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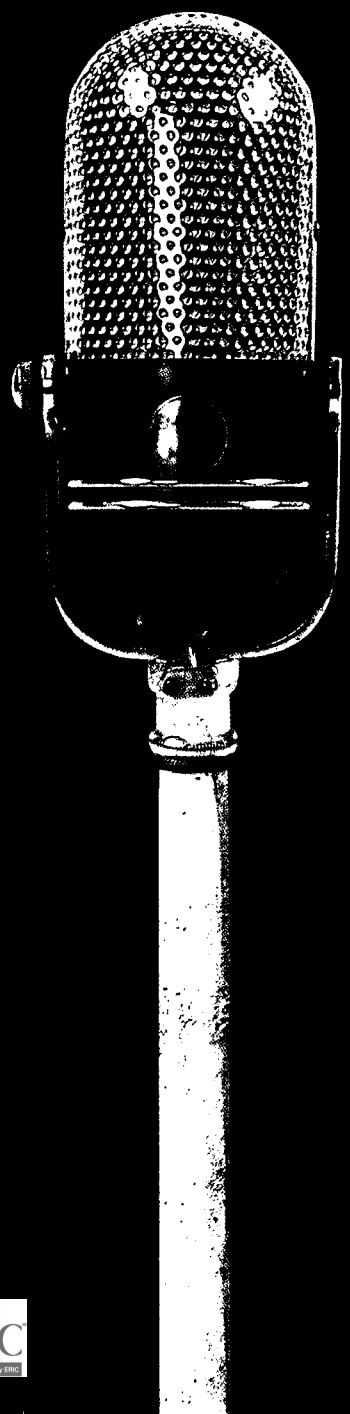
ABSTRACT

This publication focuses on the stories of learners in workplace literacy programs in New Zealand. Nine adults give their perspectives on the changing nature of work, their attitude toward and experience of formal schooling, and the impetus that led them to participate in literacy learning opportunities established in their workplace. They talk about the difficulty of fitting learning into busy lives and the benefits that have flowed from new-found skills and understanding--benefits not only to themselves and their employer, but also to their children and families. The stories were gathered by a researcher through a series of interviews with learners in programs funded by Workbase, the New Zealand national center for workplace literacy programs. They are set against an exploration of the emergence of workplace literacy programs in New Zealand and the themes that thread through the experiences of adult learners who have participated in them. The report lists 20 references. (KC)



VOICES FROM THE WORKPLACE

Workbase

The National Centre for Workplace Literacy & Language

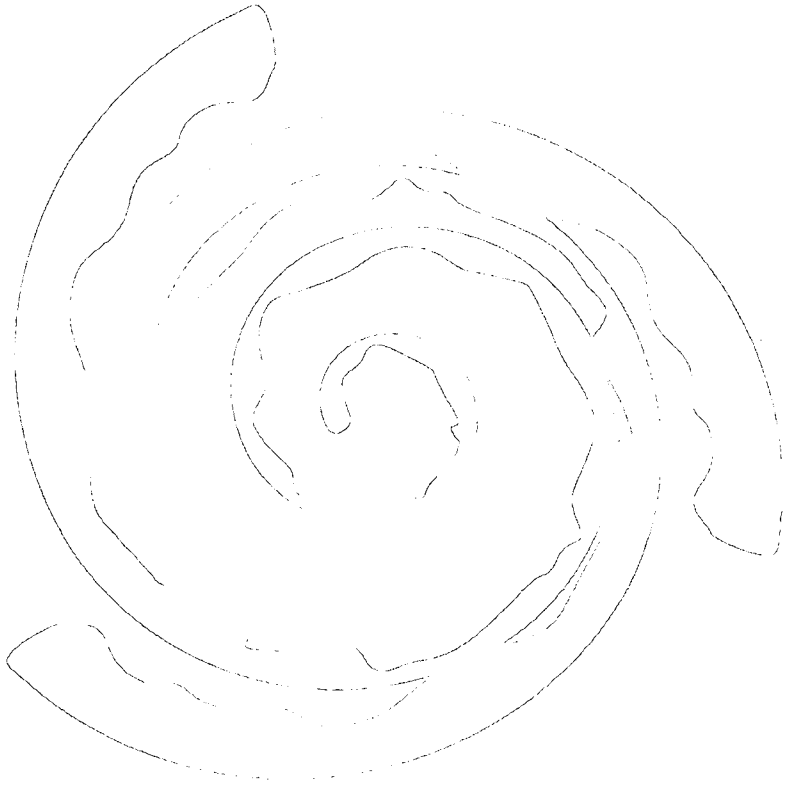
WORKBASE

Workbase is the National Centre for Workplace Literacy & Language

Workbase provides:

- Innovative solutions to low workforce literacy
- Information and advice
- Access to quality learning and training materials
- Research
- Professional development for training providers to improve the literacy skills of the New Zealand workforce

Researched and compiled by John Benseman



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FOREWORD

Workplace learning is not a new phenomenon. Neither is adult literacy learning. Learning to do the job on the job has been a key feature of many adult working lives. Literacy programmes have been around for years, providing opportunities for thousands of New Zealand adults to improve their reading and writing skills.

However, learning the literacy skills needed for work at work is still a relatively new field of practice. Because of this, there is not much evaluative material available to those interested in the process of workplace literacy learning or its benefits, both to the individual, to the workplace and to families and communities. Particularly missing are the voices of learners themselves.

Voices from the Workplace is a Workbase publication that focuses on the stories of learners in workplace literacy programmes in New Zealand. Nine adults give their perspectives on the changing nature of work, their attitude to and experience of formal schooling and the impetus that led them to participate in literacy learning opportunities established in their workplace. They talk about the difficulty of fitting learning into busy lives and the benefits that have flowed from newly found skills and understanding - benefits not only to themselves and their employer, but also to their children and families.

These stories were told to John Benseman through a series of interviews with learners in Workbase programmes. They are set against an exploration of the emergence of workplace literacy programmes in New Zealand and the themes that thread through the experiences of adult learners who have participated in them.

Voices from the Workplace is a Workbase contribution to building better understanding about the need for and benefits of workforce literacy initiatives.

I would like to thank the learners who gave their stories, the tutors who have helped them achieve their new skills, the workplaces that have shown the vision to provide literacy learning opportunities at work and to John Benseman for carrying out the research for this publication.

Liz Moore

Liz Moore
Chief Executive

Liz Moore

John Benseman

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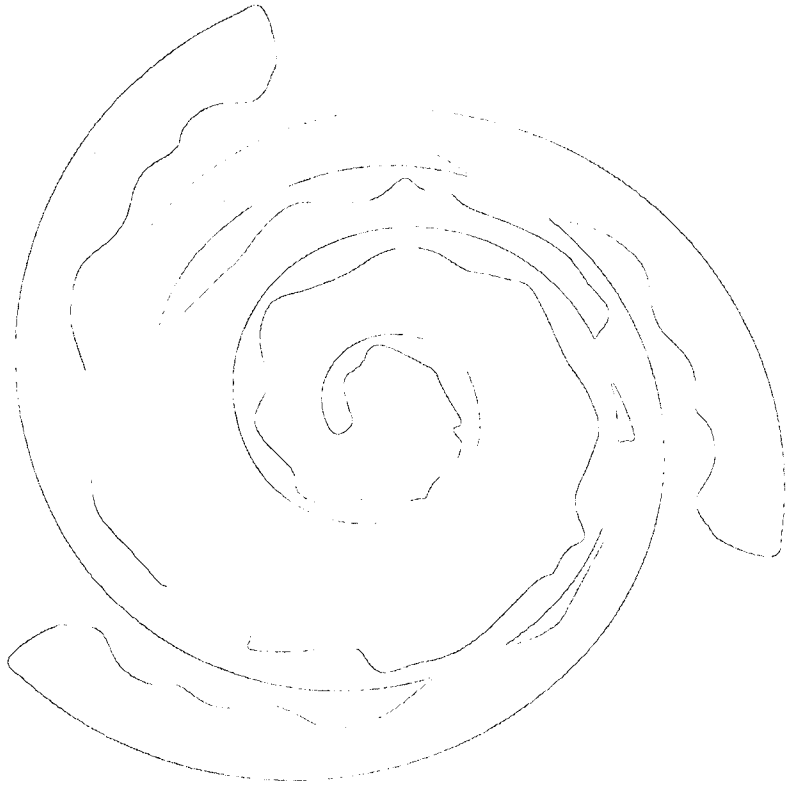
WORKBASE

The National Centre for Workplace Literacy & Language



Undertones - the context

Introduction

Literacy has a long and varied history. From Egyptian hieroglyphics through to computer programming and e-mails, it has taken on a myriad of forms and performed a range of purposes. The literacy demands made on a new settler to this country were only occasional and involved limited skills. The number of marriage registers marked with an X rather than a signature are testimony to a large proportion of adults who lacked even basic literacy skills, but still managed to live their lives in a perfectly adequate way. But as our environment has become more complex, so too have the dimensions and skills of literacy become more extensive. While we readily acknowledge these demands in high skill occupations, there has been less acknowledgement of the changing dimensions of literacy throughout the spectrum of jobs that maintain and develop our economy. Greater literacy demands are now commonplace and are also increasingly difficult to avoid. From the scientist reading statistical data to the farm labourer reading insecticide instructions, literacy is a multi-dimensional skill that is intertwined with our daily life.

Measuring adult literacy in New Zealand

Until recently, most official publications stated that New Zealand had a '99%' literacy rate. This figure was never based on any research data, but it was assumed that because the great majority of New Zealand adults have had at least some primary schooling, if not two or three years of secondary schooling, then it could be safely assumed that they were therefore 'literate'. Even putting aside the issue of what 'literate' means, this assumption has been accepted as reasonably accurate and few have ever challenged it as adult literacy issues (usually identified by the very negative term 'illiteracy') were confined to the Third World or an earlier period of our history.

This public perception started to change about 20 years ago in New Zealand as occasional stories in the media recounted (usually in a

very 'victim-oriented' way) the difficulties that some adults encountered because of their inadequate literacy skills. Isolated individuals helping these adults formed local voluntary groups to organise systematic provision and the National Council of Adult Education endeavoured to put the issue on the educational agenda with government. The number of groups offering literacy programmes grew to match the growing numbers of adults who realised that they could in fact learn skills that they had thought were only taught at school.

Despite this growth in demand however, there was a fundamental stumbling block for adult literacy groups in not being able to prove in any systematic and defensible way just how big the issue was. During the 1980s and early 1990s there had been a number of small scale research studies done, but most of these were confined to small samples of specific groups known to have literacy difficulties such as the unemployed (Irwin, 1988) and prisoners (Mudford, 1993) - and were therefore not able to be generalised to all adult New Zealanders. But these studies were also limited in the research methods they used. With very limited budgets and the lack of a rigorous, valid method for measuring literacy skills, they relied on 'self-report' where the study's subject are asked to assess their own levels of literacy skills. One study (Moore & Benseman, 1993) minimised some of these limitations by using assessments from a number of sources, but nonetheless these studies were useful in a limited way and certainly held little political clout in terms of pushing adult literacy onto the national political agenda. As a method of measuring literacy skills, 'self-report' has also been shown to consistently underestimate skills (Jones, 1997).

