Analysing Literacy Engagement from a Sociocultural Perspective: Appropriating an Assessment Tool

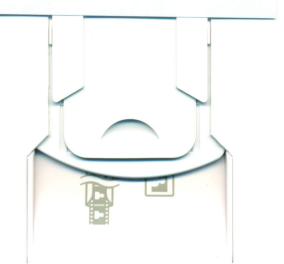
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Abstract

Qualitative research broadens and extends notions of valid data. For example, when the researched are vulnerable and there are no baseline data, how can valid claims about the participants be made? The data described in this paper derives from a study of nine men who self-reported literacy difficulties. As highly vulnerable participants no data could be obtained from their worksites, nor was the researcher prepared to subject them to an assessment instrument. Ongoing interviews over more than one year were the predominant source of data. The task for the researcher was to somehow make sense of hours of interesting interviews. Using three case studies from a doctoral thesis (Kell, 2005) this paper demonstrates how appropriating an instrument designed for another purpose and transforming it into an instrument of analysis can expose literacies that are not apparent in standard tests. The instrument, Communication collaboration and culture: The national framework of adult English language, literacy and numeracy competence (Cope, Kalantzis, Luke, McCormack, Morgan, Slade, Solomon & Veal, 1995) was originally written to assist adult literacy and numeracy teachers in Australia assess the literacy skills of adults in order to plan individual teaching programs. The value of this instrument was that it is premised on the broad literacy and numeracy requirements of the contemporary workplace and on the notion that "competence is context-specific, and reflects larger social, cultural and economic agendas" (1995, p. 41). In a study that took a sociocultural perspective, the appropriation of an instrument such as this as the analytical tool seemed to be particularly apt.

Introduction

As a "rite of passage" (Cartledge, 2002, p. 35) postgraduate research can be an exhilarating, chaotic or even traumatic experience. For researchers unfolding patterns and the unexpected insights that emerge during the data analysis process are powerful and exciting. However, for novice researchers the notion that conducting and reporting research is an easy, straightforward undertaking with clear outcomes is a "dominant social story" (Pinn, 2001, p. 187) serving to undermine confidence and sap enthusiasm. When the research is qualitative,



one of the most confidence-sapping and perplexing issues can be analysis and interpretation of data. Inherently qualitative data "have a concrete, vivid, meaningful flavor that often proves far more convincing to a reader ... than pages of summarized numbers" (Miles and Huberman, 1994, p. 1). Yet to provide more than an engaging narrative, qualitative researchers must respond to and interpret the data.

Qualitative research is not judged on the impressiveness of the data or the writer's compelling interpretation. Credibility is determined in the way data collection and analysis are structured and the transparency with which this structure is applied (Creswell, 2003; Merriam, 1990; Miles and Huberman, 1994). As a researcher I needed to systematically demonstrate, layer by layer, how the context-specific ways of doing work tasks enhanced or impeded each of the nine workers' literacy.

My story: In the Beginning - The Proposal

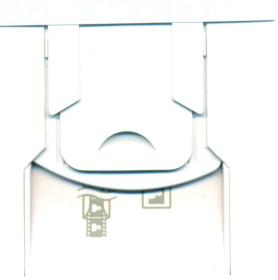
Like other doctoral candidates I have met, I made two mistakes about the proposal for my study (Kell, 2005). First, I assumed that having researched and written a proposal that the hard work was over. What I had not realised is that the proposal represents only the initial formal and public step in any research project. Essentially it contains a framework for the study, describing the epistemology, the theoretical perspective, the methodology and the methods that the researcher will employ (Creswell, 2003; Crotty, 1998) in an endeavour to identify issues or problems, pose questions and find plausible answers (Liddell, 2002).

The second error I made was assuming that having proposed a framework that the detail would just fall in to place. However, reflective perusal of my ethics application reveals that the brief paragraph on methodology did not detail the proposed data analysis methods. How could I have failed to even mention this vital strategy? The result was that I was ill-prepared for the complex and difficult task that lay ahead.

A brief overview of the study I conducted contextualised the difficulties I encountered because I had paid too little heed to how I was going to analyse and interpret the "sexy" (Miles and Huberman, 1994, p. 1) data.

Learning by Experience

Asking the question: What are the issues of identity and social interaction that allow men who self-report literacy difficulties to access and engage in a range of workplace literacies? I chose case study methodology to interview men who



self-reported literacy difficulties. This is a quite specific group often living in a world of self-seclusion, opening up to a few very close friends or family and rarely, personally, to an employer. Their lives are characterised by pretence as they use an array of strategies to represent the persona of literate adults. James¹, for example explained that in a sport-focused nation like Australia being good at sport and outgoing allowed "you [to] just bluff your way through" Interview 1, 13 April, 2000, Line 87-88). George found that by being pleasant and polite he was able to "get other people to do it [literacy tasks] for you" (Interview 1, 28 July, 2000, Line 139).

