"I never used to read." Patterns of talk in regulative and instructional discourse: a systemic functional approach to analysing a literacy difficulty.

A Case Study with S.

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Abstract

This study explores the issues relating to literate practice for an individual who has a literacy difficulty. The process of negotiating meaning is articulated from the perspective of English as a second language. However, S (the participant in this study) was an ESL student for whom a more complex picture became evident when, at the completion of her formal schooling, she was diagnosed with severe dyslexia. This had implications for her development in literacy which were vital to becoming a qualified practitioner in her chosen career of hairdressing.

S participated in a mentor / tutor relationship to support her engagement with text. This was in direct response to her immediate need to access theoretical information which formed a coursework component of her workplace training program. The reading and understanding of text materials was necessary in order to complete the written assignments which were part of the course requirement.

The study makes an analysis of literate practice from a systemic functional perspective with particular reference to literacy difficulties. The engagement in talk about and talk around texts in relation to reading specific texts is explored as the means of negotiating meaning. The analysis of the transcripts from instructional dialogue and other interactions reveal characteristics and patterns of language behaviour which have implications for teaching practice in regard to accessing written texts.

It is evident that mediation is pivotal to the development of understanding. The features of the specific texts are pivotal in making meaningful connections and the features of conversation are the mediating practices of negotiating meaning. The abstract nature of written texts signal a necessity to identify and explicate the grammatical features which are realised in both verbal and written text constructions and are implicated in making meaning.

Statement of Authorship

This thesis contains no material which has previously been accepted for the award of any other degree or diploma in any university and, to the best of the candidate's knowledge and belief, the thesis contains no material previously published or written by any other person, except where due reference is made in the text of the thesis. The author also consents to the thesis being made available for photocopying and loan when accepted for the award of the degree.

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Date: 02/11/06.

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F G H J	Appraisal System - exploring explicit or implied meanings Information from school reports Psycho-educational Report TAFE Learning Unit 5.5	135 137 141 147

List of Abbreviations

ABS Australian Bureau of Statistics

ACAL Australian Council for Adult Literacy

ACER Australian Council for Educational Research

ALBSU Adult Literacy and Basic Skills Unit

ALLP Australian Language and Literacy Project

DETE Department of Employment, Training and further Education

DEET Department of Education, Employment and Training

DEETYA Department of Education, Employment, Training and Youth Affairs

DSE Department for Society and the Environment

EAL English as Additional Language

ESL English as a Second Language

GDP Gross Domestic Product

IALS International Adult Literacy Survey

ILY International Literacy Year

IRE Initiation Response Evaluation

IRF Initiation Response Feedback

IQ Intelligence Quotient

L Line number

LBOTE Language Background Other than English

LEP Limited English Proficiency

NESB Non-English Speaking Background

NSW New South Wales

OECD Organisation for Economic Community Development

TAFE Technical and Further Education

UNESCO United Nations Education and Scientific Organisation

ZPD Zone of Proximal Development

Chapter I Introduction

1.1. Overview

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1.1. Overview

This study examines aspects of language which manifest as perceived literacy difficulties. It is a response to specific needs experienced by S, who strives to function in a workplace environment with limited literate proficiency. The study explores the apprenticeship of a student into technical discourses and analyses the language features inherent in the written texts of a curriculum, the mediating talk of her tutor and conversations between tutor and student. As a member of a work place community and a participant in a study program, there are particular challenges and demands in terms of literate practice which limit S in realising her potential in the workplace.

1.2. Aims and Questions

The general aim of this study is to examine S's literacy experiences and the generation of meaning through oral and written forms. It examines reading and talking as mediated literate practice rather than remediation in developing literacy.

- What problems are encountered by S in her engagement with the texts of an apprentice training curriculum?
- What are the features of the teacher-meditated talk supporting her engagement and comprehension of texts?
- What are the implications for teaching and supporting learners in the negotiation of professional training texts?

1.2.1. Analysing the construction of linguistic and social knowledge

The participants' talk about texts provides the data for analysis of meta-functions and an exploration of social constructions for supporting literate practice (Halliday & Martin, 1993; Hasan, 1996). Heath (2000) asserts that students may not be provided with appropriate opportunities to share what they know or have experienced and that teachers "may not tap into students' customary ways of communicating their competence" (p.28). The customary ways of sharing information in classroom settings are usually determined by a set of assessment criteria which require students to respond according to predetermined rules.

Two aspects of inquiry are explored. First, the nature of the texts which were necessary for S to negotiate in her training program. Second, the nature of my discussion with S whilst negotiating

meaning when reading and talking about texts. The practice of reading and talking together in this context did not involve the practice of basic skills, isolated drills or especially prepared grammar tasks. It was reading and talking about the course content.

According to Cope and Kalantzis (2000:3), "the fundamental mission of every educator is to improve every child's educational opportunities". Teachers are challenged by claims and counterclaims about grammar and the need to return to basics in an educational climate in which political debate emphasizes the need to improve literacy outcomes (DEETYA, 1996, 1997, 1998; ACER, 1997; ABS, 1997a & b; ACAL, 1999). The *what* (instructional content) and *how* (way of talking) of literacy have relevance for the individual, in the workplace and community.

S is a young adult who had $12^{1}/_{2}$ years of formal education but experienced significant difficulty in reading and writing and could not meet the expectations required for completion of the theoretical course work of her traineeship. My role in guiding S through her course work was to support her in the literate practices which related to her chosen field of employment and connect her workplace with a theoretical knowledge base.

In working through the literacy requirements of S' traineeship I have endeavoured to identify particular language resources and to show how they are manifested between individuals in a particular context. The challenge for teachers is to deliver appropriate instruction, which is not only pivotal to literate development but also embedded in the regulative practices applicable to specific contexts. In exploring aspects of interpersonal and experiential functions the regulatory language dynamics revealed through the talk are articulated with the instructional content of the texts.

1.2.2. Instructional conversations in reading

A literate society manifests a complex array of literate practices, multi-literacies or multi-modal patterns of meaning (Cope & Kalantzis, 2000) in which individuals function as members of a learning community with a diverse range of competencies. Within any community, there is a distinct range of language styles which apply to a variety of practices and function in accordance with the achievement of certain goals.

Talk is presented by social theorists as the vehicle for supporting the reading process and making meaning from texts (Baynham, 1995; Street, 1993; Love, 1996). The talk used in teaching and learning reflects the social perspective of literate practice. Particular features of the tutor directed talk in this study reveal attempts to support engagement with the written text and to support student responses. Other features in the talk serve to illustrate how meaningful connections are being created but it is through the identification of the meta-language that analysis is possible.

1.2.2.1. What problems are encountered by S in her engagement with the texts of the apprentice training curriculum?

Critical framing interprets the social context and purposes of "Designs of meaning" (Cope & Kalantzis, 2000). Oral and written texts are integrations of interpersonal and experiential functions and are analysed in this study as negotiations between participants to construe meanings through the lexico-grammar. The talk about topic content forms an oral text which reveals features of interpersonal function within the process of negotiating and exploring topic information. The field of instruction determines the nature of each text and the demands made of participants in terms of dealing with abstract concepts.

1.2.2.2. What are the features of the teacher-meditated talk supporting the engagement and comprehension of texts?

The situated practice of teaching draws upon individual experiences, social engagement and workplace involvement (Cope & Kalantzis, 2000) in which interpersonal processes are recorded in language as action, and analysed in conjunction with information about regulative and instructional discourses (Christie, 2000). The regulative language of teaching discourses differs from that of instruction although they are not so much separate entities as perhaps an interweaving of discourse strands which operate on the interpersonal level. Regulative aspects such as the modality features of teacher talk have the capacity to open up conversations or alternatively to shut them down. Hence opportunities are either provided for participation or denied.

1.2.2.3. What is the nature of the language and teaching practices?

Overt instruction contributes to the development of linguistic structures necessary for different types of negotiation which aim to promote understanding, reflection and the integration of information as a knowledge domain. The actions of talking, explaining, questioning, confirming and appraising between participants, draw upon ideologies and experiential functions in the analysis of texts. These are the language practices pivotal to literacy development. Transformed practices which occur as a result of meaning making have implications for cognitive and linguistic development with potential for new social perspectives, and the shaping of future endeavours, goals or actions (Cope & Kalantzis, 2000).

1.3. Rationale

Literacy is highly valued in a global, economic society in which governments operate as a "lean and mean machine" (Gee, 2000:6) and correlate economic success with high levels of literacy. Schools are the institutions charged with particular responsibility for developing the literate skills required for individuals to function successfully within a society (Mickan, 2004). In an educational context the development of complex literate practices are emphasised to the extent that reading, writing and facility with oral language in response to academic tasks have become the primary means by which educational success is measured. The term literacy is itself an abstraction through which we attempt to describe a concept which encompasses a number of complex, related activities (Freebody & Wyatt-Smith, 2004).

A psychological model of educational assessment generally prevails within our western education system whereby success and potential are equated with quantitative data and measurement. The relevance of qualitative data is explored in this study with reference to the social theory of literate practices and their implications for teaching and supporting learners. Literate knowledge and skills are achieved predominantly through communities of practice and embedded within the complexity of schools systems and classrooms themselves constitute specific communities of practice. Classroom dynamics contribute to a social order in which individuals participate and through which structures of hierarchy and distribution of power are determined (Gee, 2001). It is important to recognise how membership to one kind of community may be influencing identities across private and broader communities and global lifestyles.

This thesis challenges a reliance upon quantitative measures as the dominant practice in assessing student ability and foregrounds the mediating practices which are critical to engagement with texts and with significant others.

1.3.1. Political issues

Literacy education and assessment are concerns for governments, educators and communities alike and have implications reaching far beyond educational practice. These concerns derive from a belief in literacy as the cornerstone for success in school, later training for employment and the general economic and cultural well being of a society. The standard of literacy has become an important political issue in many countries because of its significance in relation to workplace dependence upon information and the investment in human capital as workplaces change in response to societal needs (Freebody & Wyatt-Smith, 2004). Therefore standards in education are inextricably linked to the status of the national economy (Knobel, 2001). For individuals not to succeed in formal education is an indictment upon the system which has specific cultural responsibilities (Mickan, 2004).

Economically well-developed countries invest heavily in formal education, which is understood to promote literacy and correlate positively with economic productivity. In countries where greater economic productivity exists, there are more adults with higher levels of literacy compared with those who fall into categories of underdeveloped and developing nations with struggling economies (Bracey, 2000). The global benchmark of national status is The United Nations 'Human Development Index' which is characterised by three factors: life expectancy, literacy and per capita gross domestic product (Graff, 1987). Although debates are plentiful on the subject of literacy, they are not only about competing theories and approaches in relation to reading and writing issues, but they are just as much about overall standards of educational, cultural and economic activity (Wyatt-Smith, 2000).

1.3.2. Educational issues

The information age or new times (Lankshear, 1998) presents unique challenges and demands more of individuals in terms of literate practices. An increasing need to understand, manipulate and manage a variety of information has become apparent, with the subsequent realisation by

governments that a significant portion of populations in writing based communities are at risk. There is no simple methodology for addressing this issue since the term literacy is itself an ideologically loaded word (Baynham, 1995), which foregrounds perceptions of standards, levels and benchmarks. Literacy can no longer be defined as a single entity since multi-literacies have become a reality as part of social and technological change (Cope & Kalantzis, 2000).

The formal education system is a skills and task oriented domain which reflects the values of a particular society. In a reading / writing based language system, it is commonly assumed that children are predisposed to learn the complex skills of reading and writing by the time they reach a certain age. In many circumstances the education system tends to categorise individuals in relation to literate ability and attach a problem label to those deemed to be lacking such a predisposition. In the case of dyslexia, Frith (1985) attests to the collocation of literacy and problem, judging dyslexic individuals as deficient and thus in need of remediation by some form of special instruction. If instruction is at issue, then it is relevant for all participants in education. Teachers of literacy understand the importance of explicitness and a systemic functional approach (Halliday, 1994) provides an explicit and specialised form of instruction and analysis (Christie & Unsworth, 2000; Christie, 1995, 2001, 2005; Comber, 1998).

1.3.3. Literacy as a social practice

Schools play a critical role in determining students' life opportunities. They provide access to three major types of social activity: 1) a hierarchical world of work, 2) the shaping of citizenry and 3) supplementing the discourses of private, community and global lifestyles. As the activities of these domains change, so the roles and responsibilities of schools are challenged (Cope & Kalantzis, 2000). In order to determine the relevance of schooling in the development of literacy, it is necessary to consider language experience as a social construction for making meaning. Perret-Clermont, Perret, and Bell (1991) contend that social factors affect cognition especially within schools where an individual's psychological functioning and behaviours cannot be understood independently of a context which is influenced by their teachers, peers and others. Instruction is therefore a social endeavour in which there are multiple participants and the quality of instruction can vary according to the nature of personal interaction. The nature of the interaction is significant since it constitutes how relationships are established, thus influencing the success of educational outcomes or what is learned.

Reading and writing are complex processes (Clay, 1991; Snowling, 2000a; Christie, 2005), which require explicit instruction. They occur in conjunction with and in response to a social context where interpersonal and experiential dynamics have a key role. The work of Perret-Clermont, Perret & Bell (1991) directs us to examine characteristics of the social and physical environment in which individuals develop their cognitive resources and attribute meaning to them. I.e. how the individual can operate on the social and physical features of the environment and gain knowledge from these experiences.

1.4. Defining Literacy

General definitions of literacy (UNESCO 1962; NLA of USA, 1991 see Appendix A; OECD, 2000; ACAL, 2003) imply an acquisition of language skills. Definitions identify literacy with the development of competence in reading and writing in order to participate effectively as a member of society. The general concept of literacy in this study challenges the concept that it is synonymous with school literacy i.e. the perception that the formal process of schooling determines the development of literacy. S is one of many individuals who has participated in formal education and not achieved a literate status which affords her independence in work and community.

A common assumption within the current definitions is that to be considered literate, a person must be able to cope with some reading and writing tasks. However, the emergence of multi-literacies determine that literacy as an entity cannot be explicitly defined. Existing definitions of literacy differ in several ways but reveal some shifts in perception and awareness. For example, literacy does not have an end point or stasis neither is it absolute. Recent definitions (OECD, 2000; ACAL, 2003) offer a view of literacy as being dynamic and being relative to other cultural elements. They assume a definition within a certain context of functioning, which may change from one country / culture to another, or over time. Some definitions also include mental skills such as numeracy and problem solving.

By current definitions being literate implies a dynamic state of becoming more literate as the changing social systems within which individuals function present new challenges. Formal

schooling does not necessarily create literate graduates, even if such a goal were achievable in a society where multi-literacies abound and a multiplicity of cultures are represented.

Some definitions (Appendix A) differ from the notions referred to by Halliday (1996) of being literate and becoming literate. According to Halliday (1996), literacy is a practice, a process and a product of language and within the conceptual framework of linguistics, there is a way of understanding it as follows:

- "... in becoming literate, you take over the more elaborated forms of language that are used in writing and the system of social values that goes with them." (p.340)
- "... being literate means engaging with language in its written form: distinguishing what is writing from what is not writing, and producing and recognising graphic patterns." (1996:342)

On their website the Australian Council for Adult Literacy (ACAL, http://www.acalview.html) addresses the issue of being literate in the 21st century in the following way:

- 1. One needs to be literate as a citizen in a democracy:
 - understanding and fulfilling one's role
 - being able to assess one's needs
 - having one's say and responding to the views and actions of others by engaging in the range of literacy / communication practices required in the public domain
- 2. One needs to be literate in one's workplace, participating confidently in routines and practices: interacting appropriately with others according to workplace roles and relationships reading, writing, and speaking different texts generated within that field of work accurately employing its language of use (discourse)
- 3. One needs to use a broad range of literacy and communication practices in order to: successfully negotiate the job market access community services and their associated bureaucracies.

1.4.1. Problematising literacy vs a literacy curriculum problem

The acquisition of school literacy is an organised regime of tasks, which are timed and sequenced in relation to standards based upon average developmental trends (DEETYA, 1998) but not necessarily with any particular regard for individual experience or progression. It defines a schedule of skills acquisition in order for individuals to be academically successful. In school, the

measure of success is determined by a student's control over the language resources required for completing curriculum tasks (Mickan, 2004). The process for becoming literate is therefore being literate within school oriented practice and succeeding at school is a prominent social value. The inter-relationships of a diverse range of components contribute to literate development and are critical to a fuller understanding of how we undertake the assessment of literacy in our schools (Matthiessen, Slade & Macken, 1992).

The categorisation of people according to literacy / illiteracy parameters creates what Freire (cited in Baynham 1995:7) calls "a culture of silence". A healthy literacy status is valued by society and contributes to an individual's positive self-image but where this is not the case, it is generally not freely acknowledged i.e. "if you can't read and write you keep quiet about it." (ibid.:7). In the context of adult literacy there are many individuals who have passed through the formal education process but are deemed to have failed or rather, we may question whether the system has failed them.

1.4.2. Role of context

It is expedient to explore new dimensions of *what* and *how* the explicit teaching of literacy is achieved. For example to what extent is cognitive development dependent upon the development of sociocognitive knowledge in specific contexts? I.e. "how the individual can actively operate on the social and physical features of his or her environment to gain knowledge from these experiences" (Perret-Clermont, Perret & Bell, 1991:42).

An educational institution controls the parameters of time, content and context. The context for learning is of primary importance since it is underscored by social engagement. Halliday (1993) asserts that learning experiences and the emergence of ideologies are first construed in social contexts through interpersonal relationships. The physical features of the environment such as settings, resources and materials, contribute to the interactions and support logical and symbolic meanings in an effort to make sense of the learning processes. Hence, the learning processes and interactions that are situated within a learning context are determined by the individual roles of teachers, peers and others.

When perceived developmentally, the process of learning that constitutes becoming literate forms part of an integrated social structure. According to Hasan (1996:25),

"Language is rooted in community and communication ...(and) in the satisfaction of the user's needs ... It is the means by which we share our experience of physical and social reality within an entity of cyclical progression."

These social entities are shaped through:

"... systematic operations of sharing a language but furthermore, the reality we shape is dealt with and understood through the language itself." (ibid: 22).

Literate activities are shaped through the language practices that surround and embed them. The diversity of language use and the purposes for reading and writing in the social context of community offer as much variation as communities themselves. Historically, the community was responsible for the education of its members in terms of literate practices which has subsequently been replaced by the uniformity of a formal system. However a formal system of education does not guarantee success in becoming literate and education has now become a national and global concern.

1.5. Justification of the Study

The focus of this study is the analysis of particular language experiences of an individual who did not succeed in formal schooling. A systemic functional analysis (Halliday, 1990) reveals some of the language characteristics which emerged between student and tutor in striving to make meaning from technical texts.

The study is an exploration of the way that language supports the learning processes involved in developing reading and writing practices. Interpersonal language function and experiential domains of exchanging information and exploring new knowledge domains have been the primary vehicles for analysis, based upon sociolinguistic theory (Halliday, 1990).

1.5.1. Informing personal practice

The analysis of personal practice promotes an increasing awareness of the meaning making processes which may assist in advancing students toward an understanding of text. The negotiations which take place in this practice reflect the types of mechanisms which are ordinarily at work in the creation of meaning, and suggest how they may contribute to applications of explicit instruction in the development of reading and writing in an academic setting.

1.6. Research approach

This study relates to context-based learning and situated literate practices. It involves the joint negotiation of text and analysis through a systemic, functional linguistic structure. The emphasis upon making meaning is based upon the notion of reading and talking as learning (Purcell-Gates, 1997b; Gerot, 2000). In the many overlapping communities of practice there is engagement in a complexity of social practices some of which have discourses embedded in them. Reading and writing are some of the ways that people participate in other social practices of which schooling and training programs such as apprenticeships, form a significant part. Reading and talking as learning in relation to curriculum texts have their own discourses which are analysed here through a systemic functional approach.

1.6.1. Individual case study

The case study focuses upon the generation of meaning which is central to the concept of learning through making connections between oral and written forms. The sharing of text through reading together and a mediating process of talking about and around texts, provided the process for the collection of language data for analysis.

1.6.2. Collection of data

Engagement in the teaching practice and mentoring process provided the following data:

- audio text and transcripts of conversation
- audio text and transcripts of oral reading
- secondary school reports
- psycho-educational report

1.7. Framework for Data Analysis

A theoretical framework of systemic functional linguistic analysis (Halliday, 1975) underscores this study. The data are explored through experiential and interpersonal meanings which enable an appreciation of the role that oracy plays in language development. Oral language patterns reveal the resources at work in the creation of meaning. Such language resources are realised through grammatical structures (White, 2005; Droga & Humphreys, 2002).

1.8. Organisation of the Report

The next chapter presents the context of the study within the current educational and economic environment. Chapters III and IV explore the educational issues relating to literacy from respective psychological and social theoretical perspectives. Chapter V presents the methodology of the study, Chapter VI contains the analysis and interpretation of data and Chapter VII raises points of discussion and conclusions emerging from the study.

1.9. Limitations of the Study

In an individual case study there are issues which emerge that may not necessarily translate to other individuals with comparable circumstances. Although extrapolation and interpolation may be possible in relation to other cases, they are not assumed. There may be similarities but also differences which are relevant.

- 1.9.1. The study focuses upon the higher level of function in terms of literate acts and illustrates how these were supported through the processes of talk as a means of generating understanding and making meaning.
- 1.9.2. There is no intention to recommend a single method of support or a particular way of teaching but only to reveal through the analysis the characteristics which are evident in the language which assisted an understanding of literate development in the case of S.
- 1.9.3. Language and literacy are explored as a spectrum of complex practices which have underlying phonological and symbolic structures. The focus in this study is the development of literate practice through the comprehension of abstract language concepts and grammatical metaphor (Halliday and Martin, 1993).

Chapter II Context of Study

2.1. Overview

2.2. Background

- 2.2.1. Political / economic vs educational / social agendas
- 2.2.2. Social context

2.3. The Role of Literacy

- 2.3.1. Notions of literate function
- 2.3.2. Educational practice and teacher education
- 2.3.3. School assessment of language
- 2.3.4. Remediation to accommodation

2.4. Summary

2.1. Overview

This chapter presents the context and background to the current issues surrounding practices in the teaching of literacy. It foregrounds the tension between political, economic, and social agendas which relate to literacy and educational practice. The participants in this study are engaged in a social system within which a main social expectation is that attendance at school provides the necessary experience to enable one "to achieve one's goals and to develop one's knowledge and potential" (OECD, 2000:x).

2.2. Background

Until the 1970s, it was generally assumed that the number of years spent in formal schooling correlated positively with higher levels of literacy. Even though there has been an increasing level of awareness about literacy issues, there is a growing concern about the rates of change in our national literacy status over the past 50 years (Castleton, 2000). Media attention has focussed upon societal, economic and political concerns but what actually defines the literate individual is the subject of much debate (Castleton, 2000).

Recent information on the literacy status of a population comes from the International Literacy Survey conducted in the International Literacy Year (1991). This followed a report by Wickert

(1989) which brought attention to the literacy status of the adult population of Australia which revealed that 10%-20% were having some difficulty with aspects of literacy (OECD, 2000). The survey was conducted in 20 OECD countries from which data were collected based on individual responses to different types of texts. These included prose, document style and quantitative texts and the 20 participating countries in the study, represented 50% of the world's GDP.

The National Literacy Survey: (ACER, 1997) ("Mapping Literacy Achievement: Results of the 1996 National School English Literacy Survey and Literacy Standards in Australia") reported student achievement in key aspects of literacy: namely reading, writing (including spelling) speaking, listening and viewing. The results provided an analysis of student achievement against the agreed draft benchmarks of the survey. The "Literacy Standards in Australia" informed the benchmarks process and showed the minimum standard of reading and writing expected of children in Years 3, 5, 7 and 9. The survey findings showed that there were a significant number of children (around 30%) failing to meet a minimum acceptable standard (ABS, 1997a & b). This outcome is consistent with the Longitudinal Surveys of Australian Youth, a sample of 14 year olds over the period 1975-1995 indicating that around 30% had not mastered basic reading comprehension (DEETYA, 1996, 1997, 1998).

2.2.1. Political / economic vs educational / social agendas

Official concerns have clearly emerged about adult literacy since the report by Wickert (1989). However, definitions within this context can be somewhat flexible. The use of terminology such as "functional literacy" or "illiteracy" has a tendency to mean different things over the passage of time. For example at one point in history a person who could sign his/her own name was considered to be functionally literate. This definition later applied to someone who had a level of literacy competence commensurate with three years of formal schooling (Bracey, 2000).

Technological and social change impact upon educational and literate practice and although the maintenance of literacy standards in accordance with technological change seems possible for a majority of people in a reading and writing based language system, significant difficulty is encountered by many others in attempting to achieve an effective level of participation in an increasingly complex literate environment (Lo Bianco & Freebody, 1997).

The response of the federal government has been to inject funds into special programs based upon recommendations from official surveys on the literacy status of our population (DEET, 1991; DEETYA, 1996, 1997, 1998; ABS, 1997; ACAL, 2003). In addition to school based programs, adult needs have also been considered so that literacy and numeracy provision can be made well beyond the years of compulsory schooling (Hartley, 1990; Black, 2001).

2.2.2. Social context

Language is dynamic and meaning emerges from many contexts. There are three levels of meaning which tell us about the world and about the state of relationships, which construe words, images and ideas in ways to capture the attention of viewers, readers or listeners (Lemke, 2000). Halliday and Hasan (1976) describe these kinds of meaning as ideational, interpersonal and textual functions which are central to classroom discourses. The social context of language and literacy is represented by a conceptual framework of field of discourse, tenor of relationships (between speaker and listener) and mode of discourse (Halliday, 1994; Matthiessen, Slade & Macken, 1992). The multi-levels of field, tenor and mode determine the changing nature of language competence according to situation, as described by Halliday (1996). In becoming and being literate people are dealing with the multi-literacies of the 21st century and teachers need "deep and rich understanding of the nature of language and of the function that language serves for us in our lives" (Halliday, cited in Christie, 2005:vii).

The student participant in this study had completed 12 years of formal schooling in Australia, and was not able to access the theoretical information which accompanied her career training program in the form of written texts. Learning support was required in the pursuit of her course work as a hairdressing trainee which was mediated through collaborative talk. As a tutor and mentor I subscribed to the notion that 'one reads to learn' (Purcell-Gates, 1997a). It was intended that the appropriation of new knowledge would be supported by apprenticing into reading practices through the means of guided talk. Mitchell & Myles (2002), refer to making a shift in consciousness from inter-mental to intra-mental activity. However Rorty (1979, 85) states:

"What is special about language is not that it 'changes the quality of experience' or 'opens new vistas of consciousness' or 'systematises a previously unconscious manifold' or produces any other sort of change. All that its acquisition does is to let us enter a community whose members exchange justifications of assertions, and other actions with one another." (cited in Hasan, 1996:32).

The language experience is therefore the means by which to enter a specific community of practice in which engagement is possible. Halliday states that talk is the agent for change and brings language to a level of conscious awareness which can be analysed in systematic terms (Christie, 2005).

We learn language through the use of language (Hasan, 1996). The language experience is an important socialising process in order to understand specific domains of knowledge. Mediation and collaboration are language vehicles which help to make this possible (Halliday, 1978, 1990, Christie, 2000, 2005). My role was to facilitate the entry of S into a specific community of semiotic exchange and action: a process that could be analysed through the grammar of spoken interactions.

Newcomers to new kinds of learning are supported or apprenticed through joint practice or gaining new knowledge through immersion in collaborative practice (Gee, 2001). Collaboration and joint negotiation of texts (Gregory, 1994) fit within the concept of scaffolding which is generally aligned with the Vygotskian principle of the zone of proximal development (ZPD). In the circumstance pertaining to S, collaboration involved the joint negotiation of texts related to the work place. The tasks of reading course notes and responding to questions, constructed as a component of the topic assessment could be supported through a practical knowledge of the field. Since apprenticeship is about promoting learning through socio-cultural activity, the knowledge gained by S through practical experience was an important source of information which supported her negotiation of technical information presented in the course texts.

2.3. The Role of Literacy

Literacy pedagogy has an important role in fulfilling the conditions which lead to full and equitable social participation. Traditionally, this has meant teaching and learning to read and write in a standard, official, rule-governed form (Cope & Kalantzis 2000). Dealing with print has expanded in terms of schooling and technological practice (Durrant & Green, 2001). Meaning is generated in multi-modal contexts through the internet, interactive media and a wide variety of visual and audio applications, collectively identified as multi-literacies.

