

The Researcher.

Chris Beardsley carried out the survey and analysis work and produced the reports. She is the Director of Performance Matters Limited, a small Christchurch based management consulting company which specializes in the provision of management training, executive coaching, performance management, survey and report writing and conflict resolution services. Email - chrisbeardsley@clear.net.nz

EXITO and the industries it supports are indebted to Chris for the enthusiasm and professionalism she brought to the task.



Report on the EXITO National Survey of

The New Zealand Quarry Industry

IoQ/AQA Joint Annual Conference

2003

Report on the EXITO National Survey of the New Zealand Quarry Industry

Index	Page Number
Executive Summary	1
Introduction	5
Methodology	6
▪ Conducting the Pre-Test	6
▪ The Survey	7
Results of the Survey	9
▪ Demographic Data	9
▪ Relevant Experience Before Entering The Industry	12
▪ Qualifications Gained Before Entering The Industry	13
▪ Licences Gained Before Entering The Industry	13
▪ Training Undertaken While Working In The Quarry Industry	14
▪ Number Of Quarry Companies Engaged In EXITO Training	14
▪ Qualifications, Skills Or Licences People Should Have Before Entering The Industry	15
▪ Are There Ready Replacements Within Your Company If Your Job Becomes Vacant?	16
▪ Are You Encouraged To Take On-Site Supervisory Or Management Roles?	16
▪ Number Of Quarry Companies You Have Been Employed In	16
▪ Staff Turnover	16
▪ Job Areas Needing More Skilled Workers	16
Managers and Supervisors responses on:	17
▪ How to attract younger people into the industry	17
▪ Marketing	18
▪ Pay and Conditions	18
▪ Careers and Training	19
▪ Recruitment	19
▪ Induction of Young People	19
Career Paths	20
▪ Categories of quarry work	20
▪ Career Paths Managers and Supervisors	21
▪ Career paths of quarry workers	25

Report on the EXITO National Survey of the New Zealand Quarry Industry

Recommendations	30
▪ North and South Island differences	30
▪ Pay rates and conditions	30
▪ The aging workforce	31
▪ Recruitment and selection	32
▪ Career Paths	33
▪ Management skills	34
▪ Succession planning	35
▪ Training inequalities	36
▪ Marketing	37
Managers And Supervisors Ideas and Recommendations On Where EXITO Training Should Be By The Year 2010	37
Distribution of Results	38
Appendix:	39
▪ The Questionnaire	

This survey was commissioned by the Extractive Industries Training Organisation and was designed and conducted by Chris Beardsley, Performance Matters Limited, March 2003

Report on the EXITO National Survey of the New Zealand Quarry Industry

1. Executive Summary

During December 2002 and January and February 2003 the Extractive Industries Training Organisation national Quarry Industry survey was conducted throughout New Zealand. The purpose of the survey was to obtain data and information to facilitate future EXITO policy decision-making and enable accurate planning for the training needs of those people entering or involved in the New Zealand quarrying industry.

A total of 201 respondents were surveyed in twenty-six sites. The survey traversed the regions Auckland, Waikato, Taranaki, Manawatu, Wanganui, Wellington, Nelson, Canterbury and Otago.

The Methodology

Firstly a draft questionnaire was designed and circulated to the EXITO Executive Director and industry experts for their comment. Amendments were made based on their feedback. The questionnaire was pre-tested with a cross-section of quarry workers who fitted the profile of the final group to be surveyed. Finally the survey was amended to take account of all the pre-test information.

The standard questionnaire was given to all employees who were not supervisors or managers. Supervisors and managers had an additional 2 pages of questions.

The Survey Results

The design and pre-testing of the questionnaire made it easy for respondents to participate fully. There were very few questionnaires missing specific data. The response rate is outstanding in that a 100% return was achieved and this result did away with the problem of non-response bias.

Demographic Data - New Zealand Quarry Industry

Men made up 91.05% and women 8.95% of the quarry worker population.

The respondents consisted of 70.17% NZ European/Pakeha, 24.02% NZ Maori with very small percentages coming from other ethnic groups.

The largest proportion of men (almost 25%) enter the quarry industry between the ages of 21 to 25 years. The largest proportion of women (approximately 22%) enter the industry between the ages of 31 – 35 years.

The highest proportions of men have spent 6 to 10 years in the industry (almost 20%) or 11 – 15 years in the industry (almost 14%). For women nearly 17% are recorded in each of the following categories: 2 to 3 years - 6 to 10 years - 11 to 15 years - 21 to 25 years.

Of all respondents only 30% indicated they had relevant experience before entering the quarry industry.

Report on the EXITO National Survey of the New Zealand Quarry Industry

83% had no qualifications before entering the industry. 87% of respondents held some sort of vehicle licence before entering the industry.

Supervisors and Managers' Career Paths

A linear career path, where one job is done and is a precursor to the next, is not a common feature of the quarry industry. People are more likely to be working in several different roles at once.

39% of managers entered the industry at the Quarry Face
23% of managers entered the industry as qualified tradespeople
20% of managers entered the industry in processing
6% of managers entered the industry and worked concurrently at Quarry Face, Processing, Stockyard and Production
6% of managers entered the industry in Administration
6% of managers entered the industry in Technical

Currently the fastest route to a supervisory position is to enter the industry as an administrator. The fastest route to a management position is to enter the industry as technician. This is problematic for the majority of employees who enter at the coalface. At the moment this group of employees is restricted in moving into positions of responsibility within relatively short time frames.

Almost all managers surveyed had to work at the 'coalface' before they moved on to take up positions of responsibility. This was the case whether they possessed tertiary qualifications or not.

It was noticeable that no supervisors or managers surveyed were women.

Quarry Worker Career Paths

The combinations of roles which quarry workers take on is extremely varied and for this reason it is not possible to demonstrate a common career path which most workers are likely to take.

However one quarter of all quarry workers work concurrently in the roles of Quarry Face, Processing, Stockyard and Production work. The average time spent in this role is 12 years but approximately 25% of these people work in this role for the greater part of their quarry work life (i.e. from 20 to 32 years)

The next most common role (10% of workers) is working concurrently in Quarry Face, Processing, and Stockyard. Workers spent on average 8.25 years in this role. Again a significant percentage of workers remain in this role only.

Respondents are interested in having more involvement in how their careers progress. There were many instances where individuals indicated their commitment to the industry and their desire to progress and learn. Respondents enjoyed the opportunity to talk about

Report on the EXITO National Survey of the New Zealand Quarry Industry

their work and had many ideas about how career paths in the industry could be enhanced.

North and South Island Differences

The range of issues being experienced is similar for both North and South Island quarries.

However there are two factors to note. Firstly more Maori were employed in quarries in the North Island and secondly women were employed in non-traditional quarry jobs only in the North Island (i.e. women were employed as quarry workers.) It follows that more Maori would be employed in North Island quarries because of the greater Maori population.

Pay Rates and Conditions

There is very considerable concern amongst staff that industry pay rates are perceived as poor. There are wide differences between companies in terms of job conditions and staff welfare.

Approximately 21% of people are working up to 55 hours per week, 30% up to 60 hours, 14% up to 65 hours and 8% over 66 hours and often up to 70 hours. A total of 73% of employees are working 15 to 30 hours above the 40-hour week.

The Aging Work Force

This factor is a major issue for most people in the industry. Approximately 53% of those surveyed were over 40 years old. A substantial number of companies had a predominance of employees in this older age group. Many respondents indicated that improving pay rates would help attract younger people into the industry. Others felt at a loss as to what to do about this issue.