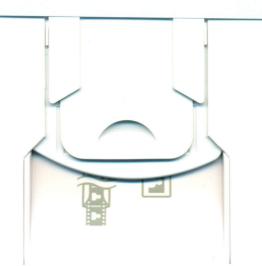
Researching a group such as this posed particular problems. First, techniques such as written surveys, diaries or reflective journals were problematic because of the literacy problem reported. Second, owing to the men's reluctance to reveal their literacy difficulties to employers there was little point in seeking access to workplace documents. Finally, none of the men had any data obtained from literacy assessments and at least four commented that had I wanted to administer a test instrument, they would have withdrawn their permission to participate.

My task was, first, to record the work experience of this high-risk group, focusing on literacy engagement. The technique I chose was that of critical incidents. That is, participants were asked to report incidents from the workplace that they regarded as critical or important. Then, in an ongoing process I was to analyse, interpret and report those incidents from a sociocultural perspective.

Commencing the study

Owing to the nature of the participants being sought, participant recruitment was a long, difficult and at times frustrating process. In all, recruitment of the nine participants took approximately three months. This was a time-consuming process as it involved contacting and negotiating with gatekeepers (Carmody, 2001; Creswell, 2003), such as trade unions officials, family members and adult education agencies who could identify possible participants. Often this process took several telephone calls over a period of weeks to identify a single participant.

Nine men agreed to take part in the study. They came from varying employment settings in either one of two cities in south-eastern Australia. Each of these cities had industries with a mix of light and heavy industrial production, as well as a range of service industries.



¹ All names are pseudonyms.

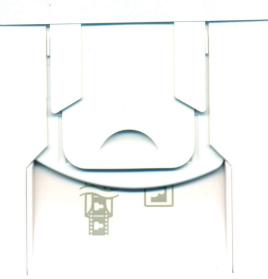
The data collection process, as set out in my research proposal, was straightforward—conduct a series of open-ended interviews with each participant and with up to two secondary participants (colleague, friend or family member nominated and recruited by each participant). As interview data was transcribed I would commence analysis, a recommended strategy (Miles and Huberman, 1994; Robson, 2002).

A problem emerges

By the conclusion of the third round of interviews a problem began to emerge. The data were starting to build. As a series of narratives guided by open-ended questions the accounts provided descriptions and explanations of the process that had shaped the lives of nine men. As a result initial analysis opened my eyes to the diversity of workplaces and work tasks, helping me to "get beyond initial conceptions and to generate or revise conceptual frameworks" (Miles and Huberman, 1994, p. 1). However, initial attempts to write any form of analysis using a version of Miles and Huberman's (1994) three-step analysis model proved to be extremely difficult. For example, the task of chunking and summarising data, and condensing it to a stage that conclusions could be drawn was problematic because I had no way of deciding what the important data were.

In taking a sociocultural perspective, the study aimed to refocus attention from the learner as an individual defined by age and IQ to highlight the socially situated nature of learning or knowledge generation. The mass of existing data did not allow demonstration of the process of individuals moving from lower to higher mental functioning by means of the mediation of culturally constructed psychological tools and signs in social contexts (Cole, 1990; Wertsch, 1985; Van der Veer and Valsiner, 1991; Vygotsky, 1978) that are typical of a sociocultural approach. The narratives were full of everyday workplace experiences but I had no way of showing how the moment-to-moment events and the individuals' engagement with prevailing circumstances were important in the development of higher mental functions.

While elements of sociocultural theory, such as the use of tools and signs, mastery, internalisation and zones of proximal development (Vygotsky, 1978) were evident in the stories, they showed variation, perhaps too much variation, for me to establish any reliable conclusions. Importantly the stories remained just that—fascinating narratives of nine lives. It became apparent that any analysis based solely on sociocultural elements would lack the richness and depth that I was seeking. Further it would not demonstrate the sustained, transparent structure on which the credibility of the study could be judged. I needed an instrument to contextualise the evidence I was collecting. The instrument needed to allow consideration of individual shifts to higher mental functions, such as abstract reasoning, logical memory, voluntary attention and goal-directed behaviour (Gindis, 2003).