The International Adult Literacy Surveys (IALS)

In the late 1990s however, this situation changed. Within the OECD a series of International Adult Literacy Surveys (IALS) was begun, using a research methodology developed in the United States by Irwin Kirsch and Ann Jungeblut from the US National Center for Educational Statistics at Princeton University, for a study of adult literacy skills among young adults. The methodology was developed over a number of years and was specifically designed to have international validity, which meant that comparative studies could be done of OECD member countries. The methodology has had remarkably few critics, especially given the amount of controversy sparked by earlier efforts to develop this type of research (see Comings, 1997 and Tuijnman, Kirsch & Wagner, 1997).

The IALS method involved measuring adults' literacy skills across three dimensions or domains (prose - such as a newspaper article; document - as in a bank form; and quantitative, using mathematical calculations) as used in a variety of everyday tasks. At the simplest level for example, this required people to read a medicine label and then identify the maximum number of days the medicine could be taken safely. At the other end of the spectrum, they were asked to calculate compound interest on $100 over a ten year period. The results were then analysed and categorised into five skill levels for each of the literacy types. The results were reported for each individual country (for New Zealand see Ministry of Education, 1996) and two summary reports of all the studies were published by the OECD and Statistics Canada (1995 and 1997).

New Zealand was part of the second group of countries surveyed in 1996. The total group included Sweden, Germany, Netherlands, Switzerland, Belgium, Canada, Australia, United Kingdom, Ireland and Poland. A total of 4223 New Zealand adults aged 16-65 years were randomly chosen and asked to complete a range of tasks involving prose, document and quantitative skills (see OECD & Statistics Canada, 1997 for a fuller account of the study). In brief, the study found that:

- one in five New Zealand adults are at the lowest level literacy skills (Level One); a further quarter have poor literacy skills (Level Two); fewer than one in five scored at the top two levels (Four and Five)
- groups with higher-than-average numbers of people in the lower levels of literacy skills included the unemployed, Maori, Pacific Islanders, people for whom English is not their mother tongue, older adults, those with low levels of schooling and low-income groups
- New Zealand's literacy skills are certainly better than Poland, comparable with Australia, the United Kingdom and the United States, but well below those of Sweden and the Netherlands.

The report concluded, "Over half of New Zealand adults are operating at a level considered as a requirement to meet the demands of everyday life".

So here for the first time, was clear, documented research evidence that adult literacy is an issue that warrants a significant and sustained response across the board if New Zealand is to maintain, let alone improve, its present standards of literacy for all its citizens, irrespective of age. It is important to realise that improving the literacy skill level of New Zealanders will not be achieved by changes in the schooling system alone - although they are an important part of the overall solution.

'Schooling solutions' can never be adequate alone for a number of reasons:

- no schooling system, no matter how well it works, can ever guarantee 100% effectiveness for all its pupils
- there is evidence (Tuijnman, Kirsch & Wagner, 1997) that literacy skills can deteriorate when not used, which partly explains why adults' literacy skills can be lower than when they were assessed at school
- even if schools do achieve significantly higher levels of literacy skills, there is a considerable time delay before these skills can filter through and rectify present skill levels (it takes approximately 30 years before the working population is replaced by school graduates)
- literacy demands are constantly changing in nature and complexity beyond what was taught at school (see below) - the goal posts are being raised constantly.

All of these points indicate that any long-term improvement in the literacy skills of adults must involve learning beyond the school gates. Lifelong Learning, the Learning Society and Lifelong Education are all key concepts driving most Western educational systems and increasingly, elements of New Zealand's (see for example, Ranson, 1998 and Longworth, 1999 for a fuller discussion of these concepts and their implications). Whereas these concepts were once confined to 'updating' professional and managerial workers, they have now been broadened to include all levels of our society and across a broad range of dimensions - not only is learning lifelong, but it is also life-wide.

Successive New Zealand governments have been slow to recognise the extent and the importance of adult literacy and they have certainly been slow to initiate any substantial response to the issue (Sutton & Benseman, 1996). New Zealand has lagged well behind overseas developments in adult literacy in comparison with comparable countries such as Australia, Britain and Canada. In Australia for example, the Federal government gave a grant of over $A20m for International Adult Literacy Year in 1990 which kick-started a wide array of research, policy formation and programme development in the field. The New Zealand government gave less than 1% of this amount in the same year.

The release of the findings from the IALS research however has meant that the Pandora's Box of adult literacy has been opened and is unlikely to be shut again. The results of the study have been widely distributed and constitute 'proof' that New Zealand adults do have literacy skill issues. In the light of the current push to develop a knowledge-based economy and society (see 'Nation-building: Lifelong learning in a knowledge society', press release by Hon. Steve Maharey, April, 2000), this warrants a sustained and substantial response from government and other interested bodies. It is clear that literacy is being debated and developed by a larger array of groups than those that have been involved historically, and the Ministry of Education is currently developing what it terms an 'adult literacy strategy framework'. The framework is yet to emerge publicly and endure due political process to the point that it becomes government policy and directs the extent and nature of provision in response to the issues laid bare by IALS. Nonetheless, it is still the first response of any significance ever to emerge from the New Zealand government about adult literacy.

Literacy in the workplace

In relation to the workplace, the nature and extent of demands for literacy skills are being driven by a range of factors at different levels of our society. Manuel Castells (1993) has identified five fundamental features of the new world economy:

- increasing dependence on applying science and technology (especially, but not exclusively, in computerisation), as well as on the quality of information and management employed in workplaces
- an ever-growing role in work organisation and productivity by the 'manipulation of symbols' - especially in information processing
- dramatic changes in the way that production is organised - away from mass production ('Fordism' as epitomised by the linear production line) towards flexible specialisations, increased innovations and adaptability
- globalisation of markets for goods and international competition for products - lambs killed in a Bay of Plenty freezing-works on Thursday are packaged in cuts ordered by a British supermarket chain, priced in pounds, air-freighted to London and sold there on the following Monday
- dynamic and inseparable relationship with technological revolutions, especially those with communication dimensions.

These features are seen in everyday workplaces in the form of:

- large scale introduction of computers and computerisation
- reductions in labour levels, especially in the unskilled and semi-skilled categories
- flatter management structures
- use of teams with devolved responsibility and autonomy; multi-tasking for workers
- increased emphasis on report-writing
- complying with international quality standards (e.g. ISO) and national legal requirements (e.g. Occupational Safety and Health)
- emphasis on adapting processes and minimising wastage and storage of material
- introduction of new materials, micro-technology, bio-technology and renewable energy
- overseas links in planning, production and sales.

All of these changes have led to changes in the literacy demands placed on workers, irrespective of their place in the workplace hierarchy. Even in 1992 the OECD considered that in many cases the problem was not one of failing to meet literacy standards upon entrance into the workforce, but rather one in which the literacy demands of jobs in particular workplaces had changed. Previously qualified workers faced new literacy demands for which they were no longer qualified (Benton & Noyelle, 1992, p. 13)

Murnane & Levy (1996) identified the "new basic skills", as the minimum skills people now need to get a middle-class job as:

- the ability to read at the ninth grade level (i.e. Third Form) or higher
- the ability to do maths at the ninth grade level or higher
- the ability to solve semi-structured problems where hypotheses must be formed and tested
- the ability to work in groups with persons of various backgrounds
- the ability to communicate effectively, both orally and in writing
- the ability to use personal computers to carry out simple tasks like word processing.

These changes are summarised by Wiggenhorn (1990, p. 71)

Ten years ago, we hired people to perform tasks and didn't ask them to do a lot of thinking. If a machine went down, workers raised their hands and a trouble-shooter came to fix it. Then all the rules of manufacturing and competition changed. We learned that line workers had to actually understand their work and their equipment - that change had to be continuous and participative. From the kind of skill instruction we envisioned at the outset, we moved out in both directions: down, toward grade school basics as fundamental as the three Rs; up, toward new concepts of work, quality, community, learning, and leadership. Today we expect workers to know their equipment and to begin any troubleshooting process themselves. They have to be able to analyse problems and then communicate them.

Development of New Zealand workplace literacy programmes

Despite the lack of official recognition at government level, there has been a steady rise in the provision of workplace literacy programmes over recent years. As Liz Moore has detailed elsewhere (Moore, 1996) workplace literacy has developed out of two strands. Up until 1990, most adult literacy provision had been based in community organisations. With a small International Adult Literacy Year grant, the Adult Reading and Learning Assistance Federation (ARLA) developed a series of small pilot literacy projects in Auckland workplaces. This development later became an autonomous organisation, Workbase, the National Centre for Workplace Literacy and Language.

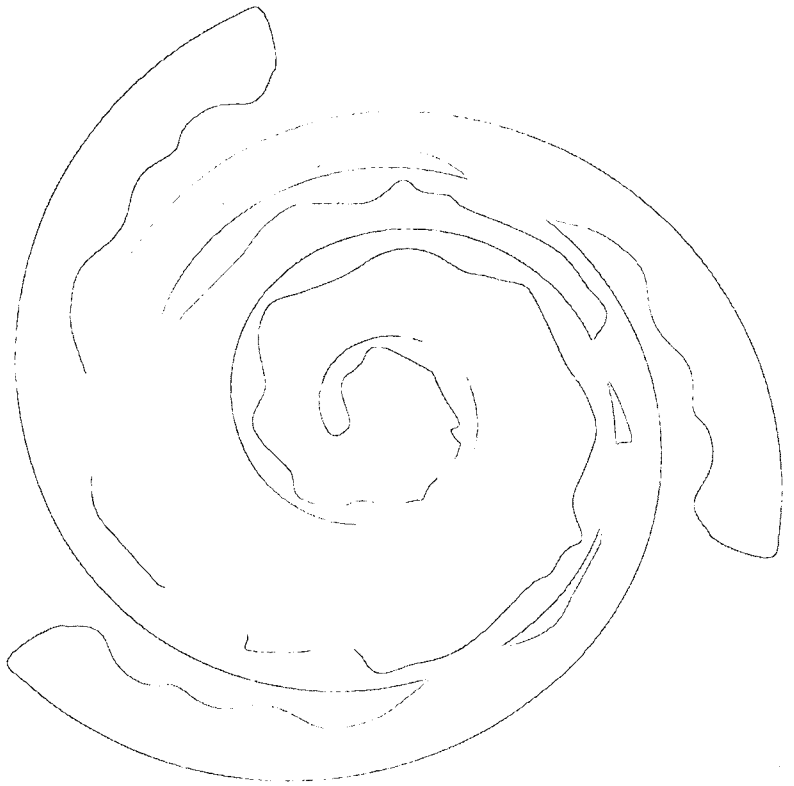
Alongside these developments, came extensive changes in the workplace and the subsequent push for greater skill development among workers. Workplace reforms and changes (as outlined earlier in this article) have meant that there has been a growing demand to upgrade workers' skills at all levels of companies, where these were once the exclusive domain of top management and technical staff. Included in the demands have been the need for greater literacy skills - an area that had not been of great concern previously.