Engagement in a variety of literate practices facilitates opportunities to access a broad range of information on both a local and global community level. The OECD (2000) survey indicated that many students who make early exits from school have low reading and writing skills. The former Federal Minster for Education in Australia, (David Kemp) contended that as a consequence they encounter limited access to tertiary education and contribute to high levels of longer term unemployment (DEETYA, 1996; Lo Bianco & Freebody, 1997; Black, 2001). However, Black (2001) challenges the commonsense understanding that lacking literacy and numeracy skills may in fact cause unemployment. Literacy and numeracy are not always distinguished as separate entities and numeracy is often subsumed as quantitative literacy (Kirsch, Jungeblut, Jenkins, & Kolstad, 1993) or included within the notion of basic skills. The dominant discourse of governments is that a lack of literacy has "negative implications for the economic security and productivity of individuals, enterprises and the nation generally" (DEET, 1991:20-23). Street (1993) argues that this represents an autonomous model of literacy which focuses upon the extent to which people possess a particular set of skills rather than examining the personal value of certain literate practices in the workplace and within different social contexts (Freebody, 1992).

2.3.1. Mediating literate practices

There are established theorised notions and assumptions that language and literacy are powerful semiotic systems for the construction of meaning according to social contexts (Hasan, 1996; Williams, 2000). However, language and literacy are a variable set of social practices rather than unitary concepts (Hammond & Gibbons, 2001). The mediation of literate practices such as reading and writing is somewhat different from the practice of treating texts as information to be memorised and tested (Dugan, 1997). The participation of an individual in learning opportunities which constitute a genuine apprenticeship into literacy allows for the transformation of understanding and the development of responsibility as members of a community of practice (Lankshear, 1998). To explore the process of language socialisation informs our understanding of education requirements i.e. "that students show what they know in certain oral and written forms" (Heath, 2000:28). Individuals such as S indicate that students do not necessarily reveal what they actually know through these forms. The study of language features evident in the interactions with S revealed her difficulty in dealing with the technical language of workplace texts. Although she performed successfully in workplace tasks, it was not possible for her to respond to the theoretical

requirement of reading topic information and selecting from test-based multiple choice answers in order to fulfil other assessment criteria of her training program.

2.3.2. Educational practice and teacher – student interaction

The work of Mehan (1979) drew attention to the pattern of classroom talk and the dominance of the IRE or as Sinclair and Coulthard (1975) refer to it, the IRF model being the pattern of teacher-student interaction where a majority of 'wh' questions from the teacher are followed mostly by one word responses from the students. In the studies of Mehan (1979) and Cazden (1988), it was evident that teacher education programs were not providing information about the close connections and interdependence of language, context, socialisation and the joint construction of shared knowledge as an important part of the learning process (Christie, 1995, 2005; Christie & Misson, 1998; Christie & Unsworth, 2000). The recording and transcription of language interactions in educational settings has facilitated the detailed qualitative analyses of teacher-student discourse.

People do not engage in literacy practices in isolation but in social networks, sharing and exchanging as part of a local community such as students assisting others in classrooms in a variety of procedures (Heath, 1983). People act as mediators or literacy brokers in assisting others (Hamilton, Barton & Ivanič 1994; Baynham, 1993) in classrooms as in other areas of the community. In the context of organizations and systems an understanding exists of the ways of behaving which are socially appropriate for different contexts. In the classroom, students and teachers move from speaking and listening to reading and writing activities. Students are operating in a variety of social groups where they talk, read and write together, or have individual undertakings as well as whole class encounters under teacher direction (Christie 2005).

The role of teacher and language structures within the classroom or teaching setting were analysed by Bernstein (1996) in terms of regulative and instructional discourses (cited in Christie, 2001). In a regulative discourse the teacher orchestrates classroom interactions which allow for informational exchange to a greater or lesser extent. It is a response to student dialogue as much as to teacher initiated exchanges and underpins the instructional discourse of subject specificity. The instructional discourse is driven by the technicality and specific language of the texts which

often consist of abstract concepts relating to definitions, formulae and a specialised lexicon for specific fields of study. Discourse analysis enables the exploration of language use and the examination of language opportunities provided for learners. The dynamics of regulative talk about texts and instructional content of the texts are integrated through negotiation. The negotiation of meaning aids comprehension and interlanguage restructuring through talk (Mickan, 1997). Literacy learning is therefore a complex interaction of reading, writing and talking which incorporates physical elements relating to setting, resources and materials.

2.3.3. School assessment of language

Traditionally, schooling has been the means to an end in imposing national standards. However, difference and diversity is a central and critical issue in education. It relates as much to perceptions of developmental standards as it does to cultural and linguistic standards (Cope & Kalantzis, 2000). The issue of difference is of critical importance with implications for literacy pedagogy. In attempting to address the context of cultural and linguistic diversity there is also the influence of a political emphasis on a back to basics approach and returning to the teaching of grammar (Cope & Kalantzis, 2000). The limitations imposed by a 'basics approach' puts at risk the richness of learning experiences that come from diversity of culture, language and gender that have potential to enhance educational success.

Lankshear (1998) raises the issue of how measures including national benchmarks, assessment, reporting and remediation are appropriated in relation to the notion of 'foundational literacy'. It is worthy of note that official policy statements place an emphasis upon the relevance of education in schools with reference to activities in daily life (DEET, 1991; DEETYA, 1998). Does school learning therefore articulate with other discourses as Bernstein (1996) advocates, to cover a broader range of relationships than those within schools, to provide a sound foundation for lifelong learning? On the contrary, school literacies often appear to be detached from life in the home, out of school or in the work place. Lankshear (1998) also suggests that teachers often find themselves in contrived teaching/learning situations compared with other professionals whose actual work is in a specific knowledge domain. For example concepts such as algebraic functions in simultaneous equations are not as readily applied to real life situations in a mathematics lesson compared with the use of map co-ordinates or scale diagrams in a geography class. The

opportunities for authentic learning experiences as in immediate practical applications are not necessarily applicable in all circumstances.

2.3.4. Remediation to accommodation

The approach in remedial education in the western world is based upon a continuum from remediation to accommodation which assumes a primary disability emerging from a language deficit model (see Appendix A). Those who are classified as not meeting the standard or who are classified as poor readers or writers include individuals who may know and understand what is asked of them as well as those who can read words but have difficulty in comprehending (Heath, 2000).

The study of classroom talk and the relation between speaking and writing have emerged over the last decade with a focus on social and cultural influences (Black, 2001). Attention given to language development in particular has emphasised those aspects which vary from the standard and appear to inhibit learner success. A closer examination of language in the classsroom tends to be contained within assessment tools and procedures which utilise pencil and paper tests, essay writing and class discussion through teacher questions and student responses. There are also computer-based forms of assessment used for some purposes such as TOFEL tests and in the TAFE system for progressive assessment (DETE, 1991).

There are circumstances where students can contribute to discussion and participate in joint constructions of texts but are not ready to make independent constructions of their own. Difficulties are compounded when classroom instruction emphasises skills at the expense of meaningful reading and writing experiences (Allington, Steutzel, Shake & Lamarche, 1986; Johnston & Allington 1991; McGill, Franzer & Allington, 1990 cited in Dugan, 1997). Students need much more than subject content in the challenge of coming to terms with school literacy (Knobel, 2001).

The National Joint Committee on Learning Disabilities (1993), offered the following recommendation "...students are best served by a range of placement(s) and not by the ideology of 'full inclusion' " (p.25). This seems to suggest that some students require withdrawal from

classroom programs in order to receive special separate instruction of some kind. If students in general need much more than subject content in becoming literate then significant implications exist for individuals such as S. The idea of a range of placements other than full inclusion suggests that something other than being in the classroom and learning with peers is more appropriate for particular students. This would appear to be an adherence to the ideology of autonomy rather than dealing with the real issues of diversity. The challenge for teachers is the diverse nature of student needs in any given classroom.

Lankshear and Knobel (1998) questioned the value of intervention programs which may possibly do little more than develop code breaking ability as a reading practice rather than develop relevant literate practice. Their intention was to reveal some anomalies and contradictions which emerge when current trends are compared with information from new research. Gee and Green (1988) identified three dimensions of literate, sociocultural practice: the operational (context), the cultural (language) and the critical (meaning). These do not feature well in the instructional discourse of classrooms which are predominantly content driven and confined by parameters of time and where knowledge can be construed as having a commodity status and is something to be acquired (Lave, 1991, Knobel, 2001). The acquisition of knowledge is emphasised rather than the notion of apprenticing individuals into classroom or social practices.

2.4. Summary

The competing voices which influence decision making in education create numerous challenges for educators. What teachers teach and how they teach have implications in an environment of diversity which crosses the boundaries of both communities of practice and individual capacity, be they cultural or linguistic. An exploration of the mediating practices of teacher – student interaction, assists in our understanding of the nature of problems encountered by students and the features of mediated talk which supports the engagement with texts.

The next chapter explores the psychological perspective in relation to literate practices in the education system. Psychological assessments constitute a dominant voice in decision making within schools which impacts significantly on the future of individuals.

Chapter III Psychological Perspectives on Literacy Practices

- 3.1. Overview
- 3.2. A Psychological Perspective of language and Learning
- 3.3. Cognitive Approaches to Learning
 - 3.3.1 Interface of Psychological and Social Theory
 - 3.3.2. Pedagogic discourse

3.4. Educational Issues

- 3.4.1 Developmental asynchrony
- 3.4.2 The reading/literacy debate
- 3.4.3 Qualitative and quantitative assessment
- 3.5. Summary

3.1. Overview

The aim of this chapter and the next, is to compare aspects of cognitive and social theory which illustrate the relevance of socialising language practices in education. The traditional emphasis in education has been placed upon understanding cognitive development based on psychological paradigms. This relates to a process of internalisation, suggesting that knowledge is a cerebral function of transmission and assimilation (Lave & Wenger, 1991). It does not articulate specifically the role that language plays in learning, and therefore does not promote the concept of development through social practices.

3.2. A Psychological Perspective on Language and Learning

According to Pica & Long (1986), language develops through what is comprehensible. This relates to three 'strata' of language. Each stratum is a network of options which is interconnected with others in order for experience to become comprehensible. In simplistic neurological terms, these processes are internal and are determined by an array of neurological connections which manifest as anatomical structures and interact through the transmission of chemical messengers within specialised areas of the brain (Castro, Merchut, Neafsey & Wurster, 2002). The psychological view interprets language and literacy cognitively. It emphasises skills and acquisitions which are referenced by higher order (top down), lower order (bottom up) and

integrated processes of neurological activity (Goodman, 1976a & b; Marek, 1987; Crowder & Wagner, 1992), not necessarily by languaging activities.

The role of language is socialising individuals into communities of practice. In S' circumstance, it was perceived that she could not participate fully in her community of workplace practice because she was unable to deal with the literate demands of the written texts associated with her work. As a component of her career training it was necessary to read the set texts and respond to specific questions, based upon the topic content in order to demonstrate her theoretical knowledge and attain a designated level of competence. Most participants in a competency based program of this kind would function relatively independently because they have acquired the necessary skills to read and respond to the relevant texts. In a competency based regime such as TAFE, an individual is encouraged to work independently and take the assessment tasks when ready. This system was not tenable for a person such as S. Her particular difficulty was in accessing the texts of her workplace independently. She required reading support in order to access the texts and opportunities for discussion about meaning.

The social theories of literacy would contend that segmentation and reductionist approaches do not socialise individuals into a community of practice to the extent that they are able to function in response to the literate demands of their workplace. Following the psychological model, students with difficulties are segregated through endeavours to individualise programs and to meet specific learning needs in an education system (Clay, 1985; Juel, Griffith & Gough, 1986, Juel, 1988; Greaves, Coughlin, Suter & Munro, 1998). A pattern of segregation becomes evident whereby an individual is no longer functioning within their community of practice but in isolation. In S' circumstances I have questioned whether this made her learning activity more difficult because it was less social.

Special literacy programs within schools, are intended to intervene in such a way that specific skills are addressed. For example, high frequency word recognition and decoding of letter-sound patterns in the form of practice drills are intended to support other classroom learning practices (Torgeson, Wagner & Rashotte, 1994). Practice in sight word recognition is widely implemented and accepted by teachers as a way of assisting in the reading of texts. Reductionist techniques are

more likely to be used in individualized programs and settings where letter-sound and sight word recognition skills are practised in attempts to support students with reading difficulties. The retracing of developmental and accumulative procedures are often employed in literacy intervention programs (Orton, 1925, 1937, 1939; Augur & Briggs, 1992; Fawcett, Nicholson & Dean, 1996; Spalding, 2003) which are perceived to enable an individual to fill or close the developmental gaps. As noted by Cope and Kalantzis (2000), the disparities in educational outcomes do not seem to be improving. "... mere literacy remains centred on language only, and usually on a singular national form of language at that, being conceived as a stable system based on rules such as mastering sound-letter correspondence" (Cope & Kalantzis, 2000:5).

The methodology commonly adopted in special reading programs e.g. Reading Recovery (Clay, 1987) is that simpler texts are used for the practice of basic skills. In order to improve reading ability there is a trend to employ specially written or simplified graded texts so that competence can be more easily monitored or referenced against quantitative data of developmental norms and standards. The reduction of texts to enable a student to get through a reading task is intended to encourage independent activity. In practice however, it often distorts the structure, cohesion and language quality which comes from the original work (Gerot, 2000). In such instances the richness of a text is diminished or sacrificed for the sake of so-called readability. The readability is therefore questionable since by the very act of reduction, the text is compromised and at risk of losing its cohesion. This presents a dilemma for individuals like S because much of the technical information would be lost if the texts were to be simplified. In her workplace situation, a simplification of theoretical material would not have sufficed. It was necessary to work towards an understanding of the standard texts. She needed more time to do this with others and also having more opportunities for talk.

Although an intervention approach based upon practice drills and simplified texts has been supported through a plethora of psychological studies and has been recorded as a successful paradigm (Clay, 1985, 1987, 1990), there are many individuals like S for whom interventions have not been successful. S had experienced the segmentation style of an intervention approach during her primary years of education. She has recalled experiences in primary school when she was withdrawn from the main class with small groups of ESL and special education students to

do some separate and different activities (learning the alphabet and sounds) in order to support her language development. In secondary school it was perceived that her difficulty with literacy was due to learning English as a second language. She reported that an assessment was made during year 8 in response to teacher concerns about her literacy but there was no further action taken.

Although my mentoring of S in this study was a segregated experience, the issue here is taking part in the required social practices and the associated texts. Reduction or simplification of text material was not an option but mediation was required in order for S to access the texts. Although mediation occurred with mentor and student working together which was not part of a group or class setting there was no other alternative since the conditions of funding were for her individual support.

Within the TAFE system, S was required to complete a series of assignments which dealt with topic content in a written multiple choice answer format. Her tasks were submitted electronically for marking and were required to meet a designated threshold of accuracy before being accepted as meeting the competency standard (ALBSU, 1992). An example of a course work topic is provided in Appendix J.

Multiliteracies and the application of technological resources make learning and creating meaning a multimodal process. Written-linguistic modes are part and parcel of visual, auditory, and spatial patterns of meaning (Cope & Kalantzis, 2000) and these were clearly promoted in a career training program such as the one in which S was engaging. For S' course there were video discs for the demonstration of practical skills or techniques and computer programs of topic presentations linked to data bases for completing multiple choice assignment formats, marking and tracking individual progress. The use of data bases depended upon a high level of independent reading of written texts which S had not acquired and therefore required assistance. It was necessary to talk about the structure and nature of texts and changes in lexico-grammatical structures as well as to negotiate the conceptual content of them.

3.3. Cognitive Approaches to Learning

According to Gagné (1993), the essence of learning is in being able to transfer knowledge by adapting what is learnt or known from one setting to another in order to satisfy some useful purpose. Educational activities may be perceived by social theorists as simultaneous participation in regulative and instructional discourses, at the heart of which is the integration of information into knowledge structures. In psychological terms, Gagné sees this as the interface between entities of declarative and procedural knowledge (Schunk, 1991), monitored by conditional (Schunk, 1991) factors.

Declarative knowledge (Schunk, 1991) relates to Bernstein's notion of instructional discourse (Bernstein, 1996). It has its application in the acquisition of facts and belief systems, defined psychologically as concepts and schemas and is generally well established by the time children commence school (Pressley, 1998). However, access to knowledge is facilitated on a micro- and macro-cultural level through the social practices of family and community, power relationships and personal experiences (Gee, 2000).

Procedural knowledge applies to regulative rules and negotiative processes for utilising facts and manipulating information, re-contextualising experience and establishing relationships between events. The overarching principle of conditional knowledge (Schunk, 1991) is that it represents an internal process of decision making i.e. evaluating and knowing what to do, how to apply the procedures and when to do it (Schunk, 1991, Gagné, 1993). From a social perspective we are languaged into these practices. The social settings and communities of practice provide the interpersonal and experiential engagements which constitute our learning environments. They are the language settings in which participants develop their concepts and schemas referred to by Pressley (1998).

In the psychological sense, the activation or retrieval of information depends upon the integrity of neurological networks and the relevance of the information for the individual. The relevance of information determines its authenticity and how effectively it is embedded into existing knowledge structures. According to Schunk (1991), Pressley (1998) and Gagné (1993) propositional networks share common chemical neuro-transmitters which facilitate problem

solving, analogising and recognising what is relevant. A social translation of this view might be to say that languaging activities make these connections possible. At the outset, the languaging process is the precedent and the catalyst for learning activity albeit the engagement of either speech or thought (Lave, 1991). How this process is mediated impacts upon learning.

Behaviourist, cognitive and humanistic psychology is centred around a definition of skills and knowledge acquisition with an inclination for reading development to be identified as an incremental, skills based continuum. The work of Rennie (2000), revealed that such a model supports hierarchical development with decoding at the basic level and critical thinking at the top but Luke and Freebody (1997) advocate a critical social theory where students access coding, meaning, pragmatic and critical practices as integrated processes. Exploration from a social perspective indicates that reading activity is influenced by interpersonal factors such as cultural history and social context (Luke and Freebody, 1997).

The context of engagement is also recognised as an important attribute in psychological theory (Snowling, 2000b). What seems to be less emphasised in psychological theory is the explication of social constructs through which language operates as the process for the mediation and integration of information. In achieving her learning goals, S had to meet the challenges of both theory and practice. The written texts had to be read and understood in relation to her workplace practice. According to Christie (2001), the discourse of a community precedes and eventually coexists with pedagogic discourse and so the means exists by which the language of the theory could articulate with the language of the workplace. Mediation through talk provided the conduit for S to make meaningful connections between the workplace practice and the theoretical texts.

3.3.1. Interface of Psychological and Social Theory

Halliday (1996) foregrounds language function as being embedded in social activity and although meaning making occurs simultaneously at a multiplicity of levels, thought and conceptualisation commence on an interpersonal level through language engagement. There is no learning which occurs independently of a social context since thought and action have emerged from interpersonal experiences and prior involvement with other people (Lave & Wenger, 1991).

Halliday (1990) describes the strata of language as semantics, lexico-grammar and phonology. In social terms, "semantics is realised as words, and words, as sounds" (Hasan, 1996:73). Linguistically, language is the socialising process through which the cognitive constructs of conceptualisation are developed. Smagorinsky, (2001:62) puts the view that language enables us to produce mental images, referring to "a new form of text with meaning, allowing for reflection and transformation". These are further explained as exploratory processes leading to representation, reflection and new thoughts. The meanings of words, depend upon the sentences and the grammatical patterns of texts within the social practices in which they occur (Hasan, 1996:7). High order meaning making processes such as reflection, representation and transformation occur through different genres and text types. Phonology is specific to every language and the degree of individual competence is reflected in the capacity to utilise attributes such as prosody and nuance in meaning making activities (Torgeson, Wagner, & Rashotte, 1994).

As Purcell-Gates (1997b) asserts we cannot simplistically assume that we learn to read (implying a bottom-up sequence), in order to read to learn. The notion that reading is learning would suggest (to use cognitive terms), that bottom-up and top-down processing occur concurrently and integratively. What is suggested by Halliday is that individuals utilise a type of selective processing as to which suits them according to a specific situation (Christie, 2005). Rather than being interpreted as separate kinds of processing the focus is always on making meaning whether at the word level or at the level of whole text. Subsequent higher mental processes or as Halliday states, different mental practices requiring different semiotic resources (comprehension or meaning making) are appropriated through cultural practice (Vygotsky, 1978; Kress, 2000a cited in Smagorinsky, 2001) using a complex array of communicative language experiences as part of apprenticing an individual into social practices. Having a learning identity is a commodity of contemporary life in which one is shaped as a member of a community through becoming knowledgeable and skilful (Lave,1991) in practice with others.

Matthiessen, Slade and Macken (1992), support a vision beyond the "lowest levels of the linguistic system" (p.174) and promote the language in context model which "integrates linguistic analysis of higher levels of organisation in writing, with the analysis of student use of

grammatical resources" (p.175). Cultural mediation is necessary for the construction of new meaning and is therefore critical to concept development. In this context language is socially constructed, representative of a spectrum, which reflects integral complex relationships. Learning with others and through the contributions of others would seem to provide more opportunities for meaning making than learning in segregated or isolated settings.

The means by which to access and respond in learning situations may in some instances require the aid of technological resources, such as hearing or visual aids. Even reading assistance software programs and word processing packages require a cohesive knowledge of phonology, word structure, grammar and semantics in order to negotiate and gain optimal benefit from them. Unfortunately, many programs within formal educational practice are used as a substitute rather than an integrated aspect of literate practice. For example, computer based reading and spelling programs utilise new technologies and are promoted as tools which can be used to fill the learning gaps rather than to socialise individuals into reading and writing practices. They are designed to be independently operated, repetitious and have self-correcting functions which enable the user to progress at an independent pace through sequenced activities.

Although knowledge and learning are expressed as cognitive / psychological constructs, it is facility with language in conjunction with, or embedded in social practices, that realises growth. (Cambourne, 1988; Barnitz, 1994; Bloome, 1994; Purcell-Gates, 1997b). For example, the reading of stories alone is not what enables children to reflect and exercise the kinds of thinking which are necessary for school. It is the process of mediation in reading and writing activities that an adult provides through the roles of reader, interpreter and shaper of narratives and information i.e. social mediation that enables literate development (Williams, 2000). The role of parent (subsequently the teacher) is as important as the story itself. For S, the languaging process through stories did not occur prior to school. This was not a feature of her family life but one which she identified as important to her, in having a family of her own (Appendix C, Line 150). However, it is not known what other variety of oral experiences might have constituted narratives and provided different levels of enrichment in S' early development.

3.3.2. Pedagogic discourse

Bernstein (1996) brings into focus a social perspective on cognitive theory through his categorisation of regulative rules of distribution, re-contextualisation and evaluation. The regulative rules of distribution determine access to knowledge and therefore discursive power. Re-contextualisation implies an understanding of the embedding of discourse i.e. how to integrate new knowledge which occurs outside the school context. Evaluation of knowledge takes place according to time, place, context and age (Christie, 2000).

"Bernstein (1996) proposes that a pedagogic discourse has two elements: a regulative discourse and an instructional discourse. The latter is "embedded" in the former in such a manner that the discourse of some context outside the pedagogic relationship is taken and relocated for the purposes of teaching and learning." (Christie, 2001:316)

We are socialised into the regulative discourse of a community practice which embeds instruction and learning. The social linguistic analysis of practice for the purpose of this study was conducted through the interpretation of linguistic meta-functions from the recorded interactions of student and tutor who were negotiating texts. Christie (2001) argues that the regulative discourse embeds the instruction required for teaching and learning episodes and therefore the analyst's attention is drawn to the manner in which both endeavours of teaching and learning operate.

Instructional discourse constitutes the *what* of classroom teaching and regulative discourse provides the social constructs of *how* a learning activity is enacted. The skills and competencies relating to content of instruction emerge in response to the language structures which make meaningful connections within a field of knowledge. In meeting the challenges of teaching and learning, teachers are making decisions about how to present and talk about technical or abstract constructs. The talk constitutes a regulatory practice.

3.4. Educational Issues

The National Plan – 'Literacy for All: The Challenge for Australian Schooling' (DEETYA 1998), recommends the measurement of student progress against designated benchmarks. A critical level of literacy and numeracy is one in which a student is deemed to be making sufficient progress at school and without particular difficulty. These benchmarks therefore, identify essential aspects of

literacy and numeracy within the school context (DEETYA 1998: 23). It is intended that where individuals fall below the benchmarks, issues of need can be further assessed and addressed. Standards and benchmarks, according to Knobel, (2001) should only provide baselines by which to observe the development of children rather than a classification system.

Education systems promote the idea of language in "real contexts for real purposes" (Department of Education, Queensland, 1994:7) but recommend the implementation of intervention programs which do not deal jointly with the condition of meaningful contexts. Many programs are repetitive, skills oriented and make use of practice regimes. However, "without meaningful and relevant contexts the less successful learners are trapped into reading, writing and speaking texts that are not natural and not related to the texts with which they are already familiar because of their life's experiences" (DEQ, 1994:7).

Quantitative measures of S' reading and writing performance were reported by education authorities in keeping with the outcomes of objective standardised tests. The tests purport to reveal the level of competence of an individual in relation to age peers compared with developmental trends or benchmarks. They are measures which are sanctioned by governments, and promoted by educational research bodies as the appropriate means by which to assess the literacy status of individuals within our population (DEETYA, 1996, 1997, 1998). Quite often, they are used as an independent source of data, from which to extract information and make wide ranging decisions about education, whether it be for an individual, a class, a whole school, a state or an entire nation (Castleton, 2000). The statistical analysis used in educational and psychometric measurement involve the reduction of multiple indicators of performance to underlying clusters or factors which are interpreted as competence measures (Freebody & Wyatt-Smith 2004).

S' experiences prior to school had not prepared her for the encounter with school literacy practices and neither had the experience of schooling prepared her for the literacy challenges in relation to texts and her workplace (Appendix C: Lines 29-34). This presents an interesting notion in terms of apprenticeship. Her identity as an apprentice in workplace practices implies participation in developing knowledgeable skills in areas of reading, writing and manual expertise specific to her

field. Apprenticeship into the texts of the work place also forms an important aspect of her learning. Other forms of apprenticeship relate to membership of school and family communities. The general concept of functional literacy is one which suggests that an individual is able to connect with written information in a meaningful and independent way within the culture and community of practice. Apprenticing into literate function occurs on both individual and institutional levels but here it seems, according to Lave (1991) is the paradox.

"It is exactly in those organisations in which control through narrowing, trivialisation, and decomposition of full participation is most common – in schools and workplaces – that learning is most often an institutional motive and yet by argument here, most likely to fail." (Lave, 1991:78)

Alternatively, Lave proposes, apprenticing into other aspects of life in the family and social community usually leads to successful participation. Developing an identity as a member of a community and becoming knowledgeably skilful are part of the same process, with community practice being the shaper and motivator which gives meaning to the experiences that establish knowledge. Learning and failure to learn point to relationships within these socio-historical processes of knowledgeability and identity (Lave, 1991).

However, the process of distinguishing the literate from the illiterate remains problematic. There are many factors which influence literacy development because of the intricate relationships within these functions (Clay, 1987) but processes such as reading and writing depend upon the smooth interaction of brain systems (Snowling, 2000). Numerous language and literacy support programs have been published but Clay (1997) suggests that some precautions need to be taken when focussing upon literacy deficits in developmental programs. The nature of brain function is such that a deficit may not be isolated to one particular area and it may also be influenced by factors such as timing and the nature of experiences during the acquisition of skills. Ultimately, language development is referenced to an underlying capacity to make meaningful connections as a result of interpersonal experiences.

The results which have been reported from the outcomes of literacy surveys (ABS, 1997a & b; ACAL, 1999; OECD, 2000) reveal that there is a diverse range of individual ability for the processing of language and especially for responding to print. This ability depends upon the

manner in which text is configured and the way in which individuals are required to work with texts and respond to them. Readers "will be successful to the extent that an understanding exists between the cultural and situational contexts and how the language in the text functions" (Gerot, 2000:206).

3.4.1. Developmental asynchrony

Throughout the latter part of the 20th century, the British Dyslexia Association (1968), supported research which identified characteristics in individuals which reveal a predisposition for confusion with print, therefore making it difficult to access information and communicate through systems of reading and writing (Orton, 1939; Augur & Briggs, 1992). The term dyslexia has become the descriptor of specific phenomena, experienced in relation to reading and writing processes. Dyslexia was originally defined as having its etiology in the processing of linguistic units (Orton, 1925), which form the basis of our speech-sound system, i.e. the phonological structure of the language. Such a label is currently applied to many individuals, and has become the basis for special educational provision in the form of literacy support programs. Without basic phonemic awareness, knowledge of letter-sound relationships and decoding strategies, emergent readers appear to experience difficulty in learning to read (Munro, 1998; Hulme, 2000; Snowling, 2000; Coltheart, 2000).

