

**THE CHALLENGE OF EDUCATIONAL
DISADVANTAGE IN A KNOWLEDGE ECONOMY – A
CASE STUDY OF WATERFORD CRYSTAL LTD
1990-2006.**

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Appendices

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Table Of Contents

APPENDIX A: RESEARCH PHASE 3 - INTERVIEW QUESTIONS	1
APPENDIX B: PROFILES IN ADAPTATION TO CHANGE THROUGH EDUCATION.....	2
APPENDIX C: HISTORY OF WATERFORD CRYSTAL	326
APPENDIX D: GLOSSARY OF TERMS.....	339
APPENDIX E- RAW DATA FROM RESEARCH PHASE 1.....	344
APPENDIX F: RAW DATA FROM RESEARCH PHASE 2	356
APPENDIX G: RAW DATA FROM RESEARCH PHASE 4.	389
APPENDIX H: NATIONAL COLLEGE OF IRELAND CERTIFICATE AND DIPLOMA.....	393
APPENDIX I: IRELAND'S CURRENT GLOBAL RATING.....	394
APPENDIX J: WATERFORD CRYSTAL & WATERFORD INSTITUTE OF TECHNOLOGY PARTNERSHIP PROGRAMMES 1990-2006	401

Appendix A: Research Phase 3 - Interview Questions

Adapting to Industrial Change

(Interviews with 112 employees. October 2004 to June 2005)

1. Name – current job title- age – marital status?
2. Date of joining company, education status and the reason why you joined?
3. Outline your work and personal development experiences to date?
4. Explain what were the main– barriers and supports in achieving educational qualifications while at work?
5. In hindsight-would you have pursued a different development route and career path? (If you knew then what you know now, what would you do?)
6. On reflection what is your preferred career choice?
7. What motivated you to return to education while at work?
8. What difference has your new educational experience made to you as a person?
9. What do you intend doing next in your career / personal development?
10. What in your opinion are the main issues to be addressed in facilitating employees countrywide return to education?
11. Do you intend working on in the company until you retire?
12. What in your opinion are the most important skills and competencies needed by employees in industry today?
13. What should the company be doing to become more competitive?
14. Define the term employability?
15. Are you an employable person – If yes – why do you think so?
16. Name three to six of the most significant developments in your career/ development path to date?

Appendix B: Profiles in adaptation to change through education.

A research study was carried out with 112 educationally disadvantaged employees in the company. They were selected from a total of approximately 900 employees who had between 1987 and 2006 returned to education to improve their qualifications and employability. The interviewees had been successful in acquiring new qualifications and moving on to new positions or had departed the company and secured alternative employment. The research study captures and analyses the individual development journeys undertaken. All of them had to find the other way back to education having foregone the full time student route. They had to find new ways to redeem their careers and eliminate an educational deficit that was holding them back in the new technology, knowledge based workplace. A rich mix of employee categories with different background, age, gender, including craft and non -craft were interviewed. Their profiles highlight their success in finding the 'other way' to changing career and retaining employment in the new workplace.

Research Phase 3: Summary of Interviews with 112 Employees from Waterford Crystal Ltd.

The following 112 profiles included a representative mix of educationally disadvantaged employees who, from a total of 900 employees (including management and staff) returned to education at a most difficult period in their working lives to develop improved work related qualifications. These profiles were produced from hand written notes taken by the researcher during each interview. The first draft profile was returned to each employee for validation and correction. Every interview involved sixteen questions and it took on average took approximately 45 minutes to complete. The profiles are an accurate record of the answers to the questions. They played a key role in informing the findings, conclusions and recommendations of the study.

Alan O'Keeffe

Company:	Waterford Crystal Ltd.
Job Title:	Training Officer Cutting Technology
Marital Status:	Married
Age:	35
Years of Service:	19

Starting Position	Current Position
Apprentice Cutter	Training Officer Cutting Technology

Most Significant Career Developments

- (1) Qualified as a Cutter
- (2) Completed National Certificate in Engineering & Science – Glass Technology.
- (3) Appointed to successfully manage a Shift Team.
- (4) Acted as Head Training Instructor in the New Technology Area.

Alan joined the company as an apprentice cutter in December 1985. His father was a master cutter at the time. While completing his Leaving Certificate he suffered sunstroke and performed poorly in the remainder of the exam. Alan is 35 years of age and is married. He qualified as a cutter in 1990. The one major strike that occurred in the company occurred between April and July 1990. It was a huge setback for him. He was moved to the semi-skilled section for a period of time as he was in a vulnerable redeployment situation being one of the shortest serving cutters in the company. In the semi-skilled area he learned how best to rework the product. He accepted the option of returning to cutting.