Recruitment And Selection

Two issues were identified. Firstly the difficulty of actually finding staff to hire and secondly the lack of training for managers in how to recruit and select staff. Consistent comments were made that it was very difficult to find motivated people with a strong work ethic who would ensure a plentiful supply of appropriate employees. Several managers had very clear strategies for finding and selecting staff.

There was consistent comment on the need to have quality induction processes to ensure new employees know what and how to do the job, to find the best fit of person to the job and to make employees feel valued.

Management Skills

Much comment was received from both employees and managers about the standard of managerial skill. The theme that emerged was a perceived lack of management ability in handling the people side of the business.

Report on the EXITO National Survey of the New Zealand Quarry Industry

There was support for recruiting managers who had moved away from traditional styles of management towards those who were skilled in managing people, not just the technical/commercial side of the business.

Succession Planning

This was one topic that received some very negative responses. Some respondents' experience was that succession planning was either non-existent or very haphazard. Many respondents said they had no opportunity to progress or to be promoted. This has been a source of rancour and disappointment and has affected employee morale and motivation. This was particularly noticeable in several companies where high proportions of employees felt they had never had the opportunity to take on greater responsibility.

Because of the lack of fast track promotion people reported they felt stuck in the job with little prospects and that this in turn contributed to a loss of confidence and diminishing motivation for the job.

Training Inequalities

None of the small companies surveyed (i.e. 1 – 5 staff) were participating in EXITO training. This is a concern as the number of quarries with 1 – 5 employees made up approximately 20% of our survey respondents. In these small companies there was support for the training of staff but the logistics of sending staff away for training were reported as insurmountable.

Repeatedly respondents regretted the demise of apprenticeships and felt that this system should be re-instigated for the benefit of companies, individuals and the industry as a whole.

Overall there was very strong support for EXITO training. Suggestions were made about the need to simplify training systems but most respondents were very satisfied with their ITO and the quality of the training it provides.

Summary

This report contains a number of questions based on the recommendations. It is expected that these questions will stimulate and direct the Board in their thinking, decision making and future planning. A majority of respondents strongly support the idea of enhanced marketing strategies being put in place to promote the industry and to resolve some of the issues it is facing.

There is wide variation between the way different quarry companies, their managers and staff have handled the issues confronting the quarry industry. The industry contains a number of individual quarry managers who have successfully confronted the challenging issues that face the industry. They have found creative and workable ways to solve these issues. These people will be a valuable resource for the Board as they move further into the 21st century.

Report on the EXITO National Survey of the New Zealand Quarry Industry

1. Introduction

During December 2002 and January and February 2003 the Extractive Industries Training Organisation national Quarry Industry survey was conducted throughout New Zealand. The purpose of the survey was to obtain data and information to facilitate future EXITO policy decision-making and enable accurate planning for the training needs of those people entering or involved in the New Zealand quarrying industry

Survey sites were chosen from a cross section of types of quarries that the Board had asked be reflected. They were:

- A large urban area
- Large corporate quarry in both North and South Island
- A mid-size private quarry
- A one-man operation
- A rural area
- A country town
- Survey 20 sites
- Survey both A and B grade sites
- Survey EXITO and non EXITO sites

A total of twenty-six sites were surveyed. Five sites were A and B grade sites. Nine sites were A grade sites only. Five sites were B grade sites only. Seven sites were surface permit only sites.

The survey traversed the regions Auckland, Waikato, Taranaki, Manawatu, Wanganui, Wellington, Nelson, Canterbury and Otago.

During discussions with quarry managers prior to the pre-test quarry managers voiced their concerns about illiterate or partially illiterate workers being involved in the survey. They did not want these staff to be embarrassed or put on the spot. As a result of these discussions we decided the person conducting the survey would offer a choice to respondents – people could either fill in the questionnaire themselves or the person conducting the survey could ask the questions and complete respondents' survey forms.

In practice this worked well – some people chose to quickly work through the form themselves and others had their smoko while the form was completed for them. In this way no one was put on the spot. It meant we unobtrusively gathered information from people with limited or no literary skills. Other respondents who could read and write were happy to have the form completed for them so they could eat during their smoko and return to work within the correct time frame.

Most respondents were very interested in the purpose of the survey and there was a great willingness to be involved. Only one small quarry site proved difficult to motivate people to complete the questionnaire – however this was managed.

Each participating quarry contact person has been thanked personally for their

Report on the EXITO National Survey of the New Zealand Quarry Industry

contribution to this work and all the quarry sites involved will receive a copy of the final project report after the Board meeting in April.

Grateful thanks and appreciation to all those involved in the survey –

- to the pre-test participants and their manager Alan McDowell at Fulton Hogan, Pound Road, Hornby - thank you for your helpful suggestions and responses
 - to the quarry managers and supervisors throughout the country who generously gave of their time and prepared their staff for the survey visit
 - to the 201 respondents who so willingly participated in the survey - thank you for providing your industry with important information for future planning needs.
 - to George Cunningham whose help in suggesting categories of jobs simplified the career paths section of the questionnaire.
-
-

1. Methodology

The EXITO Executive Director and Board directed the contractor to research specific information based on statistics required for Skill New Zealand and information needed for the future planning needs of the industry.

Firstly a draft questionnaire was designed and circulated to the EXITO Executive Director and industry experts for their comment. Amendments were then made based on their feedback.

Conducting The Pre-Test

Arrangements were then made to have the questionnaire pre-tested with a cross-section of quarry workers who fitted the profile of the final group to be surveyed.

Alan McDowell of Fulton Hogan, Canterbury agreed to us conducting a pre-test with his staff.

A short introduction outlining the purpose of the survey was given by the surveyor on site and face to face with the pre-test group. Participants' confidence was enlisted by providing information and answering their questions about the purpose of the survey. Minimal information was given about how to fill in the questionnaire, as we wanted to find out where any problem areas occurred. This meant that pre-test respondents completed the survey without any special instructions. Instead they were responding to the written text of the questionnaire, not to guidance from the surveyor.

The questionnaire was distributed, completed and collected immediately after

Report on the EXITO National Survey of the New Zealand Quarry Industry

completion.

Respondents were timed from start to finish. After completion they were asked for their reactions to the survey based on the following questions:

- *Was the survey clear and easy to understand?*
- *Were you comfortable answering the questions?*
- *How comfortable were you with the time it took to complete?*

The respondents' answers were recorded. The resulting data were then analysed to determine if it was the kind of information we wanted to receive. We considered:

- *Were there responses that should have been included but were not?*
- *Were some of the questions redundant?*
- *Were questions being answered with 'don't know'?*
- *Were there any questions that were too complicated?*
- *How long did it take respondents to complete the questionnaire?*

The main finding of the pre-test was the problematic question about the career paths that respondents had taken during their time in the industry. In the pre-test we asked respondents to identify all jobs they had done in quarrying and then to track their progress from job to job from the start of their quarrying career until the present time. We asked them to provide information about time spent in each separate job. This proved to be very problematic and complicated.

However some of the pre-test respondents came up with a very good solution to this problem. As a result this section of the questionnaire was substantially modified to take account of their very useful feedback and ideas for improvement.

Finally the survey was amended to take account of all the pre-test information. The final draft was circulated to the Executive Director and industry people to get their endorsement to go ahead.

A special thanks to Alan McDowell and the guys at the Fulton Hogan Pound Road site for their willingness to be involved the pre-testing of the questionnaire. We received some very thoughtful suggestions about how to improve the design of the questionnaire. Your comments were especially helpful in area of career paths and enabled us to design a questionnaire that people found easy to follow and use.