There are also many children who have reading ability and may appear ready to write but have little idea of how to spell (Pressley, 1998). This particular phenomenon was identified by Orton (1937) who claimed, "These children can often learn to spell words by rote memory but this is apt to be very short lived..." (cited in Henry, 1998:84). Teachers have become aware of instances where spelling and grammar are problematic and although syntactically a text may be relatively cohesive, unorthodox spelling and word order may interfere with its semantic elements.

The definition of dyslexia has undergone a two stage transition in its definition, having first emerged from a medical model of the World Neurological Foundation (1968), with an emphasis upon a deficit theory. A subsequent definition focused on an IQ discrepancy, which was revealed through the disparity between verbal and performance scores on psychological sub-tests (Frith, 1985). More recently, dyslexia has been perceived from both a cognitive psychological and a

linguistic perspective. Snowling (2000) describes dyslexia as having clear identification with reading and writing cultures in which characteristics vary according to age, ability, motivation, experience and the type of writing system being learned. Definitions have also been careful to specify that the processing characteristics described as dyslexia have no direct correlation with so called levels of general intelligence:

"A disorder in children who, despite conventional classroom experience, fail to attain the language skills of reading, writing and spelling, commensurate with their intellectual abilities."

(World Federation of Neurology, 1968)

Frith (1985) identifies a causal chain associated with dyslexia that incorporates biological, cognitive and behavioural factors. Snowling (2000) specifies a developmental disorder that will change with maturation and in response to the environment. This reflects the findings of work carried out over many years by Samuel Orton (1925, 1937, 1946) in the first half of the twentieth century and subsequently continued by other researchers such as Anna Gillingham and Bessie Stillman (cited in Henry, 1998). Since psychological testing is a dominant practice in education, the decisions about the intelligence and abilities of individuals are often influenced by the results of these tests. The information provided by such tests should be considered in conjunction with the social practices surrounding an individual and the nature of instruction which are integral to individual learning.

What might be particularly significant is that factors relating to conventional instruction and socio-economic opportunities were features of the definition originally given by the World Federation of Neurology (1968). The relevance of instruction is what makes social theory a pertinent aspect in relation to dyslexia. Learning in relevant contexts makes instruction meaningful. The *what* of learning is the knowledge gained about the social world, and the *how* is social mediation. "Knowledge is changed in the course of activity and includes speech and thought but cannot be reduced to either one or the other" (Lave, 1991:67).

Many individuals struggle with the kinds of learning practices which are common throughout formal schooling. They often free themselves from the shackles of school literacy as early as possible and pursue fresh opportunities that re-vitalise the learning process through endeavours

which generate their own level of personal satisfaction. (DEETYA, 1996,1998; ACAL 1999) This enables an opportunity for learning from a totally new perspective and for completely different reasons. The "learning of authentic texts for authentic reasons" (Purcell-Gates, 2000) creates interesting analogies of readers some of whom are like enthusiastic travellers leaping onto the train, impatient to reach their next destination. Next, there are the ones who are struggling to clamber aboard but still manage to achieve their goal and finally, there are those who are left standing at the station and have missed the train completely because they could not muster the skills and resources to get there quickly enough. Studies by Stanovich (1980, 1986, 2000) have shown that children who experience difficulty with reading in their first years of school are still struggling many years later.

Clay (1985) refers to early identification of literacy difficulties and claims that these difficulties in terms of school literacy will emerge within the first year of formal schooling. For some individuals they will persist throughout the rest of their education and into adulthood (Clay, 1985, 1987, 1990, 1991). Orton (1939) emphasised the need for stimulating and encouraging oral language prior to schooling as well as informal phonological awareness training. It is significant to note that school commencement ages vary throughout the world. In Australia, the majority of children start school at 5 years of age but in other countries 6 years and 7 years. Age and maturation factors impact on social experiences and language development. Children who are more established in communities of practice prior to schooling may also have better language resources to function in a formal instructional setting.

Williams (2000) observed variations in practice amongst mothers of preschool children which revealed specific differences in linguistic reasoning according to sociological factors. These were not just in relation to time spent with children but also based upon the extent of mother's independence and the extent of her autonomous decision making. Such a study offered data which showed that mothers who had a greater degree of autonomy in terms of social status were able to expand their children's responses beyond the immediacy of the text. This was much more than reading words, it was exploration and mediation of text through shared experiences. As such it was excellent preparation for the literacy practices encountered in school.

3.4.2. The reading / literacy debate

Reading and writing, like speech and thought are not independent processes. We also read as we write (Mickan, 1997, Miller, 2004). At any given level of reading development, a competent reader knows where to commence reading and realises the connectedness of stories or text. For example, words and pictures have a relationship between them and that chapters have a common thematic element. Competent readers are able to consistently recognise words and access meaning from the text, taking account of word order, context and interactants within their own socio-historical and cultural experience. Competent readers can also talk about the message in the text and usually make some connection with personal experience or make comparisons with another text (Chall, 1967; Goodman, 1976b, Clay, 1991).

However, competence is relative. A competent five year old reader as perceived in a formal educational setting is not the same as a competent twelve year old reader. Competence with one type of text, regardless of age, may contrast with competence in another. For example, the demands of reading a narrative are different from reading a magazine article, newspapers, poetry or Shakespeare. The challenge presented by one poet differs from another and one Shakespearean play is not necessarily just like every other. Resources and experiences for engaging with texts and processing texts can be just as diverse as the nature of texts themselves.

Is competence a useful concept at all? If we are assessing or observing performance or competence relative to a specific task, there are other ways that learning behaviour can be described. Unfortunately, there are circumstances where a demonstrated lack of competence with a certain text leads a person to dispense with it and seek something easier.

Reading requires practice and success naturally favours those who learn easily, enjoy the experience and get the much needed practice. Meanwhile, those who struggle or cannot seem to get aboard the reading train are reluctant to perpetuate the degree of hardship that must necessarily be associated with the process and simply do not get the practice they need (Stanovich, 2000; Rayner, Rayner, Perfetti, Pesetsky, & Seidenberg, 2002).

In some cases, even where children come from the same family, reading has developed as expected for one, but not for another. In S' family other siblings learned to read without difficulty. Is it that some developmental anomalies (Snowling, 2000) may impede learning for an individual such as S? The diagnostic commentary of the psychologist refers to the role of cognitive functions which account for such differences. But in the study of S, some success in reading has occurred long after the optimal period of time that parents, educators, and psychologists associate with such development. S' motivation to succeed in the field that she had chosen as her career could be viewed as a significant factor in her development. She had made her own choice about what she wanted to learn. The relevance for her was that this was that work she wanted to do.

Reading activity has been re-contextualised into schooling but has its origins in family life (Williams, 2000). In the early school years, levels of reading accuracy have been highly correlated with phonological awareness (Juel, Griffith & Gough 1986; Perfetti, Beck, Bell & Hughes 1987; Neilson, 1999). A phonemic understanding of written English can be acquired by invented spelling which is an attempt by children to encode their own language whilst gradually moving towards a fuller understanding of letters and sounds. The component skills of reading, rely upon a foundation of conceptual knowledge about print (Clay, 1991; Purcell-Gates, 1997a) and basic phonemic knowledge of letter/sound relationships in addition to word recognition skills (Torgeson, Wagner, & Rashotte, 1997; Pressley, 1998). However, while phonological awareness training may enhance decoding ability, it is not a sufficient condition for success in comprehending text (Henry, 1998).

From a cognitive perspective, reading progresses from context to the recognition of words in print. Print materials are observed in the environment through visual images, logos and graphic representations as well as a variety of other semiotic systems for making meaning in communities of practice. The experiences of formative reading and subsequent instruction lead to the development of writing which is acknowledged by teachers to require explicit teaching and modelling. Although different opinions exist as to whether we use predominantly whole-word or phonics to achieve status as readers, linguistically we are aiming to make meaning. However, it has been claimed in cognitive research that the explicit teaching of phonics makes it easier for

children to develop reading behaviour (Chall, 1967; Juel, Griffith, & Gough, 1986; Perfetti, Beck, Bell & Hughes, 1987; Juel, 1988; Hulme & Snowling, 1994; Henry, 1998; Pressley, 1998; Johnson, 1999; Coltheart, 2000; Hulme, 2000; Snowling 2000).

A plethora of reading support programs cater for students with specific literacy needs such as Reading Recovery (Clay, 1987), Teaching Students with Dyslexia (Augur & Briggs, (1992), THRASS (Ritchie & Davies, 1998) and The Writing Road to Reading (Spalding, 2003). Many result in only partial success. Frith (1985) defined three stages of reading (1) visually recognising words (2) learning the correspondences between written symbols (*graphemes*) and spoken sounds (*phonemes*) and (3) achieving visual recognition of an automatic nature i.e. not having to consciously go through the previous stages. The argument in support of phonics based programs versus the whole language or the literature based model (Chall, 1967) is enmeshed in differing philosophies surrounding traditional and progressive approaches. In recent times, teachers have discovered that the combination of literature based and phonics instruction is more powerful than either method alone (Pressley, 1998; Rayner, et al 2002).

However, linguists (Mühlhäusler, 1992; Harris, 1993; Harris & Hatano, 1999) would suggest that to limit the debate to one versus the other or even consideration of a combination approach is still only part of the story. The role of language as social practice is not included.

3.4.3. Quantitative and qualitative assessment

Assessment of literacy is closely associated with two discrete goals. First, accountability in terms of policy and second, measurement of instruction. Rigorous testing and measurement of students are implemented in Australian schools. They are commenced as early as possible after school entry and then in year levels 3, 5, 7 and in some instances at year 9 in the form of national basic skills testing in literacy and numeracy. The performance of students is benchmarked as standard, proficient, excellent or not meeting the benchmarks at all (DEETYA, 1996; DEETYA, 1998). The national testing policy incorporates initiatives relating to issues of equity and social justice in schooling and promotes testing as the means to reveal whether improved outcomes have happened or not. This plan is constructed as 'Literacy for All: The Challenge for Australian Schooling' (DEETYA, 1998; Wyatt-Smith 2000).

Quantitative literacy assessment is integral to the domain of cognitive psychology. Reading and responding meaningfully to text (comprehension) feature as standard tasks in all normative assessment procedures. Gerot (2000) has explored reading assessment in terms of a functional linguistic framework. The nature of some reading programs, reading tests and their questions were examined according to context, structure and a question hierarchy. She found that reading and comprehension processes operated upon predictions between context - text relationships in terms of field, tenor and mode. But some texts were naturally more difficult to read than others. Standardised testing procedure used de-contextualised written texts for assessment of student performance. Is language being treated as text for meaning or is being treated as just words and sentences. If the latter, then reading tasks are not helping to establish the connections between text and context. Gerot's findings reveal that the comprehension of texts is supported by their relevance to the situation of the individual. The talk that surrounds texts in building the field and finding out what they know about a topic helps to familiarise the reader with the task and establish meaningful connections.

Reading accuracy and reading comprehension scores are frequently given close examination in psychometric assessments. Snowling (2000) refers to the discrepancy theory of developmental dyslexia. It indicates that specific sub-test scores can be lower on IQ measures of verbal or performance areas for an individual. I.e. there are differences between expected and actual attainment, where one might expect them to be higher, based on teacher or parental knowledge about a particular individual. Lower scores on tasks of auditory memory or visual memory may be interpreted as having implications for hearing or visual acuity by comparison with other aspects of neurological processing such as auditory or visual perception. In many cases other intellectual processing abilities may be quite well developed and even exceptional such as general information, social reasoning, visual-spatial skills and problem solving.

There may be perceived anomalies or discrepancies in the measurement profiles of certain individuals subjected to IQ testing procedures, hence giving recognition to relative strengths and weaknesses in the processing of information. However, the characteristics to which Snowling (2000) refers as asynchronous within the overall developmental picture of an individual fits a pattern of discrepancy.

People are identified as different if they fail or are poor at something. Difference is a sensitive issue from quite an early age. Some children, even as young as 6 years of age (from my experience) are critically aware of the differences in their performance in reading, writing and especially spelling to that of their peers. Labels such as average, deviant, intelligent, advanced or learning disabled, dyslexic, etc. are commonplace in the everyday terminology of educational settings and are used to classify or categorise students (Mehan, 2001). Dyslexia is a label for a developmental phenomenon in which the notion of phonological knowledge has become the focus of much research and discussion in educational and psychological disciplines.

The notion of skills acquisition foregrounds a hierarchical structure where cognitive development is synonymous with incremental progression and knowledge is perceived as basic units of information. The interactive dimensions of knowledge systems are articulated as inter-relations, transformations and retrieval mechanisms which become the object of testing in the school environment and a psychological context. The ability to decode the written word is something different from making meaning from texts. Although the S could not accurately decode (letter-sound correspondence) a written text, she could construct relevant meanings through discussion about the text.

3.5. Summary

By comparison with psychological theory, a social learning theory embraces a broader perspective of experience as being operational (contextual), cultural (language) and critical (meaningful) within an integrated systemic framework of practice. Integration and embedding of experience are fundamental to dealing with language in context.

The next chapter explores the creation of meaning in a socially constructed context and gives rise to the notion of knowledge within a sociocultural theory. It constitutes a deviation from the cognitive ideology of knowledge acquisition and focuses upon mediating learning practices.

Chapter IV Social Perspectives on Literacy

4.1. Overview

4.2. Social Language Theory

- 4.2.1. The uses of language
- 4.2.2. What signifies complex literate functions?

4.3. Language and Literacy

- 4.3.1. The social context of language
- 4.3.2. The social context of literacy
- 4.3.3. Reading, writing and comprehension in a school context
- 4.3.4. Language and communicative power
- 4.3.5. Teaching practice

4.4. Language in Context

- 4.4.1. Language as a social practice
- 4.4.2. Language as a social process
- 4.4.3. Language as a social product
- 4.4.4. Grammatical appraisal
- 4.4.5. Grammatical abstractness and metaphor

4.5. Summary

4.1. Overview

From a social perspective becoming literate is based upon two continuities: "learning to mean" and "to expand one's meaning potential" (Halliday, 1993:113). Oral language is one of many human resources for making meaning which include educational contexts as well as commonsense types of knowledge that are characteristic of the human species (Hasan, 1996). The work of Halliday (1993), directs us to the "fountain of everyday speech" (ibid:112) which provides the key to understanding how we use and learn language. Making meaning employs a range of semiotic systems but these involve more than speech alone and the most complex of these systems operate in our classrooms (Lemke 2000; Christie 2001) where talking, looking and listening are integrated with signs, symbols and interactions. Systemic functional theory promotes language as a resource for making meaning within the social context of many different

community practices. The social context is the predicator of a dialogic principle in which one person interacts with another in either written or spoken form (Pearce, 1994). The social context is also multi-dimensional and defines a process and product not as separate entities but as integrated functions. This chapter raises some issues relating to the learning of complex language functions such as reading and writing within the context of school classrooms.

4.2. Social Language Theory

A sociocultural theory of language assists us in developing a fuller understanding of educational practice. Wells (1999) cites two inter-related goals of language activity as cultural continuity and personal empowerment. In an educational setting, both are achievable "through problem-solving social activity, mediated by linguistic interaction with teachers and students as well as students and their peers" (ibid:204). The first goal is the transmission of a cultural history to each generation through its artifacts and stories: the second is the transformation and appropriation of knowledge to individuals to empower them in making their contribution to solving problems of the broader culture (Wells and Chang-Wells, 1992). Nystrand (1997a) asserts that a sociocultural theory is more than a theory of interaction because it offers insights into human dialogue, with implications for comprehension, meaning and interpretation. Bakhtin (1978) and de Saussure (1915) seem to suggest that the true nature of things is in the relationships we construct and perceive between them not in things themselves (cited in Pearce, 1994). According to Bakhtin (1978) it is the positioning of relative perspectives, conflict and tension which shapes the discourse and develops understandings within socio-cognitive practices. What is of interest to educators is that dynamic processes of interaction and dialogic tension contribute to meaningful interaction. Learning as a social construct is to apprentice students in the ways of making their contribution to the culture through the activities of the school curriculum. However, meanings unfold through dynamic processes which depend upon reciprocal relationships (Pearce, 1994).

Halliday (1993) asserts that language is "an essential condition of knowing" (p.93). Language is making meaning, "a continuous learning process by which experience becomes knowledge" (p. 93). Firth (1950) concludes that it is not "domain of human knowledge" or "one kind of learning" nor is it "a mechanism for producing and understanding text" (cited in Halliday, 1993:93). The languaging process allows us to learn about language through language (Hasan, 1996) and

explicit teaching about specific structures is possible through the regulative and instructional discourse of the classroom. It would seem that the roles of teachers and learners are intertwined through reciprocal and respective acts (Nystrand, 1997b) and that "Literacy is not a matter of learning to go it alone with language but (rather) learning to go it alone with each other" (Brandt, 1990:6 cited in Nystrand, 1997b).

Perret-Clermont, Perret & Bell (1991) examined the specific features of social interactions not only as the mediating vehicle but also as an intrinsic part of the language process in the transmission of meaning.

"The interpersonal coordination of actions and symbols create both the task and the problems; the endeavour of finding solutions for these problems is not only a logical affair but, identities, status, and role definitions are also at stake" (p.45).

There is an element of power and authority in any discursive position (Pearce, 1994) which influences the roles of individual participants. Since learning involves the restructuring of meanings or meaning potential in order to perform at a previously unattained level, it is not simply a stimulus-response process of interaction but a dynamic engagement where previous experiences, modes of behaviour, identities and beliefs are either activated or suppressed within a perceptual space. The zone of proximal development has become a particular educational notion from the work of Vygotsky (1978), but Lave and Wenger (1991) challenge us to consider some different interpretations of ZPD. In a scaffolding approach there is space or distance established between learner knowledge and the degree of assistance provided in a problem solving task by a more experienced person (Greenfield, 1984; Wood, Bruner & Ross, 1976). The distance between active knowledge of the individual and what is understood or made accessible through direct instruction (Davydov & Rhadzikovskii 1985) is perhaps the typical kind of engagement in classroom settings. Engeström's definition states that the

"distance between the everyday actions of the individuals and the historically new form of the societal activity that can be collectively generated as a solution to the double bind potentially embedded in ...everyday actions" (Engeström, 1994:174)

Engeström's interpretation focuses upon learning which occurs in conjunction with previous experience (including active and vicarious knowledge). Social transformation occurs because of the relevance of new activities to current circumstances and an individual desire to become a

participant in the learning process (Lave & Wenger, 1991). The nature of such engagements is distinctly social in that transformations of knowledge and behaviour occur through collective, negotiative actions in response to everyday actions. According to Perret-Clermont (1980) peer interaction promotes reasoning and cognitive re-organisation when differing perspectives engender conflict although dialogue does not necessarily engender polite, respectful or conciliatory exchange with one another (Pearce, 1994).

The Piagetian (1954, 1955, 1970) model of learning states that the source of progress lies in the cognitive conflict generated by negative feedback to a particular response. Perret-Clermont, Perret and Bell (1991) expand this notion to explain that the more direct the form of conflict, the more likely it is to trigger a cognitive re-structuring. However, sociocognitive conflict does not always produce developmental progress. Pre-requisite knowledge must exist in order for an individual to benefit from a specific interaction, but also an appropriate distance or transactional zone for learning must exist within and between participants. Kaufman's (2004) view of Piaget's developmental theory supports the notion that learning is holistic which involves self-motivation for the construction of new knowledge based on prior learning experiences, information acquired through reading and active exploration. In Piagetian terms learning experiences are equated with assimilation, accommodation and equilibrium. Cognitive development and learning are therefore not autonomous functions but a result of individual dependency (Perret-Clermont, Perret & Bell,1991; Kaufman, 2004) or as Bakhtin and Medvedev (1978) propose, that participants such as teachers and learners, readers and writers are "sequentially contingent" on each other (1978:128). It is important then to consider the nature of texts and how the dialogue between teachers and students influences the interaction on an interpersonal level.

4.2.1 The uses of language

We use language to construe and understand reality and to communicate with others. Language is a practice, a process and a product. It involves speech (although not exclusively) and prosodic features, such as intonation, nuance, pitch, rhythm and physical attributes of gesture and posture. The relations of human activity are integrated with speech and thought but cannot be simply reduced to either one or the other (Lave & Wenger, 1991). Language can take its material form through acoustic signals, alphabetic print and graphics, musical notation, manual signing,

hieroglyphs, or in Braille (Lemke, 2000) and when incorporated with electronic resources contribute to an extensive range of communicative devices and languaging modes. Meaning is made in ways that are increasingly multimodal where written modes are becoming more integrated with visual, audio and spatial patterns of texts (Cope & Kalantzis, 2000). Through language processes we make our needs known, express our ideas and feelings, share our knowledge, signal our intent and hence take part in social practices. The use of oral language equips us for progression into the expansion of meaning potential through increasingly more complex applications including reading and writing systems. A definition of language would be difficult without the inclusion of visual and semantic elements in situational contexts (Lemke, 2000).

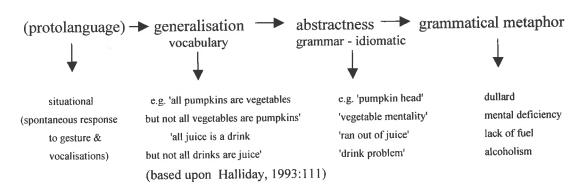
Individuals strive for and achieve different social purposes through language. Those who initiate a message and those who receive either as speaker or listener, writer or reader, engage in negotiative roles of communication and interpretation of meaning. Language depends upon negotiation, the success of which relies partly upon how a message is construed for communicative purpose and partly on how it is interpreted by the recipient. Whatever meaning is generated depends on individual language resources, as in the absence of oracy and the use of a signed language; or the absence of a mutual oral language. The resources of the interlocutors are interconnected with previous language experiences and cultural history. It is sociocognitive, not just a cognitive process because participants have identities, motivations and emotions in relation to the interaction (Lave, 1991), but the primary purpose for language is to make meaning in order to achieve community or individual goals. The social constructs of language experiences provide the foundation for cognition but the complex activities of reading and writing also depend on the integrity of brain systems.

4.2.2. What signifies complex literate functions?

A variety of language constructions are used for different social purposes. Halliday (1993) asserts that abstractness has significance for literate development, and that learning to read and write requires the reconstitution of language into new, more abstract modes. Reading and writing are educational forms of knowledge compared with the common sense form of spoken language.

A significant aspect of the conversational and text analysis in this study is the identification of abstractness which presents in the oral language of participants and that of the written texts. Halliday (1984) revealed in this observations of *Nigel's* language development and I have presented them in the following adaptation of Halliday's model.

- generalisations through naming provide flexibility and expansion of vocabulary
- grammatical abstractness is the key for entering into literacy at a primary level
- grammatical metaphor is the key for entering into literacy at a secondary level and a knowledge that is discipline-based and technical (1993:111).



Although an arbitrary selection, the example given here of a particular nomenclature serves to illustrate a progression from concrete language to more abstract and metaphorical conceptualisations for which there are distinctly different purposes for use and dimensions of knowledge. That is not to say that there is no place for concrete experience at more abstract levels. Lave's (1991) research refers to learning through different forms of apprenticeship relative to other cultures which are founded upon concrete learning experiences. In western cultures there are domains where demanding skills co-exist with high levels of abstract knowledge such as those required by surgeons. Surgical techniques are developed through concrete experiences of apprenticing or internship as we otherwise describe it. In other areas such as learning in mathematical and scientific fields, an understanding is developed through the use of models, demonstrations and experiments which accompany instruction, hypothesizing, recording and problem solving.

4.3. Language and Literacy

Early language and literate experiences prior to schooling provide formative patterns for the sophisticated challenges of reading and writing. Within a schooling context, literacy is "construed

in a different kind of language" and "building it up involves reconstruction and regression" (Halliday, 1993:109). The development of a meta-language is implicit in this construction process as in order to learn about the ways of writing, there has to be a way of talking about it. Therefore explicit instruction and language practices are required for explaining the lexico-grammars and structures of different texts.

Levels of abstractness change according to the purpose of the task. In oral mode, the spontaneity of speech maintains a complexity in relation to the grammar and more simplicity in its lexical density but written texts become more lexically complex and comparatively less so grammatically, although higher levels of abstraction make written texts less readily accessible (Halliday & Martin, 1993). The level of abstractness, use of metaphor and grammatical links (such as embedding and dependency of clause structure) in written texts are distinguishing characteristics as information becomes more specialised and technical in its content.

Literacy involves the transition from interpersonal function to an experiential function requires the capacity to deal with abstraction. Halliday (1993) refers to the 'magic gateway' to becoming literate and to be able to exchange abstract meanings is to gain entry into formal education (Halliday & Martin, 1993). Martin (2000) asserts that to understand grammatical metaphor is to the key to educational success. Language as reflection construes the processes which exist in the outside world as those of inner consciousness (Halliday, 1993). Reflection and expansion of meaning depend upon making connections with text in a meaningful way. In specialised subjects, written information becomes increasingly more abstract. The scientific curriculums of our academic programs are testament to the complex literacies which are inherent in understanding scientific facts, concepts, and to use scientific apparatus and calculations. Specialised knowledge must be articulated across verbal, mathematical, graphical, and pictorial modalities in a process of translation and selection of what needs to be done at whichever appropriate moment (Lemke, 2000). Processes such as reflection, re-contextualisation and evaluation operate in a complex linguistic and intellectual space (Lo Bianco & Freebody, 1997).

4.3.1 The social context of language

The language experiences of individuals sustain them in the semiotic and social processes as a member of a community and a formed (adult-like) lexico-grammar prepares an individual for the challenges of reading and writing (Malinowski, 1923; de Laguna, 1927; Halliday, 1975). Language is learned through the need to respond and interact within a social context for purposes of communication and personal fulfilment. "Language is a meaning potential......not mirrored but constructed" within the context of a literate environment (Hasan, 1996:22). The literate environment of a school classroom requires the language processes to be explicated as well as modelled. The role of a parent or adult in sharing stories and elaborating on meanings is paralleled in classrooms by teachers, where it is necessary to explain how the language works in relation to texts as well as to model and guide student writing through joint constructions.

4.3.2 The social context of literacy

Rayner, et. al. (2002) challenge the idea that children learn to read in the same way that they learned to talk. We cannot assume that to surround children with the appropriate materials and to be good models of reading behaviour will automatically cause them to become readers themselves. Nor can it be assumed that through a similar style of immersion they will learn to write. Parents, teachers, educational authorities and governments are continually raising concerns about the literacy status of individuals, cultural minorities or other specified groups which are often the subject of investigations into the teaching of literacy (DEETYA, 1996, 1997; Castleton, 2000; Black, 2001). The response of governments in many English-speaking countries to literacy concerns, has been to broaden and intensify the assessment of literacy. Testing and reporting systems have been implemented which increase the accountability of schools and tie aspects of funding and other resource allocation to performance based outcomes to the extent that literacy has become a high-stakes issue with many stake holders (Freebody & Wyatt-Smith 2004).

"The discourses of reading and writing are taught within a larger set of values and beliefs other than schooling" (Kirk, 2001:4) and these form part of the language process. Language therefore, "is not simply a collection of expressions, it also involves relating the spoken word to the written and the symbolic" (Hasan, 1996:22). However, within the context of school literacy, the activities of reading and writing are not necessarily connected to the life experiences of all individuals i.e.

"being able to bring knowledge and experience to those things which pass before you" (O'Neil, 1970:261-2 cited in Lankshear and Knobel, 1998). The relationships between teachers, students and parents in establishing meaningful contexts for learning are critical to understanding and appreciating what has been lived and therefore what personal knowledge and language experience will contribute to a new challenge in a new context. "Pedagogical practices which enable students to develop sociocultural identity, discourse skills and grammatical competences will empower them to participate more fully in their education" (Miller, 2004:21).

4.3.3. Reading, writing and comprehension in the school context

Reading is rarely discussed in educational contexts without reference to comprehension. This has become a competency based measure used for the assessment of individual progress. The reading and comprehension programs in schools require that students are at home with the language of the text and the kinds of questions being posed. According to Meek, "to be at home in a literate society is a feeling as well as a fact" (1991:3). The diversity of communities within a nation has prompted educators to challenge the capability of a standard system to validly assess the literacy levels of their students where considerable variations exist between syllabuses, pedagogies and demographics (Freebody and Wyatt-Smith 2004).