Working socioculturally towards a solution

In discussing this problem and the frustration I was feeling with a colleague, Professor Mary Kalantzis, she suggested I use the National Framework (Cope et al, 1995)2. Her idea immediately catapulted me into the situation of a novice learning at work. In a process of guided participation (Rogoff, 1990) Kalantzis helped me to expand my thinking and understanding of the workplace literacy competence. In essence guided participation, deriving from Vygotsky's concept of inter-subjectivity, positions the novice and the tutor in roles characterised by collaboration in joint problem solving. For Kalantzis the task was to share with me the possibilities of using a structure designed for curriculum construction delivery and assessment, as an instrument for qualitative data analysis. I warmed to the concept when I realised that one proposed function of the Framework was "to develop an awareness of specific work-related competencies involving English language, literacy and numeracy" (Cope et al, 1995, p. 2). From my perspective I would be able to use the incidents the men were reporting framed in terms of the range of literacies apparent in work-related tasks. Another factor that made the Framework attractive was its conception of literacy. Reductionist notions of literacy competence characterise it as reading and writing. The Framework viewed literacy competence as context-dependent ways of communicating, acting or doing (Cope et al, 1995). Since the data were describing, acting, communication and doing rather than reading and writing I felt that the Framework had great possibilities.

Literacy Competence Framework

The Framework, developed at a significant period of education policy development in Australia, was specifically a succession of reports commissioned by the federal government focusing on language and literacy. Most influential amongst these was Australia's language: The Australian language and literacy policy (DEET, 1991). This report followed from "the emergence of literacy as an economic issue" (Watson, Nicholson & Sharplin, 2001, p. 9) during the International Year of Literacy and was designed to provide policy direction. The 'key competencies' expounded in Employment Related Key Competencies for Post Compulsory Education and Training (Mayer, 1992) identified and formulated performance levels for seven key competencies (Kell, 1998) (Table 1).

² Full title Communication, collaboration and culture: the national framework of adult English language, literacy and numeracy competence

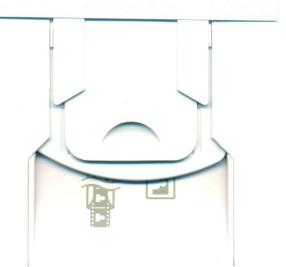
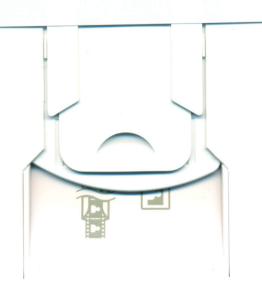


Table 1; The Mayer Competencies

Key competency	Description
Collecting, analysing and organising information	The capacity to locate, sift and sort information in order to select what is required, present it in a useful way, and evaluate the information itself and the sources and methods used to obtain it.
Communicate ideas and information	The capacity to communicate effectively with others using spoken, written graphic and other non-verbal means of expression.
Planning and organising activities	The capacity to plan and organise one's work activities, including making good use of time and resources, arranging priorities and monitoring one's own performance.
Working with others in teams	The capacity to interact with other people on a one-to-one basis and in groups, including working as a member of a team to achieve a shared goal.
Using mathematical ideas and techniques	The capacity to use mathematical ideas, such as numbers and space, and techniques, such as estimation and approximation, for practical purposes.
Solving problems	The capacity to apply problem-solving strategies in purposeful ways, both in situations where the problem and the solution are clearly evident and in situations requiring critical thinking and a creative approach to achieve an outcome.
Using technology	The capacity to apply technology, combining the physical and sensory skills necessary to operate equipment with the understanding of scientific and technological principles needed to explore and adapt systems.

Killen, 2003, pp. 264-265

The Mayer report reflected a desire for "a convergence of vocational and general education and more well-defined targets for both teachers and learners" (Cope et al., 1995, p. 1). The Framework (Figure 1) aimed to set out literacy and numeracy competence statements based on Mayer's key competencies. As a landmark document it sought to define competence in literacy and numeracy for the new



world of work resulting from globalisation, especially new manufacturing and communication technologies.