The Survey

Professional surveyers find an acceptable questionnaire response rate of fifty percent or higher difficult to achieve. Given this we decided to conduct the survey on site, on the spot and collect the questionnaires immediately after completion. By doing this we achieved a 100% yield and did away with the

Report on the EXITO National Survey of the New Zealand Quarry Industry

problem of non-response bias. Only 2 quarry workers initially protested about completing the survey – they were persuaded to respond once their resistance was managed.

The final survey involved 201 people – 186 men and 18 women. The gender and ethnicity statistics combine both men and women in a final statistic. For all other statistical breakdowns we have compiled separate statistics for men and women.

Response rate is the single most important indicator of how much confidence can be placed in the results of the survey. We surveyed just enough people to assure confidence in the results, but no more. We needed to survey 10% of the quarry worker population. According to EXITO data this meant we needed to survey 200 quarry workers.

The survey was conducted anonymously. Respondents were informed of the purpose of collecting the information (i.e. the questionnaire) and that the use and disclosure of the information would be limited to what is necessary to fulfill the survey purpose. We did not ask for peoples names – i.e. the survey responses cannot be used to identify an individual because no personal information has been used that would enable identification of the survey respondent.

This was a wise decision as it encouraged survey participants to be more open because their opinions and comments were not linked to them as individuals.

We have however coded the survey and identified with the use of a special code the type of quarry site. This special code does not identify any individuals but has enabled us to link survey data with different types of quarries so we can ascertain whether there are trends according to the type of quarry.

Each quarry site surveyed has been promised a copy of the completed project report.

Report on the EXITO National Survey of the New Zealand Quarry Industry

2. Results Of The Survey

The design and pre-testing of the questionnaire has made it easy for respondents to participate fully. There were very few questionnaires missing specific data. For instance occasionally some people felt uncomfortable about including their age. The response rate is outstanding in that we obtained a 100% return.

Demographic Data - New Zealand Quarry Industry

Total number of Quarries surveyed = 26

Number of North Island Quarries surveyed = 17

Number of South Island Quarries surveyed = 9

Age Distribution

Age	Male	Female
15 - 19	1.16%	
20 - 25	7.06%	11.11%
26 - 30	8.26%	
31 - 35	11.56%	5.55%
36 - 40	18.13%	27.79%
41 - 45	16.13%	22.23%
46 - 50	14.25%	11.11%
51 - 55	12.77%	11.11%
56 - 60	4.43%	5.55%
61 - 65	4.46%	5.55%
66 plus	1.79%	
Totals	183 men	18 women

Gender Distribution

Gender	Male	Female
Total Respondents – 201	91.05%	8.95%

Report on the EXITO National Survey of the New Zealand Quarry Industry

Ethnicity

	Male	Female
NZ European/Pakeha	63.44%	6.73%
NZ Maori	21.65%	2.37%
Other European	2.86%	
Samoan		
Cook Island Maori	.99%	
Tongan		
Niuean		
Tokelauan		
Fijian		
Other Pacific Island		
Indian	.49%	
South East Asian		
Other Asian		
Chinese		
Latin American/Hispanic		
African	.49%	
Middle Eastern		.49%
American	.49%	
Total respondents - 201		

The respondents consisted of 70.17% NZ European/Pakeha, 24.02% were NZ Maori with very small percentages coming from other ethnic groups.

Report on the EXITO National Survey of the New Zealand Quarry Industry

Hours Worked Per Week

Hours per week	Male	Female
Below 40	0.55%	11.77%
40 - 45	6.14%	52.94%
46 - 50	20.92%	11.77%
51 - 55	20.92%	17.64%
56 - 60	29.69%	0%
61 - 65	13.96%	5.88%
66 plus	7.82%	0%
Total respondents	183	18

Age When Started Working In The Quarry Industry

Age when started in industry	Male	Female
Below 15 years	2.73%	
15 - 17	6.24%	
18 - 20	19.57%	11.11%
21 - 25	24.49%	16.67%
26 - 30	12.47%	16.67%
31 - 35	13.56%	22.22%
36 - 40	6.29%	11.11%
41 - 45	5.73%	16.67%
46 - 50	5.11%	5.55%
51 - 55	2.18%	
56 - 60	1.09%	
61 - 65	0.54%	
Total	183	18

The largest proportion of men (almost 25%) enter the quarry industry between the ages of 21 to 25 years. The largest proportion of women (approximately 22%) enter the industry between the ages of 31 – 35 years.

Report on the EXITO National Survey of the New Zealand Quarry Industry

Total Time In The Quarry Industry

Time	Male	Female
0 – 1 year	10.23%	5.55%
1 – 2 years	8.53%	11.11%
2 – 3 years	5.69%	16.67%
3 – 4 years	3.98%	5.55%
4 - 5 years	5.12%	
6 – 10 years	19.89%	16.67%
11 – 15 years	13.64%	16.67%
16 – 20 years	10.22%	11.11%
21 – 25 years	9.65%	16.67%
26 – 30 years	6.25%	
31 – 35 years	3.97%	
36 – 40 years	2.27%	
41 – 45 years	0.56%	
Total	183	18

The highest proportions of men have spent 6 to 10 years in the industry (almost 20%) or 11 – 15 years in the industry (almost 14%). For women nearly 17% are recorded in each of the following time categories, 2 to 3 years - 6 to 10 years - 11 to 15 years - 21 – 25 years.

Relevant Experience Before Entering the Quarry Industry

Of all respondents 30% indicated they had relevant experience before entering the quarry industry - 70% said they had no relevant experience. The following table gives a breakdown of the type of experience:

Percentage	Type of Experience
30.0%	Truck driving
15%	Farm work
10%	Construction work
10%	Earthmoving work
5%	Mining
3%	Dad ran a quarry
Total 73%	
The other 27% of respondents did work which included:	
Cement works, Power projects work, Process work, Machine operator, Explosives factory technician, Military service, Mechanics, Ministry of Works, Landscape industry, Laboratory work environmental testing, Selling quarry equipment, Computing, Civil Engineering.	

Report on the EXITO National Survey of the New Zealand Quarry Industry

It was beyond our brief to survey whether prior experience makes a significant difference to the time workers take to get up to speed in their first quarry job.

Qualifications Gained Before Entering The Quarry Industry

17% of respondents had gained qualifications before entering the quarry industry - 83% had no qualifications before entering the industry. Of those who had a qualification before entering the industry:

Percentage	Type of Qualification
42%	Had a University Bachelor Degree including one Honours Degree and one Ph.D (Doctor of Philosophy)
48%	Had a trade qualification
8%	Had University Entrance or Bursary
2%	Had School Certificate only
Miscellaneous qualifications	Pitmans certificate, Automotive pre apprentice, Secretarial certificate

Licences Gained Before Entering The Quarry Industry

87% of respondents held some sort of vehicle licence before entering the industry. Of those:

Type of Licence	Percentage
Drivers licence	26%
Heavy trade	33%
Truck and trailer	18.5%
Wheels/rollers	7%
Wheels/rollers/ tracks	8%
Road machines	2%
Articulated	1%
Bobcat	.5%

Please note that some respondents indicated that:

- they had a licence but did not specify type of licence (these have not been included in the data)
- they had a heavy trade licence but did not include that they had a driver's licence.

One person had a flying licence. Several other people told the surveyor that they still don't hold a driver's licence.

Training Undertaken While Working In The Quarry Industry

The most common type of training undertaken in the quarry industry is on-the-job training where people learn alongside each other. Large quarry companies also provide company training and are involved in EXITO training. There was great variation in how employees perceived whether they were encouraged to do training or not.