Gerot (2000) has postulated that difficulty or ease was not only reflected in the text but also in the nature of questions which accompanied texts. The ambiguities often contained within questions demand much of a reader especially where written responses are also required. So it would seem that in an increasingly print dependent society there are many people who are not 'at home' (Castleton, 2000) but disadvantaged socially and psychologically and are therefore, to some extent, disenfranchised and vulnerable to a degree of exploitation if texts cannot be accessed in a comfortable way.

In creating an active learning environment, students deal with real problems, conduct meaningful dialogue and have opportunities for conceptual growth, ideally amidst flexible understanding from their teachers and others. Learning arises from the active construction and transformation of experiences, not from the passivity of either students or their teachers (Unrau & Ruddell, 1995). Since the reader constructs a representation of the text based upon individual experiential and

interpersonal functions, the reader can make unique but valid meanings (Unrau & Ruddell, 1995). Moreover, the formal tasks of reading and writing usually require the recall of knowledge in a purely semiotic context that is identified as classroom knowledge, which has a specific form (Halliday, 1993). Because some learning experiences are an abstraction of reality, it is sometimes more difficult for some students to transform or re-construe their knowledge within a classroom context and to accommodate the levels of language function dictated by the task and respond in the more or less prescribed manner. The pedagogic practice of the classroom determines the extent to which individuals can participate in learning when considering that regulative and instructional discourses do not operate in the same way across disciplines or with individual teachers (Halliday & Martin, 1993; Lemke, 1990, 1994; Gee, 2000, 2001; Christie, 1995, 2001, 2005).

For example, subject areas such as the sciences contain not only some of the most concrete procedures but also some of the most abstract language concepts. Within science, there are significant ways of making meaning; verbal, visual/spatial, material and symbolic features are most often simultaneously integrated in the process of instruction. Verbal content is abstracted due to its technical vocabulary and nomenclature, visual content is abstracted because of its diagrammatic representation and symbolic content is an abstraction by the very need to reduce and package complex information into discrete nominal and formulaic entities which can be organised and sequenced in an efficient and logical manner. The real application of complex concepts can be difficult to realize when they may only be relevant in specialised settings of engineering, science or technology (Halliday & Martin, 1993). However, as history illustrates, abstraction has evolved from the desire of mankind to unravel the mysteries of the universe and natural phenomena which arose from the need to find more efficient methods for solving practical problems. These may range from the most immediate practical need of building a vertical wall to one of the most intriguing - building the ancient pyramids (Christie, 1995).

The school environment includes the dimensions of text and practices, embodied within an authority structure but this is set against a sociocultural backdrop which has its own powerful influence upon motivation (Marshall, 1992). An understanding of formal educational practice and the relevance of specialised knowledge in the world is facilitated through explicit instruction and

learning about language function. The implications of rapidly expanding technology and its impact upon communication, transport, marketing economies and lifestyles have set a predictable pathway for the future in determining the need for individuals to be comfortable with the use of multi-literacies and the negotiation of text in a variety of forms. Lo Bianco and Freebody (1997) refer to various linguistic and intellectual resources such as technologies, written and visual texts which are needed by learners in order to function at the broadest literate levels.

The nature of classroom learning is one of diversity, both for teachers and students. Nunan, (1989:86) noted that teachers ought to be involved in active research for themselves "if they are to find more successful ways of explicit language instruction and meaning based practice within a student-centred but varied environment". There are many aspects of writing which remain part of the "hidden curriculum" (Christie, 2001:325), which serve to advantage those whose life experiences have socially positioned them in order to immediately benefit from their opportunities but disadvantage those who have lacked such sociocultural experience." A common problem for classroom teachers is that language is so instrumental to the task in hand that they often do not bring its characteristics to the forefront of students' thinking" (ibid:325).

4.3.4. Language and communicative power

The importance of meaningful learning experiences and supportive interpersonal relationships are emphasised by Matthiessen, Slade & Macken, (1992:176) in that "language achieves communicative power because it is multi-stratal". The three interlocking levels of semantics, lexico-grammar and phonology are all embedded in context. The social context is represented through the semiotic organisation of field of discourse, tenor of relationships and mode of discourse (Halliday, 1978).

Reading is a languaging process through which reader and text interact (Gerot, 2001) according to conditions of practice, and through which a product is created in terms of some form of social transformation. The language in context model of schooling integrates the linguistic (cognitive) analysis of organisation in written texts with the analysis of student use of resources, compared with a traditional focus based upon formal properties of grammar (Matthiessen, Slade & Macken, 1992:173). The language in context model is an analysis of the language resources that

are being utilised by the student on an ideational, interpersonal and textual level in their experiences of reading and writing. Our understanding of this is assisted by Halliday's representation of how language is re-construed throughout the maturational process in the previously mentioned model (p.47 of this text) of human semiotic development.

There may be many explanations as to why people have not acquired a particular reading level or competence at any given point in time. But it seems increasingly necessary for each individual to function independently. Learners need to read with some independence and well enough for participation in social engagement, role fulfillment and for new skills to be learnt through the process of reading (Purcell-Gates, 1997b). Historical changes from traditional approaches in education to the progressive movement of the 1960s and the subsequent back-to-basics political emphasis of more recent times, reflects a dichotomy between "objective large scale, external, summative assessment of product and informal progressive subjective assessment of process" (Matthiessen, Slade & Macken, 1992:175). The conflict is evident as the political / economic issues are revealed by the sponsors of education, along with the product versus process concerns of educators.

The concept of skills in reading, writing and comprehension has not only become institutionalised but has also become an abstraction of everyday contexts. Language is not separable from experience within the environment or situation but the analysis of language based on the summative assessment of products has created a dichotomy between text and context (Goodwin, 1999). Although some differences between home and school literate traditions have been found to be less likely to impact upon early literacy learning, these early years of development appeared to have relevance in later stages of schooling (Williams, 2000) where the use of grammatical metaphor is a typical component of English (Halliday & Martin, 1993) and is the key for entering the higher levels of education (Halliday, 1990).

4.3.5. Teaching and educational practice

The primary purpose of teaching is to bring about induction into societies' valued practices (Nunan, 1989). Speakers of languages with writing systems mostly learn the relationship between letter symbols and the sounds associated with them (the phonemic units) without great difficulty.

However, so far as alphabetic knowledge is concerned, this does not completely cover all that there is to know in relation to sound and letter-symbol correspondence. Some orthographies of the first words that a child attempts to write in English are highly irregular and experience is also required in whole word recognition (but not so for other languages).

A common practice in classrooms is the use of "triadic dialogue" (Lemke, 1990) consisting of a teacher *initiative*, student *response* and teacher *follow-up* sequence (IRF) (Caldas-Coulthard & Coulthard, 1996; Wells, 1999) or IRE *initiation, response, evaluation* (Cazden 1988; Mehan, 2001). Wood, Bruner & Ross (1976) and Lemke (1990) argue that this approach used by default by teachers, is overused and far too controlling of the discourse. Although its use restricts participation it is claimed by teachers to be a practical technique to engage and monitor student participation in the classroom (Wells, 1999).

Nunan (1989) presents the notion of "reflective teaching" as opposed to "effective teaching" (p.129). The former has broader implications than simply finding a best way, which will result in effective learning for everyone in a variety of contexts. In the reflective model, the teacher as researcher explores variables in a range of settings with diverse learner types. It is a move away from centralised curriculum to a more learner-centred focus in which the teacher is the principal agent in curriculum development. Although the organisation of syllabuses can be grammatically sequenced but follow a natural order, classes are not ever likely to consist of learners at the same developmental stage and who are progressing at the same rate (Nunan, 1989:39). Since education is a social enterprise, diversity rather than homogeneity in language development will usually reflect the learning status in classrooms. There are also times in classrooms when the literacy demand exceeds the capacity of most students but if such moments are not sustained too long it may help to stimulate and stretch individual capacities (Lemke, 2000).

Current practices in the assessment of language which encompass literacy tend to be based upon a partial theory of learning and focus on one aspect of development at the expense of others. The inter-relationships of language levels need to be known i.e. the linguistic potential in actual discourse as well as familiarity with the structure of language such as semantics, grammar and phonology (Matthiessen, Slade & Macken 1992). The extent to which individuals can connect

with written texts, talk about them and write about them is varied and qualitative assessment provides a balance in the measurement of progress. The ideology of reflective teaching fits well within the framework of systemic functional grammar i.e. discourse analysis based upon grammar. The hermeneutic circle of reader, teacher and text interact to make meaning (Gerot, 2000) within a sociocultural context which is shaped, both by school and community (Unrau & Ruddell, 1995).

4.4. Language in Context.

In teaching about texts we need a specialised language. Halliday's (1978) language meta-functions provide the lexicon for exploring the grammar of texts for different purposes. Explicit instruction is necessary in the application of language meta-functions as a means to identify the way that texts are used and to distinguish them in accordance with meaning making activities and interaction between reader and writer.

4.4.1. Language as social practice

Ideologies are reflected in experiential functions of knowledge, understanding, reflection, transference and assimilating new information into existing knowledge structures or cognitive domains by engaging in activity. Ideological function also encompasses the socialising practices of establishing norms, values and attitudes in keeping with social forces and the dominant discourses of a community or society (Halliday & Hasan, 1976; Williams, 2000). We bring our own experiences to texts which are moulded by the social norms, cultural attitudes and values of a community (Mickan, 2004).

4.4.2. Language as social process

The interpersonal elements by which we analyse and appraise an aspect of language function include personal forms, dynamics of force and attitude as well as social complexities of roles, status and voice (White, 2005, Droga & Humphreys, 2002). Interpersonal aspects of language allow for the message to be emphasised or de-emphasised in a particular way and provide the grammar for analysis and interpretation of meaning. Other features such as modality and attitude define individual perceptions through the use of repetition, continuatives and individual positioning in terms of polarity (White, 2005). A range of grammatical resources in both oral and

written texts are used as cohesive devices within various stages of the developmental spectrum to convey and construct meaning. A systemic functional analysis identifies the grammatical resources and provides a way of talking about the language features of dialogic engagement (Halliday, 2005; Christie, 2005).

The interpersonal processes of language define language as action. The regulative aspects of interaction, negotiation and reconstruction occur in a situated context of learning through active engagement and participation. Language use may vary across a range of contexts either to direct or elicit information in the course of the learning process. Classrooms have specialised discourses for sharing understandings and collaborating in order to fulfil social purposes. "Talk constructs the environment for socialising the students into the discourse of content" (Mickan, 2006:1 in press). The interpersonal talk about the texts, which accompany classroom language practices, establish patterns of interaction which assist a student's experience and understanding in order to participate in a social context.

Although the concepts of practice and process may appear to exist as separate entities they are not distinguishable as such within the teaching context. Just as instructional discourse is embedded within regulative discourse, so is practice integral with process. It is the distinction between what we teach (instructional discourse) compared with how we do it (regulative discourse).

4.4.3. Language as social product

The lexico-grammar and the phonological system define language form. The designers of school curriculum emphasise the importance of listening, speaking, reading and writing as productive learning activities (Mickan, 1997, 2004). These are the meaning making activities that are engaged in when new texts are encountered and they are also the product of engagement with text. They are the resource which itself becomes the product (Cope & Kalantzis, 2000).

Schooling works in a specialised sphere of human activity to develop the discourses of talk and text which utilise specific lexico-grammars to fulfil social purposes (Mickan, 2006 in press). The roles of speaker, listener, reader, writer are construed to achieve specific outcomes. Success in schooling is measured by the quality of the product i.e. how well a task is presented either orally

or in written form. However, language as product is as applicable to teachers as it is to students. The extent to which a task is comprehensible is determined by how it is presented to students and apprenticed into processes of analysing, interpreting and responding. Meta-functional tools provide the structure for systemic analysis in both reading and writing so that any form of text can be assessed according to the same principles which may differ from quantitative standards or benchmarks.

Schooling is an institutional practice which broadens social experience (Mickan, 2006 in press). In classrooms, we are socialising students into the practice of working with a variety of texts. We need the appropriate language tools in order to articulate on a regulative and instructional level. It goes much further than a traditional grammatical approach where students have been required to parse sentence structures for purposes of identifying grammatical elements. A functional approach identifies how a text works and why it is construed in a particular manner. Its features can be discussed in terms of message and intent on the part of interlocutors.

4.4.4. Grammatical appraisal

An appraisal of conversational extracts in this study provides an example of the language resources at work through the lexico-grammar. In striving to understand how language is at work in conversational exchanges i.e. ideologically, interpersonally and textually, we are also informed as to how abstraction is realised; referred to by Halliday as a necessary condition for learning systems such as reading and writing (Halliday & Martin, 1993). The manipulation and perception of grammatical elements with respect to speaker or listener (writer or reader) determines the control of language dynamics in the interactional process and provides the means of signalling or understanding intent and generating or interpreting meaning. In the process of becoming literate, language is shaped and dynamic shifts occur as it is reconstituted into new and more abstract modes (Halliday, 1990).

According to Hammond (1990), children who struggle with reading and presenting their own knowledge about things in written form can often reveal a regression of up to 3 years. They learn to construe their experience in two complementary modes: first, a dynamic mode of everyday commonsense grammar and second, the synoptic mode of elaborated written grammar. The

written grammar reveals an increasing presence of nominal characteristics as the language of a text becomes more abstract and is guided by the pedagogic discourse of the educational setting (Halliday, 1996:110).

4.4.5. Grammatical abstractness and metaphor

The abstractness of the language as Halliday asserts is reflected through the use of metaphor. One way that the language can be appraised or explored is within a framework of attitude, graduation or engagement (White, 2005). Although oral and written language can be analysed systematically in this way, the meanings are generated through the integration of these three entities. For example a statement reflecting an attitude of affect, judgement or appreciation, could also be graduated in terms of its force or focus and may engage the listener or reader through features of attribution or modality (Droga & Humphreys, 2002; Appendix F). A systemic analysis provides a pathway for tracing back and forth between the lexical items and the meanings generated either explicitly or implicitly in any type of oral or written context. Abstractness exists in both the lexicon and the grammar. The lexical items convey abstract concepts that are removed from the familiar expression of spontaneous, everyday speech. The words are symbols which name not only the simplest of things but also the most complex phenomena. At the grammatical level the metaphor is in the "thingness" of experiences formerly identified as processes which have become nominalised. Expression therefore becomes a new type of construct, especially in relation to written texts. Children cannot enter the discipline-based domain of technical language without deploying grammatical metaphor (Halliday, 1993:111).

4.5. Summary

The means of making meaning from the texts is through talk. The teacher-mediated engagement with the texts is provided in this study through the analysis of conversational extracts. The identification of language meta-functions illustrate the features of engagement and the resources at work in creating meaning on an interpersonal level. The building blocks for making meaning are the connections between experiences and the abstract concepts which represent them.

Chapter V Methodology

5.1. Overview

5.2. Research approach

Questions addressed by the research

- 5.2.1. What problems are encountered by S in her engagement of the texts of the apprentice training curriculum?
- 5.2.2. What are the features of the teacher-meditated engagement with the texts and the talk supporting the meaning making?
- 5.2.3. What are the implications for teaching and supporting learners in the negotiation of curriculum texts?

5.3. Research procedure

- 5.3.1. The setting
- 5.3.2. The student
- 5.3.3. The mentor
- 5.3.4. Data collection
- 5.3.5. Analysis of data
- 5.3.6. The schedule

5.4. Summary

5.1. Overview

This chapter presents a theoretical and methodological rationale for the research design. The research aimed to analyse the ways that a teacher and student talked about and around text whilst negotiating meaning. It attempted to address the issue of supporting literate practice without resorting to practice drills, reduced texts and de-contextualised learning activities.

The learning setting was an individualised tutorial / mentoring situation where a reciprocal teaching approach prevailed (Nunan, 1989; Nystrand, 1997a). Systemic functional analysis enabled the tracking of progress and changes in discourse as the regulative and instructional registers unfolded (Christie, 2001).

5.2. Research Approach

The study explored the purposeful and staged social activity in which the operation of the two registers (instructional and regulative) make the transmission and the construction of knowledge possible (Christie, 1995). The social practice of mediation supported S in the negotiation of text, relevant to her chosen career.

Questions addressed by the research

5.2.1. What problems are encountered by S in her engagement of the texts of the apprentice training curriculum?

An analysis has been made of what difficulties appeared to be evident in S' reading of coursework texts. I have endeavoured to situate the analysis in relation to patterns of commonsense language use and make a comparison with the abstract, metaphorical nature of technical information and text constructions. The kinds of experiences that S brought to the task to inform and support her own learning have significance.

5.2.2. What are the features of the teacher-meditated engagement with the texts and the talk supporting the meaning making?

The features of mediation were analysed through the language scaffolds that emerged in interpersonal dialogue. The grammatical resources representing dialogic support in assisting the construction of meaning are significant in the way that the talk created or denied opportunities for learning.

5.2.3. What are the implications of 5.2.1. & 5.2.2. for teaching and supporting learners in the negotiation of curriculum texts?

The issues for teaching and supporting learners involve the management of curriculum which is relevant for a wide range of different literacy needs. In the majority of classrooms there is diversity rather than homogeneity and the reality for teachers is that for approaches to literacy development to be effective they will need to include all learners and reshape notions and perceptions about educational assessment and standards.

Exploration of these questions involved both qualitative and quantitative approaches. The collection of qualitative data included transcripts of audio-taped dialogue between participants during teaching sessions and reflective comments on the dialogue and interaction between them. An analysis of dialogue intended to capture the role of mentor / mediator to assist and extend the student's current level of understanding or ability as might be interpreted from the perspective of scaffolded learning (Lantolf & Appel, 1994; Hammond & Gibbons, 2001). Quantitative data was also available, given that the student was recommended for special assistance in her engagement of written text and information from standardised assessment was provided through a psychoeducational report (Appendix H).

The outcomes of psychoeducational assessment indicated specific difficulties for S in relation to literate development. An interesting comparison is revealed between these outcomes and the variety of assessment comments contained in S' school reports (Appendix F) which range from teacher acknowledgement of S having some difficulties to S having it all under control.

The procedures for learning to read and for assessing reading, writing and comprehension have been examined by Gerot (2000) from a systemic functional perspective through a three way exploration. Based upon the work of Halliday (1994), in systemic functional linguistics it is argued that we can observe linguistic resources at work through which "students are apprenticed into behaviours, skills, attitudes, procedures and forms of knowledge which enable them to achieve particular pedagogic subject positions" (Christie, 2001:222-223). Acquiring aspects of the common knowledge (Edwards & Mercer, 1987) relevant to these subjects / disciplines is an important part of schooling. In relation to Bernstein's theory it would seem that the language resources of instruction, on the part of the teacher and the meaning making resources on the part of the student are embedded in the regulatory discourse of the practice. From a social perspective, instruction is not so much the transmission of information as the interpretation and collaborative co-construction of understandings (Nystrand, 1997b).

The systemic-functional perspective of language supports the philosophy of literacy as social practice, integrated with language development. Socialisation begins through meaningful auditory and oral experience which articulate with integrated reading and writing activities, often

extending into the complex forms of written genre. The genres in language development represent "staged, goal-oriented social processes" (Martin, Christie & Rothery, n.d. p.59 cited in Christie 2001).

According to Nurss and Hough (1992), classrooms with opportunities for functional reading and writing will include regulatory practices (following rules and instructions), representational language features (use of appropriate labels and vocabulary), personal expression (opinions and feelings) as well as imaginative opportunities (fantasy or humour). Heath and McLaughlin, (1994) identified three important tasks for students with limited English proficiency i.e. fluent word recognition, rules of sound symbol correspondence, ability to use rules and learn words through decoding practices. However, the development of these occurs simultaneously rather than sequentially. Development therefore does not imply a specified pattern of emergent skills but refers to the integration of cognitive-linguistic connections through meaningful communication in the social environment (Hudelson, 1987; Tough, 1977; Wells, 1993; Wong-Fillmore, 1985). The reading process is the active construction of meaning from text cues (Smith, 1978) whilst making use of prior knowledge.

This case study follows the progress of S, a young adult who experienced specific difficulty with reading and writing in English. We became participants in the engagement of text through a mediated approach to facilitate reading and understanding and also attend to aspects of writing. In studies of early literate development, Williams (2000) cites the role of mediator as being as important as the text itself. In this situation, and also with young children, mediation provides opportunities to negotiate written text through scaffolding (Vygostsky, 1978) i.e. techniques of shared reading through supporting, guiding, conferring, compromising, overcoming difficulty (Gregory, 1994) and making meaning.

The content of course texts is not autonomous. It has been constructed by the writers with meaningful intent but has to be re-constructed by readers who are engaging with them and developing understandings by striving to make meaning (Nystrand, 1997a). A view revealed by Vygotsky (1978) was that making meaning is a level of consciousness which is more than being aware of cognitive abilities; rather he conceived that it revealed the self-regulatory and essential mechanisms that humans deploy in problem solving (Lantolf & Appel, 1994).

S was one individual for whom learning opportunities within a formal education system had not enabled her to move beyond the most elementary stages of literate development. There are many like her, whose length of time spent in the formal education system does not necessarily correlate with success in reading and writing (Purcell-Gates, 1997a).

The enculturation of language learners within a community of speakers, accounts for the resources they bring to any learning situation but the nature of language as a shared resource, is enhanced through meaningful, communicative activity. Case studies by Hasan (1996) and Williams (2000) with mothers of young children have provided a rich source of reference and confirm the relevance of such information for analysis.

5.3. Research Procedure

A mediated process of shared reading and discussion, has been utilised for accessing relevant texts, which form the theoretical basis of course work and as an essential component of S' apprenticeship training program.

Interactive weekly sessions focused upon contextually specific information, organised as topics for study in an official text format and have direct application in the workplace. The notion of 'reflective teaching' (Nunan, 1989) or 'reciprocal teaching' (Nystrand, 1997; King & Johnson, 1999) is utilised which explores variables within a learner-centred environmment for the purpose of explicit language instruction and nurturing a meaning based practice. The exploration of text, discussion about terminology, articulatory and expressive aspects of reading, elaboration of ideas and connections between text and practice are linked with everyday experience. Scaffolded learning (Lantolf & Appel, 1994; Hammond & Gibbons 2001; Mitchell & Myles 2002) is the designated practice of supporting, sharing and discussing whilst reading within the teaching and learning context, hence jointly negotiating information for each of the topics of the course.

5.3.1 The setting

The teaching/learning setting was that of the apprentice training provider which offered a full day of instruction to provide for the practical and theoretical needs of apprentices/trainees. The facility offered the resources of trained instructors with teaching expertise in the subject domain as well as all the practical and reference materials required for the demonstration of skills and completion of course work. My involvement with the participant extended over an 8 month period with meetings times of 2-3 hours, one day per week. A total of 30 meetings were conducted at the training facility.

5.3.2 The student

S has attended school for $12^{1}/_{2}$ years and has obtained a job in her chosen career, but must be able to fulfil theoretical course requirements in order to gain registration in her industry. As an apprentice/trainee, it became apparent to her instructors that the course notes and any other written references were presenting a significant problem. It was observed that this young person could not read the text materials comfortably and was therefore at a significant disadvantage when attempting to process and learn the content of designated texts.

A procedure of formal assessment (psycho-educational) was conducted in order to establish S' eligibility for federal government funding through DEETYA, which would assist in tutorial provision, relative to the course work that she was undertaking. The outcome of the assessment resulted in the diagnosis of severe dyslexia and recommended tutorial support. A learning approach based on mediation in this instance dealt primarily with the negotiation of written course texts.

In S' case, English was not her first language but having arrived in Australia as a pre-school child, she experienced her entire schooling in English although complemented by her cultural tradition of also attending Saturday Greek school. For many children in similar circumstances this is common practice and presents no particular conflict in relation to their general academic endeavour. The phenomenon of a literacy difficulty such as dyslexia is not unique to those who have a first language other than English but is also recognised as a common problem within a population of English as first language learners (Snowling 2000).

Ideologically, S was classified by the educational system as an EAL / ESL / NESB or LBOTE student (Appendix G). Although she was experiencing difficulty in the development of reading and writing in English whilst still at school, this was not acknowledged through any context other than being a learner of English as a second language (Appendix C: lines 65-67).

The psychological interpretation or diagnosis of her difficulty was provided 3 years after S had completed her formal schooling. In this context the reference was in terms of the psychological construct of cognitive function:

"S has specific problems with the visual and auditory processing of symbols (letters and their sounds) and this had led to significant reading and spelling problems"

"In addition S has difficulties processing language as it becomes more complex and this means she finds it hard to learn by listening, but can learn by using her visual processing skills. (Appendix H).

It was determined in the psychoeducational report (Appendix H) that the demands made upon S in independent reading endeavours were severe and it was recommended that alternative ways be sought for teaching the theoretical information for her course of study and a tutor be provided for her to this end.

5.3.3. The mentor

My interest in literacy development has accumulated over 25 years teaching experience extending from pre-school age children through all year levels of formal schooling and tertiary levels. During this period I have worked with a large number of students in schools who have been diagnosed with dyslexia and also with students identified with other disabilities such as speech and language disorders and autism. In undertaking this research I am exploring some of the dimensions of talk in supporting a reading task which perhaps were not explicit, regular or sustained features of S' experience whilst at school.

5.3.4. Data collection

- Tape recorded dialogue from interactions during sessions.
- Transcripts of instructional conversations relevant to the learning experiences (Appendices B,C,D,E).
- The psychological report (Appendix H).
- School report summaries from the secondary years (Appendix F).
- Course work sample Topic text on Hair Analysis (Appendix J)

5.3.5. Analysis of Data

In seeking a range of insights into teaching and learning processes, it has been useful to examine the data using the three levels of meta-functional analysis. Interpersonal functions have implications for motivation as well as for expanding knowledge, since language analysis on an interpersonal level reveals attitudes toward learning and what aspirations may exist in relation to current and future learning experiences. Experiential analysis reflects the kind of knowledge basis from which S may be operating and the nature of experiences which influence her motivation toward learning. Textual analysis reveals what particular aspects of the written language (the course information), may be creating a challenge for her.

The language phenomenon is a process for making meaning and is achieved through negotiation and mediation but is subject to ideologies, interpersonal dynamics and textual elements. The way that these operate in the languaging process is determined by context but especially whether content has particular relevance for the participants and can be connected with prior experience. The textual characteristics of spoken dialogue show significant differences to a technically oriented written text relating to the same subject. The cohesive elements of written texts are in contrast to the way that cohesion is achieved through spoken dialogue e.g. language extract 4, where the metaphorical constructions of the written texts were related to an everyday workplace style of language construction.

The table in Appendix F displays the categories of appraisal for analysing meaning. These are integrated with the language meta-functions described by Halliday.

5.3.6. The schedule

Department for Employment, Training and further Education – Learning Guide

Unit No.	Topic Title	Date
5.2	Winding	9/4/02
5.3	Basic Winding Patterns	16/4/02
5.4	The Perming Process	23/4/02
5.5	Analysis	20/4/02
5.6	Preparation for the Perm Service	14/5/02
5.6	Perming Faults	14/5/02
5.9	Winding Variations	21/5/02
5.11	Special Effects	28/5/02
5.12	Straightening	4/6/02
6.1	Colour & Light	11/6/02
6.2	The Colour Wheel	18/6/02
6.3	Classification of Colour	25/6/02
6.4	Identification of Colour	2/7/02
6.5	Client Analysis	16/7/02
6.6	Temporary Colour	23/7/02
6.7	Allergy Testing	13/8/02
6.8	Semi-Permanent Colour	13/8/02
6.10	Permanent Colour	20/8/02
6.11	Retouch & Recolour	27/8/02
6.12	Resistant White Hair	27/8/02
6.13	Tinting Virgin Hair	3/9/02
6.14	Bleaching	17/9/02
6.15	Bleach Application	1/10/02
6.16	Tinting Back	15/10/02
6.17	Colour Correction	12/11/02
6.18	Fashion Colouring	19/12/02
Test	Units 5.4 / 5.5 / 5.8	26/11/02
Test	Units 6.2 / 6.3 / 6.5 /	11/12/02
Test	Units 6.10 / 6.11 / 6.12	23/12/02
Test	Units 6.13 / 6.14 / 6.15 / 6.16 / 6.17	14/1/03

The topic on *Analysis* (Appendix J) was selected for transcribing and language analysis. It was representative of the content and nature of other conversations and dialogue which occurred throughout the mentoring period. The topic had semantic links with other course content because of an introductory element or overview which was elaborated upon in other units.