The authors of the Framework attempted to meet the fledgling national vocational education and training (VET) system's demand for measures of competency in a manner that allowed curriculum writers and eventually teachers to provide contextually relevant meanings. In other words it was not a prescription but a structure on which to determine site-by-site recognition of competence. It achieved this by taking a "generic approach, specifically [defining] competence in terms of broad clusters of abilities or attributes" (Marginson, 1993, p. 145). In deliberately using the term competence, as opposed to the more common term competency, the authors described a concept that reflected the varying values and priorities represented in "larger, social, cultural and economic agendas" (Cope et al., 1995, p. 41) and explained the relationship between an individual and a specific context. It is a term that enabled the "connections between social activity, work and learning" (1995, p. 44). The Framework focused on the interaction of "performance and knowledge" (1995, p. 9) in social contexts as the basis of competence. It stressed the way people act on the basis of knowledge gained through previous experiences and how that knowledge and individual identity are transformed through performance in specific social and cultural contexts. In particular it proposed that:

knowledge refers not only to what is learned in formal education, training and study, but also to the languages, cultural and gendered experiences, ways of knowing and doing, which have been learnt in a broader social setting. (Cope, et al., 1995. p. 9)

Elements of the Framework

When depicted diagrammatically the Framework (Figure 1) is represented as a six-sided figure that is divided into six segments. Each segment refers to a particular aspect of competence. Within each segment are three levels radiating from the centre. Each of these levels describes a level of competence.

ASPECTS OF COMPETENCE

The Framework presents six aspects of competence that represent a broad perspective on the different social and cultural contexts of the workplace and in the community, namely:

- task (procedural communication)
- technology (technical communication)
- identity (personal communication)
- group (cooperative communication)
- organisation (systems communication)
- community (public communication).

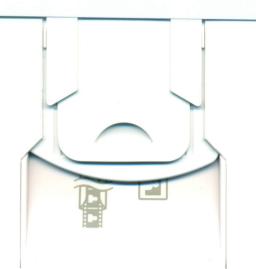


FIGURE: 1 THE FRAMEWORK

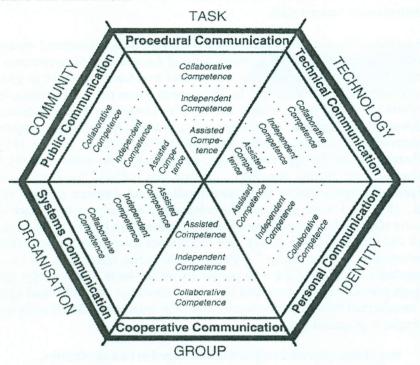
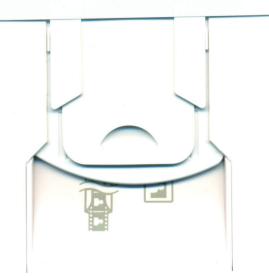


Figure. 1.: Cope et al., 1995, p. 15

A range of literacy skills is the common element in these aspects of competence. From the centre of the diagram (Figure. 1) these stages of competence are assisted, independent and collaborative competence. The Framework (Cope et al, 1995) discussion paper provides detailed descriptions of examples on the types of activity that indicate aspects or stages of competence. There is an assumed progression of competence from the centre to the periphery.

How the Framework became an Instrument of Analysis

Two specific elements of the Framework's underpinning were important in my study. First, the historical nature of all learning is placed alongside cultural and social aspects of the workplace. Second, the broad clustering of abilities and attributes that define competence legitimate the tacit, learned on-the-job ways of doing in conjunction with other orthodox concepts of knowledge learning. Both of these made it possible to categorise the nine narratives about doing literacy-related tasks at work and then discuss them in a systematic manner. As a result the Framework, a construction designed to meet a bureaucratic system's demands, was transformed into a methodological framing for a research study and an analytical tool within that study. As such it made an important contribution to the adult literacy field.



Appropriating the Framework

Achieving a comfortable fit was not instant. Over a period of some months I used various aspects of the Framework to analyse large amounts of data. At the same time the collaborative conversation continued and eventually I decided to use only the main elements of the Framework as an analytical tool. The final structure for analysis set out a precise sequence as shown in Table 2.

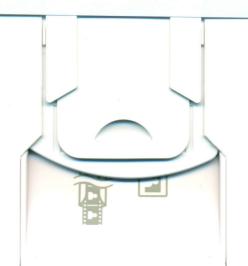
Table 2: THE THREE-PHASE DATA ANALYSIS PROCESS

PHASE	Data analysis process	Data Analysis Chapters
1	Data reduction	Chapter5:introduced participants Chapter 6: located aspects of competence
2	Data display.	
	■ within category sorting	Chapter 7: stages of competence before work·
	i karati Para perandakan Ka <u>r</u> tan dan Masayati dan	Chapter 8: stages of competence in the working years
	across category sortingacross category clustering	Chapter 9: drawing all cases together
		Chapter 10: reviewing cases in sociocultural terms
3	Conclusion drawing and verification	Chapter 11: drawing conclusions and verifying findings

This structure combined a variation of Miles and Huberman's (1994) analysis process with the aspects and stages of competence of the Framework (Cope et al, 1995). Consequently the thesis was able to develop a convincing argument that sociocultural factors influence the development of contextually appropriate literacy skills even in the presence of a set of inherent characteristics (self-reported literacy difficulties). Some examples from the data can illuminate this process.