The most common type of formal training respondents identified was First Aid and Fire Fighting training but EXITO records of assessments show the most common type of training done during the last year was industry specific unit standards. This reflects the difficulty respondents had in remembering the specific names of unit standards - First Aid and Fire Fighting were the easy ones to recall.

Number Of Quarry Companies Engaged In EXITO Training

▪ Companies with 1 – 5 employees

When conducting the survey employers in small quarries repeatedly explained the difficulty of giving staff time off to undergo training. Because of the small operation the whole quarry process slows or comes to a halt if one person is undertaking training. It is more difficult for a small quarry to hire casual staff to replace those attending training. As a result none of the small companies surveyed were participating in EXITO training. This is a concern as the number of quarries with 1 – 5 employees made up approximately 20% of our survey respondents.

One company in this category had staff involved in night class training.

▪ Companies with 6 - 9 employees

There are difficulties for companies of this size to provide time off for employees to undertake EXITO training. One company in this category was participating in EXITO training with approximately half of their staff. All the employees and the manager in another company in this category were adamant that they were actively discouraged from undertaking any training. They indicated that this seriously affected their motivation at work.

▪ Companies with 10 - 49 employees and Companies with 50+ employees

Sixty seven percent of companies surveyed made up this category. They were all involved in EXITO training. However a number of employees indicated that they had to work extremely hard to convince supervisors or managers to organise EXITO training for them. The obstacles they encountered in trying to become involved in EXITO training frustrated these people. The size of companies had a direct relationship as to whether respondents felt encouraged about growing their skills.

Qualifications, Skills Or Licences People Should Have Before Entering The Industry

This was the one question that a significant number of respondents did not answer. Of this group many people said they did not have the knowledge to comment.

The responses did clearly fall into the three following categories.

1. High Priority Prerequisites were:

- HT licence
- All licences
- Wheels, rollers, tracks
- Heavy machinery experience
- Mechanical knowledge and aptitude

2. Medium Priority Prerequisites were:

- Safety consciousness/awareness and Safety and First Aid training
- Motivated people who have the desire and ability to learn, who possess common sense and enthusiasm, who have a good work ethic and who can think on their feet and think ahead
- People skills including good communication and listening skills
- Loader licence
- Drivers licence
- Welding experience

3. Lower Priority Prerequisites were:

- Understanding of what materials are used for - product knowledge
- Mining process degree for managers
- Basic hand tool skills
- School Certificate English and Maths
- Not afraid of heights and big machinery
- Dangerous goods blasting
- Managers – to have business, accounting, asset and cost management skills
- Excavator licence

One person made the comment that - *“Working in a roading laboratory before doing quarry administration work was invaluable. I know what products are what, how they are used, rock types and their differences and how to help customers find the best product for their job.”*

A small proportion of respondents felt that no prior qualifications, skills or licences were necessary as *“all people are trainable.”*

Report on the EXITO National Survey of the New Zealand Quarry Industry

Are There ‘Ready Replacements ‘Within Your Company If Your Job Becomes Vacant?’

Nearly everyone felt that there was always someone to take over another’s role if that person was absent from the work place. If particular jobs became vacant usually someone would be moved into that position from within the company and another person would be recruited externally into a more junior position. In this way people within quarry companies learn a wide range of quarry worker roles.

Some people felt that ‘succession planning’ was not happening in a planned and organised way – they said it was rather haphazard and felt this approach was discouraging needed to change.

Are You Encouraged To Take On-Site, Supervisory Or Management Roles?

Of the 201 respondents 49% have been encouraged to take on on-site, supervisory or management roles. A small percentage of the respondents had come into quarry work at the management level, however most respondents had worked their way up to take on responsibility for staff or equipment/machinery.

The 52% of respondents who had not taken any on-site, supervisory or management roles were sometimes very critical of this.

Number Of Quarry Companies You Have Been Employed In

Of the 201 respondents 58% had only worked in one quarry company. The other 42% had worked in an average of 2.5 companies each.

Staff Turnover

This question proved difficult for many managers to answer with surety. Consequently approximately 50% of quarry managers were able to make a response. Three companies had a high staff turnover (for the quarry industry) – from 15% to 30% annually. The rest of the responses fell into 3 categories:

- Two companies had nil annual staff turnover and described themselves as ‘very stable.’
- Four big companies and two small companies reported a 5% annual staff turnover.
- Two companies reported an extremely low annual staff turnover rate of 1%.

Job Areas Needing More Skilled Workers

Generally the answers to this question were very consistent. A large proportion of respondents answered ‘all areas.’ In breaking this down most respondents indicated the jobs needing more skilled workers were concentrated in four main areas. These were:

- Plant operators, Loader drivers, Machine operators and Maintenance. These were

Report on the EXITO National Survey of the New Zealand Quarry Industry

also the job areas respondents identified as *most urgently* needing skilled workers.

Crushing operators and Face team workers were the next priority, followed by Fitting and Drilling and Blasting and Engineering. Also at this level managers' skills were identified for improvement in the areas of:

- Managers with good people skills
- Managers who have been hands on
- Managers who understand about stress and how it affects workers
- Management knowledge of how to run a business
- Financial skills for managers

Respondents also outlined competencies requiring greater skill levels. These included:

- Team leadership skills
- Beginning level skills
- Health and safety
- Environmental skills
- Geology
- Community
- Supervisory skills
- People who respect gear
- Technical skills to undertake ground testing

Small numbers of respondents wanted more skilled workers in:

- Rigging
- Welding
- Trades
- Mechanics
- Mobile plant operators
- Truck driving
- Process workers
- Trained foremen

Managers And Supervisors' Responses On:

How To Attract Younger People Into The Industry

A great variety of ideas emerged from this question and managers were especially interested in giving their ideas on this topic. All agreed it was a difficult and vexed area. There was very high agreement that paying people more attractive wages would help.

There was also common agreement that the industry had to improve the way it marketed itself as most people knew very little about what the industry was about and what it had to offer. Suggestions included:

Report on the EXITO National Survey of the New Zealand Quarry Industry

Marketing

- *Hire marketers who know how to do this*
- *Constantly promote and make the industry attractive*
- *Urgently sell the industry*
- *Develop a programme for schools with the video*
- *Get children at primary and secondary level to visit quarries*
- *Promote at school level – school visits to sites, polytechnic and university visits to sites*
- *Educate more in Polytechnics*
- *Marketing needs a damn good rev up!*
- *Explain the importance of the quarry industry*
- *Higher profile – need to show people the opportunity*
- *Strategic need of industry to be more commonly understood*
- *Encourage high profile of company to the public*
- *Employ students during the holidays*
- *Identify quarrying as an industry that all people in all walks of life require*
- *Show that minerals and aggregates extracted are used by everyone every day*
- *Promote outdoor work*
- *Promote the green effect – working with the environment*
- *Sell the job as a modern industry – work on image*
- *Highlight training and formal qualifications that can be acquired*
- *Promote the team environment*
- *Offer our industry, because it does not require extreme academic achievement, to those that perhaps do not wish to further their education to tertiary levels – however basic skills are needed e.g. communication skills*

Pay And Conditions

All the comments regarding paying higher wages have not been included. This is emphasised in the introduction in this section.

