New workplace, new literacies, new identities

Mastin Prinsloo and Selwyn Scholtz

University of Cape Town

This paper presents a case study of a workplace in Cape Town, a 'new workplace'. Like many others around the world this workplace has been redesigned as a 'high performance' workplace under the pressure of international competition. Our concern in this paper is to examine this particular case in relation to the literature on new workplaces as 'learning organisations' and 'literacy rich' environments.

The firm (we will call it 'Strongarms' though this sounds nothing like the real name of the company) makes shock absorbers and related products for the local and export markets. In 1935 a South-African subsidiary of a USA company was appointed sole agents for these products, then imported, for use in locally assembled motorcars that had been manufactured in the USA. In 1962 the firm opened up the first factory to build these products in South Africa in response to government legislation on 'local content' quotas for locally assembled but imported motorcars. In 1970 the first products were exported from South Africa. The local branch prospered, through innovative development of gas technology, in addition to the oil-based procedures that are commonplace for such products. In 1986 a merger and buy-up by the USA-based company saw the local operation become part of a 3,5 billion US$ international operation, and the worksite in a Cape Town suburb, represents the holding company's commitment to state-of-the-art production for the global market. A further global buy-up was announced in the company newsletter in June 2000 as follows:

> "..workers have once again been elevated into greater heights of globalization, with the announcement that their company has merged with one of the biggest automotive component manufacturing companies in the world. This transaction has created a premier global supplier of a broad range of integrated systems, modules and components for light vehicles, commercial truck, trailer and speciality original equipment manufacturers (OEMs) and related aftermarkets.

At a company breakfast in July 2000 at which the entire staff were present the new CEO said that the target turnover for the new mega-company was 15 billion US$ world-wide and that the South African company had an important part to play in this because of their success in manufacturing gas-based products. The CEO said that the motto for the new company was "we have a part in it", and urged all workers to participate in the team concept of the company.

The first take-over in 1986 had seen the introduction of a new working system, called TQS (Total Quality Systems) which, briefly, aimed at

improving production processes through lean production

the elimination of waste

greater employee involvement

The work system is now called 'S'TQS, where S stands for the name of the mega-holding company, and Employee Involvement (EI) is prioritised in management literature, as the source of continuous process improvement:

every employee must be 100% utilised in the most productive way.

workers need to be prioritised over machine.

the employee is the key to successful production.

On the factory floor these commitments are most obviously manifest in a break-up of production and assembly work into relatively contained and self-monitoring cells or teams led by team leaders who are appointed from the ranks of the workers and trained extensively in team leading and team-building practices. The company claims in its promotional literature on its web-site that since embarking on the 'S'TQS system its labour costs have declined by 7% over seven years and the "cost of quality – which includes the full cost of training, prevention and quality failure" has declined by 49%. The company projects a future saving from Lean Thinking initiatives to exceed 100 million US dollars annually (these claims are posted on the company web-site).

In its rhetoric and its practices, then, Strongarm can be seen as an exemplar globalised company, increasingly mega at the level of ownership and responding to the increased pace of technological change and the cut throat world of global competition by "empowering" its workforce and setting them into small co-

operating, responsible and competitive units. As Castells argues in his 1999 report to UNESCO, the network is the "real operating unit" of the global economy

> This is because the "real time" of the global economy results in the simultaneous concentration of decision making and the decentralization of execution. This solves a major limitation of industrial capitalism – the contradiction between growth and size, on the one hand, and flexibility on the other. The possibilities of "real time" reward flexible, individualised labour and render anachronistic the socialisation of work that was characteristic of industrial economies. (Castells, 1999)

New management texts talk about these strategies using terms such as 'flattened hierarchies', 'self-directed work teams', 'empowered workers' and partnerships, and the new workplace is conceived of as an 'enchanted' place, where constant learning is the central activity of the enterprise and new knowledge is the capital. (Gee, Hull and Lankshear, 1996 *The New Work Order;* Lankshear 1997, 319). Gee and others suggest that fast capitalist texts create on paper a version of the new work order that their authors are trying hard to re-enact in the world. (25) where partners engage in meaningful but often fast-paced and stressful work in a collaborative environment of mutual commitment and trust.

 In Tom Peters' words,

> The message [to chiefs] is clear: (1) trust, (2) 'they' can handle 'it' (whatever 'it' is), (3) you're only in control when you're out of control (head of a flat, radically decentralised 'organisation') (Peters 1992: 758-59, quoted in Gee, Hull and Lankshear, 1996, 30).