At the beginning of 1997 he was promoted as Cutting Technology Technician having completed a National Certificate in Engineering Glass Technology in Waterford Institute of Technology. This was a four-year part time course, which included science and technology subjects and crystal manufacturing.

After successfully completing the transfer to technology-based production Alan was appointed a Team leader in the new area and ran one of the five shifts in the area.

He was promoted on to a project for the development of cutting technology, which was a new departure and his responsibilities included writing programmes and solving problems. He became expert in CNC and CAD programming and took full responsibility for the programming of product and design.

Also at this time he completed a Certificate course with City and Guilds in Industrial Training Technology. He quickly became responsible for the training in the area as well as his other duties. He trained all the operatives and technicians in the area. He was selected to participate in the 'Expand' Programme.

The main barriers he faced were his own lack of confidence around completing a third level course given the length of time he has been away from formal education. The time and commitment needed to achieve a third level certificate was huge and daunting.

The supports included the company who provided funding and encouragement. The Training Department encouraged and supported everyone who showed any interest in returning to education. All reasonable requests for help were promptly granted and there was a great air of optimism and progress engendered into the re-education and retraining process.

He would like to pursue a course in research & development in science and technology, as he doesn't like supervisory roles. He is happiest when engaged in problem solving and process improvement tasks in the technology-engineering field. He would like to complete a national certificate/diploma/degree in this area.

In hindsight he regrets not having returned to education sooner. His preferred career choice would have been as a pilot as he has always been interested in Helicopters. The motivation for returning to education came from a desire to improve his position, earn more money and get involved in more challenging work.

He would like to progress further in research and technology and in Process Improvement. He would like to stay with the company for his working life, as he knows that it is a good employer and there is a good work environment in the company. The most basic skills needed in the workplace are information technology and an effective team player with good people skills.

For the company to improve its competitive position it needs to involve employees from the floor as many of the solutions and innovations that are required can be found there. Employability possesses a wide range of skills that are required by companies. He believes that he is very employable as he is a hard worker, is adaptable and not afraid of change. He can work on his own or as part of a team.

Alice Power

Company:	Waterford Crystal
Job Title:	Data Auditor
Marital Status:	Married
Age:	36
Years of Service:	18

Starting Position	Current Position
General Operative	Data Auditor

Most Significant Career Developments

- (1) Participated in NOW, WICCA and EXPAND Programmes.
- (2) Completed the National Certificate in Manufacturing Technology.
- (3) Appointed to the SAP Project and developed New Skills.
- (4) Promoted to position of Data Auditor.

Alice joined the company in 1986 as a general operative having completed her Leaving Certificate and a secretarial course in the Waterford Institute of Technology. She was delighted to be employed and earning money at the time. Alice is 36 years of age and is married with two children.

Her first job was a contract for one year. During the 1987 rationalisation she was made redundant for three months and was then recruited to work on the Lehr for three years. In 1990 she was transferred to the Packing as an Examiner and then she became a Double Sorter, spot- checking glass already examined to ensure its quality standard. In 1992 she applied for a position in managing quality in the Packing Department. Her aptitude test showed a high intelligence in Maths. She was quickly chosen to participate in a course on Statistical Process Control and she became a training instructor in Statistical Process Control on completion of the course.

She was then transferred to rework for one year when the NOW (New Opportunities for Women) EU Employment Project was launched. Alice was selected as one of thirty women to participate in this project. The project involved examining the barriers to the progress of women in the organisation and designing ways and means for them to progress. The project included modules on assertiveness, business literacy, communications and presentation skills, information technology, teamwork and interviewing techniques and CV development. She found this project extremely informative and motivating as for the first time the organisation were seriously studying the role and potential of the contribution of women to the organisation.

In 1997 she was selected to participate in a second EU Leonardo da Vinci Project – WICCA. This project involved six women, four employees from the company and two from outside the company. They were selected to participate full time in the Accelerated Technician Programme in the Waterford Institute of Technology. This was a seminal education experience for her. She was returning to education full time and covering engineering subjects that she had little previous knowledge, except maths at which she excelled.

The results from the four employees were exceptional. She achieved a distinction in every subject. The six women sponsored by the company were the only women who finished the course. She credits this achievement to (1) support provided by the company (2) group learning (3) availability of mentors (4) fierce determination of the participants, who were conscious that the eyes of the organisation were following their progress. It was a very stressful but successful experience. Their confidence and competence had improved substantially as a result.

On return to work she was then appointed training instructor for Stuart Crystal. She spent one month in the UK training packing operatives on quality standards. In 2001 she was assigned to the SAP project team processing sales orders and purchase orders. She progressed to developing the business transactions form the initial order to delivery and then testing and implementing them.

