chomsky et al[2].

This particular model (probabilistic connectionism) would, in theory, suggest that systemic/ environmental intervention would be particularly effective when seeking to alter children's language skills, assuming that the intervention takes place over a sustained period of time. Of all theoretical frameworks held, the connectionist perspective is arguably the most sensitive to group based intervention, which forms the basis of the intervention referred to throughout this thesis.

A proposed middle ground position is often referred to as cognitive linguistics (Langacker 1999; Tomasello 2003). Cognitive linguistics does not refute the

[2] Although Chomsky has a fundamentally different definition of syntax to most connectionist theorists

suggestion that language has innate components, but suggests that language and therefore language learning is more general than the position of (for example) generative linguists. Under this (non modular) position, language is viewed as an integrated system which is dependent and related to other cognitive systems such as working memory and executive functioning. This perspective would not necessarily preclude the principles of probabilistic connectionism, but would place limits on the capacity to process and absorb language due to the interaction and level of functioning of the other systems. This particular model would make predictions about the effects of a language intervention difficult. Theoretically, language could be improved based on environmental modelling in a similar way to the one that is associated with connectionist modelling. The position held by cognitive linguists differs however due to the more integrated view of language, which would not allow for language to outstrip cognition in a more general sense, but also allows for some separation of cognitive abilities. Language, therefore could also improve as a result of efforts to improve other aspects of cognition, such as working memory and executive processing via a more holistic approach. A holistic approach in the case would refer to an intervention which doesn't seek specifically to improve language but as part of a more general enrichment programme. This type of approach is advocated in current government policy and is discussed in more detail in section 2.4.

This thesis overall adopts the position maintained by cognitive linguists, advocating a due to the recognition of the wider cognitive subsystems associated with language, which lend themselves to a holistic approach to language intervention, which provides the backdrop to the current research.

## 2.2 The role of nonverbal aspects of language in communication

Whilst much of the research relating to language acquisition (see section 2.1) and language intervention (see section 2.3) is focused on the acquisition of more structural elements of language, it is worth noting that the more general concept of communication stretches beyond this. Communication encompasses both verbal and nonverbal aspects of language which must crucially be taken into account when discussing communication. As the current study surrounds the issue of effective communication in key stage 3 it seems relevant to briefly discuss the role of gesture in communication.

### 2.2.1 Two positions on the relationship between verbal and nonverbal aspect of communication

Currently, a range of different perspectives exist regarding the relationship between manual gesture and oro-facial communication. Highly influential work by Rizzolati and Arbib (1998), routed in evolutionary psychology views language and gesture as fundamentally the same, citing neurological evidence to support the notion that that "meaningful" gesture evolved on top of language. As a result of this Arbib (2005) suggests that the use of gesture and the use of oral language results in activations of the same language circuits in Broca's area[3].

Whilst this perspective can be regarded as compatible with a modular-generative account of language (see section 2.1), it is also possible to link it with a cognitive perspective, which would merely suggest that gesture is therefore affected by the

[3] An area long associated with language processing

same underlying language processing constraints that affect other forms of pre productive language.

An alternative position regarding the relationship between language and gesture comes from McNeill and colleagues, who assert that a synchronous relationship exists between language and manual gesture (McNeill 1996; McNeill 2005). More specifically, Mcneill asserts that we use the production of gesture to display concepts that would otherwise be difficult to express when relying solely on the spoken medium. Work by Krauss (1995) for example, suggests that the use of manual gesture when communicating is a characteristic of effective communication. Manual gesture can in some circumstances be considered to be a more efficient and effective symbolic tool, particularly when expressing spatial concepts ("The box is this big"[4]). The position held by Mcneil and colleagues can therefore be considered alternative to the one or the other perspective implicit within the Mirror System Hypothesis.

In terms of contribution to communication systems, both positions assert the importance and primacy of gesture as a medium of communication although differ in terms of the actual relationship that they have with language. Processing of gesture (as opposed to oral language) could also be easier for some children. One reason for this could relate to variation in the way that different children process information. Badderly's model of working memory (Baddeley and Hitch 1974; Baddeley 1986; Baddeley 1996; Baddeley 2003), for example, dissociates visuo-spatial working memory (which would be more involved with processing of gestural information) from phonological working memory (which would be more implicated for processing spoken information). Children who struggle to engage with verbal content of lessons due to weak loop capacity could therefore compensate by using gestural cues which

[4] In this particular example an individual could be seen as holding his/her hands out to indicate the dimensions of the object.

rely less on verbal working memory, assuming appropriate stimulus is available (Gathercole and Hitch 1993; Gathercole and Packiam Alloway 1998). Modelling or extended use of gesture in a classroom, in addition to other symbolic prompts context may therefore impact both in terms of a child's understanding of the class content generally, and may also provide an additional source of information which can be used to enhance the spoken medium more typically available in class.