Case study 1 - Robert

Robert left school at age 15, angry and disillusioned. He felt that his teachers had not adequately taken into account his particularly difficult socio-economic situation, caring more for students from more advantaged families. When he commenced an apprenticeship he preferred to study and work away from other students and frequently critiqued examination questions. In the workplace he railed against the hegemony of employers and felt that he was punished for this.



Robert became an active member of a trade union, as he made a name for himself, rose through the ranks. He recalled that he had a rebellious nature and a willingness to speak out. Scott, his supervisor at the time Robert was interviewed, first came across him at union meetings. He remembered Robert as someone not shy of giving his opinion. "He's always had something to say. He's always outspoken about anything and he's never backward in saying something" (Scott: 255-257)³. The opinions he expressed were on issues relating to him or the social inequities he perceived.

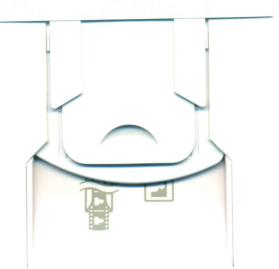
Robert would be the first to say that his orthodox literacy skills were more than adequate. He enjoyed reading and completed the academic aspects of his apprenticeship, if a little tardily. However, his oral communication skills were poor and he was dogged by feelings of inadequacy when expressing ideas. Importantly, Robert had deliberately distanced himself from offers of help, making the point that he "never seek[s] out help" (Robert, 13 April, 2000, Line 114) as demonstrated in rejecting the offer of a study buddy during his apprenticeship.

The segment of the Framework concerned with these types of communication literacies is the community (public communication) aspect. However, even the level of least competence did not account for people who refused assistance. This led me to introduce a fourth entry level of competence that I called "nil" for those who were not ready to accept assistance in the workplace.

In accordance with Robert's meteoric rise through the union he was appointed as an industrial officer. This is the position he held when he was interviewed. Robert's appointment to the position of Industrial Officer placed him on "a ... learning curve" (Scott, 314) that was "hard and fast and ... huge" (Robert, 15 December, 2000, Lines 46-47). There were inherent challenges in this position for a person with Robert's difficulties. First, he needed to develop different styles of oral presentation. For example, instead of "the person ... arguing with the official" (Robert, 15 December, 2000, Line 143) at a union meeting he was the official trying to placate angry workers. Additionally, the role entailed presenting cases in the Industrial Commission. This required a specific and superior standard of writing. While others may have bucked under the pressure, Robert regarded it as a challenge, primarily because some other union members felt he was too inexperienced for the task.

In meeting the challenges Robert learned new skills and demonstrated higher mental capacities particularly in his public communication skills. For example, his initial attitude of trying to "do everything on [his] own" (Scott: 184) changed

³ All secondary participants, such as Scott, were interviewed once. Thus only the line numbers of transcripts are given.



to a more teamwork approach. He began to seek assistance overtly, not by asking but by putting up a proposition for others to comment on (Scott: 340). As Robert described it he began to write his thoughts about particular cases on the whiteboard in his office. When he ran out of space he wrote on the whiteboard in Scott's office.

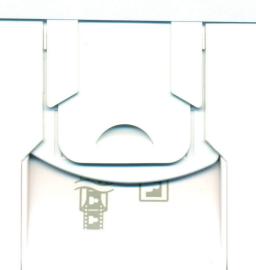
Clever tool use, such as this, served several purposes. First, it indicated to Scott that Robert needed help. Second, it allowed Robert to seek help without asking for it explicitly. Third, it allowed for collaborative problem solving. The latter was beneficial for Robert as it enabled him to learn about the history of previous cases. Importantly he found that he "could be running a case that has been run ten times before and the principles are the same" (Robert, 25 May, 2001, Lines 174-175). With supportive and professional structure at work Robert began to discover new, more effective ways of communicating that allowed him to "look outside the parameters" (Robert, 25 May, 2001, Line 179) he had set himself.

The Framework permitted incidents as seemingly insignificant as sharing a problem on a whiteboard, that is allowing public comment and debate of personal thoughts, to be categorised on a scale of the development of literacy skills. I estimated that in the position of industrial officer Robert's public communication had advanced from nil to collaborative.