- *What you know and practical experience is more important than qualifications*
- *Target women so that we double our intake*
- *Have good company benefits*
- *Offer good conditions*
- *Offer superannuation, medical and company shares – we have low staff turnover because we do this*
- *It is an unsociable job as people have to work long hours to make decent money – something needs to be done about this to attract people in*
- *Long hours mean that many marriages break up in this industry*
- *Use IoQ – get young people to join up and have a say in the industry*
- *Reward skill level*

Careers and Training

- *Create a set of career paths with different levels within the industry i.e. technical, quarrymen, management, quality control etc. We are starved of people who can do everything*
- *Offer a career and a challenging role*
- *Have very good training programmes*
- *Keep the present training system going*
- *Have all parts of the industry promote training*
- *Teaching and training in all aspects of quarrying*
- *Provide more money for scholarships*
- *Have schools encourage young people to look at this industry as a good option*
- *An apprenticeship for 5 years in quarrying*
- *Apprenticeships*
- *Offer a training scheme through schools and institutions*
- *Establish real roles in the industry – not just introductory, intermediate and supervisory – we lump things into categories which don't accurately reflect peoples jobs*
- *Need more flexibility for training for real roles*
- *Get people involved right at the start of their career in EXITO training*
- *Encourage young people to grow their skills and try things out*
- *Give young people the opportunity*
- *Train young people up before we lose older people's knowledge*
- *Let young people operate big machinery and see the attraction in it*

Recruitment

- *Advertise – identify potential prospects for employment*
- *Use word of mouth to attract people in*
- *Too many older workers are kept on and there are no ready replacements*
- *Talk to staff to see if they know anyone looking for a job*
- *Recruit people who want to work and who are willing to learn*

Induction Of Young People

- *Get young people working on mobile crushers*
- *Make the work interesting*
- *Target the right people*
- *Bring them in as loader drivers*
- *Recognise potential early and encourage people to go further*
- *Create a good team spirit*
- *Respect and look after staff*
- *Provide vacation work for kids of staff members*
- *Present staff children with holiday work*
- *Give new workers a variety of jobs when they start, to find out where they will fit*

Report on the EXITO National Survey of the New Zealand Quarry Industry

Career Paths

Part of the purpose of the survey was to establish:

- whether there were patterns and similarities in the range and sequence of jobs taken during a career in quarrying
- the length of time spent in each job role

The section of the questionnaire dealing with career paths was heavily amended after pre-testing to make the completion of this section simpler. This proved to be the most challenging aspect of the questionnaire for both the questionnaire designer and respondents. Many respondents had been in the industry for considerable lengths of time - this meant that it was difficult for people to recall the order of jobs worked in the industry and the length of time spent in each job. As well many of the roles people took on were done concurrently. A linear career path, where one job is done and is a precursor to the next, is not a common feature of the quarry industry. People are more likely to be working in several different roles at once.

Categories of Quarry Work

Because of the multiplicity of jobs and the need for simplicity, they were divided into the following nine categories.

1. Quarry Face = getting the material – the resource winning area
2. Processing = crushing, screening, reducing stone
3. Stock yard = stockpiling
4. Production maintenance/repairs = changing screens, adjusting crushers, repairing/adjusting conveyors etc.
5. Administration/support
6. Technical
7. Qualified – Mechanic, Fitter or Welder
8. Supervisor
9. Manager

The standard questionnaire was given to all employees who were not supervisors or managers. Supervisors and managers had an additional 2 pages of questions.

Report on the EXITO National Survey of the New Zealand Quarry Industry

Career Paths – Managers And Supervisors

Entry Into The Industry

Entry Point	Percentage
1. Quarry face	39%
2. Qualified Tradespeople	23%
3. Processing	20%
4. Concurrent Quarry face Processing Stockyard Production	6%
5. Administration	6%
6. Technical	6%

1. Career Path - Managers/Supervisors Entering the Industry At The Quarry Face

For those supervisors/managers that began their career at the quarry face

- 68% of them went on to concurrently work in processing, production and stockyard work
- 8% went on to work in processing and stockyard work
- 8% went on to work in processing only
- 8% went on to work in production only
- 8% moved from quarry face work to become a supervisor

The next job:

42% moved on to work concurrently as administrators and technicians

17% moved on to work as administrators

17% moved on to work as technicians

8% moved into management

8% went to a supervisory position and then to management

8% went on to a supervisory position

The final job move (for those above who had not become supervisors or managers) was to take on either a supervisory or management position.

Report on the EXITO National Survey of the New Zealand Quarry Industry

The average length of time taken for employees entering at the Quarry Face to become supervisors was 14 years and managers 19 years.

2. Career Path - Managers/Supervisors Entering the Industry As Qualified Tradespeople

75% of this group were qualified Fitter and Turners
12.5% were qualified as both Mechanic and Fitter and Turner
12.5% were qualified as Mechanics

The next job:

62.5% went on to concurrently work in processing, production and stockyard
25% became supervisors
12.5% went on to concurrently work in processing and technical

The next job:

17% became managers
17% became supervisors
66% became supervisors then managers

The average length of time for employees entering the industry as tradespeople to become supervisors was 10 years and managers 15 years.

3. Career Path - Managers/Supervisors Entering the Industry In Processing

43% of them went on to concurrently work in processing, production and stockyard work
29% became supervisors then managers
14% moved to stockyard work, then into a supervisory position, then administration and finally management
14% moved into quarry face work, then production, mechanic work and finally supervisory positions

The average length of time for employees entering the industry in processing to become supervisors was 11 years and managers 13 years.

4. Career Path - Managers/Supervisors Entering the Industry in Concurrent Quarry Face, Processing, Production and Stockyard Work

One person moved from this role after 21 years, then to administration for 3 years and then became a supervisor.

One person moved from this role after 18 years to become a supervisor.

The average length of time for these people to become supervisors was 19.5 years.

Report on the EXITO National Survey of the New Zealand Quarry Industry

5. Career Path - Managers/Supervisors Entering the Industry As Administrators

One person in this category moved on from administration to production, processing and stockyard work then became a supervisor and later a manager. The other person in this category moved from administration into a supervisory position.

The average length of time for employees entering the industry as administrators to become supervisors was 5.5 years and managers 10 years.

6. Career Path - Managers/Supervisors Entering the Industry As Technicians

Only one person started as a technician and was in this role for 10 years then became a manager.

One person started with a tertiary qualification and worked as a technician for 3 years then moved into a management role.

Entry Point	Time Taken To Become Supervisor	Time Taken To Become Manager
1. Quarry face	14 years	19 years
2. Qualified Tradespeople	10 years	15 years
3. Processing	11 years	13 years
4. Concurrent Quarry face/ Processing/ Stockyard/ Production	19.5 years	No data for this category
5. Administration	5.5 years	10 years
6. Technical	No data for this category	6.5 years

The fastest route to a supervisory position was to enter the industry as an administrator. The fastest route to a management position was to enter the industry as technician.

The Manager's Journey

Twenty eight managers were asked if they worked their way up to management from the 'coal face' or got a management qualification and began their quarry work as a manager.

Report on the EXITO National Survey of the New Zealand Quarry Industry

Twenty-five respondents worked their way up to management from the coalface. Three respondents began work in quarrying with tertiary qualifications but all had to spend time in 'coalface' positions before they gained a management position. For one of these managers that time was spent in a consulting position before becoming a quarry manager. It was noticeable that no supervisors or managers surveyed were women.