Chapter VI Data Analysis and Interpretation

6.1. Overview

6.2. Interpersonal Function

- **6.2.1.** Interpersonal analysis of the language resources
- **6.2.2.** Interpersonal analysis of grammatical features

6.3. Experiential / Ideological Function

- **6.3.1.** Experiential analysis of the language resources
- **6.3.2.** Experiential analysis of grammatical features

6.4. Textual Function

- **6.4.1.** Textual analysis of the language resources
- **6.4.2.** Textual analysis of grammatical features

6.5. Specific Difficulties

6.5.1. Imparting new information

- 6.5.1.1. Analysis of the language resources
- 6.5.1.2. Analysis of grammatical features

6.5.2. Extending into new experiential domains

- 6.5.2.1. Analysis of the language resources
- 6.5.2.2. Analysis of grammatical features

6.5.3. Developing logical-semantic relations

- 6.5.3.1. Analysis of the language resources
- 6.5.3.2. Analysis of grammatical features

6.5.4. Learning abstract terms

- 6.5.4.1. Analysis of the language resources
- 6.5.4.2. Analysis of grammatical features

6.5.5. Moving through the 'magic gateway' of abstractness

- 6.5.5.1. Analysis of the language resources
- 6.6. Summary

6.1. Overview

The extracts which are presented in this chapter are from conversational and course work transcripts used for the grammatical analysis of language meta-functions. The chapter presents an analysis of the meaning making process which is first construed on an interpersonal level, integrated and expanded into ideational or experiential / ideological contexts (Halliday, 1993). The language principles which involve speaking, listening and realising meaning are initiated interpersonally through action, and ideologically through reflection on personal experiences. Ultimately, these are the integrated language practices, processes and products which constitute social action. Bakhtin (1929) and Medvedev (1928), (cited in Wherle 1978) propose that every utterance is preceded and followed by interaction with others and the shaping of discourse occurs through relationships, perspectives and tensions which arise through competing voices on interpersonal and intrapersonal levels. This is what lies at the heart of understanding as a dynamic, sociocognitive event (Nystrand, 1997a & b).

6.2. Interpersonal Function

Halliday (1990) specifies three broad developmental bands, which emerge first from a protolanguage and develop to generalised language use; then from generalisations to abstractness and finally from abstractness to the use of grammatical metaphor (Halliday & Martin 1993). Halliday (1994) also refers to the synoptic / dynamic complementarity of construing language in two modes. They are modes of spoken everyday commonsense language and elaborated written language, with commonsense language foregounding function and flow and written language representing the metaphorical world of things which foregrounds structure and abstraction. In classroom contexts the challenge for students is to become not only participants in a specific discourse but also to develop the lexical and grammatical resources that are required to construct coherent texts, with the latter often being learned incidentally. Students do not inherently know or share a set of knowledges about how texts work as it might sometimes be assumed or expected (Ludwig & Herschell, 1998).

The following excerpts are from transcripted interactions between tutor and student. They illustrate some particular features of talk around encounters with written texts. The analysis intends to foreground particular features which illustrate the nature of abstraction in technical, written texts and explore literacy practices and personal positioning (van Leeuwin, 2000) which

provide an avenue for analysis and gathering information as a necessary condition for initiating and assisting further development.

6.2.1. Interpersonal analysis of language resources

Refer to Extracts 1a and 1b from Appendix B.

Analysis of the language resources in the following transcript Extract 1a, (Appendix B) reveals interpersonal exchanges of function and flow that are mainly realised through modal processes and mood adjuncts. They constitute the grammatical structures which scaffold the dialogic activity of the partipants. In this instance the student is asked if she is familiar with the next topic of the course and she provides the following response.

Extract 1a: Interpersonal function - analysis of language resources

Appendix B: Extract from conversation with S about recent reading experiences.

Tra	Franscript Extract 1a		Language Practice - Type of Resource		
App	en	dix B			
8	S	I've just been like because whenever I've finished with you,	Attitude of affect / comment mood adjunct (refers to mentoring sessions)		
9		I've been getting the units and I'd do that instead.	(refers to reading course work topics instead of engaging in the reading of stories)		
10	Т		Engagement of modality / proclaimer - expectation : continuative conjunction (affirming S' efforts to become more familiar with text)		
11		How often would you go through it?	Graduation of focus: interrogative (inquiring about frequency of reading)		
12	S	Oh around twice, three times just so I can get it.	Graduation of force Engagement of modality / proclaimer – pronouncement: adjectivals and mood adjunct (statement of action)		
13	Т	You'd be fairly familiar with it by the time we looked at it in the next lesson.	Graduation of force: adverbials (affirming response to S' action)		
14		But this one here I didn't take I don't know because	Engagement of modality: concessive conjunction (qualifies recent actions in relation to previous ones)		

15 T You haven't taken that one?

Engagement of modality / disclaimer - counter

(expectation: finite - negative polarity)

6 S I haven't practised it.

Modality negative

(qualifies current circumstances)

17 That'll be interesting won't it?

Attitude of affect / relational process - positive attribute

+ clause projection

(responds with encouragement)

But your reading up 'til now has been fairly

Concessive conjunction - counter expectation

fluent on these topics.

positive finite + mood adjunct

(affirms progress)

9 S I know. I'm enjoying it.

18

Attitude of affect / relational process - positive attribute

(states attitude)

In order to transcend some of the semiotic barriers between a dynamic everyday grammar to the more elaborated version of written texts there are particular features of dialogue which emerge in extract 1a (Appendix B). The support or scaffolding provided by a mediator is signaled in the regulation of the talk. On this occasion S had expressed interest and enjoyment in becoming more familiar with the text at hand which were positive attributes and register in the talk through modality (lines 9 & 12), attitude of affect (lines 7 & 19) and relational processes (Extract 1b). I also thought in this instance that S' remark about not having practised the reading (line 16), was reminiscent of a student acknowledgment of not doing homework. It seemed helpful to create a positive connection here, between her initial comment (more from a negative polarity) and my observation that she was making good progress and therefore emphasising a positive aspect (line 18).

6.2.2. Interpersonal analysis of grammatical features

The analysis of Extract 1b, identifies some of the language features of a grammatical abstraction. "I'm enjoying it" (line 19) is an everyday construction in which S reflects upon her personal experience to express a feeling. The transitivity and modality (lines 17, 18 & 19) jointly express positivity in relation to a reading activity in which S had expressed a previous lack of confidence. The use of a clause projection (won't it?) (line 17) by the tutor is a regulative feature which invites S to continue the interaction.

Extract 1b: Interpersonal Function – grammatical features

Appendix B: Extract from conversation with S about recent reading experiences.

- 16 S I haven't practised it.
- 17 That'll be interesting won't it?
- 18 T But your reading up 'til now has been fairly fluent on these topics.
- 19 S I know. I'm enjoying it.

Analysis of grammatical features: Extract 1b Appendix B

haven't	pra	actised	it.
Process:	material / b	oehavioural	Participant: goal
modal Finite	negative	Residue: pi	redicator
Mood: decla	rative / pronoun	cement	
Rheme:			
	Process: modal Finite Mood: declar	Process: material / b modal Finite: negative Mood: declarative / pronoun	Process: material / behavioural modal Finite: negative Residue: product declarative / pronouncement

17 (T) That	'II	be interesting	[won't it?]
Participant:	Process:	mental / thinking	clause projection
Subject:	modal Finite: positive	Residue: predicator	+ complement
	Mood: declarative (attit	tude of affect)	
Theme:textual-structural	Rheme:		

18 But your	reading	up 'til now		
Participant: actor	Process: material / action	Circumstance: temporal		
Subject:	non-Finite:	Residue: predicator		
Subject	Mood:			
Theme: textual (conc. conj.) + top.	Rheme:			

	has be	een	fairly fluent on these topics.
Participant:	Process: relation	al	Circumstance: manner + phenomenon
Subject:	modal Finite: positive	Residue: predica	tor + complement
- di	Mood: declarative + mo	od adjunct	
Theme:	Rheme:		

19 (S) I	know.	
Participant:	Process: mental	
Subject:	non-Finite:	
	Mood: declarative	
Theme: topical-marked	Rheme:	

I	'm		enjoying	it.	- 5
Participant: senser	Process:	mental	/ feeling	Participant: phenomenon	
Subject:	modal Finite	positive	Residue: pred		
	Mood: declar	rative (attitu	de of affect) / p	ronouncement	
Theme: topical	Rheme:				

On an interpersonal level, the regulative register of clause projection (line 17) works to sustain the interaction which is illustrated in Extract 1b. The engagement occurs on a level which is signified by specific grammatical devices of transitive features which are predominantly of positive modality (lines 17, 18 & 19) in connection with tutor oriented relational processes and student oriented mental processes.

6.3. Experiential / Ideological Function

Eggins (1994), asserts that experiential meanings are realised simultaneously with interpersonal meanings i.e. transitivity and mood are complementary features of experiential and interpersonal interaction. As there is a connection with mood and tenor, transitivity also complements mood in relation to the dimension and the context of the field. The dialogic choices of process types and the participant roles are determined by their experiential reality of actions, relations, participants and circumstances of the talk.

6.3.1. Experiential analysis of language resources

Refer to Extracts 2a and 2b from Appendix C

Particular language resources revealed in Extract 2a such as continuative conjunctions e.g. "well" (lines 1 & 15) and "so" (lines 9 & 14), along with repetitions are a characteristic of direct speech which allow the speaker to exercise a dialogic space. Repetitions (lines 1, 2, 5, 8 & 9) can also emphasise an emotive aspect of the engagement through degrees of polarity expressed as modal verbs (lines 1, 5, 8, 9, 10, 11, 14 & 16). S' experiences in reading have been influenced by a variety of interpersonal experiences throughout her schooling which are revealed in the dialogue with negative polarity (lines 1, 5, 8, 9 & 16) and an attitude of affect (lines 2, 10, 12 & 16) which reflects a degree of unhappiness.

Extract 2a: Experiential function - analysis of language resources

Appendix C: Extract from conversation with S about early reading experiences.

Transcript Extract 2a			Language Practice - Type of Resource		
Appendix C					
1 S	3	Well, at the beginning when I couldn't	Continuative conjunction		
		read	Modality - negative polarity		
			(expresses negativity)		
2		I couldn't like	Attitude of affect - unhappiness		
5		l didn't wanna, like, look at any writing.	Modality - negative polarity		
		because I because I could see	Graduation of force – repetitive		
			(reflects on negative feelings regarding reading)		
7		that other people were reading	Attitude of affect / mental process		
		better than me and things like that	Attitude of judgement / social esteem - capacity		
			(recollects & makes comparison with others)		
8		and I just I was too scared to look at the	Attitude of judgement / esteem		
		page	Modality (negative intensity) / mental process		
			(expresses negativity)		
9		so, I wouldn't like look at the pages,	Continuative conjunction		
			Modality (negative inclination) / mental process		
			(expresses negativity)		
10		l'd just look at the pictures	Attitude of judgement / esteem		
			Modality (usuality) / mental process		
11		but now now I've taken more interest in	Counter expectation - concessive conjunction		
		the words	Modality (positive inclination) / relational process		
			Graduation of focus		
			(expresses positivity)		
12		and trying to figure them out.	Attitude of affect / mental process		
13	Т	That's really interesting.	Graduation of force (adverbial grading)		
			(encouraging S to continue)		
14	S	So now I've got the courage.	Attitude of affect / comment adjunct		
			Modality (positive inclination) / relational process		
			(expresses positivity)		
15	Т	Well, in school um	Continuative conjunction		
	S	l always used to be scared.	Attitude of affect / circumstance of manner		
'	_		Modality (negative usuality)		
			(expresses negativity)		

Extract 2a, presents a temporal comparison in relation to how S perceived her own literate development through the utterance, "Well, at the beginning when ..." (line 1). It is an immediate expression which constitutes an abstraction representative of personal experience involving a separation in the timing of an event and her subsequent reflection upon it. Her use of modal expressions as in "couldn't" and "didn't" (lines 2 & 3) signify the general perception of her capability and status as a reader at an earlier stage, compared with the current time. She employs everyday commonsense expressions and the negotiation of meaning in this context is straightforward. It is evident that on a verbal level it is possible for her to transpose her perceptions from early in her life, across time in a reflective manner. The interaction is personalised and includes modal aspects, repetitive features, continuatives, material processes and punctuational pauses which characterise oral interactions.

According to Christie (2001), particular instances of continuatives (lines 1, 9 &14) in student and teacher talk occur at critical stages when teaching and learning are taking shape. These serve a declarative purpose, define the directions for learning and are useful as a scaffolding technique. The predominance of relational and mental processes utilised by S also characterise this text as personal and reflective.

6.3.2. Experiential Analysis of grammatical features

In the next language Extract 2b affective aspects of S' talk reveal the way she has been accustomed to approaching a reading task. She does not convey any attitude of confidence in her pursuit of reading activities and gives the impression that this was always something which caused her anxiety. Her commentary indicated that she was aware of how others were progressing and how this knowledge affected her. The use of modal negatives (lines 1, 2, 3 & 9) and circumstances of manner (lines 7 & 16) reveal her attitude about reading activities. They reflect negative and attitudinal qualities which signal the difficulties which she had in functioning as a member of a class.

Extract 2b. Experiential function – grammatical features

Appendix C: Extract from conversation with S about early reading experiences.

- I S Well, at the beginning ... when I couldn't read ...
- 2 I couldn't like ... I didn't wanna, like, look at any writing.
 - ... because I ... because I could see that other people were reading better than me and things like that
- and I just ... I was too scared to look at the page ... so, I wouldn't like ... look at the pages,
- 10 I'd just look at the pictures ...
- but now ... now I've taken more interest in the words and trying to figure them out.
- 13 T That's really interesting.
- 14 S So now I've got the courage.
- 15 T Well, in school ... um ...
- 16 S I always used to be scared.

Analysis of grammatical features:

Extract 2b Appendix C

1. (S) Well, at the beginning when	1	couldn't	read
Circumstance: temporal (grad. of focus)	Participant: act		
Residue: complement	Subject:	modal Finite: negative (capability)	predicator
Residue.		Mood: declarative	
Theme: textual (continuative) topical - ma	arked	Rheme:	^

2. l couldn't like ...

2.		
Participant: actor	Process: material - action	
	modal Finite: neg. (capability)	Residue: predicator
	Mood: declarative	
Theme: topical -marked	Rheme:	

3. (I) didn't wanna ... look at any writing.

3. (1)	didii t		
Participant:	Process:	material / mental	Circumstance: phenomenon
Subject:	modal Finite: neg. (inclination)	Residue: predicator	
Judjetti	Mood: declarative / repetitive		
Theme:	Rheme:		

6. ... because I could see

Participant: senser	Process:	mental (knowing)	
Subject:	modal Finite: pos. (capability)	Residue: predicator	
	Mood: declarative / repetitive		
Theme: text. (struct) + top.	Rheme:		

7.	that other people	were	reading	better than me and things like that.
				C' manner (attitude of aus

Participant: actor	Process:		Circumstance: manner (attitude of quality)
Subject			cator + complement (epithet)
U.C. Journal	Mood: c	leclarative (procl	aimer / pronouncement) + adjunct
Theme: textual (structural) + top.	Rheme:		

. and I just	ī	was to	o scared to loo	k	at the page		
articipant: senser + a	ctor	Process: m	ental (feeling)		Circumstance: loc. (spatial)		
Subject:		Finite:	Residue: mood	adjunct (intens	ity) + complement (epithet)		
di jeci		Mood: dec	larative (procla	imer / pronoun	cement)		
heme: textual (struct	ural) + top.	Rheme:					
				- 4 41-			
. so, I	wouldn'	't lil	ke look		e pages,		
articipant: actor	Process:	ın	naterial (action)		imstance: location (spatial)		
ubject:	modal F	inite: neg.		e: predicator + o	complement		
1		Moo	d: declarative			_	
heme: textual (contin	nuative) + top	ical Rher	me:				
0. I	'd		just look	at tl	ne pictures		
	Process		mental (to pe	rceive) Circ	umstance: location (spatial)		
Participant: actor	modal		Residue: pro	edicator + co			
Subject:		lity (usual)	Testado. pro		1		
		declarative	+ m	ood adjunct			
Theme: topical - marl							
i neme, topicai - man	ica Talellie						
11. but now	now I		aken		t in the words		
September 2		Process:	material	Circumstance	: manner (means) + location		
Participant: actor					I lilite Residue: prediction		
and the same of th				ator +	complement	_	
Subject:		Mood: de		ator +	complement		
Subject:	.conj.)+ top.			ator +	complement		
Participant: actor Subject: Theme: textual (conc	c.conj.)+ top.	Mood: de	clarative	re them out.	complement		
Subject: Theme: textual (conc	trying	Mood: de	clarative to figu Circun	re them out.	purpose)		
Subject: Theme: textual (conc 12. and Participant:	trying	Mood: de Rheme:	clarative to figu Circun	re them out.	purpose)		
Subject: Theme: textual (conc	trying Process non-Fil	Mood: de Rheme:	clarative to figu Circun	re them out.	purpose)		
Subject: Theme: textual (conc 12. and Participant: Subject:	trying Process non-Fii Mood:	Mood: de Rheme:	clarative to figu Circun	re them out.	purpose)		
Subject: Theme: textual (conc 12. and Participant: Subject:	trying Process non-Fii Mood:	Mood: de Rheme:	clarative to figu Circun	re them out.	purpose)		
Subject: Theme: textual (conc 12. and Participant: Subject: Theme: textual (struc	trying Process non-Fii Mood: ct.) Rheme	Mood: de Rheme:	clarative to figu Circun	re them out. Instance: cause (ine: predicator + instance: rea	purpose) complement		
Subject: Theme: textual (conc 12. and Participant: Subject: Theme: textual (struc 13. (T) Th	Process non-Fit Mood: et.) Rheme	Mood: de Rheme: s: material nite: declarative:	clarative to figu Circun	re them out. Instance: cause (Ine: predicator + Instance: rea	purpose) complement lly interesting. ce: attribute		
Subject: Theme: textual (concount) 12. and Participant: Subject: Theme: textual (struct) 13. (T) The Participant: carrier	Process non-Fit Mood: et.) Rheme	Mood: de Rheme: s: material nite: declarative:	to figu Circun Residu	re them out. Instance: cause (ine: predicator + instance: rea	purpose) complement lly interesting. ce: attribute		
Subject: Theme: textual (concount) 12. and Participant: Subject: Theme: textual (struct) 13. (T) The Participant: carrier	Process non-Fin Mood: et.) Rheme at Process Finite:	Mood: de Rheme: s: material nite: declarative: 's s: relational	to figu Circun Residu	re them out. Instance: cause (Instance: predicator + rea Circumstan Residue: co	purpose) complement lly interesting. ce: attribute		
Subject: Theme: textual (conc 12. and Participant: Subject: Theme: textual (struc 13. (T) Th Participant: carrier Subject:	trying Process non-Fil Mood: et.) Rheme at Process Finite: Mood:	Mood: de Rheme: s: material nite: declarative : s: relational declarative	to figu Circun Residu (attributive)	re them out. Instance: cause (Instance: predicator + rea Circumstan Residue: co	purpose) complement lly interesting. ce: attribute		
Subject: Theme: textual (conc 12. and Participant: Subject: Theme: textual (struc 13. (T) Th Participant: carrier	trying Process non-Fil Mood: et.) Rheme at Process Finite: Mood:	Mood: de Rheme: s: material nite: declarative : s: relational declarative	to figu Circun Residu (attributive)	re them out. Instance: cause (Instance: predicator + rea Circumstan Residue: co	purpose) complement lly interesting. ce: attribute		
Subject: Theme: textual (conc.) 12. and Participant: Subject: Theme: textual (struc.) 13. (T) The Participant: carrier Subject: Theme: textual (struc.) Theme: textual (struc.)	trying Process non-Fil Mood: et.) Rheme at Process Finite: Mood:	Mood: de Rheme: s: material nite: declarative : s: relational declarative :	to figu Circum Residu (attributive)	re them out. Instance: cause (Instance: cause	purpose) complement lly interesting. ce: attribute mplement courage.		
Subject: Theme: textual (concount) 12. and Participant: Subject: Theme: textual (struct) 13. (T) The Participant: carrier Subject: Theme: textual (struct) 14. (S) So now I Participant: actor	trying Process non-Fil Mood: et.) Rheme at Process Finite: Mood:	Mood: de Rheme: s: material nite: declarative : s: relational declarative : 've Process:	to figu Circum Residu (attributive) + mood adjund got materi	re them out. Instance: cause (Instance: cause	purpose) complement lly interesting. ce: attribute mplement courage. cumstance: goal		
Subject: Theme: textual (conc.) 12. and Participant: Subject: Theme: textual (struc.) 13. (T) The Participant: carrier Subject: Theme: textual (struc.) Theme: textual (struc.)	trying Process non-Fil Mood: et.) Rheme at Process Finite: Mood:	Mood: de Rheme: s: material nite: declarative : 's s: relational declarative : 've Process: Finite: po	to figu Circum Residu (attributive) + mood adjunce got materiositive Residu	re them out. Instance: cause (Instance: cause	purpose) complement lly interesting. ce: attribute mplement courage. cumstance: goal		
Subject: Theme: textual (conc.) 12. and Participant: Subject: Theme: textual (struct.) 13. (T) The Participant: carrier Subject: Theme: textual (struct.) 14. (S) So now I Participant: actor Subject:	trying Process non-Fin Mood: et.) Rheme at Process Finite: Mood: ct.) Rheme	Mood: de Rheme: s: material nite: declarative: 's: relational declarative: 've Process: Finite: po	to figu Circum Residu (attributive) + mood adjund got materi	re them out. Instance: cause (Instance: cause	purpose) complement lly interesting. ce: attribute mplement courage. cumstance: goal		
Subject: Theme: textual (conc 12. and Participant: Subject: Theme: textual (struct 13. (T) The Participant: carrier Subject: Theme: textual (struct 14. (S) So now I Participant: actor	trying Process non-Fin Mood: et.) Rheme at Process Finite: Mood: ct.) Rheme	Mood: de Rheme: s: material nite: declarative : 's s: relational declarative : 've Process: Finite: po	to figu Circum Residu (attributive) + mood adjunce got materiositive Residu	re them out. Instance: cause (Instance: cause	purpose) complement lly interesting. ce: attribute mplement courage. cumstance: goal		
Subject: Theme: textual (conc.) 12. and Participant: Subject: Theme: textual (struct.) 13. (T) The Participant: carrier Subject: Theme: textual (struct.) 14. (S) So now I Participant: actor Subject:	trying Process non-Fin Mood: et.) Rheme at Process Finite: Mood: ct.) Rheme	Mood: de Rheme: s: material nite: declarative: 's s: relational declarative: 've Process: Finite: po Mood: de Rheme:	to figu Circum Residu (attributive) + mood adjunce got materiositive Residu	re them out. Instance: cause (Ine: predicator + rea Circumstan Residue: const the al	purpose) complement lly interesting. ce: attribute mplement courage. cumstance: goal complement		
Subject: Theme: textual (concount) 12. and Participant: Subject: Theme: textual (struct) 13. (T) The Participant: carrier Subject: Theme: textual (struct) 14. (S) So now I Participant: actor Subject: Theme: textual (contour)	trying Process non-Fin Mood: et.) Rheme at Process Finite: Mood: ct.) Rheme tin.) + top. always	Mood: de Rheme: s: material nite: declarative : 's s: relational declarative : 've Process: Finite: po Mood: de Rheme:	to figu Circum Residu (attributive) + mood adjunce got materi ositive Residu	re them out. Instance: cause (Ine: predicator + rea Circumstan Residue: cont the al Circumstan Circumstan Circumstan Circumstan Circumstan Circumstan	purpose) complement (Ity interesting. ce: attribute mplement courage. cumstance: goal complement de: manner (comparison)		
Subject: Theme: textual (conc.) 12. and Participant: Subject: Theme: textual (struc.) 13. (T) The Participant: carrier Subject: Theme: textual (struc.) 14. (S) So now I Participant: actor Subject: Theme: textual (con.) 16. I	trying Process non-Fin Mood: et.) Rheme at Process Finite: Mood: ct.) Rheme tin.) + top. always Process	Mood: de Rheme: s: material nite: declarative : 's s: relational declarative : 've Process: Finite: po Mood: de Rheme:	to figu Circum Residu (attributive) + mood adjunct got materiositive Residu eclarative used to be	re them out. Instance: cause (Ine: predicator + rea Circumstan Residue: const the al	purpose) complement (Ity interesting. ce: attribute mplement courage. cumstance: goal complement de: manner (comparison)		
Subject: Theme: textual (conc 12. and Participant: Subject: Theme: textual (struc 13. (T) Th Participant: carrier Subject: Theme: textual (struc 14. (S) So now I Participant: actor Subject: Theme: textual (conc 16. I Participant: existent	trying Process non-Fin Mood: et.) Rheme at Process Finite: Mood: et.) Rheme tin.) + top. always Process modal	Mood: de Rheme: s: material nite: declarative : 's s: relational declarative : 've Process; Finite: po Mood: de Rheme:	to figu Circum Residu (attributive) + mood adjunce got materi ositive Residu clarative used to be existential	re them out. Instance: cause (Ine: predicator + rea Circumstan Residue: cont the al Circumstan Circumstan Circumstan Circumstan Circumstan Circumstan	purpose) complement (Ity interesting. ce: attribute mplement courage. cumstance: goal complement de: manner (comparison)		

S' experience with course notes (Extract 3) reinforces the links between text, diagrams and illustrations in the construction of meaning. Although they are fundamental features of some texts, illustrative and diagrammatic adjuncts have potential for a wide variation in complexity just as there is a wide ranging complexity in the lexicogrammar of written texts. In the talk surrounding the text, the embedding of the regulative discourse (lines 111, 113 & 117) serves to support the learning practice which constitutes the instructional field (Bernstein, 1996 cited in Christie, 1995). In the event that diagrams may not be immediately realised as relevant by the text user, an exploration of connections between written and other symbols (Appendix D: lines 109 & 113) becomes part of apprenticing into reading practices as a result of embedded regulative discourse.

Tran	Franscript Extract 3a		Language Practice - Scaffolded talk
App	end	ix D	
109	Т	So if we want	directing attention to connection between text and
			diagram
110	S	fullness	self corrects
111	T	to reduce the fullness	re –iterates text
112	S	um a larger rod should be used.	reads from text
		Remember that smaller curl gives more body	
		and a fuller appearance.	
113	T	Well done. That is fabulous.	gives encouragement
		What have got there in figures 16, 17 and 18.	directs attention to diagrams
114	S	Five pairs for for?	mis-reads text
115	T	few	provides correct word
116	S	few rods, few curls spacious	Reads again correctly
117	T	this is a sparse appearance	connects terminology of spacious and sparse
118	S	sparse	re-iterates word from the text

6.4. Textual (written language) Function Refer to Extracts 4a and 4b from Appendix D.

Engagement in literacy involves both reading and writing through which language is reconstituted into more abstract forms. These practices involve the construction of knowledge which requires a re-interpretation of reality and mastery of new knowledge. However, an implicit process of

shaping new knowledge, integrates both reconstruction and regression as two complementary modes of practice (Halliday, 1975, 1990). Dynamic texts utilise a complex array of abstractions and metaphor which are realised through the grammatical features of a written language system. The features of written texts in this study direct attention to the way that talk might be generated about the texts in relation to the events and practices within the workplace.

6.4.1. Textual analysis of language resources

Extract 4a illustrates how the construction of a written text differs significantly from the verbal text of the workplace. Although the practice of assessing a client's hair was a familiar and routine activity, the written text of course work presents it in a very different form. The following extract is taken from S' reading of topic content in the course book

Extract 4a: Textual function – analysis of language resources

Appendix D: Transcript of reading and dialogue - Hair Analysis

Transcript Extract 4a Appendix D			Language Practice - Scaffolded talk
1	S	Shall I continue?	inquires about continuing with reading of text
2	Т	Yes.	Affirmation
3	S	Hair Analysis sis	giving title of the text.
4	T	Okay.	affirming response
5	S	The qual qual i ty	segmenting the word to assist pronunciation
6	T	That's it.	providing encouragement
7	S	The quality of the hair needs to be assisted	substituting the word 'assisted' for 'assessed'
8	T	needs to be assessed	providing correct term
9	S	because it will affect the chance	substituting the word 'chance' for 'choice'
10	Т	the choice	providing correct term
11	S	the choice of product and tec	faltering at reading the word 'technique'
12	Т	tech nique	supporting attempt to articulate term
13	S	technique used.	