Case Study 2 - Sam

Sam changed job roles during the data collection period. When first interviewed he was installing prefabricated kitchen. He was happy to work on his own because he was good with his hands and knows "how to read a plan" (Sam, 25 April, 2000). The role involved almost no writing and even if there were written instructions on a plan, he rarely read them. This is not to suggest that Sam's work was shoddy. It was not. His colleague, Peter, characterises Sam's approach to his work as "precise, very fussy and [he] likes to be right to the millimetre, particular and efficient" (Lines 55-56).

Like Robert, Sam worked hard in his own sphere. He was good at his job and did it well. As a sub-contractor he organised his files with the help of his wife who had an innate sense of knowing when to help and when to stand back. In terms of the task aspect of the Framework Sam demonstrated independent competence with respect to his trade skills. He was precise, accurate, dependable and reliable. Literacy in this instance was evident in his use of plans, drawings and measurements. Yet when the task involved more orthodox literacy skills, such as reading writing and spelling, Sam was at a nil level of competence because "reading takes much longer [than looking at a plan] and it normally doesn't make that much sense anyway" (Sam, 18 January, 2000, Line 114).



Within a few months of commencing data collection a new opportunity arose for Sam. As he described it there was a crisis in the company because two detailers "cost the company a lot of money" (Sam, 17 January, 2001, Lines 27-28) because of the errors they made.

I actually went to them [the company] and I said I wouldn't mind having a go at it [detailing], just to get out of the dust and whatever [of installing]. I was kinda a bit shocked when they sort of said, "Oh well yeah." And that's because they had another guy already coming in for an interview. And they said, "Unless he's knocks us off our socks, you've got the job and do you want to start? Do you want to take it?" And I said, "Oh I'll have to think about it." I was a bit shocked at that I suppose. (Sam, 18 January, 2001, Lines 43-49)

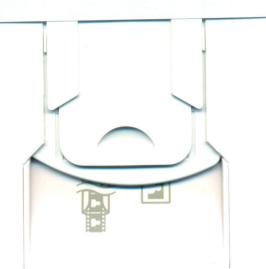
His learning curve was much steeper than Robert's. He was given two weeks to learn how to interpret a designer's rough plan, decoding the dimensions of all the cabinets in order to provide an accurate:

perspective view of the top elevation and floor plan and take it out to the client and go through the features—their appliances, how big everything is to make them fit—and then go back, put in any adjustments that I need to do [such as] wall dimensions, if the designer hasn't measured the walls properly (which is 99% of the time) and to overcome the problems that the designers [make]. (Sam, 13 November 2000, Lines 130-135)

His task was complete when he detailed plans and cutting instructions of each cabinet to the workshop. While he was able to bring the perspective and skills of a cabinetmaker to the task, he also found himself propelled into a long established production culture of which he had no previous knowledge. The first hurdle in this respect, for example, was outwitting the factory staff who thought he would only last three weeks.

A large part of the role of a technical (tech) detailer is transferring rough drawing and measurements on to a computer aided design (CAD) program. Sam had been very much against computers. Now he found that he had to learn "something completely out of my field" (Sam, 13 November, 2000, Lines 347-348). He achieved this by writing notes to himself.

I've got about 50 million stickers on my wall with different things on how to go into different programs ... like ... 'c' press that and then press 'enter' and then press such and such and then press 'enter' and so I've got to keep referring back [to them]. (Sam, 13 November 2000, Lines, 36-40)



Three months after reporting this Sam noted that most of the notes had fallen onto the floor but he found that he had learned the new task to automaticity and did not need them any more. For him the surprising thing is that:

I can do it and ... I'm learning every day but it's not a problem. I can do it easy enough. ... I'm a bit slower than the other tech detailer that they've got but he's been there for three years. So every job I find that I'm getting a little bit quicker ... and there's different things that you learn that... makes you quicker... quicker at every time you do it. (Sam, 17 January 2001, Lines 64-70)

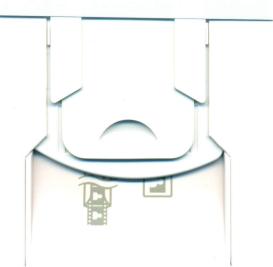
Apart from learning CAD programs Sam has to write special instructions on many plans. He found that the more he read, the better he became. "And now I'll read a word and I'll think, that doesn't look right. I wouldn't have spelled it that way". (Sam, 17 January 2001, Lines 218-220). A colleague who installed kitchens following Sam's written instructions commented that he had not picked any spelling errors (Peter). He felt that the thoroughness of Sam's plans, derived from his knowledge of cabinet making and kitchen installation, was much more important than minor spelling errors. Coming from a trade background Sam "knows how to make things easier" (Peter, Line 111).