### 2.3 Language Interventions

Cross comparison of differing language interventions is often fraught with difficultly, largely due to the inherent difficulties facing researchers in recruiting homogenous and statistically representative groups of children in order to inform conclusions. Sample selection represents a particularly important issue when working within a cognitive linguistic framework, as due to the multi modal conception of language implicit in this position, groups of children exhibiting similar surface difficulties, (e.g. expressive language difficulties) may be due to differing underlying reasons (see (see Leonard 1998 for a detailed review). Results from studies of language disordered populations, particularly ones that have not utilised detailed matching criteria must therefore be treated with caution.

Generally speaking, it is possible to divide most language interventional studies into one of three categories, which have been referred to as direct training of linguistic behaviours (didactic), teaching a child to respond more effectively to the linguistic environment (naturalistic) and a combination of these approaches (hybrid). (Law, Boyle et al. 2000).

In a review article Law et al (2005) systematically review a large number of language interventions, reporting largest effect sizes associated with interventions aimed at improving expressive language outcomes. In particular Law et al indicates that studies show particular improvements when measures of expressive vocabulary are taken but not when the study outcomes rely solely on measures of expressive syntax.

Studies choosing to focus on expressive syntax have adopted a range of different measures which make firm overall conclusions regarding the sensitivity of expressive syntax to intervention difficult to draw. Compounding the lack of methodological consistency in this area is also lack of theoretical clarity regarding expected outcomes from interventions, particularly in older studies. Without a clear theoretical perspective guiding the construction of a given study, it is often difficult to interpret the precise meaning of any results drawn (see section 2.1 for discussion).

A number of studies that failed to find a statistical difference as a result of intervention, (see Law et al 2000 for review and meta-analysis) such as Courtwright (1979), adopted sentence length as their outcome measure. In this study, no account was taken of the grammatical complexity of the sentences such as the degree of morposyntaxic agreement and overall clause structure which are usually associated with expressive syntax. Arguably this type of assessment is more reflective of working memory capacity, which is unlikely to develop purely as a result of sentence modelling[5] (which was the nature of the intervention in the study). In this case, even if an effect had been shown, it would have remained debatable as to whether the results reflected any genuine improvement in language.

More recent work by Robertson (1997) however, provide evidence for improvements in expressive language when children work with typically developing peers. Whilst

[5] Work by the SLI Consortium (2002, 2004) even suggests that working memory cannot be improved

this result would seem to advocate the use of peers as a language intervention the exact impact of this on language functioning remains unclear. For example, increased engagement in pair work of this nature, may more reflect increased levels of social confidence (Kniveton 1998).

Studies that have attempted to use more sophisticated standardised measures of expressive syntax (incorporating grammatical complexity) (Gibbard 1994a; Gibbard 1994b; Fey, Cleave et al. 1997) have also typically failed to find any statistically significant effect due to intervention. Studies of this nature tend to be based on work with language impaired (LI) children. These studies often rely on children having a pre diagnosis of expressive language difficulties and often no attempts have been made to establish the homogeneity of the sample. This is a particularly crucial issue when working from a cognitive linguistic paradigm (See above) as within this framework, the functionally diverse nature of language could potentially result in a range of apparently similar "surface" similarities in language impairments, but for different underlying reasons. As a result, statistical analysis which involves the comparison of means should be treated with extreme caution due to the potential heterogeneity of samples, and the resulting small sample sizes[6].

Whilst interventional attempts to improve expressive syntax have for the large part been unsuccessful, attempts to improve vocabulary usage in children have been more successful. Successful vocabulary interventions have typically involved the use of indirect interventional approaches (Wilcox, Kouri et al. 1991; Girolametto, Pearce et al. 1996a; Girolametto, Steig et al. 1996b; 1997).

Studies that have worked directly with children such as Girolametto et al (1996a) typically show either no effect or small effect sizes where vocabulary is used as a

[6] Which are generally a result of difficulties in recruiting appropriate samples

measure[7]. Unsurprisingly, a number of studies found that expressive language interventions were only effective when working with children that were not considered to have receptive language impairments in addition to expressive difficulties.

Interventions in this area typically involve children being placed in an environment where language is modelled to them in an informal and discrete way. Studies have included the use of combining language impaired children with typically developing peers (Robertson (1997), indirect parent administered therapy (Girolametto 1996a,b) and school-class based intervention (Wilcox 1991).