When reading the course notes, S had a tendency to falter at the recognition of some content words and to mis-read others. This was of concern because of the potential to disrupt meaning-making. For example, a term such as 'analysis' (line 3) being the nominalised form of the process

'to analyse', is probably less likely to feature in the spontaneous talk of the workplace. It might be something like, "take a close look at" or maybe "examine the hair carefully", rather than "make an analysis of the client's hair". In her reading of the text, it is apparent that S is not particularly adept in recognising either of the nominal terms 'analysis' (line 3) or 'quality' (line 5). As she proceeds, further difficulty is encountered with the content words 'assessed' (line 7), 'choice' (line 9) and 'technique' (line 11). The words used in the written text also have orthographic elements which make their recognition more of a challenge. Although these are not necessarily unfamiliar spoken forms, they are more likely to be expressed in an active voice such as "you need to look at ...", or 'assess' and "choose the most suitable ..." rather than 'the choice of ...'. Similarly, "you do it like this ..." is more of a commonsense type of expression than 'the technique for this is ...'. Within a school context, the term 'assessed' may be quite familiar, such as a teacher informing the class by saying, "your work has been assessed" or "I have assessed your work," but as terminology common to the workplace, it is probably less expected. At first, S reads the word 'assessed' as 'assist' (line 7) a more likely option for the workplace setting of the hair salon since her work is about being able to assist her client.

S' resources for reading appear to be consumed by the orthographic demands of each task which may be due to a lack of familiarity with a variety of content words. The nominalised form of the text also determines quite a different word order from a verbal text, thus creating an additional challenge. The mode of operation in the workplace is procedural and the language is therefore process oriented but the textual content of course material is presented in a nominal form which appears to create a greater demand in order to gain meaning from the text. S' difficulty with nominalised terms (lines 3, 5, 7, 9, 11 & 13) indicates that the form of the text is probably a significant issue. Nominalisations are an abstraction of commonsense talk and they mainly precede relational processes in the structure of more technically oriented texts. Most of the written text is presented in a nominalised form with participants rather than processes being foregrounded in each clause. The course work presented a metaphorical representation of the workplace.

6.4.2. Textual analysis of grammatical features

The analysis of grammatical features i.e. participants and processes, reveals a text of a technical nature, characterised by abstractions of everyday workplace experiences. In the commonsense or plain talk of the workplace the ideas of quality, choice and technique are most likely to be expressed quite differently. These particular lexical items may not even feature in the talk of the workplace. It would therefore be apparent that for one to appropriate the knowledge from workplace practice in order to connect with written text, then a broad experience of language is required. Within an instructional context explicit meaningful connections need to be made. For example an explanation can be given for the grammatical change from a process to a nominal term. The function of a meta–language is to provide the means for explaining differences in commonsense language and abstract terminology.

Extract 4b: Textual function – grammatical features

Appendix D: Analysis of grammatical features:

7.	The quality of the hair	needs to be	assessed	
Parti	cipant: goal	Process:	material - action	

Participant: goal	Process:	material - action
Subject:	modal Finite: positive	Residue: predicator
Theme:	Rheme:	

8.	because it	will	affect	the choice of product	and	the technique used.
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Participant: goal	Process: material - action	Participant: goal	Participant: goal
Subject:	modal Finite: Residue: p (probability)	redicator	
Theme:	Rheme:		

On a textual level, it would appear in Extract 4b that the negotiation of a technically oriented text presents a particular challenge for S which involves not only the abstract nature of the lexicon but also the structure of the text. Abstract nominalised concepts are foregrounded as themes and the material action refers other abstract participants as rheme. The reading of such a text which is not at all like the procedure it represents and consumes extra energy when the decoding of unfamiliar words is required as well as coming to an understanding of its meaning.

6.5. Specific Difficulties

The following extracts provide examples of the language features manifested by S in the negotiation of text. First, it was difficult for S to recognise many of the content words in the course texts, which might otherwise be understood in a verbal context. It is accepted that many of the technical, lexical items would constitute familiar concepts in terms of the language practice of the workplace, although their specific form and the grammatical construction surrounding their use within the course text may differ from more commonsense, everyday references. Her recognition of many technical terms was inconsistent and possibly unreliable as an independent means of making meaningful connections between theory and practice.

Second, the time taken for S to work out some written words was frequently prolonged perhaps due to limited phonological knowledge, hence necessitating a guess based upon the orthographic similarity of words. The extent to which the texts were mediated and words / phrases renegotiated made reading an intensive and time consuming exercise. On one hand, it is acknowledged that the type of verbal text in the workplace is somewhat different from the technical orientation of the written texts. The course work therefore, may have presented a terminology which was somewhat unfamiliar, causing difficulty in making connections between theory and practice and hence meaning-making. Alternatively, hesitancy in articulation may not necessarily influence meaning in a negative way but this could only be clarified through dialogue or talk about the text. The talk was the vehicle for supporting the reading process and establishing meaningful connections between text and context.

6.5.1. Imparting new information via the reading of text

Refer to Extracts 5a and 5b Appendix D.

I worked on a shared reading approach with S where interaction with a text was supported through mediation and talk about the text was utilised for the negotiation of meaning. In the case of S, reading presented a major challenge and this ultimately affected her capacity to write in response to any given scenario. The analysis of texts, conversation and instructional dialogue provides an insight into the resources which are at work in language negotiations.

6.5.1.1. Analysis of the language resource

Extract 5a Appendix D: Transcript of reading and dialogue - Hair Analysis

Tran App		pt Extract 5a ix D	Language Practice - Scaffolded talk	
13	S	The quality of the of the hair refers to textra, dens dens dentsy	mis-reading technical terms	
14	T	a few new terms here texture and density	signaling the introduction of new information	
15	S	density		
16	T	What might you understand about density?	encouraging a connection with current knowledge	
17	S	It's like the thickness density	making knowledge connection	
18	Т	So we have texture and density which is the thickness of the hair strand. Does that start to make a bit more sense?	reinforcing concept seeking a response	

Extract 5a illustrates the manner of support for making sense of text. A pattern of faltering with some lexical items e.g. 'texture' and 'density' (line 13) suggests that S may struggle with aspects of language in a more technical written form, although mispronunciations e.g. 'textra' instead of 'texture' may not necessarily indicate that the word is misunderstood. In this instance, S seems to make an appropriate connection between the words and meanings (line 17) as they are used to carry a particular concept within the text. However, the following extract would appear to indicate that there are situations where this may be difficult to determine.

6.5.1.2. Analysis of grammatical features

Extract 5b Appendix D: Transcript of topic information - Hair Analysis

13. The quality of the hair	refers to	texture, density and diameter.
Participant: attribute	Process: relational - attributive	Participant: carrier
Subject:	non-Finite:	

Although the clause is grammatically simple its lexical complexity is contained within the two nominal groups which present four abstract items and a relational process with an attributive function. This is not a commonplace utterance of the workplace but an abstraction of the workplace practice. The lack of familiarity with such terms is apparent as S negotiates the text and direct references to everyday experiences are necessary in order to promote meaningful

connections. The process of talk enables meanings to be clarified as the abstract nature of the text increases.

6.5.2. Extending into new experiential domains

Refer to Extracts 6a and 6b Appendix E.

Interpersonal experiences provide the point of departure for developing new understandings and creating new meanings i.e. "being able to bring knowledge and experience to those things which pass before you" (O'Neil, 1970).

6.5.2.1. Analysis of language resources

Extract 6a Appendix E: Transcript of reading and dialogue

	nscr pend	ipt Extract 6a lix E	Language Practice – Scaffolded talk
ī	S	To ensure a qual quality	segmenting the word
2		To ensure a quality outcome you must	
		always consiter (sic)	mis-pronouncing word
3	T	always conduct	providing correct term
4	S	always conduct a thorough thoroughly	struggling with word form
5	T	thorough	providing correct word form
6	S	thorough analysis	segmenting to assist articulation
7	T	Well done!	affirming attempt
8	S	Appear	mis-reading the word
9	T	Prior that means before	providing correct word and explaining
10	S	Prior to an an	hesitating
11	T	Prior to any	confirming attempt and modeling
12	S	any chemicals you need to allocate	struggling to recognise the word - segmenting
		allocate	pronouncing first syllable as the word 'all'
13	T	try allocate	providing correct pronunciation
14	S	allocate time within the selvis ser	trying to segment
15	T	service	providing correct pronunciation
16	S	service for this very important procedure	repeating

17	T	Excellent!	affirming completion of sentence
18		Have a little think about that.	signaling the need to review information
19		If you're going to do an analysis then it	encouraging reflection upon workplace practice
20		would be very important to do this	
21		especially before you're going to put	emphasising the work practice
		chemicals on some-one's hair.	

Extract 6a (Appendix E) contains examples of scaffolding during reading, which are features of the talk about text. In some instances S mis-reads a word which becomes a substitution for what is actually there. e.g. To read 'consider' (line 2) instead of 'conduct' or 'appear' (line 8) instead of 'prior' one would need to question what might prompt her choice of words at the time. It could be suggested that she reads one thing and is thinking another but even if the correct word had been read, there is no guarantee that a connection with appropriate meaning was forthcoming. It could also be argued that if the substitution makes sense in relation to the context, then perhaps there are occasions when it makes no difference whether it is one word or the other.

The process of scaffolding is an interactive and responsive process which monitors occurrences such as these and although meaning may not be disrupted by a word substitution, it is necessary to raise awareness of some difference. In this circumstance, the utterance "To ensure a quality outcome one must always consider..." is not greatly different from "To ensure a quality outcome you must always conduct..." when it is an analysis of the client's hair that is the subject of the action. Another interesting feature in this example is that 'consider' is a word that has been more frequently encountered by S in previous texts and it has a slight orthographic similarity to the word 'conduct'. It is a possibility that her attention may have been more focused upon the orthographic features of words rather than the semantic elements of the text. Her tendency then was to say a word that she recognised which also happened to make sense. The use of the word 'appear' (line 8 & 9) was not going to make sense in the next clause and therefore it was just as well to provide the correct term.

6.5.2.2. Analysis of grammatical features

To ensure

Extract 6b Appendix E: Transcript of topic information - Pre-treatment Analysis

a quality outcome

Process: material - action			Participant: g	oal			
4.	you	must always	conc	duct	a thorough analys	sis.	
Participant: actor Process: material -		l - action	Participant: goal				
Subje		modal Finite:	Resi	idue: predic	ator		
10.	Prior to a	any chemicals	you	must	allocate		time
Circu	mstance: con	9	Participant: actor	Process	: material -		
Circu	imstance: con	condition	•	4	material - inite: positive (obligation)	Residue: pr	Participant: goal
Circu	mstance: con	condition	actor Subject:	modal F	inite: positive		

The text in Extract 6b contains abstract items which makes reader accessibility even more difficult. The construction of each clause complex incorporates dependent clauses which present either process or circumstance as the theme (lines 2 & 10). This constitutes a digression from the typical form of the text in which participants (albeit abstract concepts) have been positioned predominately as themes. Although processes in theme position are more procedural (line 2), the abstract nature of the terms presents another level of difficulty.

6.5.3. Developing logical-semantic relations

Refer to Extracts 7a and 7b Appendix D.

New dimensions of semantic domains are created through the expansion and refinement of interpersonal and experiential encounters i.e. talking through an experience invites participants to share and become further informed. Extracts 7a and 7b illustrate that the connections being made by S, which surround the concept of texture, may not be clear. Some uncertainty regarding the meaning-making process is evident in the utterance at the beginning of this extract; "Textra (sic) refines diameter." which requires clarification. It is through the talk that a concrete reference is made about the hair and some clarification is achieved. To know that one's own hair is of a fine texture supports the notion that it is the hair thickness which is integral to this concept of texture or density. S' response to a subsequent question about texture, that 'The texture is referring to

what solution and what rod,' does not seem to indicate that she had an accurate understanding of the connection between the terms texture and diameter.

6.5.3.1. Analysis of language resources

Extract 7a Appendix D: Transcript of reading and dialogue - Hair Analysis

		ipt Extract 7a dix D	Language Practice - Scaffolded talk
 25	S	Textra (sic)	
		Textra refines	mis-reading technical terms
26	T	refers	providing correct term
27	S	refers to the di diameter	segmenting another technical term
28	T	Uh huh	affirming response
29	S	refers to diameter of the hair shaft.	
		It may be coarse, medium or fine.	
		The diameter	
30	T	Have a look at your diagrams there for a	interjecting and creating an opportunity for
		moment, 5, 6 & 7.	reviewing information
		So you've got coarse texture	referring to visual information (diagrams)
31	S	coarse, medium and fine	reviewing the descriptive categories
32	T	So you're going from thick	establishing further connection between written tex
			and diagrams
33	S	to fine	engaging in dialogue about text
34	T	What would the texture of your hair be?	concretising new information
35	S	Mine's fine, really, really fine.	relating personal experience with text
		The diameter of the hair shaft infor	experiencing difficulty with word recognition
36	T	influ	intervening to model articulation
37	S	influences	repeating
38	Т	That's it.	affirming response
39	S	chance	substituting the word 'chance' for 'choice'
40	T	choice	providing correct term
41	S	choice of solution, rod selection.	
42	T	So you would check the texture?	querying action in relation to workplace practice
43	S	Yep, then you would see which solution to	confirming action and contributing additiona
		use and what size of rod.	information
44	T	Good.	

So the texture is referring to what?

encouraging knowledge connections
re-iterating question and some of previous text

45 S The texture is referring to what solution and what rod.

challenging S to re-think response concretising information to assist knowledge connection

What is it about the hair that the texture refers to?

You said your hair has a fine texture,

So we're talking about the ... thickness ...

prompting connection with prior information

diameter.

Oh yeah, yeah.

46 T

47 S

In a typical teacher directed circumstance such as initiate, respond, follow-up (IRF) mode (Coulthard, 1975) or initiate, respond evaluate (IRE) (Mehan 1979b), this would constitute an example of triadic dialogue referred to by Lemke (cited in Lemke, 1990). It was evident that some connection existed here between question and response, since there was a re-iteration of the text, suggesting that S may have been focusing more upon the words rather than the interpretation. Within a school setting, the level of activity in classrooms may not allow for a careful exploration of an individual's contribution which has the potential to encourage and extend the engagement between teachers and students. Triadic dialogue or recitation is often a feature of classroom interaction at the expense of reciprocal dialogic activity (Nystrand, 1997) and does not always reflect what has been understood.

The talk provides an opportunity to scaffold language through the use of other common terminology e.g. thickness concretises the concept of diameter and thereby helps to establish the necessary connection with more abstract and technical terms like texture (line 25). A particular type of question may not elicit a response that necessarily reflects exactly what is understood in an IRE interaction and therefore talk around the text also performs an important interpersonal function. S' understanding of texture is encapsulated in the utterance "... you would see which solution to use and what size rod" (line 43). Here is an indication that she understands that texture is integral to selection of solution and rod. What causes doubt is possibly the wording of the question which was asked in Line 44. The re-iteration of the words "texture is referring to what solution and what rod" does not provide an accurate response. The attributive characteristic of the words "refers to" (line 27) relate the concepts of texture and diameter to each other but is

not a suitable choice for making the connection between texture and what solution or what size rod to select.

6.5.3.2. Analysis of grammatical features

Extract 6b Appendix D: Text sample of topic information - Hair Analysis

27 Texture	refers to	the diameter of the hair shaft.
Participant: attribute	Process: relational - attributive	Participant: carrier
Subject:	non-Finite:	
Subject.	To the second se	
*	may be	course, medium or fine.
*		course, medium or fine. Circumstance: manner - comparison

the diameter of the hair shaft.

29 The diameter of the hair shaft	influences	the choice of solution and rod selection.
Participant: goal	Process: material - action	Participant: goal
Subject:	non-Finite:	

In Extract 6b the role of process in the text reveals another complex factor. The terms used in the text are 'Texture refers to ...' (line 27) which are re-iterated by S in her response to the question about texture. This tends to be misleading in terms of what she might really understand or mean. If she had said, 'Texture indicates which solution to use ...' or in more everyday terms 'You know what solution to use because of the hair thickness ... 'it would be clearer that she understands the connection between texture of the hair, the type of solution required and the size of the roller to use for the procedure. The technicality of the text would appear to create particular demands for S in both the use of nominalised terms as well as selections of processes since they are also somewhat distant from the spontaneous language of the workplace.

The technicality of the text masks the procedural type of activity experienced in practice. The typical language register in an instructional situation where a procedure is being learnt is immediate and foregrounded, probably more like the following: "Check the texture of the hair. What is it like? (Is it course, medium or fine?) Look at the thickness of the hair shaft. Choose the correct solution and rod size for the hair texture." A text of this type would perhaps be more manageable for a less proficient reader since it foregrounds the process features which are similar to the spoken genre of the workplace even though it is still not entirely typical of a spoken genre. It lies more toward the spoken nature of language on a cline between the technical text and the everyday practice of workplace dialogue.

6.5.4. Learning abstract terms

Refer to Extracts 8a and 8b Appendix D.

Texts which are of a technical nature are dominated by nominal groupings. This makes them more difficult to access in relation to meaning making if the terms are not familiar enough to the reader. The lexical density, while mostly being attributable to nominalised processes appear as terms such as quality, texture, density, diameter etc. in these particular texts. Nominal groupings are the product of abstract concepts and the transition from oral language function to becoming literate depends upon the ability to construct meanings via abstract language concepts.

6.5.4.1. Analysis of language resources

Extract 8a Appendix D: Transcript of reading and dialogue - Hair Analysis

Transcript 8a Appendix D			Language Practice – Scaffolded talk
19	S	Is that porous?	seeking confirmation of the next word
20	T	porosity	modeling pronunciation
		The pronunciation changes slightly when a suffix	signaling the use of word extensions
		is added.	
21	S	elicity (sic)	mis-pronouncing the word
	T	elasticity	modeling pronunciation
22		It's like elastic but the suffix at the end slightly	offering explanation for difference in phonolog
		changes the way we say it.	reinforcing an affect due to suffixes
		Instead of elastic, it becomes	prompting S to continue
23	S	e las ti city	segmenting the word successfully
24	T	Good.	affirming response
		So those extra terms are density, porosity and	reinforcing connection with other terms
		elasticity	

Extract 8 illustrates the recognition of a technical term 'porous' (line 19) even though the exact word in the text is not readily articulated. The text contains a concentration of abstract terms e.g. 'porosity', 'elasticity', 'density', 'texture', 'diameter' which are not easily negotiated by S during her

reading of the text. A lack of familiarity with words that have prefixes or suffixes may also indicate that an automatic connection with meaning has not been forthcoming. It is therefore appropriate that some relationship is established or clarified between basic word forms and their extensions especially when pronunciation is affected by a change in phonological stress.

6.5.4.2. Analysis of grammatical features

Although previous extracts also contain examples of abstract terms, an attempt is made on the part of the mediator to signal a characteristic which is a feature of abstractions i.e. the addition of prefixes or suffixes (lines 20 & 22). The grammatical features of the language are determined by the purpose for which it is used. The talk is about the meanings of technical terms and also about structural differences which influence pronunciation. Modeling of pronunciation moves in parallel with explanations which contain comparisons, identify characteristics and signal conditions for use.

Extract 8b Appendix D: Transcript of topic information - Hair Analysis

19.(S.)	Is	that	porous?
	Process:	Participant:	Circumstance: manner - quality
Subject	Finite:	Residue: predicator	

Participant: token Process: identifying Circumstance: contingency - condition Subject: non-Finite: Residue: predicator

21. (S.) E ... li ... city

Participant: token	Process:	Circumstance:
Subject:	non-Finite:	Residue: predicator

22. (T.) Elasticity. It 's

lik	e	el	25	ti	c
1117	•	\sim	LEE L		•

Participant: token	Process:	Circumstance: manner - comparison	
Subject:	Finite:	Residue: predicator	

(T.) but the suffix at the end changes the way we say it slightly.

Participant: token	Process: identifying	Circumstance: contingency - condition
Subject:	non-Finite:	Residue: predicator

(T.) Instead of elastic, it becomes ...

(1.) Ilistead of clastic,		
Circumstance: contingency - concession	Participant: token	Process: relational - identifying
Subject:	non-Finite:	Residue: predicator

23. (S.)

e ... las ... ti ... city ...

	Process:	Participant: value	
Subject:	non-Finite:	Residue: predicator	

24. (T.) Good. So those extra terms	are	density, porosity and elasticity.
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Participant: token	Process: relational attributive	Participant: attributes
Subject:	non-Finite:	Residue: predicator

Extract 8b focuses on some of the identifying features of nominal terms which in this instance all possess a common suffix. The identifying processes such as "changes slightly" (line 20) and the relationships with the grammatical attributes of terms such as density, porosity and elasticity (line 24) have been explicated in order to support an understanding of the text. The talk also aims to identify a condition (lines 20 & 22) which applies to a change in pronunciation. S' recognition of "porous" in the term porosity provided an opportunity for elaboration about a grammatical feature.

6.5.5. Moving through the 'magic gateway' of abstractness

Increasingly more complex language exchanges are required for individuals to progress to higher levels of education and the practice of writing in response to text develops gradually with explicit instruction usually over successive years of schooling. The shared experiences of reading from the earliest stages of telling stories to books with pictures prepare individuals for a visual representation of language. Written words like pictures are representations of meaning and as more abstract as language becomes increasingly technical and complex.

6.5.5.1. Analysis of language resources

The tendency for S to falter on recognition of words detracted from making meaning. The psychoeducational assessment recommended that in order for S to learn about things it would be necessary to utilise her good practical skills in learning by demonstration and to focus upon reading development through her visual strengths. This was intended to reduce the stress upon the phonological system which develops as an integral part of the language complex but in which S (according to diagnosis) manifests as a particular difficulty. The key to being literate is becoming a reader of texts. S' own words were "I never used to read" (Appendix C: line 31). In secondary school she had copied texts from various sources (Appendix C: lines 89 –106) in order to submit

assignments but to a significant extent she had avoided reading. Upon reflection, she had found it difficult to believe that for so many years she had been able to use a simple excuse such as leaving her glasses home, to avoid reading particular texts in the classroom.

Extract 9: Appendix C - Conversational Transcript

- 29 S Yeah. Oh I couldn't believe ...
 I seriously couldn't believe that I'd made it into year 12 ... half way through year 12
- and no teachers took any notice .. like .. of anything ...
- 31 'cause I never used to read. I used to always like ... my turn to read novels
- and all that ... I always used to turn 'round
- and say I forgot my glasses
- and I can't believe that was a good excuse to you know get out of everything
- 35 T So you'd do that all the time?
- 36 S I would've
- 37 T Did you actually wear glasses then?
- 38 S Yeah
- 39 T So they'd know that it was a legitimate reason for you not being able to read something.
- 40 So you did that every year?
- Yeah **but I can't believe they just** said 'alright' next person ... like they would've said .. like they would've called me back and things like that
- but they didn't you know ... at the end of the lessons ...
- they'd say I need to speak to you or something but they didn't.

Dyslexia is a phenomenon which makes reading a difficult process for some people. However, many of them learn to read even though spelling and the writing of their own texts are troublesome. S had learnt some basic reading skills but could not extend them without support. She had relied upon the help of friends and siblings to generate enough texts for school work that enabled her to progress from one year level to the next. It would seem logical to say in response to her statement "I never used to read" that she had never been apprenticed in reading. In her particular instance becoming a reader would not have been a simple process but I would question whether she had enough appropriate support to experience reading or to learn about texts in an explicit way.

6.6. Summary

The problems encountered by S reveal that while oral language i.e. a dynamic commonsense grammar is used to talk about her workplace practices and to explain how she executes particular tasks, she is unable to 'unpack' the complex features of a written text which relate to these practices. The texts, which contain a diverse range of nominal terms relating to the workplace are a new kind of language and present a new kind of challenge even though the procedures for particular practices are well known. Her practical experiences in the workplace are the reference for making meaning from the texts.

In the case of S, problems were encountered in her engagement with written texts. The level of abstraction in relation to concepts and the grammatical constructions relating to tense construed the familiar into a new and unfamiliar form. Mediation offered the means of entry into the domain of technical language.

The interpersonal level of analysis reveals the kinds of engagement that allow function and flow in dialogic activity. The regulative scaffolding by a mediator reveals attitudinal attributes through modality (adverbials) and relational processes. These signal the importance of opening up the dialogue to the extent that teachers encourage individual expressions from participants. The regulative aspects of conversations identify some of the language characteristics which can either support or diminish participation such as transitivity and modality (Extract 1b: lines 17, 18 & 19).

On the experiential level, the kinds of resources that S brought to the texts were evident in her practical experiences in her workplace. These enabled her to connect with the information presented in the course topics, although she could not independently access those texts. As with interpersonal features, the structural features of the texts had potential to influence the accessibility to information. The instructional field incorporated diagrams and symbols which were integrated aspects of the texts. These features can also vary in abstraction.

Finally, on the textual level the characteristics of abstraction made information more difficult for S to access. Nominalisations, abstract terms and metaphor were features of a text structure in which they were foregrounded as themes and unlike the procedural orientation of the oral texts of the workplace.

The findings in this study present S' reading difficulties against a background of experiences in relation to the regulative practices involved in the mediation of texts and the characteristics of texts which contribute to difficulties in accessing meaning. These aspects are embedded in complex nature of language and the extent to which technical texts use abstraction, symbols and metaphor.

Chapter VII Discussion and Conclusion

7.1. Overview

7.2. A Specific Approach to a Literacy Need

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7.3. Contexts of Analysis

- 7.3.1. Cultural context
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- 7.4.1. Language as action
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7.5. Approaching the Teaching of Literacy - Findings of the Study

- 7.5.1. What problems are encountered by S in her engagement with the texts of the apprentice training curriculum?
- 7.5.1. What are the features of the teacher-meditated talk supporting the engagement and comprehension of texts?
- 7.5.2. What is the nature of language and teaching practices?

7.6. Conclusion

7.1. Overview

This study explores the questions relating to literacy problems in negotiating text, supporting a learner through mediation and examining the nature of language and teaching practice given the specific need of S in this apprentice training context. The emphasis upon the need for explicit instruction is substantive but attention is also directed to the types of engagements which prevail in a specific learning environment, and their significance in motivating positive learning behaviours on the part of participants. A systemic functional analysis (SFL) of the discourse in relation to the written texts and the engagement of participants has supported the notion that literacy develops through working with authentic texts for relevant purposes.

7.2. A specific approach to a literacy need

S' strengths were in visual learning and it was reported that she learns by looking, not by being instructed in words. Her dyslexia was stated as being quite severe and according to the report there was to be no point in asking her to read a lot of information.

It was suggested in S' psychoeducational assessment that her ability to process sounds for speech and integrate them with written representations such as words was inefficient to the extent that she could not progress into reading and writing activities beyond a basic level (Appendix H). Her capacity to read did not appear to be efficient enough to keep pace with the externally controlled agenda set by the decision makers within educational institutions. Cognitive arguments include referents to higher order neurological functioning but also acknowledge that this is a developmental paradox for many individuals who manifest exceptional intellectual potential and ability but are unable to read and write to the satisfaction and fulfilment of their own need for independent function. However, it was evident as S had indicated during our conversations that she had a strong motivation to read (Appendix C: lines 140-152).

Negotiating the course texts involved reading a lot of information. It also included talk that directed attention to workplace experiences which assisted the meaning making processes. The surface features of mediation (Extract 3) included following the text, providing an unrecognized word, modeling the correct pronunciation of words, prompting the flow and explaining some of the grammatical functions. The mediated practices in meaning making foregrounded the language features that signified connections between text and context (Extract 4a).

A systemic functional approach does not give account for development according to ages and stages but promotes the analysis and use of language in response to explicit instruction which integrates experience, text and context.

7.2.1. The complementarity of SFL teaching / learning discourse

Halliday (1993) identified the fundamental nature of language in that it operates in two modes. We are routinely engaging in a complementary manner with others through oral and written language whether as parents with children or as teachers with students. Such complementarity is

practised from very early stages of development most commonly through the sharing of narratives and the role of mediator within the languaging process is of prime importance (Hasan, 1996; Williams, 1887). Talk has multiple sign systems and gains power as social action through its placement within larger sequential structures. The encompassing activities and participation frameworks of home, community and school provide a range of different semiotic resources (Goodwin, 1999) in which complementarity could be viewed as lacking in S' experience (Appendix C: lines 144-147) given the circumstances of her family background but also exacerbated given the psychological determination of dyslexia. The experience of shared reading and talk about texts are features of particular significance for S who by the nature of her reading difficulty required instruction that was highly explicit throughout all of her schooling. Explicit teaching from an SFL perspective would involve reading together, modeled writing tasks and examples of written responses, deconstruction and joint constructions of texts, encouragement and support in the independent constructions of written texts.