As a product of these changes, Workbase now operates as a national workforce literacy organisation with both government and private funding. Its work has centred on developing and promoting workplace literacy initiatives, as well as advising government and facilitating best practice literacy delivery within the education and training sector. In addition to Workbase's activities, literacy provision is provided by small commercial companies, educational trusts and some other educational organisations.

Workplace literacy then is barely a decade old. It is still very much in its infancy, not only in terms of its educational methods and policy, but also in terms of the documenting of its activities and impact.

This publication is intended to provide an indication as to what workplace literacy programmes can, and do, achieve. Measuring the educational impact of programmes can be done in a number of ways. Economists can measure the financial costs of not addressing literacy skills, or alternatively they can measure the economic impact that programmes have on the companies that provide them (see DEETYA, 1996 and Conference Board of Canada, 1997). Quantitative researchers typically measure the differences in performance before a programme is started and then after its completion. This 'before and after' approach often, but not necessarily, uses some form of standardised testing to assess learning. A third research method involves a qualitative approach that provides a more holistic perspective of what changes occur as a result of the programme. The research data is gathered by means of interviews with the participants and the impact is described in the learners' own words and stories. This method is seen as providing a valuable perspective that is lacking in the other, numerically-based methods and is an important complement to the findings generated by the other methods.

The learners interviewed for this study were chosen from Workbase programmes. The individuals included in the Voices from the Workplace publication provide a reasonable cross-section of learners from workplace literacy programmes, but are not intended to be a statistically randomised sample as in quantitative research. Rather, the intent is to show a range of learner experiences in these programmes and more importantly, some insight as to what these experiences have meant for them and the changes that have occurred in their lives as result.



Voices – the conversations

Graeme

Graeme is a 40 year-old cleaner and until recently could virtually not read and write anything beyond his name. A keen amateur mechanic, he used to have to take his wife on the back of his motor-bike whenever he went to a new place to purchase bike parts so that she could read the street signs and find the right location. Once he had visited a place, and he could identify physical features such as hills or distinctive buildings, he could then re-visit the place on his own. But any lapses of memory, mistakes or changes of key markers or landmarks, and it would mean another trip for his wife on the motorbike.

Despite his lack of reading and writing skills, Graeme is an accomplished mechanic who is sought after as the source of great knowledge and skills in relation to cars, motorbikes and engines generally. Much of his spare time is spent helping friends and acquaintances repair and tune their mechanical possessions.

> "You just learn to do things a different way, not being able to read and write. I mean you give me a car engine and I strip it down and put it back together and have it running as good as when I took it out, if not better. If you ask other guys to do that..."

Asked if his lack of reading skills hinders his ability to locate technical information, Graeme explained.

> "Yeah, well I'm used to it and my wife helped me and you can get a lot from a picture too (in manuals). If I've got a motor that was already stripped down, say a motorbike engine for argument's sake, I can pick up a lot just looking at the diagram and the manual. I've been brought up with cars and motorbikes all my life you know, so it's just second nature to me."

Graeme attended school until three months before School Certificate in the fifth form, but his schooling experience was no guarantee of gaining literacy skills.

> "I started off, I went to primary school - we never went to kindy or anything like that. I can always remember I started off in Primer One and then went to Primer Three, then Primer Four and from Primer Four I went to a Special Class and then I was there for a while. Then I went to Standard Four and from Standard Four I went to Form Three. I didn't even get to Form One or Two."

Asked why he progressed through classes in such a bizarre progression, Graeme said that he remembers no real explanation for it, although he has come to believe that there may have been another factor behind his difficulties.

> "Dad was working long hours, and well Mum died when I was pretty young, so Dad was working all the time. And now I've found out, well I've always wondered, but I never knew, I actually have got a little bit of dyslexia."

He attended school "just about every day", but still managed to achieve very little in his literacy skills. School is remembered as

> "... a place I didn't really want to be - all the way through. 'Cause I couldn't read and I couldn't do the exams, so what was the point sort of thing? That was my attitude. I think I just tolerated it, 'cause Dad wouldn't let me leave. But I wasn't one for getting into trouble anyway."

At home Graeme's father had few books and was seldom seen reading

> "I don't know, I've never seen Dad read. I know that he can read, but no, I've never known Dad to come inside and see him with a book or something. Nah, he's the type of guy that would rather be out in the shed playing around with something - a bit like me really."

Asked how he has coped in his life without being able to read and write, Graeme acknowledges the support and help that he has had from his wife (for example by handling all their financial matters) during their 20 years of marriage -

> "and we married pretty young, so I suppose we have more or less just grown up with it. She knew about me before we got married."

Graeme had also sought help with his literacy difficulties with a local community adult literacy programme, but this proved to be too difficult to sustain and achieved very little for him.

> "Yeah, I did go once, but I don't know about the people that were teaching. I don't know if they didn't know what they were doing, or it was me. I don't know. In the end I gave up almost and yeah I gave up, but then I was going after work and it was late and you were tired. Maybe that could have had something to do with it. I don't know."

At the Mill where he works Graeme has recently been taken on as a 'spare man', a job where he fills in wherever he is needed. He had previously been offered the position, but had reluctantly turned it down because of his lack of literacy skills. In the meantime he started attending Te Whare Ako and had managed to improve his skills sufficiently to be able to accept a second offer of the position as a spare man. In his previous work on farms Graeme had not had much need for reading and writing and none at all for computers, but in his new job these skills and computers are essential components. Many of the tasks he has to carry out are dependent on typing instructions, reading outputs from the machinery, filing data and producing labels. Tasks that are daunting enough for someone new to computers and even more daunting for someone with skills that have only recently been acquired at the learning centre. Although he is now coping with the demands of the new position, the move has not been easy.

"I wouldn't say it's been easy, it's been hard. I've come home with headaches from it, you know just the concentration of doing it. It's only 'cause it's new you know I think. All my whole life I've never really had to use it (referring to his head) like this you know."

To help him cope with the new demands Graeme has made use of a notebook with notes he has compiled on the job and as part of his work at the learning centre. As he becomes more experienced in the work, Graeme finds that he is referring to the notebook less often.

Graeme's involvement in Te Whare Ako has been pivotal in both his getting his new job and acquiring the skills to carry out the tasks involved. For someone who could only read his name when he first went to the centre and whose previous attempt to get help had ended as a failure, the first step of approaching the centre was not easy.

"I didn't even know what it was. I didn't really know what I was going to see or find out until I got here.... It was hard because you know it's a busy place - but once I got to know Susan and Fiona, that was good."

Initially Graeme attended twice a week for an hour and a half, but extended this to two hours as he started to make progress with his reading and writing. Although he felt as if he was returning to school, this didn't bother him because of the progress he was making and the support he received from the centre staff - "If I couldn't talk to them, it would have been hard."

At first all Graeme wanted to do was to "learn to read and write, that's all that was in my mind."

He certainly didn't find the work at the centre easy or straightforward.

"When I first started here they gave me a book, a series of books, and I tried reading them and they sort of blew me away. I couldn't do it. So we went to something else a bit easier and a month or two later they brought them back again and I'm not saying that I could read every word, but I could certainly make sense of the stories."

Graeme estimates that it took "probably three or four months" before he felt that he was making real progress. But a year on from his first visit, Graeme says that he

"..has come a long way, but still has a long way to go".

After working his way through a "whole stack of reader books" he can now point to a number of achievements along the way - being able to locate names and addresses in the phone book, reading signs and notices around the plant, reading parts of the newspaper and finding a new interest in books.

"Well I find books interesting you know. I'm only up to oh.... there's lots of books I can't read, but I mean even some of these kids' books, I actually find them quite interesting, because I never, you know, read them before. I still have a bit of trouble now and then, but yeah, I can get through most of it."

Graeme feels that he is able to do his job "much better" and he has also gained a new form of independence - even if it does make him "nervous".

"Well, instead of relying on my wife all the time, every time say there was something for sale in the paper and just say the name of the street, well I would have to take my wife with me to get there. But now I can actually read streets, I can actually go on my own."

He is clear that while his progress in reading and writing is still modest, it has had a significant effect on his life - "I wouldn't be doing what I'm doing now if it wasn't for this place.... I mean I've come a long way in 12 months..."

Bernie

Bernie is a Swiss immigrant who is now in his early sixties and has worked as a cleaner at the Norske Skog Tasman Mill in Kawerau for the past two years. Before this job he worked in various jobs at the mill for over 40 years. In this time Bernie has seen large scale changes in his workplace.

> "Well, in 1960 the mill probably had the same number of people as it has now. In between it had gone up to nearly double. The production is probably double now, but the number of people is the same as in 1960. For example one department I know had 100 men working - it's now got 36 and it processes much more wood. Double the volume, or three times, and that's the machinery (responsible). Yeah, a front-end loader shifts as many logs as 20 men with a picaroon (a tool used for shifting logs manually)."

Prior to his present job, he worked as a shunter at the mill for 25 years driving a range of trains, ending up on DA locomotives. His position as a shunter was made redundant when this work was taken over by TranzRail, so Bernie decided that he would apply for a position as a cleaner at the mill as he enjoyed working for the company and felt that he was too young "to be put out to pasture". His work as a cleaner involves shift work as part of a cleaning team and has had its own challenges.

> "It took a while to learn how to clean, because my eyes did not see spilt coffee - they could only see something that would de-rail a locomotive - nothing smaller than that. Now I can see, but at first I couldn't. I couldn't see where I used the mop or where I didn't, or where I used the broom or didn't. I had to do it twice to be on the safe side and it took another month to learn every place - after thirty five years going round and round the mill I know it, but I know not much inside. So 90 per cent of the rooms where I go cleaning I had never been in."

Although he feels on top of his work now, his job as a facility cleaner has undergone considerable change recently and now involves much more than the tasks normally associated with working as a cleaner. Like all the rest of the site, cleaners have been caught up in the technological and management changes of the workplace. The most obvious change has been the introduction of computer-based records and reporting systems. Whereas cleaners had virtually no involvement in the computer system previously, they are now an integral part of it.

> "Yeah, we record it on the computer so it's a tool that gets a lot of use. We didn't have it years back, but now, we'd be lost without it..... maybe it's a bit wrong that it's taken over so much, but it's there and of course you've got all the information at your disposal and if there's something you don't know you can still ask, but whatever we do, we can record."

As someone who has worked in the company for a long time, Bernie has noticed the impact of computerisation throughout the plant.

> "... computers have made a huge difference too. 'Cause it stores information - like if you have a breakdown, you can have gadgets which will tell you when it happened and exactly where. Thirty, forty years ago it took a while to get a tradesman there to have a look and then he had to find it and then he had to go and get the tools and he had an assistant to carry the tools for him. And the two of them worked and found the hole and fixed it, so two to three hours you might start again. Now the machine will record when it goes down, so if it takes three hours to get it going then someone has to explain why. It's not very good to say oh I forgot the tool, that's a thing of the past."