The case of Sam focuses on orthodox literacy skills of reading writing (and spelling). His shift from a hands on installer, rejecting orthodox skills as too difficult, to a meticulous and thorough tech detailer using complex computer programs and writing special instructions is illustrative of the way social and cultural conditions can drive change and underpin development. By using the Framework I was able to show how Sam was developing skills at a collaborative level of task competence. At the same time I was able to identify the sociocultural factors that were influential in this transformation.

Case Study 3 - Stalin

The value of the Framework (Cope et al, 1995) was apparent when analysing critical incidents described by Stalin. This is because Stalin's self-concept related to his perceived literacy weakness and was demonstrated in all areas of life. Relationships at work and home, progression through the workforce and social interactions were all governed by his fears about literacy. Using the aspects of literacy from the Framework it was possible to demonstrate how change and growth had occurred for Stalin.

Harsh memories of primary school years that he could not forget were behind the distinctive pseudonym he chose as a reminder of the "teachers [who] were ... like Stalin" (Stalin, 25 may, 2001, Lines 542-543). A consequence of the bullying and harassment he experienced at the hands of school teachers was that he entered



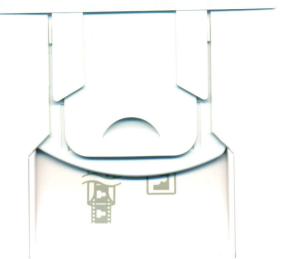
the workforce "just after [his] seventeenth birthday (Stalin, 26 July 2000, Line 18) he was scared. In particular he was very conscious of the embarrassment of others discovering that he struggled with spelling and comprehension. For seventeen years Stalin tried to stay under the radar—doing menial jobs so as not to attract attention and convinced he was "a nobody" (Ray, Line 644).

His competence in all aspects of the Framework was low and in the case of technology (technical communication) and community (public communication) I assessed Stalin as having nil competence. This is a direct consequence of not being able to communicate knowledge about the machinery he was using at work and a focus on him and his literacy difficulties with little concern for fellow workers or the company. And then he applied for a transfer to the reconditioning yard.

Ray, Stalin's supervisor in the reconditioning yard, was aware before his arrival that Stalin had some "learning problems" (Ray, Line 20) although he was unsure of the extent of theses problems. He found that Stalin was a highly dependent learner, very unsure of himself and very scared of his co-workers. Since Stalin needed to learn to operate all the complex machines in the workshop Ray "took him under my wing because he seemed like a person that needed a bit of coaching' (Lines 29-30). In reality it took more than a bit of coaching until Stalin started to demonstrate dogmatic determination in relation his fellow workers.

Persistence, patience and an encouraging manner were the hallmarks of Ray's mentoring of Stalin. Learning new skills was not easy for Stalin. He often forgot overnight what he had learned in the day. Often it "wasn't just necessarily just showing him once or twice. It was showing him quite a few times how to do things" (Ray, Lines 49-51). While this may have been frustrating for Ray, Stalin appreciated the fact that Ray had high expectations, was encouraging and "never out you down" (Stalin, 25 May 2001, Line 275). Stalin was very frank about Ray's influence: he "never gave up. He pushed me along" (Stalin, 6 March 2001, Lines 248-249). This attitude was such a marked contrast to Stalin's school experiences that it was not surprising that Ray discovered that with a "bit of encouragement [Stalin] seemed to do better and better. And once he got a bit of confidence ... he accomplished things ... and ... he done them in high style" (Ray, Lines 61-70)

The incident that best encompasses Stalin's increasing engagement with a range of literacies came about as a result of the company's decision to close a large part of the factory including the reconditioning yard. In order to plan a smooth shutdown and achieve the best possible redundancies for all workers a Transitional Steering Team (TST) was established with a representative from each shift. Ray was appointed but found the task very time consuming and asked Stalin to join him.



Initially Stalin felt he had nothing to offer and was "frightened to talk out" (Ray, Line 306). However, the TST became a very important learning experience for Stalin. One motivating factor was helping other workers (Stalin, 26 July 2000) to obtain the best redundancy. The idea that Stalin would be concerned about fellow workers contrasted directly the egocentric views he had when he commenced at the reconditioning yard.