The logic, Gee and others suggest, is an instrumentalist one:

> Since workers (now 'partners') will now find meaning in their jobs and will personally buy the 'vision' of the company, they should no longer need supervision, and should be willing both to work harder for longer hours and to share in the risks and potential losses of the company (Gee, Hull and Lankshear, 1996, 30)

Worker loyalty and commitment to corporate culture, and heightened worker involvement in quality control and efficiency concerns are sought and often gained by the company without the loss of any managerial control over the big decisions

around corporate strategy. Lankshear argues that these changes unfold in the context of a

> powerful, intrusive, highly regulatory 'techno-rationalist business world view', which impacts powerfully on language practices and processes   - the triumph of instrumental rationality within the conduct of everyday human affairs …reducing human goals and values to constructs which can be broken down into material tasks, steps, categories, processes, etc.., and tackled in systematic ways using appropriate tools, and techniques applied in a means-to-end fashion. (313)

Routine work and literacy

The Strongarm factory produces shock absorbers and other hydraulic products to order for a range of clients. The specifications for each task, are set by the engineers, including the machine specifications and the kind, shape and size of material (such as piping). and the assembly work is carried out by machines to specification, with operators feeding the machines. Interestingly, the actual work of machine operating is mostly carried out in silence by operators working in solitary routine and with not much text or literacy attached to the work. For example, here is a short description of a typical unit of activity in the production process:

> Obs (Work Event 1): P is operator: positions himself on a chair between 3 machine. With left hand he lifts tube out of tray and places tube into roll machine. Activates roll machine with right hand. Roll is completed. (35sec) Removes tube with right hand and places metal cap into roll insertion. Places tube and roll into cap welding machine with right hand. Closes safety harness with both hands and activates the machine with right hand. Weld is completed (24secs) Welded tube is removed from weld machine and places it on the piston insertion machine. P repeats the cycle for the next tube.

> Product is now 40% completely built. It took P less than 1 min to get the product to that point, disregarding time spent with setting up and picking material.

A literacy-linked feature of the routine production process is that of regular checks during the process as to whether the products are within specification. Such work of measuring and checking against listed specs was in place before the advent of

the restructured team-based work system, and is so routine that it is hardly recognised by the workers themselves as involving 'reading and writing'. The computers linked to these activities have also been part of the routine of this work for some time, and there is a general, easy, and untrained use of computers in these basic checking processes. (Whereas team-building training courses for workers are a key feature of the new workplace, these are all about new workplace practices, team work, 'employee involvement' and quality control, whereas the skills attached to computer usage has not been taught in courses and are acquired on the job through informal apprenticeship processes where older workers show newer workers 'the ropes').

> All our drawings and everything / we don't write it down / everything is on computer nowadays / each section has its own computer and you just punch in the number and whatever you want to know / it is on the computer /
>
> R   so your writing is very minimal
>
> F   yes / most of our work is on computer

Team Work and situated literacies

It is the activities surrounding the actual assembly work that are now more obviously text-based, literacy rich, information-processing and complex activities. It is these that we now examine, and it is here that we agree with Farrell's claim that work practice has or is becoming textual practice. (Farrel, 1991)

Our concern is to understand the literacy dimensions of these activities. Our focus is less on the technical dimensions of text-manipulation and more on the social dimensions. What part of wider social practices are particular literacies a part, and how does a wider perspective help us understand the limits, demands and challenges embedded in the performance of particular literacy-linked activities? In this we are following, in particular the work of Glynda Hull and her colleagues in their study of literacy practices in computer assembly plants in Silicon Valley, California.

Hull and her colleagues' study illustrates how deeply implicated literacy practices are in the wider dynamics of work and social relations in the workplace. They echo the insights of learning theory that have been commonplace since the work of Vygotsky became influential: Skills develop and flourish as a result of a social

rather than a technical process. They are socially created and socially embedded – the products of social mediation. Hull and her colleagues make the case that learning is necessarily structured and defined by social relations and social practices taking place on shop floors, training sites, and other specific contexts. They argue on the basis of their data that "taking part in literate activities is not so much a question of ability, than it is a question of rights and opportunities". In other words, patterns of literacy use are generally linked to structures of authority. They note that it is "still customary to talk about literacy in terms of basic skills and to urge schools, vocational programs, and adult literacy classes to teach these fundamentals." (Hull et al, 1996, 203) But their research shows that "this way of talking about skills misrepresents the nature of working knowledge, and leaves us with pat, inaccurate skill lists and related curricula":

> Contrary to popular opinion workers don't just need the basics … our argument is that a literate identity means being able to dip appropriately and as needed into a wide and deep repertoire of situated ways of using written language and other forms of representation in order to carry out a work-related activity. (Hull et al, 1996, 204).

They note that in their list of observed 'literacy functions' only a small portion of these functions fall into the category of 'basic', by which they mean relatively simple self-contained tasks: copying, labelling, keyboarding, tallying. Their continuum of literacy functions expands to include categories in which the purposes that literacy serves are first more complex — using literacy to explain, taking part in discourse around texts, participating in the flow of information, problem solving — and then to categories in which literacy is more obviously connected with issues of power — using literacy in the exercise of critical judgement, using literacy to acknowledge, exercise or resist authority.