Bernie's work as a cleaner is organised through a team structure that has a considerable degree of autonomy and responsibility in the way that it works. Each member of the cleaning team has a portfolio or area of responsibility (such as cleaning supplies, training and maintenance). Team members then monitor the group's activity in relation to their portfolio, plan ahead accordingly and record the various activities on the company's computer system.

> "Where I am now, you have a job, you're a cleaner. But you know to some people, what's a cleaner? - a fellow who picks up dirt, but there's more to it. Like, our group, we each have a portfolio. Mine personally is safety, so I focus on safety.

If I see something that doesn't look safe, I watch and take note and then I report it to a high place there and then. And a couple of women have a finance portfolio - they buy the cleaning fluid, the mops, the brushes, whatever they get. The salespeople show (them) different kinds of materials, different tools and they evaluate them - or they ring up someone whose portfolio is training and they say well within the next two months you're going to go on a first aid course and you'll just do it. Or they would say you'd go and spend 20 hours in Te Whare Ako (the workplace learning centre) so you can get more fluent with your computer skills. Or other people have a maintenance portfolio and I find now that they do this willing - it's not a hassle. Go for it, take an interest - they want to do it."

The team members' areas of responsibilities also extend beyond the most obvious activities.

."... we have somebody who takes a cultural portfolio, even to the extent of what to do if your workmate dies, what do you do. It's not so obvious is it? There's something more to it than just, oh, stiff cheese, he's gone. Who do you inform? Security, or various people that you have to bring in. You can't even shift the person if there is an accident, or ring security or medical staff. Don't do things we're not sure of and all that sort of thing. "

While other tasks are shared by everyone.

"So each person (14 of us) each one has got (responsibility for) quality control, so when you've done your work and have a look, what does that look like behind you. Each one has something he focuses on. Before we had this sort of thing it would have been a blank. "

Unlike working under traditional work structures, the cleaning group exercises a greater degree of autonomy within a 'flatter' management structure that has fewer supervisory positions than previously. With the greater autonomy however, comes a higher level of expectation and responsibility for the work team members, but also higher levels of job satisfaction. Management tasks previously undertaken by lower level supervisors are now part of the team's own on-going responsibilities. These include staffing schedules, monitoring cleaning supplies and product evaluation.

"... like monitoring people going on holiday, or if it happens that somebody is always away on a Friday it will show up all right. But if you don't record it anywhere, then you (the team) don't know about that. Even what cleaning fluid you use - the stuff is quite expensive so it gets recorded and at the end of the month you get a graph of how much of what (fluid) each individual has used. So if you are always at the top of the pyramid, I mean you're not the one that they blame, but you can see the graph. Yeah, things like that it's tremendous I reckon."

In addition to the impact of technology and work organisation, Bernie has also noticed changes in workplace safety over recent years. In a development somewhat akin to the 'poacher turned gamekeeper', Bernie the workplace daredevil has become a team member with specific responsibility for health and safety issues. While some of Bernie's change in attitude towards safety can probably be attributed to age, it also reflects the changes that have occurred at the plant due to occupational safety and health (OSH) legislation and worker compensation.

"Probably the biggest change is that we have become safety conscious - that's been the main issue. Whereas I was terrible as a youngster, I would do things that you'd get sent off automatically. I used to do handstands on the safety rails - imagine that now. I used to walk up and down on the safety rails but now I'm a safety captain - that's a change for you.

There's (been) a huge change safety-wise. The improvement here has been 300 to 400 percent and I think back to the time when you didn't have ACC. We made lot of accidents and did stupid things - don't worry, you just went off. But that's a thing of the past. You record these kind of things. You go to the doctor or whatever happens, you explain it, you've got to write it down and ..... the way the place is run now if you go off with an accident or sick your mates got to cover for you so you're not doing anyone a favour, not even yourself. There's still an amount of accidents, but very little. It's tremendous improvement. I find this a big plus. "

All of these changes in the work environment have brought increased literacy demands for Bernie. From recording cleaning material stocks and staffing schedules through to writing accident reports, the demands on Bernie's reading, writing and maths skills have increased steadily over the past decade. His first encounter with this new development in his work occurred when he was working as a shunter and the company sought ISO 9000 accreditation.

> "Oh it was about 6 years ago maybe, the company decided we should get ISO 9000 quality controls. There was thirteen of us train drivers and shunters and so forth and while I was on holiday I was volunteered to do the ISO. When I came back I was politely informed that I was (responsible) and I said well the English I learnt was on the wharves in Bluff. Which was mostly foreigners whose English wasn't that good either, so I can talk all right, but the grammar was pretty grim. And he said oh well your mates sent you here - you do it."

Despite some hesitancy about his grammatical skills, Bernie was reasonably confident about his ability to write up the new documentation, although the demands on his writing skills at work had been minimal up to that point.

> "I wrote reports, but just with a pen. After most shifts a short report about what happened and incidents. So for 30 years I wrote a report after the end of this shift and I was never once corrected, nobody ever said that you wrote that wrong, and I thought I was pretty good. Then this computer showed me how good I really am!"

The greatest challenge was that the documentation was not to be hand-written, but entered on a computer - an entirely new experience for Bernie.

> "So when I started writing it was quite all right my handwriting, but you had to type it up in the computer as well and then it became a different story altogether. Because I had handwriting mistakes that I couldn't see, but on the computer they're (mistakes) all looking at me and winking. I am the only man who could put a spell check out on overload I reckon. Yeah, it was unreal. Had never seen a computer before that, no never had to look at one. I had seen the gadget, I never learnt to write with a typewriter."

It was at this point that Bernie first encountered Te Whare Ako, the workplace learning centre at the Mill.

> "And then the boss said 'why don't you go to Te Whare Ako and see what happens and see what you can do. Go and see Susan and the girls there. This is what you do and this is how you start.' And in quarter of an hour my arms were sore. But they got better and after a while I enjoyed it and I made a drawing of the railway lines, the switch points the places we go to. Procedures like how you start and stop the locomotive, do's and don'ts, what you do when you go and shunt and who you get in touch with, and all this sort of thing if you get a derailment who you have to call in. 'Cause if you have a derailment nowadays the safety officer will come and assess the situation, why did it happen - to try and avoid it from happening again. Means that, the accident that happened is a thing of the past, but if you can learn to avoid it happening again, well you have benefited if you learn out of it."

As a result of the move to ISO accreditation and with the help of the centre, Bernie produced the most comprehensive piece of writing of his adult life.

> "Yeah and so I wrote the manual for this and then I got interviewed or examined about it. The woman who did it was quite impressed with me. She said you really know your stuff and I said well I should do I've been doing this for 25 years. Then I realised she was looking at the manual I had written. I must say I enjoyed it in the end. It gives me some headaches because I could do the work. I knew it off the cuff, but to put it into words, simple words that's the hard part for me."

Bernie has found the staff at Te Whare Ako very supportive and informative in his learning to use computers, but also in other aspects

of his work such as running meetings. The centre has become a place to come not only for learning to do immediate tasks, but also somewhere for longer term learning goals.

> "This place has been good to me, so that I can write and get a sense of how to record things. I had to record everything, like when we started having meetings once a month. We all get together and we discuss what happened. And then how do I write down so quickly - what actually did happen, so then later on I would type it up as minutes of a meeting. I learnt to write reports that go further up, not just to my foreman.
>
> I enjoy doing it. I come here sometimes if I want to write. I still come back when we just had a meeting. Tuition on how to make meetings helpful, beneficial, not too long - so people don't fall asleep and we sort of learnt what to do if things get a bit heated up. How to calm them down and how to get something out of somebody who don't want to speak, 'cause some people you know like me pipe up. Yeah, you know some will not say much, so you try and get them to speak. And we just learnt this with Susan and it's great you know."

Bernie has also been surprised by both who uses the centre and the effects that their involvement has on them, although not everyone makes use of the programme.

> "Some people I never expected to come here. I've seen a lot of men who you could not have got to sit behind a table coming here and learning. You can't tell from looking at a bloke how good he is at learning - a fella doesn't even know it himself unless he tries. It makes you think "I want to" instead of leaving your mind outside the gate. It's nice to see them have a go."

The impact of the programme also extends to his family life. At home Bernie is planning to buy his first computer and can at least follow what his daughters are learning about them at school, even if they still regard him as a "stone time caveman".

> "Yeah I understand their interest in the gadget (computer) without them telling me. They spend hour after hour in front of it. They would just stay with it - they won't leave it alone. So I have to put the brakes on them a bit, but they enjoy it. They have good grammar and the little one just passed her Australasian exams and she came in the top ten percent. So she has a Dad whose English is not very good and Mum's English is worse. But the children are no problem."

Finally, I asked Bernie what effect he sees that the changes in workplace demands and the programme at Te Whare Ako have had on him and his workmates.

> "Like here for 30 years or so most men watch the rugby or go to the pub to drink and now with this kind of learning you can use this (pointing to his head). It's about what it adds up to. I mean I worked here for many years without using my head at all. The work was hard, but you could shake it out your arm and you don't need your head. But when you have computers and somebody teaches you, you sorta learn to learn. Not just switch off - that's a big difference from the past. Yeah it's been great. I like especially when I started here and it was all new to me, so I kept coming back and coming back 'cause they are a nice bunch of people which makes a difference."

He saw his involvement in the learning centre as an important element in deciding to stay on with his employer in preference to early retirement.

> "How would I put it? A big point was that, when the shunting job finished I was nearly 60 then, I didn't want to go away. I didn't want a new employer after all those years and with the exception of one year I was always here in Tasman. Having gone to Te Whare Ako learning to type and that, some of the cleaners were doing that at the same time too. So they would see me and could see what I was doing or trying to do and I would sometimes ask them where do I go from here now and so forth. And I got to know them a bit better and I think they got to know me and it ties in that I become a cleaner. That's how I have a job doing this. I mean, if I stop shunting what else can you do as a train driver? You're not Gods' gift to the nation, not any more. So that helped me (make that transition). Yeah, they could see that I am interested and I want to do something. "

Sandy

Sandy is a 33 year-old Maori woman who has spent most of her working life doing seasonal work in orchards, and cleaning and serving in a takeaway shop. More recently she started work at the Norske Skog Tasman Mill cafeteria until she suffered a major accident playing touch rugby. Her injuries included a serious fracture and extensive damage to a main ligament in her leg. Since her accident Sandy has suffered considerable pain and on-going mobility problems.

> "Heaps of pain, chronic pain. I've got osteoporosis in my ankle joints - they accidentally cut a nerve in my big toe in the operation, so I've got limited feeling in that toe and all along the rim on the toe. "

Her accident meant seven months off work followed by a period back at the cafeteria for her rehabilitation. Then, on the recommendation of ACC, Sandy was given the opportunity to attend Te Whare Ako. Initially she undertook some computer training, but like many adults returning to study, Sandy was extremely apprehensive about grappling with a new generation of technology. At school she had learnt to type on an old Imperial manual typewriter "where you hit that thing and it goes flying off...", so the move to computers was initially intimidating.

> "I had no idea about computers - I didn't even know how to turn it on. They frightened me whenever I saw them."