Overall, a growing number of studies support the use of indirect interventions although very little data exists which examines the effectiveness of these types of interventions with typically developing children.

### 2.4 Communication definitions and policy

Current government policy has recently identified speech language and communication as key and essential to each child's potential to achieve each of the Every Child Matters (ECM) agenda items (staying safe, enjoying and achieving, making a positive contribution and achieving economic well being). The Bercow report (Bercow 2008) was commissioned in order to review the provision of SLCN services in the UK. Specifically, the report focuses on three key issues, the range and composition of services required in order to meet the needs of children and young people, the role of early intervention and the potential role of health and education services, and to establish examples of best practice in order to provide temples to be

[7] Although direct intervention has been shown to be effective for some types of intervention e.g. phonological awareness see Gillon (2000)

used nationally. Recommendations from the Bercow review are based on 5 themes, which were extracted during the review process, although it is unclear as to how these themes in particular were extracted. The first theme refers to communication being crucial, highlighting the need to raise the profile and understanding of Speech, language and communication needs across the board, making a number of recommendations to this effect. The report itself however remains somewhat vague regarding the specific aspects of communication that people are to be made aware of. In line with research regarding the use of families in language interventions, the recommendations also incorporate an awareness campaign targeted at parents and families which emphasises the primacy of communication in child development (see section 2.4 for details).

The importance of early identification and intervention is also emphasised in the Bercow report. Whilst this is seemingly a logical position, the nature of "predicting" language delay or language disorders rests on the notion that we are able to define a language disorder (which raises a number of further theoretical questions – see sections 2.1 and 2.2). This line of thinking would naturally mean that children who are slow to learn language but do not fit criteria for targeted intervention would not receive support. It is possible that even children who are regarded as typically developing, additional language support, in the form of teacher and school awareness could impact positively upon curricular access.

In a review of SLCN provision, Lindsay et al (2008) reports that over 80% of SLT services are oriented towards reception to KS2 with only a small proportion of services aimed at ks3 onwards. In theory (under this system) all children with communication needs would be identified and supported early on, which would negate the need for equivalent input in secondary school. Unfortunately this system

also indicates that children who are not identified early on are less likely to receive support in secondary school. In this instance, children with communication needs may arguably struggle more than they did during primary school as a result of the increase in communicative demands associated with a physically larger and more complex organisation and a more demanding curriculum. This assertion is mentioned in the Bercow report which refers to parental reports of services appearing to disappear when a child begins secondary education. Bercow briefly touches upon this issue in his recommendation that key transition points be prioritised, however this recommendation is unlikely to provide sufficient input throughout secondary school. Refreshingly however point 2.26 in the Bercow report refers to the use of holistic approaches to supporting children and young people which is compatible both with the general position on language adopted in this thesis and with the notion of indirect intervention discussed in section 2.3. In addition it is also possible that children's needs, particularly with respect to communication will change over a given period of time as a result of differing rates of development. It could therefore be possible (and arguably likely) that children whose language difficulties were considered of secondary importance in primary school could become primary difficulties in secondary school. Such occurrence would naturally require further intervention at secondary school.

In order to ensure that children and young people receive the support that they require, the Bercow report also highlights the need for effective communication around the child, in particular between parents, school and visiting professionals. The report refers to the need for more effective joint working between local authority funded workers such as Educational Psychologist and NHS funded workers such as

Speech and Language Therapists. Communication between these parties in particular is deemed to be critical particularly when referring to children with statements.

The Bercow report also refers to the notion that parents often feel confused and frustrated with services.

The Bercow report also advocates a continuum of services to be developed around the family in order to provide parents with feedback and consistency. This is largely based on a number of studies that have reported success with parent led, indirect language interventions.

A government paper entitled "Better Communication" (DCSF 2009) was an action plan published in response to the recommendations laid out in the Bercow report. Better Communication primarily addressed the need for further awareness of SLCN highlighted in the Bercow report. Strategies proposed by the Government included the use of a national communication council, headed by a communication champion of which the aim was to coordinate services relevant to SLCN, in addition to providing feedback to the government on this issue. The action plan also makes reference to the need for professionals to support the development of all children's speech, language and communication advocating the integration of awareness of SLCN into training programmes and professional development initiatives for existing children's workforce employees. The report specifically refers to senior school leaders, commissioners and teaching staff to play a key role in this process. For professionals who are currently working (and not on a training course) therefore, information regarding provision has the impression of having a top down process, relying on management to raise and promote awareness of SLCN with individuals on the level below them. The extent to which this information is disseminated therefore depends largely on the communicative efficiency and communication links between the levels

of management (see section 2.5 for discussion). In addition, whilst the government makes it clear that services are to be made available to children who require support where required, it does not provide additional resources which would be required to support children with SLCN at secondary level. The action plan also supports a series of pathfinders on effective commissioning for children and young people with SLCN. Pathfinder projects (of which the current project is one) which will be subsequently used in order to support the development of provision for children with SLCN and inform the development of improved services that are in a position to intervene more effectively (see section 1.0 for background).