Report on the EXITO National Survey of the New Zealand Quarry Industry

Career Paths Of Quarry Workers

Category of Work	Percentage of Workers in this Job	Average Time in the Job	Range - Time Spent in the Job
Concurrent Quarry Face Processing Stockyard Production	25%	12 years	15 months to 32 years
Concurrent Quarry Face Processing Stockyard	10%	8.25 years	3 months to 29 years
Concurrent Quarry Face Processing	8%	4.75 years	2 weeks to 17 years
Administration	8%	9 years	1 year to 22 years
Quarry Face	8%	7 years	2 weeks to 25 years
Concurrent Processing Stockyard Production	5%	4 years	1.5 years to 6 years
Processing	5%	6 years	6 weeks to 26 years
Concurrent Quarry Face Processing Stockyard Production Administration	4%	19 years	11.5 years to 31 years
Concurrent Administration Technical	3%	5 years	1 year to 8.5 years

Report on the EXITO National Survey of the New Zealand Quarry Industry

Career Paths Of Quarry Workers continued

Category of Work	Percentage of Workers in this Job	Average Time in the Job	Range – Time Spent in the Job
Concurrent Quarry Face Stockyard	3%	10 years	2 years to 15 years
Stockyard	2%	1 year	8 months to 2 years
Concurrent Processing Stockyard	2%	5 years	1.5 years to 8 years
Production	2%	9 years	10 year to 17 years
Technician	2 %	9 years	1 year to 22 years
Qualified Welder	2%	9 years	2 years to 18.5 years
Concurrent Qualified Fitter Welder Quarry Face Processing Stockyard Production	2%	22 years	20 years to 25 years
Concurrent Stockyard Administration	1%	3 years	2 years to 4 years
Concurrent Quarry Face Processing Production	1%	8.5 years	15 months to 13 years
Concurrent Processing Stockyard Production Administration	1%	16 years	8.5 years to 24 years

Report on the EXITO National Survey of the New Zealand Quarry Industry

Career Paths Of Quarry Workers continued

Category of Work	Percentage of Workers in this Job	Average Time in the Job	Range - Time Spent in the Job
Qualified Mechanic	.75%	1 year	N/A
Concurrent Quarry Face Production	.75%	10 years	N/A
Concurrent Quarry Face Technician	.75%	9 years	N/A
Concurrent Qualified Tradesperson Processing Stockyard Production	.75%	6.5 years	N/A
Qualified Fitter Welder Stockyard	.75%	6 years	N/A
Concurrent Stockyard Production	.75%	14 years	N/A
Concurrent Qualified Fitter Welder Processing	.75%	22 years	N/A
Concurrent Quarry Face Administration	.75%	10years	N/A

Career Paths - Quarry Workers

The combinations of roles which quarry workers take on is extremely varied and for this reason it is not possible to demonstrate a common path which most workers are likely to take.

However one quarter of all quarry workers work concurrently in the roles of Quarry Face, Processing, Stockyard and Production work. The average time spent in this role is 12 years but approximately 25% of these people work in this role for the greater part of their quarry work life (i.e. from 20 to 32 years)

The next most common role (10% of workers) is working concurrently in Quarry Face, Processing, and Stockyard. Workers spent on average 8.25 years in this role. Again a significant percentage of workers remain in this role only.

Administration workers make up 8% of those surveyed and the average length of time in the job is 9 years. However some administration workers remain in the role for over 20 years.

An unusual feature is that 8% of workers work only in the Quarry Face role and many of those people do this work for very extended periods – up to 25 years.

A third of all workers work in the following roles:

- Concurrent Processing, Stockyard, Production
- Processing
- Stockyard
- Concurrent Quarry Face, Processing, Stockyard, Production and Administration
- Concurrent Administration and Technical
- Concurrent Quarry Face, Stockyard
- Concurrent Processing, Stockyard
- Qualified Fitter Welder, Quarry Face, Processing, Stockyard, Production
- Production
- Technician
- Welders

There are a number of combinations of roles that are rare. These are:

- Concurrent Quarry Face, Production
- Concurrent Quarry Face, Technician
- Concurrent Qualified Tradesperson, Processing, Stockyard, Production
- Qualified Fitter Welder, Stockyard
- Concurrent Stockyard, Production
- Concurrent Qualified Fitter Welder, Processing
- Concurrent Quarry Face, Administration

Most smaller quarries require their workers to be multi skilled. This gives the quarry

Report on the EXITO National Survey of the New Zealand Quarry Industry

flexibility. This variety of roles employees can take on was seen as positive. Opportunity to take on a variety of roles also occurs in larger quarries. Many respondents said that some roles can be very repetitious and boring and they were appreciative of the fact that some managers organise work so that interest in the job is maintained.

However there is evidence of a considerable proportion of workers taking on one role only for many years.

5. Recommendations

While on site to conduct the survey, managers and workers actively engaged in in-depth conversations about their work. This meant a lot of information was gathered which was not part of the questionnaire but which was germane to it. Following are the list of issues and concerns that have been highlighted and which are relevant to the future planning needs of the Quarry Industry. Respondent comments taken from questionnaires are italicised and have been included towards the end of this section.

North and South Island Differences

The range of issues being experienced is similar for both North and South Island quarries. However there are two factors to note. Firstly more Maori were employed in quarries in the North Island and secondly women were employed in non-traditional quarry jobs only in the North Island (i.e. women were employed as quarry workers.)

It follows that more Maori would be employed in North Island quarries because of the greater Maori population.

Question to ask:

“What can be learned from North Island companies employing women in non-traditional work for women?”

Encouraging women into non-traditional quarry workers jobs could be one way to reduce recruitment difficulties. There is also a range of reported benefits for any workforce that moves from a single gender population to a mixed gender population.

Pay Rates and Conditions

There is very considerable concern amongst staff that industry pay rates are perceived as poor. Employees reported that it is only by working long hours that they can take home an adequate income. The long hours take their toll in broken marriages/relationships and worker stress. Some respondents reported that couple relationships are very likely to end in divorce if one works in quarrying – they thought much more so than in other jobs. This is anecdotal comment and was not part of the survey brief.

Approximately 21% of people are working up to 55 hours per week, 30% up to 60 hours, 14% up to 65 hours and 8% over 66 hours and often up to 70 hours. A total of 73% of employees are working 15 to 30 hours above the 40-hour week.

There are wide differences between companies in terms of job conditions and staff welfare. It was noticeable that 4 companies especially stood out. They had a very positive climate, were committed to providing good equipment and machinery and provided a wide range of staff benefits. Employees from these companies were

Report on the EXITO National Survey of the New Zealand Quarry Industry

especially interested in the purpose of the survey, they had been very fully briefed, gave detailed explanations, offered lots of additional information and were passionate about their jobs and the industry. In discussing the survey with the managers of these companies they all reported the importance of:

- providing clean and safe working environments
- supplying modern equipment and machinery (managers reported that poor equipment and resulting breakdowns are de-motivating and costly)
- capital investment as a priority
- providing a range of staff benefits
- robust selection and recruitment practices
- appropriate people management skills
- attending to workers' motivation and energy levels

These companies received very positive and complimentary comments from their employees and noticeably turnover levels were low and when they did recruit they did not have a problem finding good staff.

Question to ask:

“What is it that these companies/managers are doing that contributes to a contented and motivated workforce?”

The Aging Work Force

This factor is a major issue for most people in the industry. Approximately 53% of the population were over 40 years old. A substantial number of companies had a predominance of employees in this older age group. Many respondents indicated that improving pay rates would help attract younger people into the industry. Others felt at a loss as to what to do about this issue.

Question to ask:

“What is it that that has contributed to a large proportion of aging workers in our industry and given this what do we need to do to ensure we have enough younger people entering the industry?”

To attract younger people into the industry managers and supervisors highlighted the importance of higher wages and enhanced industry marketing and promotion strategies.