Teachers teach by discussing, drawing up and defining boundaries within which there are opportunities to negotiate. Negotiation is central to language theory and child development within a social framework but the questions relating to learning has historically focused upon a minority of children who have difficulty (Gregory, 1994) and their differences compared with others, rather than exploring what leads to success. The complementarity of the teaching and learning discourse provide a dimension for understanding educative processes. Discussion with S revealed that her experiences in school did not consist of a comfortable engagement in learning. She had avoided reading, was fearful of tests, and in many of her written assignments she had copied her brother's work or had relied on her friend and her sister to help her to do the task (Appendix C: lines 89-97). She had not been engaged in active participation within a systematic learning environment to the extent that she could become an independent participant in specific literate activities, even though she had copied assignments from others (Extract 8).

7.3. Contexts of Analysis

Systemic functional analysis raises the issues of the cultural and situational contexts for learning and how language and literacy develop within a community of speakers, readers and writers. Learning to speak English was not an issue for S. She has become a fluent and a competent

speaker within her community of experience but her concern after $12^{1}/_{2}$ years of formal education was that she could not read an elementary school reader. The text used for S' coursework was the standard material required for completing her tasks (Appendix J). It was used in association with other resources such as demonstration of cutting and styling techniques on video disk. The context of reading information and relating it to her knowledge and practical experience was where she needed to be actively working together with another or others. The social context of her learning was in the mentoring process.

7.3.1. Cultural Context

S has three other siblings: an older brother, a younger brother and sister who were also learners of English as a second language but they did not experience the same difficulty with reading. They were perceived by S to have achieved success at reading and writing in English (Appendix C: Lines 144-147). Therefore an argument could not be sustained that the cultural experiences of their family and community were too far removed from their school life experiences where a cultural divide gave little opportunity to make meaning from an English curriculum. It would also be difficult to concede that there would have been any plausible reason for S not wanting to succeed in education and employment or that there would have been any societal impediment to her being able to do so. She had clear aspirations to achieve a career goal (Appendix C: lines 156-158). S had ESL support all throughout her schooling. It would appear that the education system had provided for her in the most obvious and appropriate way. The cultural context would not seem to be a primary factor. It was evident that S had strong personal motivation for learning and succeeding

... 'cause I don't want my children to go ... if I ever have children, I don't want them to go through the same thing that I have gone through .. so I wanna teach them. 'cause my mum and dad couldn't teach me ... 'cause they came from a different background... um .. I just wanna .. you know teach them all I can. So ... I wanna give them what my mum and dad couldn't teach me .. like you know. (Appendix C: lines 149-152)

7.3.2. Situational Context

This is where the story for S begins to unfold. The registers of field, tenor, mode, reveal that quite different things are happening in relation to becoming literate in English. As an oral language, the

field and tenor of English are not generally problematic. Learning to integrate a variety of information in different situations, understanding the conventions of language in an oral mode has not been the issue. Rather, the encounter with written information is the heart of the matter since the semantic discourse contains not only the phonology and lexico-grammar but a graphology. In learning to read and write, the phonology of the language has to be integrated with a graphology which explicates the lexico-grammar. Written texts foreground grammatical features which differ significantly from the way oral language is organized. Clause structures which contained abstract concepts as themes differ from the procedural style of texts where processes predominate (extracts 4b, 5b, 6b, 7b & 8b). The grammatical characteristics inherent in a variety of text genres are not automatically perceived by learners and these aspects require a conscious level of awareness in order to replicate and control in one's own written language development.

The classroom practices of reading and writing are complementary procedures whereby children learn about alphabetic letters, sounds, words and how they are written. Reading and writing are encouraged and instructional guidance is provided by teachers, parents and helpers, supporting these processes by reading and writing together. Processes of modelling and talking about what they read and what they write are accepted practice. For S, the involvement of her parents in this aspect of her learning was minimal (Appendix C: line 150). S appeared to have a keen desire to learn and although she often missed tests and avoided submitting certain tasks, (Appendix G) she strove to achieve, by doing the things that she could. If her brother had completed a previous assignment that would assist with her own work she would endeavour to do the same task. Her sister and friend in particular were identified as other means of support to assist her in completing work (Appendix C: lines 89-93). These were strategies used throughout her school life but which failed her as a means of developing independent literate function. After many years of grappling with reading and writing skills, they were not developed. to the extent that would satisfy the requirement of her chosen career pathway.

Situation of context also implies reciprocity (Pearce 1994) in which dynamic qualities of conflict and tension exist (Bakhtin cited in Wherle, 1978). If learning to speak is identified was a reciprocal process for S, it was evident that learning to read and write were definitely not reciprocal processes for her. Aspects of oral language are seemingly acquired without conscious

awareness and for a majority of people it may appear that reading and writing skills develop in much the same fashion. However, for some it does not work that way and since for S it would appear that this was not the case, some reflection is necessary with regard to the obvious struggle that some students have in becoming readers and writers, and the explicit nature of teaching literacy. However, it would seem that through mediation, S was able to develop more facility with written texts which had a particular relevance for her (Extracts 1 & 2).

7.4. Social Semiotics and Cognitive Function

The resources we bring to meet the challenges of becoming literate are significant to the extent that culture and situational contexts may impact either positively or negatively on the process. Language has a reciprocal function. From a cognitive perspective this is embedded in neurological function and from a linguistic perspective it is a social response which is made by participants who are members of a community of practice.

7.4.1. Language as action

Reading and writing are purposeful activities which are taught and require practice "...learning to read (and write) requires elaborate instruction and conscious effort" (Rayner, et. al. 2002:71). The formal tasks of reading and writing require the recall of knowledge from our own cultural experiences and also in a semiotic context that we identify as classroom knowledge which has a specific form (Halliday, 1993) or a particular pedagogy (Ludwig & Herschell, 1998). School is a social institution which operates in accordance with the specific practices but it is more difficult for some students to transform or re-construe their knowledge and experience in order to accommodate the levels of language function dictated by the task. Rules of spelling and grammar do not make meaning on their own but apply in given contexts. It is essential that experiences become texts and that texts are used in context. Language patterns can be identified for their grammatical significance as well as for their phonological significance. The conventions of spelling and writing are rule-bound but the explicit teaching of literacy locates them within appropriate contexts.

7.4.2. Language as reflection

Where individuals find the process of reconstrual more difficult there are important implications

for teaching. The reciprocal nature of first language oracy illustrates the process of contextualising, modeling, joint construction and attempts at independent construction on highly supportive, interpersonal and experiential levels. In a formal education setting, the literacies of reading and writing also involve these elements. They are identified by functional grammarians as the fundamental structures of the teaching-learning cycle but the regulative language we use for reflection and developing both oral and written texts is pivotal to literate practice.

S is typical of many individuals who have tried and seemingly failed to develop some relative competence in literate practice, i.e. "to use the writing system with facility; and also to have some understanding of how it works, so as to be able to extend it when the need arises." (Hasan, 1996:344 & Williams, 1997). I have explored some of the language dynamics which are operationalised in dialogic activity surrounding reading tasks. Each context of language use reveals specific resources which participants bring to the task for the construction of meaning. Dialogic resources include attitudes of affect or judgement (extracts 1a, 2a & 3a), graduation of feelings or degrees of focus (extracts 1a, 2a, & 3a) and engagement of attributes such as modality (extracts 1a, 2a & 3a). The nature of exchanges are determined by the tenor of language resources and the extent to which we use qualitative attributes, mental and behavioural processes and modality.

7.5. Approaching the Teaching of Literacy – Findings of the Study

Intervention techniques are employed within educational institutions as the appropriate means of supporting literate development. These are often isolated from the socialising practices which attend to the manner in which texts can be discussed, modeled and constructed with peers in the classroom. To realize that explicit teaching is necessary and to have social engagement in learning activities is essential in an environment where students and teachers are able to negotiate and contribute to authentic tasks. SFL offers an approach which makes the nature of texts and the talk about them more explicit, therefore having potentially greater benefit to all students.

Language accompanies all learning experiences. It encompasses hearing, listening, looking, seeing, feeling, sensing, saying, speaking, knowing, moving, and is integral with the individual

experience through which knowledge connections are made. It does not seem sufficient to depend on or selectively develop one aspect of what we are as a being.

7.5.1. What problems are encountered by S in her engagement of the texts of the apprentice training curriculum?

The data show that theoretical types of texts used as course texts contain particular features which are in contrast to the kinds of practical experience and knowledge gained in the workplace. Although S faltered on pronunciations or failed to recognise some words she was also able to make meaningful connections (Extracts 6a & 7a) which were not evident without mediation. The technical nature of the language used in the written texts contained nominal forms (Extracts 3, 4, 5, 6, & 7) which presented abstract types of concepts when compared with the procedural language of the workplace. Explicating the grammatical structures of the texts occurred through deconstruction of nominalised processes (Extracts 5 & 6) that could be identified with the workplace. Instruction about the nature of the texts was embedded in the talk in the sense that in developing conceptual understandings, an awareness of the language structures also became part of the learning activity (Extract 7). Mediation of the texts through the talk provided insights to the kinds of meaningful connections that S was attempting if not already making.

Explicit knowledge about language and literacy forms part of a practical curriculum (Ludwig & Herschell, 1998). Since the meta-language provides the key for unlocking the meaning of text, educators are challenged by the need to promote learning about language whilst using language in meaningful ways. The examination of instructional and regulative discourse from a new perspective when dealing with all forms of texts reveals that grammatical and visual patterns both provide the basis for the exploration of meaning, instead of a dependence upon one as opposed to the other.

This study illustrates how language features such as nominalisation, grammatical abstraction and ways of thematic foregrounding determine the complexity of texts. For example, when attributes foregrounded as themes in a clause structure were related to other abstract participants (Extract

5b), the lexical density made it difficult for S to negotiate. In a mediated context, engagement with the text and connections with practical experiences supported the meaning making.

7.5.2. What are the features of the teacher-meditated engagement with the texts and the talk supporting the engagement?

The analysis revealed the regulative structures on an interpersonal level which support or inhibit the talk in a specific learning context. Interpersonal exchanges contain modality and transitivity features which are regulative aspects of teacher talk and have the potential to control dialogic flow (Extracts 4, 5 & 7). Scaffolds such as assistance when mis-reading words, making overt connections between concepts and questioning (Extract 6) are part of providing relevant experiences for reading and writing as situated practice. When analyzing the mediation of texts, affective and attributive elements (Extract 1a) were identified as regulative elements of the talk. SFL analysis specifies the language features of learning scaffolds.

Ludwig and Herschell (1998) recommend that information be provided to students directly and explicitly when it is evident or recognized that they do not have the relevant knowledge to make an accurate response or to complete a task. To persist with prolonged and circuitous procedures for getting to the point does not necessarily produce understanding, develop skills or further knowledge (Extract 8a). Students are often drawn into guessing what the teacher is thinking which complicates and detracts from the value of learning.

The pedagogy of the classroom is more than reading, writing and making meaning from text. There are also factors including teaching routines and procedures, which form part of the development of literate practice (Ludwig & Herschell, 1998).

The role we establish as teachers and the interactions we undertake with our students via discussion, questions, responses and tasks establish the possibilities for creating meanings in our classrooms and in this way establish the context of learning. Whatever we say and think is shaped by the social organization of the discourse and the respective roles of the participants (Nystrand, 1997b:)

In order to transfer literacy skills into a range of other contexts, the teaching of transferable and procedural skills is also necessary, which arises from knowledge of the technical aspects of

language. Mediation involves bringing what is familiar to facilitate the understanding of new knowledge.

7.5.3. What is the nature of the language and teaching practices?

In this study the notion of apprenticing is embodied in a readiness to learn through active engagement. The systemic functional literacy practice establishes teaching and learning contexts where 'point of need' teaching relates to the intended goals and purposes of teaching (Ludwig & Herschell, 1998). It is a shift in pedagogy away from teacher-centred models of information transmission to knowledge and learner-centred approaches. Apprenticing, in the sense of workplace training involves learning by participating in the practice which is facilitated by qualified personnel or experts in the relevant practice. In families and schools, apprenticing into literate practice occurs with parents, peers, teachers and others in the community. The pursuit of discovery, and concept acquisition with scaffolded support, are central to the learning process (Kaufman, 2004).

The environment we create for learning involves an intertwining of management structures and pedagogical procedures, which may either, include or exclude students in relation to learning ...

whatever the objective social logic of their interrelationships demands of them.

In the final count this logic defines the very experiences of people (their "inner speech")
(Bakhtin & Medvedev cited in Wherle, 1978:153).

The complementarity of the SFL discourses of teaching and learning is embedded in the cyclic progression from examining an example of the product, modeling or demonstration of its construction, sometimes de-construction, working through processes of joint construction and ultimately exercising independent construction or going it alone but with support if necessary. These are relevant practices for all learners.

7.5. Conclusion

The question remains as to why S had been at school for over 12 years and could not read or write beyond a basic level. For classroom practitioners there is a responsibility to use and facilitate language within a specific community of social practice and this is developed through mediated talk. The point of departure on an interpersonal level comes from experiences and language

practices which are realized and expanded through a variety of textual encounters (visual, symbolic and verbal).

Patterns of talk are the substance of learning experience. Explicit language teaching, which includes reading many types of text, requires the meta-language to discuss, reflect and evaluate. A method of discourse analysis is therefore essential for understanding the relationships that are at work on interpersonal, experiential and textual levels. The language practice (content that is taught), language process (way of teaching) and language product (what is assessed) are not only about what is taught but also about how it is mediated. A systemic functional linguistic approach is based on mediating language practices through talk about, and talk around texts. The talk supported S whilst engaging in the reading of the coursework texts and she achieved her goal of completing her apprenticeship training. This was not achieved through a segregated practice of remediation. This was achieved through the inclusive practice of mediation.

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Appendix A: Definitions of Literacy

The UNESCO definition, reflects a particular ideology of the organisation in that it is the responsibility of all individuals to make a contribution to society.

"A person is literate when he (*sic*) has acquired the essential knowledge and skills which enable him to engage in all those activities in which literacy is required for effective functioning in his group and community, and whose attainments in reading, writing and arithmetic make it possible for him to use these skills towards his own and the community's development." (UNESCO 1962).

The United States of America defines literacy in section 3 of the National Literacy Act of 1991.

"... the ability to read, write and speak English and compute and solve problems at levels of proficiency necessary to function on the job and in society, to achieve one's goals and develop one's knowledge and potential." (Wilson, 1999).

The Commonwealth of Australia as part of the Literacy in the Information Age: (OECD, 2000) published the following definition in its final report.

"Literacy is the ability to understand and employ printed information in daily activities, at home, at work, and in the community - to achieve one's goals and to develop one's knowledge and potential" (x).

The current definition of the Australian Council for Adult Literacy (ACAL) is as follows:

"Literacy involves the integration of listening, speaking, reading, writing and critical thinking; it incorporates numeracy. It includes the cultural knowledge which enables a speaker, writer or reader to recognise and use language appropriate to different social situations. For an advanced technological society such as Australia, the goal is an active literacy which allows people to use language to enhance their capacity to think, create and question, in order to participate effectively in society" (ACAL, 2003).

Grammatical Realisation

Appendix BTranscript from conversation with S about recent reading experiences.

Expression

n u	•		
Т	You know earlier, you said you were learning stories	Attitude of affect / process	mental process
	learning to read stories of different kinds was it Disney?	Attitude of affect / process	behavioural process
S	Yeah.		
Т	tales you liked particularly.	Engagement of modality / proclaimer - expectation	mood adjunct
	Have you tried any more of that in the last couple of weeks?	Graduation of focus	interrogative adjectival
S	No, I haven't actually,	Engagement of modality / disclaimer - denial	modal finite - neg. polarity
	I've just been like	Attitude of affect / comment	mood adjunct
	because whenever I've finished with you,	Graduation of focus	finite process
	I've been getting the units and I'd do that instead.	Engagement of modality	modal finite concessive conjunction
T	So you take that home for homework.	Engagement of modality / proclaimer - expectation	continuative
	How often would you go through it?	Graduation of focus	interrogative
S	Oh around twice, three times just so I can get it.	Graduation of force Engagement of modality / proclaimer - pronouncement	adjectivals mood adjunct
Т	You'd be fairly familiar with it by the time we looked at it in the next lesson.	Graduation of force	adverbials
S	But this one here I didn't take I don't know because	Engagement of modality /	concessive conjunction
T	You haven't taken that one?	Engagement of modality / disclaimer - counter expectation	finite - negative polarity
S	I haven't practised it.	Engagement of modality / disclaimer - counter expectation	finite - negative polarity
Т	That'll be interesting won't it?	Attitude of affect / process	mental process
	But your reading up 'til now has been fairly fluent on these topics.	Engagement of modality / proclaimer - expectation	mood adjunct
S	I know.		
	I'm enjoying it.	Engagement of modality / proclaimer - pronouncement	finite - positive polarity
	S T S T S T T	Icarning to read stories of different kinds was it Disney? S Yeah. T tales you liked particularly. Have you tried any more of that in the last couple of weeks? S No, I haven't actually, I've just been like because whenever I've finished with you, I've been getting the units and I'd do that instead. T So you take that home for homework. How often would you go through it? S Oh around twice, three times just so I can get it. T You'd be fairly familiar with it by the time we looked at it in the next lesson. S But this one here I didn't take I don't know because T You haven't taken that one? S I haven't practised it. T That'll be interesting won't it? But your reading up 'til now has been fairly fluent on these topics. S I know.	Icarning to read stories of different kinds was it Disney? Attitude of affect / process

Type of Resource

Appendix C

Transcript from conversation with S about early reading experiences.

		Expression	Type of Resource	Grammatical Realisation
1	S	Well, at the beginning at the beginning when I	Engagement of modality / counter-expectation	continuative
		couldn't read	Attitude of affect	material processes
2 3		I couldn't like I didn't wanna, like,	Graduation of force	finite / negative polarity
4		look at any writing like,	Engagement of modality /	
5		didn't wanna	disclaimer - denial	repetition
6		because I because I could see		
7		that other people were reading better than me	Attitude of judgement / social esteem - capacity	mood adjunct of capacity
		and things like that	Engagement of modality /	mood adjunct or suparity
			proclaimer - expectation	mood adjunct
8		and I just I was too scared to look at the page	Attitude of judgement / esteem Graduation of force	mood adjunct of usuality adjectival
9		so, I wouldn't like look at the pages,	Engagement of modality /	concessive conjunction
			disclaimer - denial	modal finite - negative polarity mood adjunct of usuality
10		I'd just look at the pictures	Attitude of judgement / esteem Engagement of modality /	mood adjunct of usuality
			proclaimer - pronouncement	active voice
11	_	but now now I've taken more interest in the words	Engagement of modality /	
, ,			proclaimer - pronouncement	active voice
12		and trying to figure them out.	Attitude of affect	material and mental processes
13	T	That's really interesting.	Graduation of force Engagement of attribution	adverbial nominalisation
14	S	Co year Progratika accuracy	Engagement of autibution Engagement of modality /	Hommansation
14	3	So now I've got the courage.	counter-expectation	concessive conjunction.
15	Т	Well, in school um	Attitude of affect / comment	continuative
16	S	l always used to be scared.	Attitude of affect	circumstance of manner / quality
			Engagement of modality /	active voice
- 10	T	at the control of the	proclaimer - pronouncement Engagement of modality /	prepositional phrases
17	T	Ah. What if What would you do if your teacher um gave you something to read?	disclaimer - counter-expectation	mood adjuncts
18	S	I'd try and read it myself	Engagement of modality / proclaimer - pronouncement	mood adjunct / active voice
19		but if I couldn't, I'd get my friend	Engagement of modality / disclaimer - counter-expectation Attitude of judgement / esteem	concessive conjunction mood adjunct inclination
20		because my friend used to be in the same classes as me.		
21		She always used to help me.	Engagement of modality / pronouncement - expectation	comment adjunct
22	Т	So she did all the same subjects?	Engagement of modality /	continuative
			disclaimer - counter-expectation	concessive conjunction
23	S		have your support there and so y	yould you talk to one another in
24	Т	Particular Country of Management	a nave your support there and so w	ould you talk to one amount in
		classabout things?		
25	S	Yeah, but sometimes I couldn't she used to uncover her		
26	Т	You always sat together? Was there any time when your tead	cher made you sit alone?	
27	S	No		
28	T	You just had that good fortune to be able to sit with your frie		
29	S	Yeah. Oh I couldn't believe I seriously couldn't believe	that I'd made it into year 12 half	way through year 12
30		and no teachers took any notice like of anything		
31		'cause I never used to read I used to always like my t	turn to read novels	
32		and all that I always used to turn 'round		
33		and say I forgot my glasses		
34		and I can't believe that was a good excuse to you know go	et out of everything.	
35	Т			

36	S	I would've
37	T	Did you actually wear glasses then?
38	S	Yeah
39	T	So they know that it was a legitimate reason for you not being able to read something.
40		So you did that every year?
41	S	Yeah but I can't believe they just said 'alright next person'
42		Like they would've said like they would've called me backand things like that but they didn't
43		you know at the end of the lessons they say I need to speak to you or something but they didn't.
44	Т	So you could probably do with teachers sometimes is that there are occasionally quite big classes that they have to teach and
45		because they see so many students in a day, you might have a teacher for two lessons at the most, some days and you don't have
46		time for everybody to do everything of course in the time allocated to one class
47	S	Yeah but our ESL class was like small
48	Т	Even in ESL! You could get away with not reading in ESL.
49		I'm amazed at that because I thought that would be one the one class where you wouldn't be able to.
50	S	I got away with it.
51	Т	But what about your friend where was she?
52	S	She used to read
53	Т	Was she in ESL too.
54	S	Yeah, she was Vietnamese
55	Т	Oh I see.
56	S	She came from over there when she was smaller.
57	T	How old were you what year were you in when you realised that reading was really difficult for you.
58	S	Well, in year in year six, seven I used to love spelling
59		You know how we used to do spelling and things like that, I used to love that.
60		But then when I got to high school I'd just in year 8 I told one of my my English teacher that the first lesson.
61		I told her that I she asked me to read and I said I can't
62		and she goes what do you mean you can't and I said I can't.
63		She goes alright she told me to stay back that was at P H (gives name of school) though.
64	T	Yes
65	S	and um she goes then I got that test done (referring to psychological assessment)
66		because she told those people to come but the people said I don't have nothing wrong
67		and then they didn't do nothing about that
68	Т	that was all at P H.
69	S	Yeah. The first semester of year 8 P H and then second semester I went to S H 'cause they had the language Greek there and it
70		was closer to home too so we went there and satyed in Salisbury for the whole
71	Т	'til you'd finished. What did that what happened with that teacher in year the first part of year 8? After the assessment, what
72	=	did she expect of you then?
73	S	Um
74	Т	Did you leave P H soon after that was done?
75	S	Er I stayed like well I think the thrd week of that the beginning of the semester I got that test done
76	Т	But you stayed there until the end og the semester.
77	S	The end of the semester.
78	Т	Did she ever ask you to read again?
79	S	She did, but I had another friend that she was whispering (laughs) out the things so
80	T	So you got through it that time. You wouldn't have had to read perhaps just a couple of sentences
1000	-	(i) (ii) (iii) (ii

4		
81	S	No, just one sentence she let me read.
82	Т	Um were there other classes where you were asked to read very often?
83	S	No
84	Т	It doesn't normally happen its quite unusual to have to read something in science or I mean someone might read out a question.
85	S	Yeah
86	T	But that would be mostly because they wanted to know something. Um the teacher wouldn't normally in every subject ask
87		students to read something aloud in the class. How much work did you actually manage get done? How many assignments did you
88		actually manage to complete?
89	S	Well um in year 8, 9 and 10, I used to get all my assignments like up to date and hand them out but that's with my friend's
90		help. I used to go over her house after school and do my and um my sister.
91	Т	How did she manage that when she had to get her work done too.
92	S	'cause my um brother he was a year above me and we did the same work as they did I used to copy some of his assignments
93		and um yeah I used to cheat alot.
94	Т	What about exams? Did you have to do exams?
95	S	I did one exam, that was in year 11 last at the end of year 11 but I chetaed too.
96	Т	How did you do that? Did you take notes with you?
97	S	Yep. They checked, but they couldn't find anything in the book because I had it underneath something.
98	T	Ah.
99	S	I'm a bad girl.
100	Т	You were really game to do that,
101	S	I had to because I wanted to pass my school.
102	Т	But you were under a lot of pressure. Were you frightened?
103	S	Yes.
104	T	When you took stuff in?
105	S	Yes so they don't catch me and
106	T	I'd be scared out of my wits.
107	S	
108		only wnet to that. The other ones I didn't go to because I didn't have the guts to go.
109	Т	So you just avoided them. Did you say you were sick.
110	S	
111	Т	
112	S	They were like practice exams and then that it was the last week that we did the exams and we just got our reports and my
113		report was good and then in year 12 at the beginning of year 12 I went to school and I was like because they didn't say if I
114		failed or not and I was like oh no I probably failed and they called out the names of care teachers like in year 12 and my
115		name was there and I'm like oh I made it into year 12 I couldn't believe it.
116	T	Gosh. What about tests? Did you do test on things throughout the year?
117	S	Yes.
118	T	
119	5	Actually, in maths was pretty good, but then some I don't know because I didn't do maths for one semester I just lost
120		everythinglike I didn't I forgot everything. But in maths like the easy things I was alright with that but for Greek I used to
121		cheat a bit too. I used to write 'em down and things and for ESL.
122	1	CONTRACTOR
123	1.5	
124	1	Oh I understand what ever you are telling me is not going to be heard by anybody else. What um in Greek, how did you work
125		out what you needed to take with you to help you through the exam?

126	S	One of my friends she saw what's in the Greek thing and I think we were like allowed to have a practice exam that was		
127		similar to it. So took like most of the notes and yeah, wrote them down.		
128	Т	What was your spelling like?		
129	S	Bad.		
130	Т	You said you enjoyed spelling in year six and seven though.		
131	S	They was like all the easy words.		
132	Т	You could learn those well, though?		
133	S	Yeah but I cheated in that. 'cause we used to get students to test us like my friends used to test me. I had good friends in high		
134		school and primary school because they used to just write it down and just tick it as I got it right.		
135	Т	So the teacher didn't mark the tests, you marked one another's.		
136	S	Yeah		
137	Т	Oh I've seen that happen in lots of schools now.		
138	S	I feel bad now.		
139	Т	No. No don't! This is amazing. This is such valuable experience because		
140	S	I cheated my way through primary school and high school.		
141	Т	You managed to find ways to beat the system that's clever.		
142	S	It isn't for me because I would have love to learn like		
143	T	I know you lost so much by having to do that.		
144	S	Yeah but I had to go I had to show everyone like the main thing I wanted to do was to prove to my mum and dad that I can		
145		get into high school and I can get to year 12. That was the main thing and my little brother and my sister and my brother		
146		'cause they used to call me dumb and things like that and I wanted to like prove to them that I'm not. So that's why I cheated		
147		and I did everything.		
148	Т	You worked out ways to get around it. What do you think makes you so keen to learn now?		
149	S	'cause I don't want my children to go if I ever have children I don't want them to go through the same thing that I have gone		
150		through so I wanna teach them. 'cause my mum and dad couldn't teach me 'cause they came from a different background		
151		um I just wanna you know teach them all I can. So I wanna give them what my mum and dad couldn't teach me like you		
152		know.		
153	Т	Yes, which you will do. That experience you've had um because it was because it was so powerful I mean to have to do that		
154		is something that you would never forget and you'll probably recognise signs in your own children when they are needing your help		
155		too much more readily.		
156	S	It's mainly that, but I want to do it because of work like if I ever you know decide in the future that I'm interested in doing		
157		something else, I wanna have the guts to go somewhere and if they say like can you do like stocktaking or things like that,		
158		I wouldn't have any problems reading what they've got there so		
159	Т	and that's what we'll get to, is to look at a whole variety of um ways that information is presented so that you can deal with		
160		information in any shape or form. Okay.		