Despite a number of documents, some of which containing detailed recommendations relating the provision of services to support children's communicative development, there is a notable lack of clarity regarding the proposed definition of communication. Whilst seemingly obvious, communication is by definition a multimodal construct, which incorporates a wide range of issues, stretching far beyond language or linguistic theory, which consumes a large portion of the related psychological/psycholinguistic research base. As section 2.2 points out, even when focusing specifically on language research, a large range of key theoretical issues exist which may impact on the way in which interventions may be constructed. The emphasis in the document "Effective and Efficient Use of Resources in Services for Children and Young People with SLCN" (Lindsay et al 2008) is in establishing interventions and practice that are considered to be good value for money. The effectiveness of interventions is however, often difficult to determine due to insufficient monitoring of effectiveness (which is noted in the report) and thus resulting in an insufficient evidence base upon which decisions can be made. The establishment of such an evidence base, particularly a reliable one, however may be

something of a tall order given the variable, inconsistent, and ill defined nature of the field at present (see sections 2.2 and 2.3). Finally, for reasons mentioned above, there appears to be a large gap in the SLCN provision for secondary schools. In addition to the one on one support that is provided by Speech and Language therapists to schools, schools often also benefit from more systemic advice relating, for example, to the physical environment in the school, referring to how they may benefit from the use of symbols etc to support SLCN children.

In addition, teachers who have had contact regarding a specific child and have had subsequent input from an SLT regarding effective differentiation for children with SLCN will naturally be more aware and able to include children with SLCN as a matter of course in classroom activities. The process of meeting speech and language therapists therefore can lead to a more aware and inclusive school environment. Such an environment would be likely to be of benefit to pupils even who do not meet the criteria for direct language intervention. Schools which have reduced access to SLCN support (i.e. secondary schools) would therefore be at an immediate disadvantage, when trying to include children with speech and language difficulties.

Where good practice does exist in secondary schools, the large and more complex nature of secondary schools would make this difficult to disseminate across the school. The role of other professionals such as Educational Psychologists and Specialist Teachers who often have contact with the same children or groups of children as SLT's would naturally be to support the school in improving and differentiating for these children. In reality however, this leads to a rather patchy and inconsistent approach to supporting children with SLCN (diagnosed or undiagnosed) in secondary schools.

The next section will address the issue of communication in secondary schools from an organisational perspective and draw links with the ability of secondary schools to effectively differentiate for pupils with SLCN.

## 2.5 Communication in secondary schools – an organisational perspective

As discussed in section 2.4, current government policy is partly oriented towards raising awareness of and around children with speech, language and communication needs. In order to include SLCN children in mainstream education it is necessary to create an environment which enables teachers to suitably differentiate the curriculum in order to meet the needs of the child.

The government action plan discussed in section 2.4 relies on managers to disseminate awareness of SLCN to those working below them, which by extension assumes that an appropriate communication system is both in place and will allow all concerned parties in and around schools to access the disseminated information. Without an effective communications infrastructure within schools this and other initiatives are unlikely to result in effective change for children. Whilst only a small number of studies have focused specifically on communication in school a number of studies have referred more generally to the issue of staff effectiveness, staff innovation and school culture, of which communication is considered to form a key part.

## 2.6 Relationships between school culture and communication

A key influence on the type, style, and effectives of communication used in school is culture. Due to the large volume of literature surrounding the issue of school culture a full discussion of this area is beyond the scope of this review. For the purposes of discussion this thesis will adopt the wide definition of school culture provided by Lubeck (1985) who stipulates that culture is "the meaningful system of beliefs and practices". Lubeck additionally asserts that teachers in a given school need to acquire sets of understandings about what is required of them in terms of beliefs, attitudes and values in addition to specific skills and teaching strategies in order to become an accepted member of the organisation. Thus, the culture of the school, could impact upon the way in which government policy and government initiatives are used, interpreted and implemented in school. If school culture is not one which facilitates regular and clear communication for example, then initiatives such as the ones discussed in section 2.4 automatically fail (Billett 2006)

Frequently mentioned in the literature as a central source of organisational variation is the underpinning philosophy of the head teacher ((Pollard 1985; Nias 1989; Nias, Southworth et al. 1989) which has a strong impact on the culture of the school. Whilst this is regarded by a number of researchers as a key determinant of school culture, work by Acker (1990) indicates that a number of additional variable are also important determinants, variables such as size of school, age range, type of children/community served, physical setting and resources available to the school are all considered to be crucial.