Farrell makes a related point in relation to literacy at work in Australia:

> The workplace revolution is not about increasing the literacy skills of individual workers; rather it is about changing the literacy practices of workplaces, embracing the values, attitudes and overall commitment of workers to their workplace. (L Farrell, Literacy, schooling and the workplace revolution. English in Australia 1997 119-120, 56-62, 4

We try to take up and extend these analyses in the South African context. In particular, we look at how the expanding of their literacy repertoire on the part of some workers is tied to their taking on the values and practices of the new work dynamics as set by management. On the other hand, the non-performance in terms of the new literacies of the new work practices by other workers is closely tied to their rejection of the 'junior partner' identities that are linked to these literacy practices and their retention of oppositional identities as workers in adversarial relationships with management.

These conflicting discourses and dynamics are suggestively illustrated in this brief exchange between a shop steward and a team leader at the start of a meeting, after one shop steward has fumbled around in his briefcase in search of an agenda:

Team leader:　　　You need a computer to do all your work, maybe a laptop / . that will ensure that you do not lose the agenda / and so on

Shop Steward:　　　You see / . we must look poor / we don't want a computer because we are poor /　We want to show the bosses that we must do things the hard way / . you see / Comrade / /

Team leader::　　　You are stupid / / having a computer is part of being poor / (laughter from other delegates) It is not kwaai (glamorous) to have a pc today / / . it is part of the furniture /
　　　　　　　　　　(Field Notes : 08-04-2000)

Cell (team) literacies

The cells vary in size, some as small as three people. Each cell has its own work and non-work (green space) complete with clothing lockers, tables and chairs, electric kettle and microwave oven. On the walls of the green areas are charts, charts and more charts. All the information concerning the cells' production performances, production targets, preventative maintenance, employee attendance, employee involvement and employee training are all documented and prominently displayed in the green area.

In a three person cell the following number of charts in the green area were noted: Three attendance (one for each member), nine process information (BOS charts), nine employee training charts, detailing courses each has been on or is due to go on, three preventative maintenance charts and one chart giving general hints on

how to do a specific task. A total of twenty-five charts that the cell members are required to relate to and update. These are the statutory charts in all the cells, and this number increases as the number of cell members increases. Besides these "process charts" there were five posters relating to health and safety issues, two posters dealing with new products on the production line and two company newsletters.

Also located close by, but just beyond the demarcated working area of the cells, are two white chalkboards. These white boards reflect the work in progress. The one board is specifically used to indicate shift production targets and actual production throughput.

A team leader describes its functions:

> they (the night shift) maybe will take a "first off" or maybe he will write it on the board / "I didn't take my first off' the job has been changed over / the parts have been washed / //

> And then we just write on the board maybe Farrida you must just wash two / because all the parts are washed already / you must just see that the parts are correct or / you must just build up the first off / now that is the way we communicate on the board /

> R   So the board is an important part of the day / .

> Yes, yes when I come in first thing I look at the board / oh..oh / Trevor didn't do that or that / or this machine was broken for half of the night / that must all come on the board/ so if something is wrong then we must call maintenance / right or whatever it is very important that we write down everything /

The second white chalkboard is known as the shift board. These boards allow that both the night and day shift activity, which is not production related, be recorded.

There is an uneasy blend here, we suggest, between self-regulating, self-monitoring and surveillance practices, reflecting the oscillating tensions of the new workplace, between strategies of empowerment and 'trust' (to use Tom Peters words) together with strategies aimed at making workers self-disciplining and monitors of their co-workers performance, and also together with more conventional surveillance strategies. The awarding of stars for non-absenteeism, in particular rankles for many of the workers:

8

…if you are sick or late in the morning you lose your star /　you can't come late /　after half past seven /　your get 3 minutes grace *mos* like /　that /　but if you come here at twenty five to eight then you lose a star /　yes for the month / you don't get a star for that month /

maar hulle kom met die sterrentjies soos kinders wat op skool is wat sub A is / *(but they come with their little stars as if we are children at school in Class One)*

That the work monitoring processes are taken seriously is quite clear. This is how a team-leader describes it:

　/ everything must be right on your section /　the machine must be capable / 100% capable /　I mean /　. there mustn't be no problems /　that must all be checked out before we become world class /　the machine must be100% /　I mean everything that concerns on your section must be just right. There must be no breakdowns /

It must be like /　we must reach / we umh reach a certain amount /　on our BOS charts /　These are our BOS charts (pointing to a series of charts on the wall of the green area) / say we have to reach our changeover time. Our time have to be say 2% /　then we cannot go beyond that 2% or lower down maybe /　 But we can't go over that /

say like /　they want　 / . we take 20 min to change- over /　then they want 10 min　/　we must change over in 10 minutes /　then we must prove ourselves / we must work on it we must see where we can cut down on maybe …like that we must try and bring that down to that 10 mins so /　something like that you know /

The charts are used to measure performance and to set targets for increased productivity. The concept of being 'world class' is used continuously to set standards for improvement.