She had thought about doing a computer night class at the local college, but never got round to it and found the immediacy of the workplace programme more convenient in her busy life.

> "Yeah, I wish I had starting upskilling in computers before I came here, but I've learnt a hell of a lot since I've been here."

Twelve months on, Sandy has gained her National Certificate in Employment Skills and has now completed her National Certificate in Pulp and Paper Technology. In addition, she has taken on the position of Centre Administrator for Te Whare Ako - a move that is substantially different from her previous work history.

> "I do a vast amount of work, but I figure it all comes under the umbrella of administration. When I first was given the job in administration I didn't know what the role meant, you know. I've always been an outside person or a cooking person, or cleaning - never just sit down, write up or do paper work and things like that. We've got a lot of people doing Pulp and Paper Theory which is linked up to Australia and I do all the administration work for that, plus our own administration work."

Sandy's experience as a learner and later as an administrator in the centre has had considerable impact on her in number of ways. The computer skills courses that she started on at the centre were the first educational involvement she has had since leaving school. While school was not a particularly negative experience for Sandy, it certainly did not leave her with positive attitudes about herself as a learner.

> "It was a good place to get away from home, but I never wagged - that's a good thing. I stuck my schooling out till I thought that's it, I've had enough. 'Cause when you leave school that's it, you think I've left and that's it, no one's going to help me to increase my reading or pick up my self esteem or make me feel like I'm not dumb, or I'm not ever going to get a job."

Reading at school was something to be tolerated and not a skill she felt she could do well by the time she left at the end of the Fifth Form. Since working on her reading in the learning centre Sandy feels that she has gained considerably in a number of ways. Although she does not read a lot in her spare time, she can certainly cope competently with the reading demands made on her at work.

> "I get a lot of e-mail, faxes and I get a lot of letters in the mail, so that's my reading. Whereas before I couldn't get what they were talking about, but I've picked up a hell of a lot now. "

She also feels that achieving these skills has changed her work in a fundamental way and made her a much more confident and assertive person.

"Never had to use my brain as much as what I have in here. Definitely, yeah, which I never had to do before. Because I've been here - it has made me more assertive, made me communicate a lot better."

Sandy's confidence and skills have 'flowed on' to other areas of her life.

"A lot of what I learn here I take it home - I have become a different person definitely. It's like for instance I listen to my (relative) and she's ... I look at her like yeah, I'm sure I was like that before I even came to where I am. And when I speak to her she's going like wow, do you learn all that where you are, you know sort of thing, I think I have changed my way of speaking. Before I never used to sit down and listen to people I used to be rude and walk away, but now I'll sit there and listen to them and give them my opinion."

Her perspective on education has transferred through to her son's education, albeit with some feelings of regret of not being involved at an earlier age.

"I've tried to follow my son over his schooling, but since I've been here I've been right up behind him. I look at it now and I should have followed him years ago. He's actually lower than what I was at school education-wise. I only have a problem with spelling, but he has a problem spelling, reading, and writing. So I should of targeted that ages ago, but because it didn't sort of mean anything to me I didn't bother about it. I didn't think it would become an issue as he got older. I do help him as much as he lets me, but you can only go so far, he's at that age. He's School C next year - I know it's going to be definitely hard, but he seems to think he's doing OK. "

As the administrator for the centre, Sandy also sees the changes in the people who use its services as part of their individual training matrix.

"I can see them going a long way with their training. Some of them that came here have been on site for years and done absolutely no training. A lot of the people that come down here to do computer training will never be able to get on another machine anyway up in their work area, so it's a bit of quiet space. A lot of people come and do their training down here just for somewhere different to get away from the work area, the noise, the ringing of the bells and the noise of the machines."

Sandy still sees some who resist the open invitation of Te Whare, although the pace of technological innovation in the company is making it increasingly difficult for these workers to cope with their present levels of skills.

"There would be a few of them out there - some of them are still unaware of where we are situated. They would probably be people that have been here for like 25 to 30 years. They think why should I go down there and learn something. I know what I need to know, I do my job, I go home, that's what a lot of them think. And then the job changes, upgrading of computers is big. Where a lot of them never had computers in their areas. They recently changed all the computers mill-wide from Macintosh to PC. Also some areas received a new computer as previously they had none so that has been a big thing. Yeah, that was a big change and we were inundated by a large number of Tasman workers wanting to learn how to turn on a PC."

Summing up what her involvement in the learning centre has meant for her and its significance, Sandy said,

"Oh it's had a major effect on me. I've never been a sit-down person, always up and going person and when I broke my ankle it only gave me about 70 per cent mobility. So I've lost my mobility. I actually had a date to get it fused, but I was offered a job (here) and the job came first. Because I've always thought there no one's going to hire me, I can't run, I can't carry heavy things because it puts weight bearing on my ankle. I wish they would open something similar to this place, a learning centre, after they leave school. Got no job, on the dole, something like that would be good."

From someone who admits she never used to have long-term goals, Sandy now wants to go for a Level Two National Certificate in Computing and make the best of what could have been a crippling blow to her life.

> "I always said that (her accident) was the worst thing that ever happened to me, but to get to where I am now - I don't want to say it, but it was the best thing that ever happened to me, it was something good that came out of it. Yes, definitely."

Vae

Vae first worked as a part-time cleaner in an Auckland hospital for the elderly where she now works, before taking on a job as a caregiver - although she had previously worked in this role some years ago. She has really enjoyed being back in this type of work which she finds very satisfying and has been in this caregiver position now for three and a half years.

> "But the cleaners, you have nowhere to go, you just stay there and have nothing else to do. You do the same thing this year and same thing next year. You know, you're not going to go anywhere. So it's different everyday working with the people."

Vae finds that the position is quite demanding in terms of the written work required.

> "It's very important for us to know how to read and write and so is mathematics. We do writing and reporting everyday, like the things you've been working on. You have to write reports about the residents here and how they're doing everyday. Then they go to a supervisor of the next shift. So, they're an important link between. Like for example today we're on morning shift, it will have what we do today and we have to report it to the afternoon staff, so they know what was going here in the morning shift."

Coming back to this type of work, Vae has found it challenging to meet these sorts of requirements that were not formerly part of this type of position.

> "I was nervous because I used to work in a resthome before. Also, we have this little tape that we have to record everyday and then after your shift you make sure that you take it for the next shift. You just leave stuff (on the tape) that is very urgent. You do a tape and a written report at the end of each shift."

Vae attended school in Samoa and passed one School Certificate subject in the Fifth Form. As her parents didn't have enough money to let her go back to school, she left and worked for a while before coming to New Zealand in the mid-80s. School was "not a great part" of her life and Vae feels that she missed out a lot by leaving when she did.

As part of her work as a caregiver, Vae has been attending a workplace literacy programme each week for three quarters of an hour for the past year. Vae works on self-paced material between meetings with the tutor. The content for the programme is based on everyday issues and demands of their work.

> "Most of the stuff that we do here is mainly based on work that we do here. It's all related to our job. Stress management and bits of reading and writing. For example, today we've come here to do a register. Or we will check up on what we did last week and it will take 30 minutes, but if we're doing an assessment then it will take 45 minutes."

Vae was initially apprehensive about attending the programme, because of her previous experiences as a learner at school and the fact that she had not been involved in any education since then. Vae has found the programme a totally different experience educationally mainly because of two factors - the fact that the programme focuses on issues of immediate concern and the supportive learning environment provided by the tutor, Andi.

> "It was a bit nerve-wracking. I thought, I hope it's not going to be hard, the stuff they bring out - sort of like school. Yes, but on the first day she explain to us what she's going to be doing, that it's not like school, she's here to help us. It's very

different from school. School is very hard if you don't listen the first time - that's it, you're not there - but here, it's different education. You're not really ashamed of asking. There has been this very difficult unit that I've read only - there has been some difficult words in it. I would come back, I would not do the exercise, so I would come to it with Andi. She's really up there and points it out, she's always there."

Vae described a number of areas where she felt that she had made important improvements as a result of the programme. As someone who says that she used to find that her "voice is shaking and I mumble my words", when making oral reports on her dictaphone, Vae has found the pronunciation and oral work invaluable and feels that she is now a lot more confident in this skill and as a person generally. She also values the writing skills she has gained.

"More confident. Yes, more confident. I knew how to write essays, but ... not going very deeply into it and I don't expand my ideas. But Andi, my tutor, helps me a lot. Expanding our knowledge and just making ordinary things a lot easier. In this job there is a lot of paper work now and that's very new. Like filling out accident forms, reports and check forms, changing of shifts rosters. Yes, apart from caring for the residents you do a lot of paper work.

Like filling out our forms for example, if I filled in an accident form, down here, Andi would show us - and if we get it wrong, Andi would go over it again and again. So when I go up there to fill out an accident form, it will be right this time and not the third time. It saves a lot of repetition."

Because of the increasing demands and expectations of the residents under her care, Vae has found the stress management component of the programme very useful.

"Things like stress management - sometimes when I'm overworked, I get very stressed. I learn to manage my stress level. (We do stress management) because they know that this kind of job stress has to be included in it. We've got some residents that ... sometimes they're very demanding and like they ring the bell everytime."

And like many others who have resumed their learning as adults in the workplace, Vae has found that her experience in the programme not only increases her own interest in further learning, but has also had positive 'flow-on' effects at home with her children.

"I've been wanting to do things (in education) full time and I feel that this may be a first step in that process. I can't do that right now, I don't have the money to do that."

(Has it made you feel that it's possible to do that?)

"Yes, it's possible, but not now. "

(How does it make you feel as a parent now?)

"It makes me feel that it's very important to educate your children, because now you can't do anything or go anywhere without education. It makes me motivate them to help in understanding what they do at school."

Achieving NZQA unit standards has been an important part of the programme that Vae has participated in over the past year. She has achieved eight unit standards so far and is looking forward to the graduation ceremony at the hospital later in the year. As someone who had passed only one School Certificate paper, Vae has found her achievements an interesting point of comparison and discussion with her children, one of whom is also doing unit standards at school.

"And I said to her that's what I'm doing, so we're in the same year. I said it's the same thing we did and she said no, no, you only made it up. "

As Vae says, "I find it all very good because it reminds me of what I've missed at school".

Siosina

Siosina has been a caregiver at an Auckland hospital for the elderly for nearly four years. Apart from a short time out of work, she has been working as a caregiver for over 20 years since she arrived from Tonga as a recent school leaver in the early 1980s. These positions have included work in a surgical ward and hospice care in hospitals and resthomes in Hamilton and Wellington. Siosina finds care-giving a very rewarding, but demanding job.

In her 20 years of experience as a caregiver, she has seen a steady progression of changes, such as the greater demands of the work, the increasing numbers of private providers and a decrease in the numbers of religious providers. Although she has always had to write reports as part of her work, Siosina says that this component of her work has increased and become more demanding.

> "... because everything has to be in writing. Before you just report in the numbers and so on, but it's more demanding now - incident and accident reports and that."

She also finds that the residents of the hospital expect more in her care-giving skills and energy compared to her earlier days in this work.