It is important to note that surveys show that older workers have many advantages for companies – they have a greater depth of experience and skill, they are more reliable,

Report on the EXITO National Survey of the New Zealand Quarry Industry

take less time off sick, have less absenteeism etc.

Another barrier to young people entering the industry was the combined effect of the cost of licences and low wages. Many respondents said that license cost had now become exorbitant and that young people could not hope to carry the cost of licences on the wages received. The issue of attracting young people into the industry is closely linked to the next section and is expanded on there.

Recruitment And Selection

Two issues were identified. Firstly the difficulty of actually finding staff to hire and secondly the lack of training for managers in how to recruit and select staff.

Finding staff is a vexed question for many managers. Consistent comments were made that it was very difficult to find motivated people with a strong work ethic who would ensure a plentiful supply of appropriate employees. Some reported that because of the shortage of staff they would take on any one who applied for a job – sometimes they would do without staff because they literally could not find anyone but said this put pressure on other staff and caused further problems. Several managers had very clear strategies for finding and selecting staff. These included:

- advertising to identify potential prospects for employment
- using word of mouth among colleagues to attract people in (informal reference checks are also made in this way)
- ensuring good succession planning practices
- letting staff know there are vacancies to be filled – getting staff to tell their friends and family about vacancies
- getting employees' children to visit the quarry to spark their interest in the work
- organising quarry visits with schools

Once young people have been recruited there was consistent comment on the need to have quality induction processes to ensure new employees know what and how to do the job, to find the best fit of person to the job and to make employees feel valued.

Questions to ask:

“What additional methods could be used to ensure a greater catch of potential job candidates?”

“What sources of potential employees are we ignoring?”

“How could more women and Maori be recruited?”

“What type of induction procedures ensure the best outcome for the new employee and the company?”

Report on the EXITO National Survey of the New Zealand Quarry Industry

Many supervisors and managers reported they had never had any training in recruiting and selecting staff and hence were not adequately prepared for this role. Consequently they reported that this task is often problematic – staff can be selected who leave within a very short time, other staff stay but do not prove to be adequate or suitable workers. The lack of training in recruitment and selection is commonplace in many industries but it is something that is relatively easy to resolve. Provision of a structured interview process could include:

- preparation required prior to the interview (i.e. conducting a job analysis and identifying the competencies required – both technical, interpersonal and team work skills)
- preparing criteria for shortlisting if this is appropriate
- preparing for the interview, designing the right questions and deciding the selection criteria
- conducting the interview which is focused on the competencies required and identifying any ‘red flags’
- assigning ratings and interpreting the interview data
- after the interview – conducting reference checks
- assigning final ratings
- making final decision to hire or not
- identifying the type of induction that will be needed

Question to ask:

“What could be done to improve recruitment and selection knowledge and skills for managers in the Quarry Industry?”

Career Paths

Quarry workers take on a wide variety of work roles and for this reason it is not possible to demonstrate a common path which all workers progress along. Respondents are interested in having more involvement in how their careers progress. There were many instances where individuals indicated their commitment to the industry and their desire to progress and learn. Respondents enjoyed the opportunity to talk about their work and had many ideas about how career paths in the industry could be enhanced.

Currently the fastest route to a supervisory position is to enter the industry as an administrator. The fastest route to a management position is to enter the industry as technician. This is problematic for the majority of employees who enter at the coalface. At the moment this group of employees is restricted in moving into positions of responsibility within relatively short time frames.

All managers surveyed entered at the ‘coalface’ before they moved on to take up positions of responsibility. This was the case whether they possessed tertiary qualifications or not.

Questions to ask:

“How do managers decide what workers aptitudes and preferences are when they enter the industry?”

‘How are aptitude and preference re-evaluated during an employees working life to ensure the worker is productive and motivated?’

“How are decisions made about whether a person stays in one role only or is moved on to learn new skills?”

“What information could managers give prospective workers on the criteria they use to place workers in roles, so that prospective workers have a better knowledge of the work they would be involved in?”

“What might be the benefits of a ‘think tank’ approach to help the industry develop further strategies for satisfying career paths for employees?”

Management Skills

Much comment was received from both employees and managers about the standard of managerial skill. Respondents’ preference was to tell rather than include written feedback on this topic. The theme that emerged was a perceived lack of management ability in handling the people side of the business. The core issues where respondents wanted to see an improvement were:

- ability to understand the contributors to stress on the job
- ability to understand the impact of stress (both on and off the job) and its relationship to employee motivation and output
- ability to listen effectively and communicate clearly and constructively
- ability to understand how lack of training contributes to job dissatisfaction
- skills in developing staff

Respondents also indicated their dissatisfaction with companies/managers who did not actively encourage skill building and training among their employees.

In the past leaders have been seen as aggressive, forceful, competitive, self confident, independent and achievement oriented. Research has found little support for these traits in distinguishing effective from ineffective leaders. No evidence can be found which links aggressiveness to management skills such as tackling challenging projects, setting realistic goals, organising or motivating. There are many other important variables which influence a manager’s long-term success, including the type of tasks performed, the nature of the business, experience and attitude and the ability managers have to learn new skills in new situations.

There was support for recruiting managers who had moved away from traditional styles

Report on the EXITO National Survey of the New Zealand Quarry Industry

of management towards those who were skilled in managing people, not just the technical/commercial side of the business. Respondents indicated that improving one's competence is critical to the success of any manager.

Questions to ask:

“What do quarry managers need, to stay knowledgeable and up to date in their field? Consider professional/technical skills, generic management skills and people skills.

“How can managers be helped to take charge of their own training and development?”

“What are the management training priorities for quarry managers?”

“What type of training and development will be most effective – formal qualifications, on-the-job training, secondments, individual coaching or mentoring?”

Succession Planning

This was one topic that received some very negative responses. Most respondents agreed that if someone was absent there was usually someone who could take over that person's role. Some respondents' experience was that succession planning was either non-existent or very haphazard. Many respondents said they had no opportunity to progress or to be promoted. This has been a source of rancour and disappointment and has affected employee morale and motivation. This was particularly noticeable in several companies where high proportions of employees felt they had never had the opportunity to take on greater responsibility.

On average it took 14 years for employees starting at the coalface to become appointed to a supervisory position and 19 years to become appointed to a manager's position. The biggest proportion of employees start in their work at the coalface.

Because of the lack of fast track promotion people reported they felt stuck in the job with little prospects and that this in turn contributed to a loss of confidence and diminishing motivation for the job.

Questions to ask:

“What models of successful succession planning could be shared among the industry?”

“How could employees have the opportunity to take on greater responsibility?”

“How could the length of time taken to achieve responsible positions be reduced?”

“Given that the fastest route to supervisory or management positions is to enter the industry as an administrator or technician how can the industry reduce the length of time taken for people ‘at the coalface’ to achieve positions of responsibility?”

Training Inequalities

Small quarries identified they can't afford to participate in training. None of the companies with 1 to 5 employees were participating in EXITO training. There was support for the training of staff but the logistics of sending staff away for training were reported as insurmountable.

Repeatedly respondents regretted the demise of apprenticeships and felt that this system should be re-instigated for the benefit of companies, individuals and the industry as a whole.

Overall there was very strong support for EXITO training. Suggestions were made about the need to simplify training systems but most respondents were very satisfied with their ITO and the quality of the training it provides.

Questions to ask:

“What factors need to be in place to enable small companies to take advantage of training being offered?”

“How could these factors be realised?”

“How could an improved apprenticeship system positively support the quality of learning on the job?”