　. We reach world class /　they can tell us which month we must be world class /　 but when we must be certified for this level or that or for world class or for whatever they are the persons that come and tell us listen /　October month you must be recertified. This section may be or you are the person first for world class and things like that.

9

R   Now why do you have to be recertified once you have reached a certain status.

Yes / say we go from one level to second to third level we / then when we reach the top level we go to world class / but before we go to world class / they just recertify us just to see if we are prepared for world class or whatever / . if there's a failure somewhere maybe on the way then they just ask us to check up on that and they will monitor.

R   What does world class actually mean to you? Where does this world class take you?

Mm / like the word / world class comes from overseas like America and they are like world class / they are tops and everything / everything must be right on your section / the machine must be capable / 100% capable / I mean / . there mustn't be no problems / that must all be checked out before we become world class / the machine must be100% / I mean everything that concerns on your section must be just right. There must be no breakdowns /

Meetings

Before the commencement of the shift (at the sound of the first siren), all the team members assemble in front of the shift board and the team leader will facilitate the "start up meeting". This meeting has a set agenda which is permanently printed on the board to which specific time limits are accorded for interaction on the given topic. The agenda is:

1. Review Meeting (1 min.) - roll call is taken

2. Review previous steps (2 min.) - check whether the previous benefits and concerns that were raised, have been met or addressed

3. Safety and housekeeping (1 min.) - discuss issues relating to safety and housekeeping

4.   Review KPI   (2 min.) - compare the performances of the shifts

5.   Review B's and C's   (1 min.) - review the benefits and concerns of both the employee and employer

6.   Next step   (3 min.) - suggestions to the benefits and concerns raised.

The meetings in practice stay within the allotted time but seldom follow this formula so neatly. While it is the teamleaders concern, often, to keep the meetings as routine and formulaic as possible, they are often diverted by disgruntled teammembers raising their own not-so-easily contained concerns.

While the discussion is often informal and in Afrikaans the minutes are written painstakingly in English, on the appropriate forms.

The other meetings that take place at the green area include 'focus meetings' and 'Employer Initiative' meetings.

Focus group meetings take place at every cell at various times every morning. A focus group comprises of all the key support personnel that a cell has access to, and normally consists of a maintenance foreman, a quality engineer, a production engineer, a safety representative and a member of that cell at which the focus group meeting is being conducted. These focus group meetings takes place at the two white boards, for it is here that the production and other problems which the cell may be experiencing can be identified and addressed.

EI (Employee Initiative) meetings are geared specifically to getting workers to put forward suggestions for improving production. A team leader gives a neutral account of the suggestions process:

> These are the suggestions, we go every umh / .Friday morning / umh each section gets a different day, we get an hour for employee involvement suggestions / like whatever problems we've got / on the floor or whatever we want raise, the things that they must make / and things like that, then we write it in here (points to space in form stating suggestions). Whatever we think that we can look better like and then we just fill in and they / they sign it off to say if it going to be implemented, /

A worker gives a more scornful account, stressing that there is a small payment for each worker per suggestion, but this is pathetic compared to the millions the company saves through employee suggestions:

> R : Laat ek gou reg verstaan / / so julle word betaal vir die suggestions?
>
> *(Let me get this clear… so you get paid for suggestions?)*
>
> Ja twintig rand / . eers het jy dit cash gekry / maar nou kry jy dit saam met

jou wages / Nou tax hulle nog daai twintig randjies / dan kom dit maar uit vyftien randjies / (laughter) ek meen maar / so wil hulle vir ons dinges / // die mense se EI suggestions / het die mense al die company baie geld gesave / / baie / baie geld. Ek praat nie van twenty thousand nie / nie / ek praat van 2,3 mil / 3 of 4 mil daar in daai range van dinges / . Because is vinniger werk ook / minderer mense / op die section / kyk daar soos daai een machine wat ons gedinges het daai bushing machine / wat daai twee dinges inslat het daai was Katjie se suggestion / hoekom moet eers hier werk dan weer daar werk / . hy doen een ding / en dan druk hy altwee in / daar was twee operators gewees en nou net een / shows you / daai is 'n klomp geld / wat die company score / maar jy kry twintig rand elke maand / .

(Yes twenty rands…you used to get it in cash…now you get it with your wages… Now they tax that little twenty rands… but I mean… that's how they [screw] us…// the people's EI suggestions have already saved the company a lot of money… a lot. I'm not talking of twenty thousand…I'm talking of 2,3 mil…3 Or 4 mil in that range…Because its faster work too…less people…on the section…look at that one machine that we made changes on..that bushing machine…where we put two things [machines] together..that was Katjie's suggestion…why should we work first here and then there…it does one thing…and then he put them [the machines] together… there used to be two operators and now just one…shows you..there's a lot of money.. that the company scores..but you get twenty rands every month..)