> "The people I used to take care of before, they didn't used to be demanding. They're very difficult, that makes for increased stress on you as a worker. It's different, very different."

At school in Tonga Siosina passed her Tongan Higher Leaving Certificate in five subjects that she said, "wasn't satisfactory". When she was invited to be part of a new workplace literacy programme in her present job, Siosina was initially cautious about what it would entail and how she would cope with it.

> "We were asked when they were going to introduce it - first I thought it was compulsory, but it wasn't and I thought that was really good. I thought that you don't have to go to polytech to do it, it was right here, an on-going thing and you learn as you go. So I just took it because it's an on-going learning thing and working - you learn as go along with your job."

One strength of the programme for Siosina has been achieving industry unit standards for the work they have covered. For Siosina these unit standards are the first educational credentials she has achieved since she left school in Tonga.

> "I think it's important because then you know that you have put effort to complete this and you know that you have done it and achieved it."

Siosina's greatest apprehension about the programme was that it was taught in her second language, English. Although she finds similarities between the programme and her schooling experience, she is adamant that there are also important differences.

> "It does feel like I'm going back to school, except this one, it's a stage forward. It makes you think hard and is more like everyday things. Yes, because it's in English and not in my language. "

(So that's the most demanding part of it?)

> "Yes. But it does feel different, it's like school, but school for adults. It's more mature, the course that I'm doing, not like when I was in high school."

Siosina had attended a polytechnic course as part of her job in another town. While she had found that course a reasonably satisfactory experience, her involvement in a course that was located in her own workplace, involved her workmates and was geared specifically to their work situation and issues was both more challenging and satisfying.

> "The experience (of attending the polytechnic course) - we all come from different directions and different places and we want to learn and we go there. And that's OK, but nobody knows who I am and I don't know them. Up here, I feel ... it's much easier than going to a polytechnic course where it's out there and its people you don't know. Much easier here.

And also you can build things with your experience from everyone being from the same place."

The literacy components of the course have helped Siosina with the demands of reading and writing English in her job - and especially her English grammar, which she finds difficult. Attending the programme has not always been easy for Siosina either, as she needs to fit her attendance around the busy demands of her job and roster issues. Sometimes she has come in on her days off to attend, but is happy to do this because of the enjoyment and benefits she sees coming from her learning. Siosina feels that it took most of the first year before she made significant progress with her learning. She attributes this in part to the stop/start nature of her involvement at times and says that ideally she would like to be able to attend the programme at least twice a week to maximise her progress.

Although Siosina has found these skill components of her programme useful, it is around broader topics such as stress management (part of the National Certificate programme) that she believes she has gained the most benefit. As a Tongan woman working in a predominantly palagi environment, the course has taught her a range of skills and information that help her understand her work environment and situations that she confronts in her work - as well as in everyday life.

"It really helps me to understand myself and how to deal with situations - how to delegate people to do things to help me. I learned so much about it because the culture on the island I come from, we look at it different, it's a very different way of life. And when I learn about things, I think twice."

Siosina's greater self-confidence has meant that she is also more assertive in her work environment.

"I become more assertive as a person and very positive.... Like before I used to be very shy at asking questions. Sometimes I feel there are questions, which are a bit rude to other people, but now I'm more assertive and I say not rudely, but I prefer to say and voice what I think."

(Assertive in your ways of dealing with other staff or a resident, or at home?)

"Everywhere, I'm a stronger person. "

Siosina also realises that these skills are appropriate in palagi contexts, but are not necessarily appropriate in her Tongan community.

"But in my culture it's disrespectful and rude to be too direct and that is something I have learned."

Asked what impact she believes the programme has had on her workplace generally, Siosina replied,

"That's a very hard question. I don't know, but I would think, from what I've seen and what I've heard, more knowledge, more understanding, decisions of how to deal with another staff member or resident. Yeah, it helps us care for residents."

Summarising her assessment of the programme, Siosina said,

"(It's been) the most important thing that's happened for when I do my work. I manage my time very well, I learn to allocate time, like when looking after five residents. And also the understanding and coping with the difficulty that the elderly people are going through. Understanding who they are and how they are not able to do the things they're used to. Why they leave their homes to come here. I used to think it's not my problem, that's been a lesson for me. I'm a listener, I listen to them more now, but before I was very impatient. But now I try to listen. (Does it help you with the enjoyment of your job?) It does, it does really help me and I just focus on what I learn. I like to practise it all just for my peace of mind. It's not an easy job to look after residents.

I think the programme has been a great help and I want to carry on, because I'm seriously thinking of doing my training in the future. To become a nurse."

Mata

Mata has worked at the Ford Alloy Wheel Plant for over nine years. He first worked in the heat treat section, but then transferred on to the machine line as a machine operator. In this job he turns the wheels until they are smooth using a manual lathe. It is a job that is done both manually and by robot at present, but it is clear that the robots will soon be doing all the lathe work. The robots are highly computerised, but when they break down Mata has to identify the problem and, depending on the nature of the fault, fix it. Where the machine operators are unable to fix the fault, plant fitters are then called in.

This is the first time that Mata has used computers, which he has not found easy. Attending the learning centre to learn about their use has been both useful and challenging for Mata.

> "It is pretty hard because we are just starting on computers now. You know with the courses we are doing now. Yes, to get more knowledge of it. It's pretty hard at the moment you know but I am trying my best. A challenge, yes. I never touched computers before. When I went to school, we didn't use computers."

Mata left school in the Cook Islands nearly 30 years ago when he was 15 years old. He left because the school had no classes above the Fourth Form. After working laying cables for the telephone company in Rarotonga for some years, Mata came to New Zealand in 1975. He first worked at Kinleith and then moved to Auckland where he worked on road construction before he was made redundant. After a short period of unemployment he found his present job. When the company opened the learning centre Mata was one of the workers who took up the invitation to join the programme.

> "It happened because the firm wants everybody to get knowledge of the job with computers and all those things. So they start setting up the course in the plant and when they introduced it, that is the time some of us started to go. I started on the basic engineering and then I was introduced to the computer."

Mata went to the learning centre for an hour at a time to start with, but has now increased this to two hours. Not surprisingly, for someone who had not been to any educational programme since leaving school, Mata has not found the programme easy. But he also finds the programme difficult because of the demands of working in English which is his second language.

> "Pretty new to me and pretty hard too. You know to go to the computer is pretty hard at the moment, but I am trying my best. Because with the spelling I'm pretty down at the moment. Most of the hard words, but I'm getting clearer now. I used to be a good speller at school, but it's been a long time now. I think it's about - I'm 43 now - it's a long time. I never been to another school since I left school and lots of time I write in island language, first language and I do some reading you know.
>
> What I am saying is for the spelling it is pretty hard for the hard words. What I mean is I'm very slow at typing, but I try to figure out the spelling for the hard words and it slows me down typing."

Mata needs the help with spelling as he has to write reports on various aspects of his work. The reports are not very long, but he finds them difficult, primarily because of English spelling.

> "Yes we do write reports, but short information. Yeah I think (it's difficult) so because sometimes I try to put in very short sentences, but sometimes I want it in hard words, not simple words. Sometimes when you put it in hard words it explains more clearer."

The learning centre has helped Mata with his spelling and ability to use computers as well as whetting his appetite for more learning, increasing his motivation to change his job and helping his two secondary school age children - albeit somewhat cautiously.

> "Yes, I am learning. Before, when I started, I don't know anything about it. I don't know how to open the thing up for my work. Never know anything, but now..."

(What do you want to achieve long term? Do you have goals?)

> "Yes I am thinking - there's two things that I'm thinking about. I'm just thinking now, but I don't know whether I am going to get it. I want to be a computer technician and the other thing is I want to know more about word processing."

(Do you find this useful for you in terms of helping your kids, working with them on their schoolwork?)

> "I think so. At the moment they know better than me, but the thing is, when I ask them to help me, because I am really slow, but sometimes they teach me and they get into computers."

Mata has clearly picked up the importance of the company being able to compete internationally and the increasing role of computers and education.

> "I think that the benefit is they get more quality people. They get better workers to do their work, because at the moment computers are taking over. They want more people to know about it. I mean with the world competing (against) each other you need more skilful people, you will benefit your company".

But while he and other workers value the opportunity that the learning centre has provided for them, Mata says that this does not necessarily prevent workers from moving on to other jobs - in some cases because of the additional skills and qualifications that they have gained.

> "I mean with the courses they doing now, they might move somewhere else. I think it is going to happen, because of the qualifications they get from here. "

The final part of the interview with Mata centred on the news that Ford is planning to provide all of their workers world-wide with computers for them to use at home. The deal includes an allocation of on-line time and is expected to encourage their workers to increase their familiarity with the basic tool of technology that is fast becoming the cornerstone of virtually all modern production work. Mata was awaiting the development with great interest.

Upoko

Upoko is 42 years old and came to New Zealand from the Cook Islands in his early 20s. He had left school when he was 12 and worked for a roading company before deciding to emigrate to New Zealand. As a new immigrant he started work with Ford at their assembly plant, before moving to their wheel plant next door. At the assembly plant Upoko had worked as a welder and when he moved jobs he became a machine operator in the foundry.

He had only recently started attending the learning centre programme and is still a bit vague about what he wants to achieve at the centre.

> "I guess I just want to learn more - maths, reading and writing and all those kind of things."

So far he has concentrated mainly on maths and writing skills and especially his spelling. He uses maths in his job to record tallies of products, while his writing is put to use in writing reports on machine breakdowns. Even though the reports are not extensive, Upoko still finds this task difficult because of his lack of confidence in writing and hesitancy with spelling. These tasks provide the learning content for his work with the learning centre tutor.

> "Yes, I just write down what's wrong with the machine. How come there is a breakdown, how come you can stop it. You have to just put it down like no metal, no operator. That's all you write down."

Further on, Upoko wants to learn to use a computer because, although he does not use one at present, he can see that

"...all the computers come in and I realise it's good for me to do some courses".

Upoko also sees the acquiring of these skills as useful in his home life. He is keen to improve his literacy skills as his children (aged 7, 11 and 6 months) are increasingly coming to him for help. Often he doesn't feel confident to deal with their queries and asks his wife to help them.

> "My boy was coming to me -"Oh Dad, can you write this for me?" and I says "Can you go to Mum?" and sometimes my wife will help me."

Already Upoko feels that he has made some progress, which has caused him to reflect on the opportunities he missed at school.

> "Yeah, my maths is starting to come right now. I realise that at school when I was young.... you learn it all different now all these things come in. Sometimes when I'm just by myself I realise I should do it when I was young. Yeah, yeah I wished I had done it when I was young. Now though.. I think it helps a lot, I think for everybody here. I said to myself when I start going for my maths, try to focus on my writing too, it helps a lot to me."

At this stage Upoko does not have very clear aims for what he wants to achieve at the centre - "I don't know - I just want to learn more". But he is determined to maintain the progress that he feels that he has achieved even after four weeks.