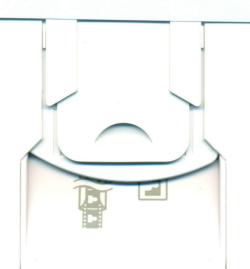
Eventually, Ray withdrew from the TST and Stalin was the sole representative from his shift. As the closure drew closer Stalin seemed to revel in the "long endless discussions" Stalin, 27 September 2000, Line 233) around operational issues. Although he did not believe his active participation on the TST made much impact on his orthodox literacy skills he felt that he:

got a bit more understanding of how people thought about me, round me. Like the other ten individual people they had personalities of their own. I got to understand a bit more how the company did its business. (Stalin, 27 September 2000, Lines 278-280)

Realising that other members of the TST accepted him and that the men on his shift believed he was doing a good job was important in the development of Stalin's overall literacy skills. As he described gradually devoting more and more of his free time to TST matters, including approach senior management to clarify issues, it was hard to image that Stalin had ever been timid and frightened of his co-workers.

On at least one occasion he was instrumental in resolving a stalemate on the TST. He argued that it was more important to resume discussions than to bicker over conflicting opinions. The motivating factor here was the needs of new workers in the sections earmarked for closure who were facing minimal redundancy payments. Some TST members were critical of him, claiming that he was taking sides with management. In a further demonstration of Stalin's maturing literacy skills he accepted their criticism as their right. The shift from regarding criticism as a sign of personal failure to accepting it as a democratic right was another indicator that Stalin was becoming an effective communicator.

Stalin used the TST as a forum for developing thoughts. Although, as indicated earlier, he was initially very reluctant to express his ideas Ray noted: "in the end ... he had more to say there then anybody else" (Ray, Line 307). He achieved this by preparing for meetings—researching possibilities, negotiating with coworkers and senior managerial staff and exploring options—so that he could argue authoritatively and with conviction. Once again these are not skills that were apparent when Stalin commenced work in the reconditioning yard. They are further testament to Ray's claim that given a little encouragement, Stalin gained confidence.



Throughout the years he worked in the reconditioning yard Stalin was supported and encouraged by Ray and Joan, a workplace literacy teacher. Joan was his teacher for approximately seven years. She helped him with the orthodox skills he needed to obtain the certificates required to advance for Level 1 to Level 3, the highest grade in the yard. Yet these skills were not the key to Stalin's improved multiple literacies. They served as a foundation. The key that Ray found through intuition and the Framework exposed was Stalin's identity as a literate person.

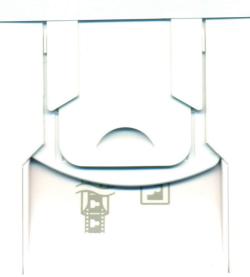
Ray instinctively knew how to approach Stalin although he was not a trained teacher. By asking Stalin to solve problems rather than simply tell Stalin how to operate a particular machine Ray taught metacognitive skills that Stalin used to advantage on the TST. By demonstrating and modelling characteristic responses to workplace errors Ray taught Stalin how to interact appropriately with his coworkers. Stalin, in turn, was able to transfer these skills to the new context of the TST, where they were refined and enhanced. The Framework (Cope et al. 1995) enabled me to demonstrate the process of progress from assisted to (for some aspects) collaborative levels of literacy engagement.

Conclusion

One of the principles of sociocultural theory is appropriation — using a tool designed for one purpose and using it in a completely different way to achieve another goal. A simple and everyday example would be using a pen or piece of paper to mark a page in a book. The data analysis described and exemplified in the three cases described above is also an instance of appropriation. The tool of analysis was written for a different purpose, but it provided a structure with which to codify some of the multiple literacy encounters that occur in modern workplaces.

By using the Framework I was able to demonstrate that by doing tasks workers are engaging in forms of literacy that are often not considered important or valuable. Implicitly these are not reading and writing but communicating with co-workers, advancing ideas, understanding the cultural practices that exist in particular worksites, considering the views of others including co-workers, supervisors and management and responding to changes in the demands of the workplace.

The results of the study suggest that confining literacy to orthodox skills of reading and writing also confines the person, rejecting the wealth or practical skills and knowledge they bring them. The cases of Robert, Sam and Stalin indicate that when elements of society, such as schools or worksites, place overdue emphasis on orthodox skills a cultural class occurs. In each case the workers used opportunities that arose at work to demonstrate a range of skills that may not

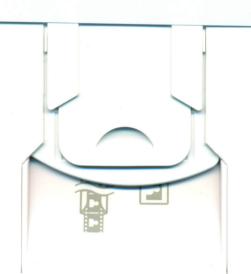


have ever been evident. Each of them benefited from having supervisors who looked beyond "normal" notions of literacy and encouraged and promoted a broader notion of literacy.

As the range of tasks workers are expected to do broaden, notions of what is to be a literate person should also broaden. The evidence from this study demonstrated that classifying individuals on the basis of school based literacy assessment may not provide a sufficiently detailed profile of an individual's profile of multiple literacies.

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