At one such meeting, the team was harangued at length for being down on their suggestions quota. The frequency of suggestions is recorded and standards set as part of 'World Class' certification strategies. This is a manager talking (he is called a 'facilitator') who functions as the teams 'coach' in these meetings. Notice that it is the score or quantity of suggestions that is the issue for him, not what they are about:

…Secondly, if I look (at) the suggestions; let's worry about your job. It is a lot of work and a lot of motivation and we really need proper suggestions up.//

We need a bigger…, but I don't want to leave it till you get certified or recertified as world class, but there is a big problem to get you on last minute. You've got to keep yourself on track. You cannot let it just slip, because you

know if you let it slip, what happens? You looking at a hundred suggestions a /
year / you've got .//

Rather let's pull it back now before it goes too far. I'm telling you this every
year and you do the same thing every year. If you go on night shift I think you
tend to forget, but you come to this meeting and with nothing, each and every
person has got to do their bit. I need those charts filled in that green area and
useful suggestions in it, because those at / / / . must wake up. Because
everybody can't keep supporting those that are not making an effort. Everybody
has got to make an effort. Not leave it to half, or two people or whatever it is.
It is not a lot that we are asked to do, it is just over one suggestion per month.
That is not a lot. We have four team meetings a month and it is just over one
suggestion a month. // That should not be difficult for anybody and they are not
looking for new machine suggestions, we're looking at small things. It does not
have to be big..

After he finished his considerably lengthier monologue in English with more of the
instrumental, means/ends logic that Lankshear, above, refers to, the facilitator
left the meeting. Immediately a worker said to the team leader,

Jy praat net saam. Jy praat dan nie terug nie. Jy moet terug praat met die man.
(*You just agree with him. You don't talk back. You must argue with the man.*)

It is clear that team leaders' activities include many of those usually associated
with middle management, and the work can be quite invidious because of their
dual identities. It is therefore interesting to see who gets to be teamleader and
who doesn't, and how reading and writing are seen to be central to these
dynamics.

Team leaders and literacies of regulation and authority

Farrida, at least on some levels, is one of the success stories of the new
communicative and authority order at work. Employed firstly as a machine
operator in this previously all-male domain she is now a teamleader, the first
woman to be appointed, and making waves as an assertive and conscientious
performer.

The insider accounts of how she became team-leader and how she has dealt with
the demands of her new responsibilities are such dramatic accounts that they draw

our attention to the wider social dramas which they represent. It is the rhetorical representation of these dynamics by Farrida herself and her co-workers that suggests that for them too it is representative of a wider drama about work, identity and commitment which is under way. Her rise is directly linked to another's fall:

This is how Stan told the story to the researcher. Stan is a member of F's team and her supporter.

Tuesday 25 April 2000 – Mono Gas Cell

The tea break is over and S walks over to talk to me:

 / .daai boytjie / wat daar is…..//.hy was team leader gewees. Maar toe is dit nie mos baie pampier werk nie / toe gooi hy sommer sy sweater … sy team leader sweater in die vuillis blik // toe wil hy nie meer team leader wees nie / .because it was te veel pampier werk / so hy was ook ene wat nie wil geleer het nie / //

ja / ja / hy wil nie meer die job hê nie / nou sê hy die boere / hulle is nie reg nie / en almal daai / maar dit is omdat hy nie kan skryf nie / .ek ook / ek vat nie aan 'n pen nie / ek het drie jaar in standerd ses gesit / ek het nie gehou van skool nie / nou ek vat ook nie aan 'n pen nie / ..

(…that guy…over there...he used to be a team leader. But then it became too much paper work…so he threw his sweater.. his team leader's sweater in the rubbish bin // then he didn't want to be team leader any more… because it was too much paper work… so he was also one of those guys who didn't want to learn (at school)..
yes… he didn't want the job anymore… then he said it was the boers (Afrikaans farmers/white men/bosses)… but he was wrong.. and all that…but it was because he couldn't write…me too…I don't touch a pen ever…I sat for three years in standard six…I didn't like school…now I also don't ever touch a pen….)

Tjappies and Stan are men who were working as machine operators for many years before the new workplace practices were introduced, they identify reading and writing as representative of the new demands, and they strongly identify themselves as people who do not read and write, as compared to Farrida. For Stan she appears to provide something of a buffer or 'broker' between him and

14

management which allows him to continue to function in this changed work environment. It is also apparent that Farrida's written and spoken fluency in English is part of her success.

> Farrida doen alles / you know / al die skryf werk en almal die dinge / ek doen niks skryf werk nie / al wat ek doen is die "OK tikket" en sulke goed / maar ek weet wat ek van praat / weet ek /
> you know / net ek hou nie van skryf nie / as ek nie moet getroud gewees het nie / sal ek nie gewerk het nie / you know / but dit is alright / ek moet werk / (laughter) / as ek ses maande 'n jaar skool gegaan het / dan was dit baie / .