Kelvin

Kelvin has only recently started work at the Ford Alloy Wheel Plant. He works at the end of a production line where up to 300 finished wheels come past an inspection process at any one time. He then stacks the wheels 36, 42 or 63 high, straps them together and covers them so that they can fit in a container for shipping overseas.

Prior to this job he ran a reactor that made arsenic acid. Following an accident when a hydrogen peroxide tank overheated and blew up "taking out half the building", the Council refused permission for the factory to re-open, so Kelvin became unemployed before taking on his present position. Before that position, Kelvin worked with a large mining company in the outback of Australia for 13 years.

> "Prior to working here I have always done sort of... 'cos I have always been a little bit like slower than the rest of the guys, especially in the mining company that I was working at in Perth. They always had a lot of training programmes there and they always sent us on, they really got us involved in the training programmes and for me to keep up with people like geologists and staff like that. I had to sort of be on the same, what do you call it, wavelength. Because I have always been a bit slow on everything - it's probably because its takes me a little bit longer to pick things up than others. Like some people can pick it up and like sitting here and now pick it up and it might take me two or three hours, but I will eventually get there, but it just takes me that little bit longer."

Kelvin was not slow in taking up the opportunity to work on his literacy skills at the plant's learning centre though and joined the programme soon after joining the company and has been a keen participant since.

> "That's why I joined up with these programmes with Ginnie (tutor), because on my time off I can, even if I'm just going past I'll stop in for an hour, like I did today. I wasn't even booked in today, but if I'm going past the plant which I usually do every day, and so on my days off I like to try and jump in and just do something."

Kelvin has mainly worked on his maths skills in the programme.

> "I have a few problems with my maths and so she has been showing me some ways around it, which I have never ever used. Like I have never been to school for years, and I got used to using calculators and things. You see especially on other jobs I just used calculators and so when it came back to writing it (maths calculations) down like from the formats

from start at the beginning, it was a challenge. A lot of the stuff was easy, but you still needed to put in down in a format, for your computer. If I didn't have a computer or calculator there, I would still have to work it out."

Although he used laptop computers in his work in the Australian desert, Kelvin does not use one currently in his work - but is "using numbers all the time". He records and calculates stock movement using barcodes and finds an increasing number of graphs used in the plant.

"Oh, we always have a big board out here and it just tells us... it has like, lost time through injuries, production levels, how far we are behind or ahead, days off all that sort of stuff, lost leave. That's all up there for everyone to look at. Yep, and they try and get most of that up there if they can."

Now he finds that he can understand the mathematical processes, whereas before he simply entered data on computers or calculators and had no confidence in detecting errors or understanding the nature of the calculations. He also had little ability in doing the calculations without the computers or calculators.

"I had computers, I was doing everything on computers, so to me it wasn't a problem. But then, when I went through this programme, I found out how far I was... because I did division and then going back to long division and all that sort of thing.... Instead of just putting in 237 times this on the calculator and it gives you the answer, it's better that I had to go and do it this other way."

Although he feels that his reading is reasonable due to the extra help he received at school, Kelvin is also aware that he has needed to improve his spelling and with that has come an improvement in his reading skills.

"My reading is OK, but I know I'll have to look at spelling 'cause I know I'm terrible at that and if it wasn't for Spellcheck on computers, I would be had it. I can visually pick up which are the right ones (spelling options on the Spellcheck) that I need for that context. I can usually pick all right doing that, but if it came back I have to go to the dictionary. But that kind of thing, I will have to be looking into later. My reading is pretty good. I used to be really bad when I left school at all of those things, but because I've been around (at the learning centre), I've had to go on these courses, it has made me more aware of how to pick up the things and how to deal with them."

Learning these skills as an adult has been particularly satisfying for someone who found school difficult - "It was pretty hard. I was always in the special classes they had there for all the sort of slow ones". Kelvin has also found his new skills useful in his role as a single parent.

"Yeah, well it's going to help me out for sure, because like I said, I'm not always on to it all of the time and I have got to try and keep up. And now I have got a daughter - that's the other thing you know. She's sort of probably more focused on all these things because her mother, she's not with me, her mother is a teacher in her own right. So when she comes to stay with me and she's got homework and things to do it's a big drama."

(So you feel more confident about that now?)

"Oh for sure. I always have, but there's going to come a time when she's that much further ahead of me. If I don't keep up with what's going on around me I'm going to be sort of shoving her away and I don't really want to do that."

In addition to the enjoyment Kelvin has had from learning skills, he also talked of achieving NZQA credits and the associated pay rises as a plus in the programme. But even these incentives are not enough to attract some of his co-workers - especially those who are already on higher pay levels.

"...this is based on getting pay rises and things like that too now. If you want a pay rise, it's good to come to these things because you know you go through these courses and at the same time you are learning and at the same time you are picking up these credits, NZQA credits. And if you can pick up some of those, you will advance a little bit more - in wages. I should say plus you are learning at the same time. The potential is there for a lot of people to go, but I think a

lot of people want to go but they just, with their four days on they have commitments, four days off, I think they still find it hard to get here. Like sometimes I've found it hard and I just rang up and said I can't make it in today but I can do it tomorrow and they're OK with that."

Asked what he thought was the particular value of the learning centre programme Kelvin said,

"I think it's very important. I think Ford's done a really great thing - 'cos there is not a lot of companies that try and educate their people. They might go and get them a forklift certificate maybe or something to do with their job, but this company looks like they're going further than that to me."

In particular, Kelvin identified the value of having an on-site tutor to help the learners with specific issues as they arose.

"We have got all those type of things here too, you can go on all different courses but with, sometimes you still need a hand. Even with the bookwork, you might go to a course and I have to go and do this for homework. Well if you can see Ginnie for half an hour she's able to sort some of these problems out. It could be anything. Ginnie is pretty open, even if it's not with the Workbase (programme), it could be something to do with other courses we go on and might not have anything to do with her, but she can sort it out."

In the longer term Kelvin is keen to move into higher levels of job in the plant where he can make use of his new skills - but he is also aware that these jobs involve skills that he is yet to achieve.

"For a start I'm looking to go for a pay rise. Everybody is, so I'll probably look at trying to go up. I want to try and do something in the foundry. I'm sort of at the bottom level probably, but I would like to try and get up into foundry areas.

Yeah, but they're also using machine lines and they use a lot of computers and things like that. They use robots, so I guess I'll need at least some sort of educational thing with computers."

In the meantime Kelvin enjoys being able to drop into the centre in his spare time and the new perspective that he has on his work.

"So its enjoyable. Like I said, if I'm going past, I come in to fill in one or two hours if I can, which is usually pretty good for me because everything for me is centred around here. Now I'm sort of focusing a bit a further than that job that I'm going to be doing. I'm trying to focus somewhere up a bit further, but it still keeps my mind occupied instead of going... I dunno, probably sitting at home watching TV or something like that."

Daniel

Daniel has worked at the Ford Alloy Wheel Plant for the past six years. His work involves the stacking and moving of finished products on to pallets in preparation for outward shipments. Most of the plant's products are exported to the United States. As with the other workplaces in this study, there have been on-going changes in the plant machinery and production methods in Daniel's work environment.

"You get a fair idea of how much has changed in the foundry when you first walk in there. Up there it's really old style die cast, - they split open, swing apart. You open it underneath, so the machine itself moves, but the other part stays still. But if you go and have a look at new machines, they're all raised off the ground, and the machines stay still so there is less chance of damage if the furnace rolls out underneath. Those machines are actually designed and made here, our very own design. The machines are faster, they pump out more units than the old ones and have less scrap, they say."

With the changes in machinery has come an increasing amount of computerisation and use of robots.

"Everything (new) is computerised now. It was before, but with the old machines certain things were left to the operator.

> But now everything is done, or you just turn a knob, press a button and turn a knob and you have to watch it yourself - but it is easier, faster and anyone can understand it. It's designed so that even a child could run it.
>
> Yep, nearly every machine is a robot. On the heat treat for example, there are two - loading and unloading. They pick up two wheels at a time, put it down and the other one picks up two wheels and puts it into a big steel frame and rolls it into an oven, that's what the heat treat is."

Daniel has longer-term ambitions to move on to other more satisfying positions in the factory, as he sees his present position as having limited appeal.

> "I'm basically a body to move things, carry things around. I'm not in a rush to move anywhere else, but I don't want to be on the floor my whole life through. "

Asked what type of work he would like to move on to, Daniel said,

> "I'd like to be the facilitator (a job that has recently been discontinued). I like dealing with people, talking to people."

Alternatively, Daniel would like to move on to one of the more skilled jobs on the production line - jobs that he knows would require a greater degree of literacy skills than he has at present, especially in maths. Like a lot of people, maths has been Daniel's weakest skill. At school ("School was horrible. I hated school") Daniel didn't do well in his reading either, but feels that at least he eventually achieved a reasonable level of skill.

> "I didn't learn to read until I think it was about, 7 or 8. I needed tutoring for it. I went to Primary over in (suburb) and had problems learning in large classes. I couldn't really focus. So the school sent me to (primary school) to get tutoring in reading. (Was that useful?) Yep. Sure was. So it's only maths, that's the only thing that is holding me back. I hated it. I didn't want to know about it. Because I couldn't do it."

For the last couple of months, Daniel has been attending the plant's learning centre. Usually he calls in to the centre once or twice a week for about an hour, but sometimes stays longer if the tutor is available. He has concentrated mainly on maths and a basic engineering course, but recently he has moved on to computers - an area in which he wants to do more work and aims to complete unit standards.

Although he doesn't use maths a lot in his present job, Daniel has found it a challenge coming to grips with skills that he has found difficult all his life. An initial assessment at the centre confirmed his problems in his area and he started his work on maths tasks.

> "Yep and it was about time really. I'd been wanting to learn maths properly for a long time and I think the assessment was perfect timing I suppose."

Daniel uses his environment to practise his new skills and satisfy a new-found curiosity about things mathematical. He enjoys calculating the total number of products in an area, the gross and net weights of pallets and the amount of scrap material currently held.

> "To me directly there is not a lot of, I don't use maths a lot, but I can if I want to. That's just personal. I don't have to go like and count, and do a check on scrap or how much we have got. I don't have to do any of that. But since I have been learning that, I do use it at work. That's my choice. I just do it myself. No one has asked me to do it."

Since he started attending the learning centre, Daniel has also had the opportunity to gain NZQA unit standards for his new skills, which are the first credentials he has achieved since leaving school - even if he has had difficulty with achieving presentation requirements.

> "... but I finished the 20 credit course to top up my credits and all I have to do is just - it's partly marked on presentation and I scribble a lot, so I have to go and rewrite it again. So once I have done that, I can hand it in."