School culture has been linked to a number of different issues in schools, including innovation. In the context of the current study, innovation would refer to the adoption

and implementation of government policy and the subsequent development of interventional strategies relevant to SLCN.

Classical studies into the role of innovation in school such as Miller & Lieberman (1988) point out that the process of innovation (in the context of the current work this would refer to the implementation of SLCN initiatives) would differ for example in inner city schools with challenging intakes and mobile sets of teachers to well resourced schools in relatively affluent areas with high degrees of parental participation or rural schools with high teacher to student ratios.

Thus school culture can be said in some sense to mediate government and / or individual initiates in schools. In addition, a number of papers have indicated that the opportunities to communicate with each other in school also provides opportunities for innovative practice due to the process of reflecting and sharing experience (Buchmann 1989; Richardson and Placier 2001). Work by Jurasaite-Harbison and Rex (2010) extends this issue further, placing communication at the heart of collaboration in school, reporting that the teachers in their study were most likely to engage productively in collaboration and informal learning where the schools physical and social environment promoted such interactions and was actively encouraged. This was particularly the case when teachers and administrators held a shared interpretation of educational polices and where teachers regarded informal learning and shared practice as an important part of their professional work. These factors could be key areas to be investigated when attempting to gain an impression of the communicative culture in a school.

## 2.7 Functional approaches to communication in school

Work by Barker & Tompkins (1994) suggest that movements away from traditional top down models of management in schools and movement towards approaches such as total quality management (Peters 1997) has resulted in a need for reconfiguration of communicative structures in schools. The flatter organisational hierarchy associated with modern school management places a particular emphasis on the role of organisational communication, due to increased reliance on bidirectional input between staff in a given institution. Building upon this notion Tourish & Hargie (1998) take a perspective on communication systems in schools, referring specifically to the way in which information flows around an educational institution. This can be said to represent a much more functional approach to communication than the studies discussed in section 2.6. Toresh and Hargie regard the role of communication in organisations principally as a tool for reducing uncertainly in staff, citing (Berger 1987) who reports a relationship between and audited staff of communication and levels of anxiety. In addition, a number of researchers have found that clear, concise and timely communication regarding organisational objectives and changes enables staff to devote more time to developing and promoting an organisations main objectives. In a review of organisational communication Clampit and Downs (1993) report that good quality internal communication results in greater commitment, higher levels of innovation, reduced absenteeism and greater productivity. Based primarily on research in industry, Quirke (1995) identifies five objectives for communication, which can also be used to evaluate communication quality in organisations. These objectives are described as, the stimulation of thinking, participation and ideas, networking of know-how/learning across the organisation, involvement of all

employees in improving processes, identification of additional ways of providing value to clients, and the expansion of what staff believe is possible.

These objectives, whilst aimed originally at industry can be adapted for use in communicative evaluation studies and will form the basis of the communicative evaluation, which makes up part of study on in this thesis. (see section 4 for details)

In order to explore the role of communication in organisations, Toresh and Hargie advocate the use of a communications audit to examine the current flow of information around schools. Toresh & Hargie additionally report a number of themes which tend to occur as a result of communication audits. The first theme surrounds the need for information and refers to the desire on the part of staff to be kept informed about their organisation and the motivational ramifications of uninformed staff. As a result of poor quality information or staff given information on a need to know basis, rumours are likely to surface which can often impact negatively on the organisation. Toresh and Hargie also comment on the manner of communication in organisations. In some organisations staff reportedly perceive managers to live in their office "bunkers" or "ivory towers" and communicate only by written memos, often regarding communications as voluminous and irritating, which again stifles the desire to communicate in the organisation. These very functional organisational issues in addition to issues pertaining to culture can have a key impact on the role of communication in schools.

## 2.8 Conclusion

Whilst it is undoubtedly important to have a clear concept of language in order to develop effective language interventions, the success of these interventions are

ultimately dependent on the efficiency and effectiveness of communication between staff within school. School communication is affected by a range of different issues, including the culture of the school (which subdivides into a range of different issues) and the extent to which management system in school is able to facilitate successful inter-staff communication. If an intervention is to be successful, particularly in secondary schools then both layers of communication need to be taken into account during planning. This thesis aims to explore these issues in more detail in the sections that follow.

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