> *(Farrida does everything…you know…all the written work and all that stuff…I don't do any writing…all that I do is the "OK ticket" (quality checks) and such stuff… but I know what I'm talking about…that I know*
> *you know…just I don't like writing…if I didn't have to get married…then I wouldn't be working…but it's alright…I must work…(laughter)…if I went to school for six months in a year…then that was a lot)*

Farrida has a similarly dramatic perpective on her appointment:

R   So who was your team leader before you were promoted / ?

F   That guy behind the window (gesturing towards an office) / I can't turn around to show you because he hates my guts /

R   Why does he hate your guts.

F   For having his job /

R   Has he been demoted now?

F   Yeah /

R   For what reason?

F   Because he did it to himself / .They didn't demote him / he said he couldn't handle the job anymore / . he was the one that resigned.

R   Then how come he hates you?

F   He hates me for having the job / I think he thought somebody else would get the job. I think / maybe / for being a lady / having his job and all / but that man hates me.

Farrida's account below gives some hint of the text-filled practices in her work. (During this discussion a number of workers approached her with routine concerns, mostly requiring her signature, as she was, in fact, acting foreman that day in the foreman's absence):

> Yes yes / it was umh / they asked (in the interview) many a question like / we must know a lot of stuff man it just didnt just / (Another worker with a query .calls him "bokkie") like umh / you must have different types of skills before you can become a teamleader there is various things that you must go through like..umh / you must have gone on courses like EI training, you must have changeover training / / you must be able to work with people and things like that /

> R   What is your current job demand?

> F   we come in the morning / it's like / the whole team comes together we check out the jobs for the day / everybody must know where and what they must do / .all the papers must be filled in like the absenteeism boards, your books must be filled in, your cell stopper books / to say how much work you have done, how much people is out for today / your focus meeting / .in the morning / that must be done / .that is important / all our OPM (operator preventative maintenance) charts must be filled in / we must check on all machines every morning to see that there is no oil leaks / water leaks whatever / .before we could start with that job / we have to come in here discuss with the foreman / thats every morning to say how much people is out / how much people you need / .how much work is loaded / do you need a workload / .

The literacy practices are extensive here but of a routine nature, and under conditions set firmly in place by mangement procedures. They require attentive and conscientious performance, however, and are located within a wider disciplinary framework, which Farrida helps to maintain:

> R   are there any corrective action taken against those who do not apply the principles of their training / ?

> F   yes / yes / .

> R   like what / ?

> F   like they get disciplined / they do / you can come to the foreman / you

can talk to the foreman / say this is the situation / certain parties don't want to pull with the crowd / and things like that / he gets called in / they first talk to him / verbal discussion and thereafter if we see there is no improvement then we sit again and then from there we take further action /

Farrida was central to another drama that unfolded during the research. As a newly appointed team-leader she was under pressure to keep all the scores on the charts positive, and in particular to keep the 'downtime' (when the machines are not active) as low as possible. However she was confronted with the dilemma of one of the machines producing products that were falling out of spec, and she didn't have management support to stop the machines and sort out the problem. After being told for a week by the senior engineer to ignore the slight discrepancy in measurements between what was specified and what was being produced, she finally refused to continue, and her cell's work ground to a halt:

R :   / with this machine now broken / does this not affect your production targets?

   F :   yes it do / but I've been standing still now for three days / let me think / yes this is my third day now / /

R : Your third day (surprised)

   F :   / because they (management) couldn't find the problem / and I didn't want / / to continue / .because I'm not going to / / (take responsibility for the products) / You see what happened [with the machine] about a month ago this happened with me / that [was] the very first time. I took a first off[1] / / then / then / it is not in spec[ification] so I go to the engineer / like he is the top of the engineers / and every time he just "signs [it] off"[2] / the papers (signing off instruction) say I must continue / now those jobs (orders) / they are all export jobs / now the big problem is I just got fedup and went to the foreman and told him 'listen here I am not going to continue with this job / [because] every time Mr W (engineer) signs off the job and I'm not happy with it' / I mean we must come to a conclusion / we must come to a

_____

[1] The first product of the batch. Normally five products are manufactured and all the specifications are measured and compared with the standard specifications on the computer system. Once it is ascertained that all five products specifications fall within the set tolerances, will the cell proceed to produce the order. This is an indication that the machines are set to the correct specifications of that particular product.

[2] When the engineer signs the product off he overrides the set specifications and in so doing authorises that

point where the problem is / I don't feel happy just signing off. I know that something is not right / that something happened here [with the machine] / so I just "threw in my papers" / and that was last Wednesday already.