Workers in Daniel's workplace are rewarded for achieving unit standards by progressing up job grades and increases in pay levels. Also

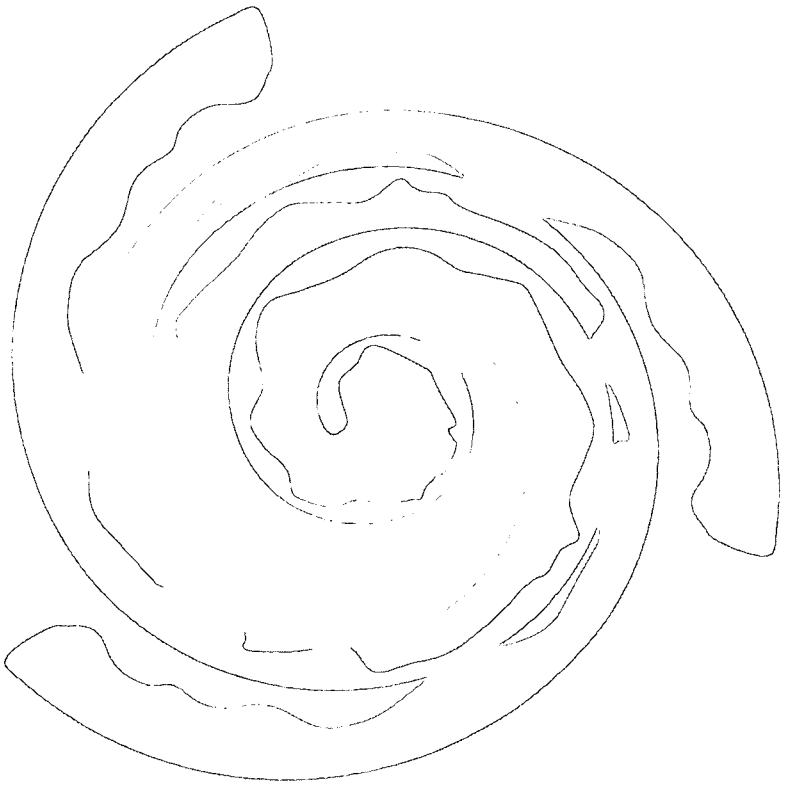
important for Daniel is the fact that he can take his certificates with him to other jobs within the plant or outside. Daniel says that the availability of the learning centre is important in his loyalty to the company, although it is only one of the factors that influence his feelings toward his job - "...they've still got to treat you right".

Participation in the learning centre programmes is entirely voluntary and not everyone is as enthusiastic about it as Daniel.

> "Some people say "Oh what do you want to do that for?" Like I came in for overtime yesterday - actually I was supposed to come in for a four hour session today, but I got the date wrong so I was going to go home and my Supervisor asked me if I wanted to do overtime so I did overtime yesterday and came in for this today. I don't know why people are so..., why people resist it so much, like if it's there you might as well use it.
>
> Now there is a mix really of young and old, and race has nothing to do with it. People I've known for a while who I thought would never improve themselves are doing quite well. Good to see too. Just that some decide to have a go and some decide to stay out of it. It's usually the people that give it a go most are the people who will succeed. That's how I see it. All the people that do it are very optimistic I suppose. Lively and want to do things."

Asked what he thinks the programme has done for him overall, Daniel talked about being much more confident in how he does things.

> "I guess since I have started this, I'm not really... like I would stand back and I wouldn't give it a go. I'd kind of stand back and let a few more people do it, but now I like... I don't care, I give it a go anyway. It doesn't bother me whether I pass or fail or whatever. Like that used to be my main concern - would be, Oh no I won't be able to do it, so I won't do it at all. But now I'll give it a go."



Overtones - the themes

Changes in the Workplace

Even in the limited number of workplaces covered in this study, it is clear that the sorts of changes discussed in Section One have filtered down and are having an impact on workers' jobs. Virtually all of the workers interviewed are having to grapple with computers. And where they aren't using them, the writing is on the wall that they will be doing so in the near future. This is true even of jobs which most people don't readily associate with computers. Bernie's job as a cleaner is built round the computerisation of work material, job rosters and reports of various types. E-mail communication, reading graphs on quality results and report writing have become the norm for most of the workers in these plants.

Greater use of technology other than computers is also increasing. Wheel presses at the Ford plant are increasingly automated and will inevitably become more so in the future. Robots are everyday work components for Daniel and Mata. Along with the increased technology have come lower staffing levels, so that fewer workers at the mill now produce more than was the case even a few years ago.

With the technology have come changes in the ways that these workplaces are organised. There is more emphasis on working in groups that have much more responsibility devolved to them. The best example of this is Bernie who works as part of a cleaner group that organises most aspects of their operations and reports to a higher level in the flatter work hierarchy. Their work is also driven increasingly by the outside demands of quality control (for example ISO 9000 manuals) and health and safety requirements monitored by Occupational Safety and Health (OSH). Even the need for their work processes and product quality to be internationally competitive has filtered through to workers like Mata and Bernie.

The increased demands are occurring, even though workers like Bernie have been in the same company for over 40 years or are still in the same job, such as Siosina and Vae.

In all of these areas, there is a strong feeling that the tempo of change is not only inevitable, but also increasing in the demands made on the workers. For workers like Sandy, Mata and Bernie, the option has sometimes come down to learning new skills in order to stay skilled for the new demands, or like Bernie's shunter workmates, opt out of the workforce.

New beginnings as adult learners

While many of the learners came to the learning centres simply because they were readily available in their work environment, others took some gentle persuasion to join programmes and others became involved as a result of specific crises or turning points in their lives. For Sandy it was a serious accident at touch rugby which necessitated a change in her work from physical jobs to an administration one after a considerable period of rehabilitation and re-training. For Bernie it was the threat of redundancy that led to a new job as a cleaner and the need to learn about computers. For Graeme and Mata it was the realisation that their future work options (and even their present job security) would be limited without improving their literacy skills.

For virtually all of them, their involvement in the learning centres has been their first educational encounter since they left school. Siosina had attended a polytechnic course as an adult and Graeme had attended a community-based adult literacy programme, but dropped out soon after. None of them talked about school in a positive way - at best they were ambivalent about it. Some, like Siosina and Vae, had had limited schooling opportunities where they grew up. Others, such as Graeme, Daniel and Kelvin, had seen school only as something to endure and a place that offered them very little as individuals or as learners. These experiences had left most of them with 'schooling scars' that meant that they often had limited, if not negative, feelings about themselves as learners.

Attending a learning centre programme was therefore a major step for them and one that took courage to take and time to re-discover themselves as learners. Sandy, Mata, Graeme and Vae all talked about their initial fears of "going back to school". But it has also led to experiences as learners where they encountered learning relevant to their everyday lives, felt they were supported in their efforts and started to see learning as an enjoyable activity. In some cases, these turnarounds did not come easily or straight away. Siosina said that it took "about a year" for her to make significant progress. Bernie found typing on the computer much more difficult than cleaning and Graeme got headaches from the tension of learning new skills. But when they did make progress, these feelings helped overcome a wide range of obstacles. Graeme didn't mind using children's readers to learn from - the fact that he could read them far outweighed any embarrassment he might have felt in using such basic books.

As learners, they came to the programmes with a wide range of skills and issues they needed help with. Even though he is a very skilled, self-taught mechanic, Graeme arrived with virtually no literacy skills at all which meant that he was very dependent on his wife and workmates to get him through some aspects of his daily life. Others had much better levels of skill, but still needed help to develop them further to cope with the literacy demands of their work.

Graeme clearly needed help with his reading skills, but so did most of the others. Bernie, Vae and Siosina identified writing as their main need, while Kelvin and Mata talked about needing help with spelling. Daniel and Kelvin spent most of their time working on their maths skills and Bernie, Mata, Vae and Siosina all had issues related to English as their second language - especially "English grammar!" All of them said they needed help with their computer skills.

Impacts of the programmes

Just as they all presented with different learning needs, they also achieved a range of different outcomes as a result of their involvement in workplace learning programmes. Changes that occurred for these workers as a result of the literacy programmes included:

- improved levels of skill in reading, writing, spelling and maths - not surprisingly, they all saw this type of outcome as the main thing they had achieved
- assertiveness skills - Siosina has also learnt practical skills and gained in self-confidence

- knowledge and information - in the course of learning literacy skills, they also learn additional information about their work
- achieving formal qualifications - for virtually all of these learners, the achievement of unit standards are the first educational qualifications they have ever passed and certainly the only ones since leaving school
- increased understanding of learning principles - Kelvin now understands the mathematical principles of decimals involved in his use of a calculator
- improved accuracy - Kelvin can now use a calculator more accurately and Vae now rarely needs to re-do forms
- oral skills - partly as a result of greater confidence, but also as a result of specific skills taught in courses, learners like Vae find it much easier to give oral reports on their work
- learning skills transferred to other contexts - Kelvin now feels more confident about enrolling in other company courses that he has avoided in the past because of his lack of learning confidence
- greater personal confidence - apart from better literacy skills, this is probably the other main benefit that participants in these programmes identify, even though it is rarely identified as something they want when they begin
- cross-cultural skills - Siosina now better understands issues that occur in palagi contexts
- better industrial goodwill - while providing learning resource centres is no cast-iron guarantee of ensuring company loyalty, most of the learners in this study said that they did feel a greater degree of loyalty to the company and were grateful for the opportunities they had been offered
- higher aspirations at work - Mata, Vae and Daniel all said that they wanted to move on to higher skill occupations, now that they felt more confident as learners
- achieving pay rises - as some of the workplaces link their skill increases to pay scales, successful learning has meant pay increases
- acquiring a thirst for learning - not only have most of them said that they now want to continue their learning, they also now actually enjoy the process of learning (usually for the first time in their lives) - as shown by those who come in to the resource centres on their days off and Daniel who does maths calculations purely for his own personal satisfaction
- impacts beyond the workplace at home and in the community - these are not always easy to measure, but better literacy skills and learning also extend beyond the workplace. With their new-found interest and confidence in learning Bernie enjoys talking computers with his teenage daughters, Sandy is working to help her son pass School C, Graeme does not always need to take his wife now on his motor-bike to read street signs, Siosina is comparing her achievements of unit standards with her daughter and Kelvin (as a single parent) feels more confident about helping his daughter with her homework. These impacts are what Sticht (2000) refers to as the 'double duty dollars' where the changes brought about in one context flow over into other areas of learners' lives.

As Sandy and Daniel have pointed out, not all of their workmates have taken up the invitation to make use of the learning centres. But for those who have, and who have persisted in their new learning ventures, the rewards have been worthwhile and rewarding and in ways that they would not have foreseen at the beginning. The last words go to Bernie:

> "If you don't accept and don't go with it, you're just kept behind, out of it. I mean, this cleaning job is not a technical job, it's manual, but what can you do to make it better, to be more efficient to be a bit professional? Not just, oh I mop and I broom and that's it. And if you record what you do and record where you can make a saving and you save the company (money) if you do things correct when you could use three times the amount of cleaning fluid and the floor may even be a bit cleaner. Maybe not, but you check it out, work it out and you record it and you get people to train each new person.
>
> I was a bit reluctant at first but, they made me feel decent, it was enjoyable. I could have been sitting in the smoko room or I don't know, whatever. Sometimes out of boredom I would wash the ceilings and the walls just to have something to do. But when I could come here I could type stuff and could get three times the amount on the page. So I did that and time flew and now I don't have to try and make the time go - it goes quick enough. "

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