“What could be done to sell the importance of training to those who do not yet understand its benefits?”

Marketing

A majority of respondents overwhelming support the idea of enhanced marketing strategies being put in place to promote the industry and to resolve some of the issues it is facing. Their ideas are outlined below.

Managers And Supervisors Ideas and Recommendations On Where EXITO Training Should Be By The Year 2010

Some of the answers included here more rightly belong in the previous section. However The answers give a good indication of the expectations industry managers have of EXITO at present and by the year 2010.

- *EXITO needs to be promoting the industry and encouraging companies to commit to much safer working conditions.*
- *EXITO pathways need to be easier to understand*
- *Small quarries need to have training on site to make sure employees can participate in training*
- *More EXITO staff visiting sites more regularly to organise training and visit the people doing the training and talk to them face to face (not second hand) and answer questions and come to staff meetings*
- *Continue to build on the good work they are doing*
- *Further research to assist in industry growth (i.e. people)*
- *Develop on-going refresher type training whereby credits and subsidies can be gained*
- *Possible mining school in New Zealand*
- *Licences are a barrier to employment if employees have to pay personally especially with the level of wages paid*
- *Maintain top level recognition as top level ITO*
- *Provide wider range of industry related training*
- *Upskilling and refresher courses for the existing industry*
- *You are on the right track*
- *Provide apprenticeships*
- *Continue with providing training*
- *Give up and revert to the old system because traditionally guys leave school young and can't be bothered with EXITO – it is also very expensive – EXITO system is protracted, the hours are so long and after a long day people don't want to study at night*
- *Work with schools to sell our industry as an option for a career*
- *Simplify training systems*
- *Poor industry image – promote it at school level - need for the industry to be common knowledge*
- *Folder puts people off*
- *Keep in touch with EXITO trainees*
- *Bring in and skill train people from schools*
- *Less state interference and political correctness*
- *Promote training and fund more scholarships*

Report on the EXITO National Survey of the New Zealand Quarry Industry

- *For practical training encourage firms to exchange employees e.g. hard rock to grave operations etc. to give more practical experience – promote further environmental encouragement*
 - *Encourage more young people into quarrying*
 - *Training to be done by people in the industry*
 - *More training throughout the whole industry*
 - *Organise more practical training by the industry including a classroom like Goughs for 3 or 4 week course for people of all ages*
 - *Promote a higher profile of the industry and its importance to New Zealand*
 - *Train more people working in the industry to get qualifications*
 - *Get more upmarket and make quarries cleaner and less noisy*
 - *Encourage young people to gain qualifications within the industry*
 - *Have everything in place and running smoothly*
 - *Continue to improve training and qualifications for people to strive for*
 - *Need for technicians certificates i.e. civil engineering, quality control and management – need more flexibility for training for real roles*
 - *Another ITO has a good workbook where you work through it and tick boxes and it gets signed off - EXITO has to have a training provider to run the course*
 - *EXITO folders are too complicated – need to streamline them*
 - *Provide specialised resource management training*
 - *Advertise what the quarry industry does*
 - *Make training easier to follow*
 - *Make training documents simpler*
-

6. Distribution Of Results

The results of the survey will be distributed to all EXITO staff and Board members.

Each quarry manager who volunteered to be part of the survey has been promised a copy of the final project report. There may also be other interest groups that might share a curiosity about the outcomes of the project.

7. Appendix: The Questionnaire

EXITO (The Extractive Industries Training Organisation) has developed this questionnaire to gather information about the quarry industry. Your answers will help us to develop and target our services, and understand how to provide the kind of training that you feel the industry really needs.

Thank you very much for taking part in this survey. We really appreciate your help.

Report on the EXITO National Survey of the New Zealand Quarry Industry

Name of Company: _____

Your Age: _____

Ethnicity: (mark one box)

NZ European/Pakeha

NZ Maori

Other European

Samoan

Cook Island Maori

Tongan

Niuean

Tokelauan

Fijian

Other Pacific Island

Indian

South East Asian

Other Asian

Chinese

Latin American/Hispanic

African

Middle Eastern

Male

Female

Report on the EXITO National Survey of the New Zealand Quarry Industry

1. What is your current job title? _____

2. How many hours do you work per week? _____

3. How old were you when you started working in quarrying? _____

4. Did you have 'relevant' quarry experience before you started working in quarrying?
If yes – what experience? _____

5. What qualifications or licences did you have before you started working in quarrying?

6. Have you had any training while you have been working in the quarry industry? If so, what training? _____

We would like to get an idea of how your career has developed. What has been your pathway through the industry? Below there is a list of jobs in the industry. We have put them into 9 different categories.

Categories of Quarry Work

2. Quarry Face = getting the material – the resource winning area
2. Processing = crushing, screening, reducing stone
4. Stock yard = stockpiling
4. Production maintenance/repairs = changing screens, adjusting crushers, repairing/adjusting conveyors
5. Administration/support
8. Technical
7. Qualified – mechanic, fitter or welder
8. Supervisor
9. Manager

Report on the EXITO National Survey of the New Zealand Quarry Industry

Below show us the pathway you have taken with your quarry jobs from your first job until now. Please write the order you did each job inside the boxes in the left column.

Years spent in each category of job →	1	2	3	4	5	6	7	8	9	10	Other amount
Number the order in which you did the jobs in the boxes below – number 1 being your first job ↓											
Quarry face <input style="width: 50px; height: 20px;" type="text"/>											
Processing <input style="width: 50px; height: 20px;" type="text"/>											
Stock yard <input style="width: 50px; height: 20px;" type="text"/>											
Production maintenance/repairs <input style="width: 50px; height: 20px;" type="text"/>											
Administration Support <input style="width: 50px; height: 20px;" type="text"/>											
Technical <input style="width: 50px; height: 20px;" type="text"/>											
Qualified <ul style="list-style-type: none"> ▪ Mechanic ▪ Fitter ▪ Welder (tick which ones apply) <input style="width: 50px; height: 20px;" type="text"/>											
Supervisor <input style="width: 50px; height: 20px;" type="text"/>											
Manager <input style="width: 50px; height: 20px;" type="text"/>											

Report on the EXITO National Survey of the New Zealand Quarry Industry

The following questions were given to supervisors and managers only.

7. Give your total time in the quarry industry: _____

8. Have you worked in more than one quarry company? _____
If yes – how many? _____

9. Have you been encouraged to take on site responsibility or supervisory or
management roles? _____
If yes – what? _____

10. Are you encouraged to grow your skills? _____
If yes – how? _____

11. What areas of quarrying do you think need more skilled workers? _____

12. In your opinion what is the **one** area that most urgently needs more skilled workers? _____

13. When a staff member changes to another job in your quarry is there a 'ready
replacement' for that position that the company has trained up? _____

14. What skills, subjects or licences are desirable for someone entering the industry? _____

Report on the EXITO National Survey of the New Zealand Quarry Industry

15. If you are a manager did you work your way up to management from the 'coal face' or did you get a management qualification and start quarry work as a manager? _____

16. Do you have to recruit externally? _____
If yes – for what proportion of staff? _____

17. Total number of extractive staff in this quarry? _____

18. Total number of supervisory positions in this quarry? _____

19. Total number of administration and support positions in this quarry? _____

20. Total number of management positions in this quarry? _____

21. What is the average age of your workers? _____

22. What are your own ideas for attracting younger people into the industry? _____

23. Does your company encourage people into the industry? _____

If yes – how? _____

24. By 2010 what does EXITO industry training and skills development need to be doing? Please comment. _____