Her distress over the situation spilled over into her homelife, and, notably, she switched to Afrikaans at this point in the interview

F :   Ja presies / dit het verlede week met my gebeur / ek kon nie slaap nie / .rerig / Ek en my man het 'n argument gehad oor die probleem hier by die werk / .dan sê hy vir my / . "Jy is alweer besig by die werk / ." dit was die waarheid / maar ek moet die probleem "uitsort" / ek moet dit "solve" en wanneer ek sit en dink hoe om dit te solve dan sê hy ek kom "dikbek" uit die werk / ek is "bad luck.."

(Yes exactly / It happened to me last week / I could not sleep / really. My husband and I had an argument over my problems here at work / .then he told me /You are preoccupied with work again / it was the truth / .but I had to sort out my problems, I must solve it / and when I sit and think about it [at home] about how to solve it, then he tells me I'm bad-tempered when I return from work … I'm bad luck..)

This is how she responded to the crisis: She printed a copy of the specifications from the computer and attached this document to the printout of the product, using a highlighter. She then highlighted the problematic measurements for the product and presented this mini comparative study of data to the senior engineer. Eventually management took action. The senior manager divided the machine into sections and instructed the foreman, engineer, manager and Farrida to each analyse a particular section. She was allocated the piston section of the machine. In order for her to carry out this task, she now had to download from the computer system all the relevant data specifications relating to the piston section of the machine. On the whiteboard she drew a block diagram which represented the piston section and then wrote in the available data and measurements for each part. On the procedures with which she was uncertain, she engaged the help of her foreman and together they constructed and labelled the piston section of the machine on the whiteboard. The operation entailed taking all the measurements of the various machine parts with a vernier caliper. (she had received some training

production can continue.

on this during one of her training sessions) These measurements were firstly compared with the standard specifications and thereafter recorded on the white board. Measurements within specification were written with a green pen and those measurements outside of the specifications were recorded in red. The recording of these measurements took two days to complete, and once completed, she called the senior engineer to the whiteboard and discussed all the measurements with him. Eventually they agreed that the measurements that were recorded in red, i.e. out of specification, were not too critical and that those parts of the machine that they were studying could not have been the cause of the problems they were experiencing. She waited anxiously for the results of her colleagues regarding the analysis of the parts they were given. Eventually the problem was discovered by the head of the inspection division. He inspected all the welds on the product under microscope, and discovered that the valve seating edges were not sufficiently "rumbled". This created burrs on the ends of the valve washers which in turn allowed hydraulic oil to pass through the valve seating into the gas chamber. When this occurred, the oil pressure in the cylinder dropped below the specification and the product thus showed up as defective. This problem was promptly fixed by the maintenance department and normal production resumed, three and a half days after Farrida "threw in her papers".

Clearly, Farrida learnt a lot and extended her literacy resources during this process. It seems also to be true that this opportunity for learning was at least partly of her own making, and that she was unusually assertive in that situation. She was able to challenge the routinisation of hierarchies of responsibility that were brought into play through the 'signing off' of defective products. She rejected the formulaic procedures of jumping through pre-set management hoops and forced management to take seriously the structures of participation that they had set up. But in doing this she took on roles of responsibility and management that other members of her cell would not have been prepared to take on. For starters, she was confident enough to operate in the technical English, both spoken and written that management were at home in. For others of her co-workers, English is not a language they feel comfortable using at a formal level. Along the way she confronted and negotiated authority and procedures. Her learnings and literacies were of a situated kind. She performed literacy-rich tasks of an analytic and investigative nature and carried out complex measurement activities which were

not part of her usual working routine, got expert help where she needed it, and pushed through to a resolution that satisfied her.

Stress:

Her experience of stress is not uncharacteristic, for both team leaders and operators. Her stress could be described as having been productive. For other workers, however, the stress is related to jumping through ever higher or narrower hoops, in what Hull calls a 'horse and pony show':

> Die bushing section was daar / nou hier is 'n "lightie" / hy het mal geraak / .because hulle werk / en hy is nie vinnig genoeg nie / nou pak hulle vir hom toe… // dan sê hulle / "maak klaar / wanneer wil jy dan klaarmaak ? / " Nou waar / / .? die man kan nie / toe het hy mal geraak / huh / // hulle wil mekaar beat / .ek gaan die ou vat na daai section toe / .dan kyk net hoe werk daai ouens / daai ouens wat so 'n duisend bou / as die "laanies" vra vir vyf honderd / dan bou hulle 'n duisend / you know / .(pointing) daar gaan die team leader / .Barbie / .hulle wil mekaar impress / hulle wil mekaar wys hulle is vinnig /
> *(In the bushng section there was a young guy who went mad because they work and he is not fast enough.. so they climb into him.. then they say 'Get finished, when will you finish?' But then…The man can't.. then he went mad .. huh… they want to beat each other… I want to take this guy to see that section.. then he can see how hard they work.., those guys that build a thousand.. when the 'laanies' (bosses) ask for five hundred.. then they build a thousand..you know…there goes the team leader.. Barbie… they want to impress each other.. they want to show who is fastest..)*