Appendix D

Halls	scri	ot of reading and dialogue - Hair Analysis			
I	S	Shall I continue?			
2	T	Yes			
3	S	Hair Analysis sis			
4	Т	Okay			
5	S	The qual qual I ty			
6	Т	that's it			
7	S	The quality of the hair needs to be assisted			
8	T	needs to be assessed			
9	S	because it will affect the chance			
10	T	the choice			
11	S	the choice of product and tec			
12	T	tech nique			
13	S	technique used. The quality of the of the hair refers to texture, dens dentsy			
14	Т	a few new term here density			
15	S	density			
16	Т	What might you understand about density?			
17	S	It's like the thickness density			
18	T	So we have texture and density which is the thickness of the hair strand.			
		Does that start to make a bit more sense?			
19	S	Yep. Is that porous?			
20	Т	porosity The pronunciation changes slightly when a suffix is added.			
21	S	elicity			
22	T	elasticity It's like elastic but the suffix at the end changes the way we say it slighty. Instead of elastic, it becomes			
23	S	e lasticity			
24	T	Good. So those extra terms are density, prosity and elasticity			
25	S	Textra. Textra refines			
26	T	refers			
27	S	refers to the di., di., am., e., ter			
28	Т	We met this along time ago this			
29	S	diameter of the hair shaft It may be coarse, medium or fine. The diameter			
30	Т	have a look at your diagrams there for a moment, 5,6 and 7. So you've got coarse texture			
31	S	coarse, medium and fine			
32	Т	So you're going from thick			
33	S	to fine			
34	Т	What would the texture of your hair be?			
35	S	Mine's fine, really really fine. The diameter of the hair shaft infor			
36	Т	influ			
37	S	influences			
38	Т	that's it			
39	S	chance			
40	T				
41	S	250,000			
42	Т				
42	Т	So you would check the texture			

43	S	Yep, then you would see which solution to use and what size of rod.		
44	T	good The texture is referring to what?		
45	S	The texture is referring to what solution and what rod.		
46	T	What is it about the hair that the texture refers to? You said your hair has a fine texture, so we're talking about the		
thickness - diameter				
47	S	oh yeah, yeah		
48	T	Now, next section.		
49	S	Choice of solution. Always follow manafacters manafacters recommedents recommendents		
50	T	almost recommendations		
51	S	recommendations from / for hair texture		
52	Т	great just on that one the choice of solution again you'll have instructions won't you.		
53	S	That's what we were looking at last week. Rod selections.		
54	T	good		
		The textra of hair/the hair will affect the size of the curl that re res results.		
55	S			
56	Т	That's it. Different textras of hair will require different size rods to a achieve the same size curl		
57	S			
58	T	Well that's magnificent. Did you think you'd be reading as well as this after six weeks?		
59	S	No. That's how I enjoy it now. The graph the graphic		
60	Т	The graphics means the diagrams.		
61	S	The graphics show the release / result of the same d I a dameter		
62	Т	diameter		
63	S	diameter rod used on fine medium and coarse hair.		
64	Т	Ah! Good okay.		
65	S	That's figure 13, 14, 15, coarse, medium, fine. Note tat the coarse hair results in a finer		
66	T	firmer		
67	S	firmer curl, fine hair in a softer curl. The / three		
68	Т	therefore		
69	S	Therefore remember the following; fine hair is using a small rod, meium hair is using a medium rod, coarse hair is		
		using a long / larger rod will res result / result in a medium curl		
70	Т	terrific		
71	S	Densty		
72	T	density		
	S	density density. When density		
73	T	When deci		
74	S	When deci(t)ing on a When deciding on either a soft, medium or fine / firm res result you must consi(t)er not on		
		the size or the curl but also the amount of number		
75	Т	amount or		
76	S	amount or number of curls on the head.		
	T	Have a look at a couple of words in that paragraph. In the first line when deciding		
77	1991			
77 78	S	deci(t)ing		
78	S	decid(t)ing deciding		
78 79	T	deciding		
78 79 80	T	deciding deciding		
78 79	T	deciding		

84	S	consi(t)er		
85	T	consider		
86	S	consider		
87	T	so don't make it sound too much like 'ter' consider rather than consiter		
88	S	consider		
89	Т	deciding and consider		
90	S	deciding, consider. The dendensdenstydensity		
91	Т	yeah		
92	S	of the hair affects the number of curls. Density is cat		
93	Т	Let's break this one up cat e gor ised		
94	S	categorised into three areas. Remember that perming will give the feel and apr apart		
95	Т	appear		
96	S	appearance of more hair. Body and fuller appearance will be		
97	T	accep!		
98	S	acceptable on sparse hair but too much fullnes on dense hair may be acceptable unceptable		
99	Т	un acceptable		
100	S	unacceptable		
101	Т	So have think about that. If you have dense hair and you end up with too much body and fullness, that might not look		
		really good but if you have fine hair, then you really want as much body as you can get don't you?		
102	S	Um to re r e d		
103	T	To re		
104	S	To re		
105	Т	reduce		
106	S	reduce the amount of body the fullnes are		
107	Т	the amount of body and		
108	S	and fullness, a longer / larger rod should be used.		
109	T	So if we want.		
110	S	fullness		
111	Т	to reduce the fullness		
112	S	um a larger rod should be used. Remember that smaller curl gives more body and a fuller appearance.		
113	Т	Well done. That is fabulous. What have got there in figures 16, 17 and 18.		
114	S	Five pairs for / for?		
115	Т	few		
116	S	few rods, few curls spacious		
117	T	this is a sparse appearance		
118	S	sparse		

Appendix E

Transcript of reading and dialogue - Pre-treatment Analysis of Scalp

- 1	To ensure a qual quality	
- 1		
	To ensure a quality outcome you must always consiter	S mis-reads
- 1	always conduct	T provides correct word
_	always conduct a thorough thoroughly	
- 1	thorough	T confirms intial response
- 1		T affirms attempt
		S mis-reads
- 1	1	T provides word and meaning
		S hesitates
	and the second control of the second control	
		S struggled to recognise allocate due to mis-
- 1		pronunciation
_		-
		T provides word
		T affirms completion of sentence
- 1		11
' [
		T makes connection between text and practice
		1 makes connection between tent and present
		S fails to recognise 'client'
S		T provides word
T		S struggles with pronunciation
S		•
Т		T provides word
S		Could assess whereing
Т		S self-corrects phrasing
S		S makes close approximation
T		T models pronunciation
S	The prechemical analysis falls into three main areas.	
	They are	
Т	These are	T provides correct qualifier
S	These are scalp, hair, client.	
	In this unit you will discuss a range of f fac factors factors.	
	Do you have an idea of that word?	
T	Factors a range of things a range of elements a range of factors,	T offers alternatives to explain meaning
S	that fall into these areas	
T	So now we'll have a look at each one.	
	So analysis starts with the scalp.	
	What is this sub-heading here?	
S	Scalp analysis	
	Breakage break breaks in the skin scarface surface.	S self-corrects
	S T S T S T S T	Well done! Appear Prior that means before Prior to an an Prior to an an Prior to an an Prior to an an Any chemicals you need to allocate allocate try allocate allocate time within the selvis ser service service for this very important procedure Excellent! Have a little think about that. If you're going to do an analysis then it would be very important to do this especially before you're going to put chemicals on some-one's hair. Yep. Remember you are res responsible for your ch change for your client client and the equ! qu a quality for the service of the service The pre chemical analys The prechemical analysis falls into three main areas. They are These are scalp, hair, client. In this unit you will discuss a range of f fac factors factors. Do you have an idea of that word? Factors a range of things a range of elements a range of factors. that fall into these areas So now we'll have a look at each one. So analysis starts with the scalp. What is this sub-heading here? S Scalp analysis

42		Always examine the scalp thoroughly pre pri prior to permimg.	
43	Т	This word means before	
44	S	An any cuts ad add addressing	
45	Т	abrasions areas of rubbing that leave an area	T explains meaning of abrasions
46		which might have tenderness or soreness.	
47	S	abrasions or sores may cause dis discomfort to your client.	
48		If chemicals come in con tact contact	S fails to acknowledge punctuation
49	Т	That's the end of the sentence there.	
50		It's saying that if they have any cuts or abrasions	
51	S	It's says that if they have any cuts or sores the chemical if it goes in	
52		contact with the client's head calm calm the client.	
53	T	What could the chemicals do?	S refers to text for information
54	S	f far farmer	T gives prompt
55	Т	Two words further	
56	S	Furthermore, furthermore, all	T provides word
57	Т	That one is allergic	
58	S	allergic re reas may occur	T provides word
59	Т	reaction	
60	S	allergic reaction may occur	
61		Furthermore, allergic reaction may occur.	S spontaneously re-reads the sentence
62		They might get an allergic reaction.	T prompts semantic connection
63	Т	You understand what an allergic reaction might be?	
64	S	Yes, 'cause my sister and my brothers are allergic to something	
65	Т	Something like cats?	T questions connection
66	S	No, they're allergic to broad beans and mothballs the smell of it and to	T questions
67		some medicine	
68	Т	Mothballs How did you discover that one?	13
69		Oh, perhaps your mother used	
-	_		

Appendix F

		ng explicit or im		Examples	
Attitude – positive or negative evaluation			1		satisfaction or
Affect - expression of a person's feelings			happiness or unhappiness	security or insecurity	dissatisfaction
Q	uality - epithet or a	nominalised thing			
		relational clause			
	circumstanc				
P	Process - mental or behavioural				
C	omment - mood adj	unct			
-	<u> </u>	* 1	mania bahariana		Examples
Judgement -	expression of moral ocial Esteem - perso	judgment about a per	son's deliavioui		admire or criticise
		normality - Is s/he sp	ecial?		
		capacity - Is s/he cap			
		tenacity (resolve) - Is			
S	ocial Sanction - mo				praise or condemn
		veracity (truth) - Is s	he honest?		
		propriety (ethics) - I	s s/he beyond reproa	ich?	
Appreciation	- aesthetic assessm	ent of objects, events	& people (not behave	viour)	praise or criticise
F	Reaction - assessing	emotional impact I	Oid it grab me?		
]	Did I like it?		
(Composition - assess	sing form I	Oid it hang together?		
			Was it hard to follow	v?	
F	Evaluation - assessir	g worth or significan	ce Was it worthw	hile?	
Graduation	- grading of feelings	, judgements or asses	sments up or down		Examples
Force - amp	itude - grading from	low (softer) to high (louder) intensity of	meaning	
F	dverbials & Adjec	tivals - amount, time	distance		
I	Repetition				
I	Expletives				
Focus - clari	ty - grading as more	(sharpened) or less (s	softened) intensity or	f meaning	
		negotiate positions a	nd enter dialogue us	ing other voices	
	- referring to a sour				Examples
		ees of support for the	material (positive)		
	Dis-endorsement (n	egative)			

	Non-endorsement (neutral)			
	Processes	- what author says (verbal), thinks & feels	(mental)	
	Nominalis	ations - noun constructions of what author	says, thinks, feels.	
		nd other resources		
		Source Type - paraphrasing, qu	otes, official	
		reference, footne	otes	
		Textual Integration		
Modality -	opening up dialogue and giving	space to other positions, opinions, points o	f view, judgements	
	indicates that what is proposed	is likely to be challenged or seen as conter	ntious	
		els of certainty, usuality, probability etc.		
		ons in order to reject, replace, dismiss	Examples	
	Denial - n			
	Counter-	expectation - acknowledging alternatives		
		Comment Adjuncts		
		Concessive Conjunctions		
		Prepositional Phrases		
		Mood Adjuncts		
	Proclaimers - presenting a posi	esenting a position which is very difficult to challenge Expectation - presenting something as 'given'		
		Comment Adjuncts		
	Pronoun	cement - writer/speaker takes direct respon	nsibility	
		Active (author's) Voice		
		Modal Finites		
		Mood Adjuncts		

Tables adapted from: Droga L. and Humphrey S. (2002) Getting Started with Functional Grammar. Southwood Press, Marrickville N.S.W.

Appendix G Information from school reports

Yr 8 English

S works hard on the presentation of her work but now needs to Tm 2 C (Ms F) concentrate on the accuracy of her writing. Careful drafting is required.

S writes well. She presents her work very nicely and is a cooperative $Tm 3 B^{+}(Mr C)$

member of class.

S is a positive student who tries hard in all set work however, reading and Tm 4 C (Mr F) writing are areas S is struggling with. I wish her every success in the future.

Yr 8 Greek

S' written work is on the improve. Her contribution to oral tasks is Tm 2 A (Mrs K) excellent.

S has consistently produced good work and has demonstrated a good Tm 3 A (Ms F) understanding of the language concepts taught. Her confidence in oral tasks is pleasing.

An excellent effort. S' written and oral work is pleasing. She participates Tm 4 A (Ms F) confidently in all language activities.

Term 1 no report due to teacher absence. Yr 9 ESL

S is attentive and offers opinions in class activities. Her commitment to Tm 2 B (MsvE) ESL has improved this assessment period.

S has continued to improve her efforts and level of commitment to this Tm 3 A (MsvE) subject and produced satisfactory results.

Due to many activities involving group work, S nearly slipped through $Tm 4 C^{-}(MsvE)$ the net. I have recommended that she do a catch-up program.

Yr 9 Greek (Ms C)

S has produced good work and has a good understanding of the Tm 1 A language concepts taught. However, she needs to have a more enthusiastic approach to class excursions and come prepared for lessons.

S once again has produced some good work this term showing sound Tm 2 A understanding of the language concepts taught. Her confidence in oral tasks is pleasing.

S is a capable student in this subject. Her written work is neat and Tm 3 A generally accurate.

 $Tm 4 B^{\dagger}$

S' oral and writing skill in Greek have continued to develop well. However, she needs to have a more enthusiastic approach to class excursions.

Yr 10 English

Tm 1 C (Mr M)

Reading skills - satisfactory Written respnses - satisfactory

Oral work - satisfactory Homework - satisfactory Behaviour - excellent

S needs to listen more effectively and be more focused on tasks set.

Tm 2 D (Mr M)

Reading skills - unsatisfactory

Written responses - unsatisfactory

Oral work - satisfactory Homework - unsatisfactory

Behaviour - good

Written literacy task was completed satisfactorily. S did not submit much of the required work this term. She had difficulty understanding some of the texts and tasks but should have been able to cope with most of the work.

Yr 10 ESL

Tm 3 D (MJF)

Written responses - satisfactory

Oral work - excellent

Assignments - satisfactory Homework - unsatisfactory Behaviour - excellent

Written literacy task was completed competently.

Tm 4 D

(MJF) Written responses - satisfactory

Oral work - satisfactory Assignments - unsatisfactory Homework - unsatisfactory

Behaviour - good

Written literacy task was completed and satisfactory.

Needs to meet deadlines more consistently. Needs to complete all tasks set.

Works co-operatively and efficiently on team projects.

Yr 10 Greek (Mr P)

Tm 1 A

Oral work - excellent

Written responses - excellent

Tests - excellent Homework - excellent Behaviour - excellent Participation - excellent Tm2 A

Oral work - excellent

Written responses - excellent

Assignments - excellent

Tests - excellent Homework - good Behaviour - excellent Participation - excellent Tm 3 A Practical work - excellent

Tm 4 A

Oral work - excellent

Written responses - good

Mental activities/computer work - excellent

Homework - excellent Behaviour - excellent

Participation - excellent

Culture/Greek dancing -

excellent

Oral work - excellent

Homework - good

Behaviour - excellent

Participation - excellent

SACE 1 ESL

Tm 1 D (MJF) Written work - no summative tasks completed. D

Oral - an excellent communicator. B

Assignments - deadlines rarely met. D

S ability is obvious but not meeting enough work to succeed.

Tm 2 D (MJF) Written work - many tasks outstanding. D

Oral - fluent but not enough work. D

Assignments - one task completed only. E

S has the ability but isn't working.

Tm 3 C (NC) Written - a good standard maintained. C

Oral - a fluent expressive speaker. C

Assignments - deadlines usually met. C

S should achieve reasonable results providing assignments and orals are kept up.

Tm 4 D (NC) Oral - careers D

Essay writing - various topics. D

Research topic - own choice. D

Biography - directed topic. D

S can achieve good results with a little effort.

SACE 1 Greek (Mr S)

Tm 1 B Reading a wide variety of Greek texts - A

Writing sentences and short paragraphs in Greek - C

Various tests on spelling and comprehension - C

Assignments including a major study of Greek person/theme - C

S has made good progress this term. However, she needs to complete all the required work. Her vocabulary has increased further. S needs to further improve

her attendance. (4/13 lessons absent)

Tm 2 C Reading a wide variety of Greek texts - B

Writing sentences and short paragraphs in Greek - C

Various tests on spelling and comprehension - C

Assignments including a major study of Greek person/theme - D

S has missed most of the lessons this term (10/16). She needed to complete all of

the required work.

Tm 3 D Reading a wide variety of Greek texts - C

Writing sentences and short paragraphs in Greek - D

Various tests on spelling and comprehension - C

Assignments including a major study of Greek person/theme -E

S has missed most of the lessons this term (5/11). These were on Wednesdays and Fridays due to work experience. She has not completed most of the required tasks.

S has demonstrated a great comprehension of the Greek language.

Tm 4 B Oral and written exercises - A

On Greek culture, language and civilisation - B

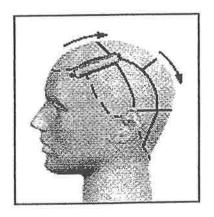
Written exam - end of year - D

S has worked very well during this term on a range of activities including internet tasks such as exchange of e-mail and real time chatting with many persons in Greece. (absences 4/14)

ANALYSIS

- Scalp
- Hair
- · Client
- Analysis Sheet
- Quiz
- Activity (1)

Learning Guide



By the time you have completed this unit you should be able to:

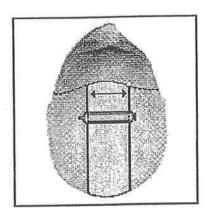
analyse (with assistance) a client's scalp and hair ask relevant questions and gather appropriate information regarding client requirements

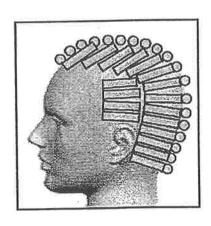
assess the analysis data

make a decision about technique, equipment and product to be used (with assistance).

To be credited with this unit you must:

study the unit information complete the quiz complete the activity.







Collecting, Analysing and Organising Information



Working with Others and in Teams



Communicating Ideas and Information



Planning and Organising Activities



Solving Problems

ANALYSIS

CENSICUY

sure a quality outcome you must always conduct a thorough analysis prior to any chemical work. eed to allocate time within the service for this very important procedure. EMBER: You are responsible for your client and the quality of the service.

hemical analysis falls into three major areas. These are:

alpir

ent.

s unit we will discuss a range of factors that fall into these areas.

CALP ANALYSIS

BREAKS IN THE SKIN SURFACE

ays examine the scalp oughly prior to perming. cuts, abrasions or sores may e discomfort to your client hemicals come in contact. hermore, allergic reaction oçcur.

. 2)

uts, abrasions or sores are ent you will have to make a ision whether to continue the service or to suggest the client return to the salon the skin has healed.

i mild case barrier cream ld be used to profect the ken skin from further ation.

FECTIOUS CONDITIONS vays check for infectious ditions such as ringworm, etigo or lice. Hairdressing tment should not be given if infectious condition is ent.

;. 3)

order OTHER CONDITIONS sts, warts, dandruff do not trict the use of perming ducts.

wever, in the case of dandruff dry scalp a follow up should alment ommended.

Fig. 1



Fig. 2



Fig. 3



Fig. 4

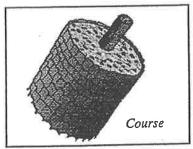


Fig. 5

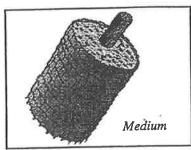


Fig. 6

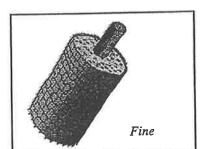


Fig. 7

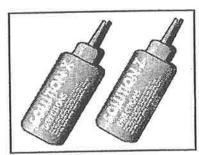


Fig.8

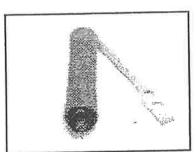


Fig. 9

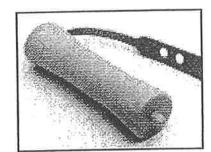


Fig. 10

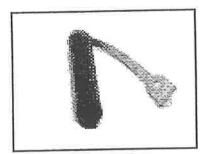


Fig. 11

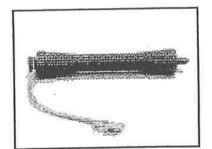


Fig. 12

HAIR ANALYSIS

The quality of the hair needs to be assessed because it will affect the choice of product and technique used.

The quality of hair refers to:

- 1. Texture
- 2. Density
- 3. Porosity
- 4. Elasticity
- 5. Length.

TEXTURE
Texture refers to the diameter of
the hair shaft. It may be coarse, medium or fine.

(Fig. 5, 6, 7)

The diameter of the hair shaft influences:

choice of solution

- · rod selection.

CHOICE OF SOLUTION Always follow manufacturer's recommendations for hair texture.

(Fig. 8)

ROD SELECTION The texture of the hair will affect the size of the curl that results.

Different textures of hair will require different size rods to achieve the same size curl.

(Fig. 9, 10, 11, 12)

raphic shows the result of me diameter rod used on nedium and coarse hair.

13, 14, 15)

E that the coarse hair s in a firmer curl, fine hair er curl.

fore, REMEMBER the

hair using á smaller rod, um hair using á medium coárse hair using á largér vill résult in á medium

DENSITY

deciding on either a soft,
im or firm result you must
der not only the size of the
but also the amount or
er of curls on the head.

lenisty of the hair affects

ity is categorised into three

16, 17, 18)

EMBER that perming will the feel and appearance of hair.

and a fuller apperance will ceptable on sparse hair but nuch fuliness on dense hair be unacceptable.

duce the amount of body ullness a larger rod should

EMBER that smaller curl s more body and a fuller

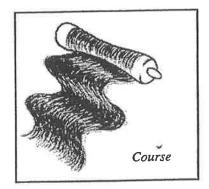


Fig. 13

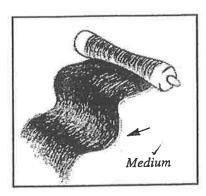


Fig. 14

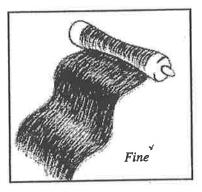
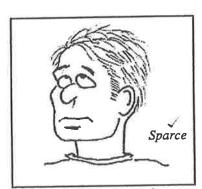
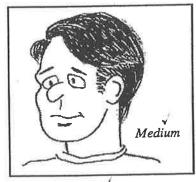


Fig. 15



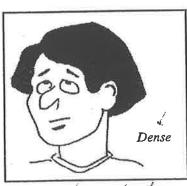
5 hairs = few rods = few curls



500 hairs = more rods = more curls



Fig. 17



5,000,000 hairs = many rods = many curls

Fig. 18

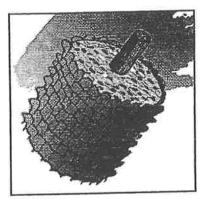


Fig. 19

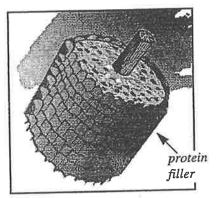


Fig. 20

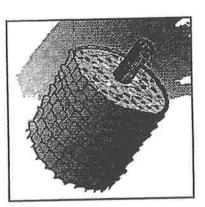


Fig. 21

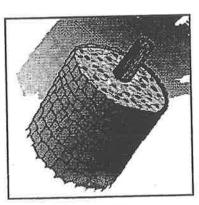


Fig. 22

POROSITY

Porosity refers to the hair's ability to absorb moisture. Porosity may be:

- high
- medium or
- low.

HIGH POROSITY (POROUS)

If the hair has high porosity the curicle layer is open and the solution will be absorbed quickly. The hair can easily become over-processed as the solution reacts very quickly with the hair structure.

(Fig. 19) High porosity may be caused by the use of harsh chemicals, previous chemical treatments (excessive bleaching, permanent waving, tinting or by excessive exposure to sunlight or sea). If the hair is highly porous the following technique must be used:

- use a protein filler on the hair
- water wind the hair
- , expressing choose a mild solution especially designed for this type of hair.

A protein filler (sometimes referred to as porosity equaliser) is a temporary form of filling gaps in the cuticle to even out the porosity. If has no long or permanent effect on the hair.

(Fig. 20)

MEDIUM POROSITY: (NORMAL TYPE) If hair has medium porosity the cuticle layer is neatly packed. Moisture iš absorbed at an even rate.

The solution chosen would be for normal hair.

The hair may be solution wound, or water wound depending on the speed of the operator.

LOW POROSITY: (RESISTANT TYPE)

If hair has low porosity the cuticle layer is tightly packed and the solution penetrates slowly.

(Fig. 22)

This type of hair is called resistant.

Other factors may cause the hair to be resistant. These may include:

- the excessive use of plastic coating colours (causes build up on the hair shaft)
- use of henna colours
- · build-up of medication on the hair shaft. If the porosity of the hair is low either of the following methods may be
- pre-dampen each section with solution prior to winding
- choose a solution recommended for resistant hair
- wind with diluted solution (half/half) or according to manufacturer's instructions.



Fig. 36

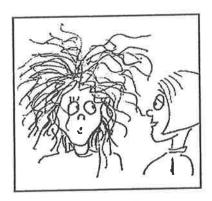


Fig. 37



Fig. 39

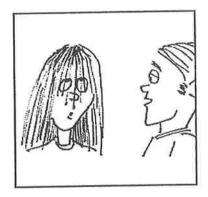


Fig. 38

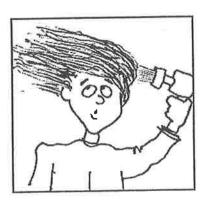


Fig. 40

CLIENT

You need to communicate with your client to determine the type of perm required.

Your client may ask for a body wave or a tight curl. However, her or his interpretation of these effects may be totally different from yours.

To make sure that you are communicating on the same wave length, show your client pictures of permed effects.

(Fig. 36)

You also need to ask questions that will provide information not just a 'yes' or 'no' response.

Some examples of the type of questions are:

'Why do you want your hair permed?'

(Fig. 37)

'When did you last have a perm?'

(Fig. 38)

'What did you like about your last perm?'

(Fig. 39)

'How do you manage your hair at home?'

(Fig. 40)

This type of question should give you an indication of what they really want.

Once you and your client have agreed on the desired result it is your task to decide how this is best achieved.

Clients wishes, scalp and hair analysis data, together with product knowledge will provide the basis for you to select the correct processes, equipment and products to produce a quality service for your client.

A perming analysis sheet has been designed to help you with these processes.

DENT'S NAM	Æ		
UP			
INT'S NAME			
E			
LP			
	**		
);
TURE	Medium	0	Coarse 🖵
se 🗖	Medium	,ca	Dense 🗖
ROSITY	Normal		Resistant 🗖
ASTICITY d	Poor	٥	*
EATED	Tint 🗖	Frosted 🗖	Semi-colour
NGTH	Medium		Long 🗖

PERMING ANALYSIS

DESIRED RESULT:

	SOFT	MED,	FIRM	ANGLE OF WIND	ROD SELECTION
√ TOP					,
SIDE			Ç.		
BACK				9	.+:
NAPE					

Winding Technique
Negotiated Winding Time (if applicable)
Solution or Water Wind
Solution to be Used
Does This Perm Require Heat to Process?
Result

1 × 11 B				
		se y		
<u>Prior</u> to perming it is important to examine the scalp for cuts brasions.				
a	true	\Box		
b	false	<u> </u>		
If a client has an infectious scalp condition would you:				
a	continue with the service			
b	treat the condition			
С	not give the service	⊡		
Texture refers to the of the hair shaft.				
a	shape			
ь	length			
С	diameter			
d	porosity			
When perming fine texture hair a larger rod should be used to achieve a medium curl.				
a	·true	~		
b	false	\square		
When perming medium texture hair a medium rod should be used to achieve a medium curl.				
a	true			

false

6.	The	e diameter of the hair shaft influences	choice of solution
	a	true	<u> Z</u>
	b	false	
7.	Den	sity refers to the amount of hair on the	e head.
	a	true a	· ·
	b	false	
8.	Por	osity refers to the ability of the hair to:	.
	a	curl	
	b	stretch	
	С	absorb moisture	S
9.	, If h	air has high porosity the cuticle layer i	√ s
	a	closed	
	b b	tightly packed	
	c c	open	4
10.	Por	ous hair can easily become over-proces	ssed.
	a	true **	5
	b	false	

If hair has low porosity the cuticle layer is					
a.	closed				
b	tightly packed				
С	open				
If hair has good elasticity it bounces up and holds the curl.					
a	true	 ✓			
b	false				
The length of the hair does not affect rod selection.					
a	true				
b	false				
When communicating with your client to determine desired outcome you should:					
a	ask questions	o ,			
b	show pictures of permed effects				
С	make suggestions				
d	all of the above	☑			