> "jy sien meneer ons bruin mense het te veel competition onder mekaar. Ons wil die boere impress. Hier in die cell moet ons net 25 units per hour bou, maar ons bou meer. Oral in die factory is dit so. Night shift wil vir day shift 'n bow wys. Party mense val vrek in die plek maar doctor toe gaan is min. Hulle wil die boere impress. Ons maak mekaar dood."
> *(" you see mister, us 'brown ('Cape Coloured') people have too much competition amongst us. We want to impress the 'boers' (whites). In this cell we only have to build 25 units an hour, but we build more. Some people will rather die in this place, than visit a doctor. They want to impress the 'boers'. We are killing each other")*

> / jy moet sien hoe kom die mense oor die lyn (refers to suburban railway line at the entrance to factory) is dangerous vra vir G hoe is dit om te kom vir die sterrentjies om te kom by die klok (clock machine) jy wil nie laat kom nie / jy verloor sterrentjies (laughter from J) nay dis waar / jy moet die dinge sien / daar was 'n ander boy wat hier gewerk het / toe stamp die kar vir hom hier by die stop straat / die was twenty five past (seven) hy het nie geworry om uit te klim om te gaan kyk of alles alraait is nie / 'cause hy wil gaan park / toe agterna gaan check hy na hy klaar geklok het / . toe is die ou wat hy gestamp het ook al weg al.
> *(you should see how the people cross the railway line (at the entrance to the factory) it's dangerous, ask G what it's like to get to the clock-in machine, you*

don't want to be late… you lose stars No, it's true… you should see it.. there was a boy who worked here… so this car knocked him down at the stop street.. it was twenty five past (seven).. he didn't bother to get out of his cat to find out if everything was alright.. 'cause he wanted to park..so he went to check up after he had clocked in…then the guy he knocked down was already gone..)

These anecdotes reflect the dark side of the 'enchanted workplace' and illustrate the borderlines and limits of the 'literacy rich' 'learning organisation' that is this 'new workplace'.

References

Barton, D, 1994, *Literacy, An introduction to the Ecology of Written Language.* London: Blackwell

Baynham, M, 1995, *Literacy Practices, Investigating Literacy in Social Contests,* London: Longman

Castells, M, 1999 , The Social Implications of Information and Communication Technologies. World Social Science Report. Paris, UNESCO.

Cooper, L, 1998, 'Worker Education and Training and the NQF: Friends or foes?', paper presented at the World Congress of Comparative Education Societies, Cape Town, July.

Gee, J, 1990 *Social Linguistics and Literacies: Ideology in Discourses.* Hampshire: Falmer Press.

Gee J, G Hull and C Lankshear, 1996, *The New Work Order: Behind the Language of the New Capitalism*, St Leonards: Allen & Unwin

Gibson, D, 1996, 'Literacy, knowledge, gender and power in the workplace on three farms in the Western Cape, in M Prinsloo and M Breier, *The Social Uses of Literacy.* Amsterdam: John Benjamin.

Graff, H (1979) *The Literacy Myth: Literacy and Social Structure in the 19th Century City.* London: Academic Press.

Hull, G, M Jury, Z Oren and M Katz, 'Changing Work, Changing Literacy? A Study of Skill Requirements and Development in a Traditional and Restructured Workplace, Final Report', National Center for Research in Vocational Education and the National Center for the Study of Writing and Literacy, September 1996.

Lave and Wenger, 1991, *Situated Learning: Legitimate Peripheral Participation*, Cambridge: Cambridge University Press, 1991.

Lankshear, C, 1997, 'Language and the new capitalism' in *International Journal of Inclusive Education*, 1, 4.

Luke, A, 1992, 'When basic skills and information processing just aren't enough: Rethinking reading in new times'. Australian Council for Adult Literacy, National Conference, Sydney.

Mathews, J, G Hall and H Smith, 'Towards Flexible Skill Formation and Technological Literacy: Challenges Facing the Education System' in *Economic and Industrial Democracy,* 9, 497-522

Prinsloo and Watters, 1996, 'Education and Training Strategy in the Western Cape Building Industry in the Early 1990s: The Mismatch of Policy Intentions and Industrial Dynamics', *Research Paper Series*, (Department of Construction Economics and Management, University of Cape Town), 6

Prinsloo, M and M, Breier, 1996, *The Social Uses of Literacy.* Amsterdam: John Benjamin.

Street, B 1983, *Literacy in Theory and Practice,* Cambridge: Cambridge University Press.

1998, 'New Literacies in Theory and Practice: What are the implications for Language in Education?', Inaugural lecture, King's College London, 19 October.

Wertsch, 1993, *Voices of the Mind: A Sociocultural Approach to Mediated Action*, Harvard Univ Press.