In 2001 she was chosen for the “Expand “ project. This was a fast track employee development programme for one year. It included 8 work-related development

modules. During this programme she was appointed to the SAP Help Desk. When the Data Auditor position was advertised she successfully applied for it.

In hindsight she says she should have returned to third level college earlier and have completed a Bachelor in Business Studies Degree Course. Her preferred career choice would be to qualify as a Pharmacist.

The main barriers to progressing in education were balancing work, family and study. Her lack of confidence and the absence of direction on what to do and where to go on leaving school was a major handicap. In the 1980s she was glad to get a job but she always interested in doing better for herself.

The main supports came from the Training Department team who provided encouragement and direction. The funding provided by the company was essential. Serious innovation on employee development under EU Programmes and the creation of a learning organisation in which every level and category of employee could participate was critical. Employees were made to feel at ease and involved. They were and provided with the most appropriate educational offering and the support to follow it through to conclusion.

Her motivation for returning to education was that she always knew she had the ability to hold down a more demanding and responsible job. She states ‘ **my involvement in the ‘NOW’ project awakened within me an ambition to test my potential in a more challenging job. I could see opportunities for advancement springing up all round me and I knew deep down that if given the chance I would make a success of a more intellectually stimulating position**’ It did take many interventions to build up her competence .The company was brilliant in giving her many opportunities to realise her potential and to match work experience to academic qualification along the way.

The benefits include a major boost to her confidence and self-esteem, a wider appreciation of the business and societal developments as her capacity to contribute more and at a much higher level was realised. The issues to be addressed for employees returning to education are direction and support across a wide range of development options including academic, technical, craft and traineeships. The biggest problem for her was making the decision to return to full time education after

a 10 years absence. She believes that a good early induction from the educators is critical to settling the uncertain and hesitant employee back into the education system. A major disappointment was the length it took for her to realise the learning opportunities available to her. The skills needed in industry today are a good education, ability to adapt and change, good people skills and information technology skills.

Employability is being well educated and having the capacity to adapt to change and engage in continuous life long learning. She believes she is employable having travelled a long journey with many changes and achievements in education and in the workplace

Dennis O'Connor

Company:	Waterford Crystal Ltd.
Job Title:	Director of IT at CPL Ltd
Marital Status:	Married
Age:	47
Years of Service:	32

Starting Position	Current Position
Apprentice Wedge Cutter	IT Director at CPL Ltd

Most Significant Career Developments:

1. Qualified as a Master Cutter
2. Appointed IT Champion in 1995
3. Joined the Training and Development Team in 1997
4. Completed a BSc in Commercial Software Computing in 2005 after 7 consecutive years of study covering a certificate, diploma and degree.
5. Appointed director of IT at CPL Ltd Waterford.

Dennis joined the company as an apprentice cutter in 1972. He qualified as a cutter in 1977 and in 1992 he was transferred into the sandblasting department. At that time he purchased a computer for his eldest child of 12 years through the company's computer purchase interest free loan scheme. *' In purchasing the computer for my eldest child I quickly became interested in information technology to be able to help him and I enrolled in an Introduction to Computers in Waterford Adult Education Centre'* The computer in the home was a great resource and everyone began to learn and practise the skills. Dennis was became very attracted to it personally and quickly

became adept at using it. It was the beginning of the development of a new portfolio of skills and the start of many years of study. Dennis consistently gained distinctions in the many exams he completed up to completing a BSc in Commercial Software Computing in 2005 after seven years of continuous study in the Waterford Institute of Technology.

He was selected as an IT Champion in 1998 and he was encouraged to build up his skills in computing. He completed City & Guilds, ECDL and ECDL Tester Courses. The IT Champion training programme developed his tutoring, coaching and troubleshooting skills and he was immediately able to use the skills learned.

After taking up a full time position in Training and Communications Dennis returned to College and completed a 3-year Certificate in Computing, Computer Applications. He found the first year extremely hard but gradually got on top of the study and exam regime graduating with distinction. He followed on with the Diploma graduating with distinction once more. He graduated with a BSc in Commercial Software Development in July 2005 and is proud of his record of 7 years of years of study. He has also achieved a Master Certificate as a Microsoft Office User Specialist (MOUS), Diploma in Web Design & Publishing and a Diploma in Web Programming and Server Technologies from the International Academy for Computer Training (IACT)

He has been involved in several projects in the company, further advancing his skills and employability status. The following are examples of projects in which Dennis has played a leading role:

“Eureka” project, Dennis produced a training programme on CD ROM for machine operatives working on shift- teams on a 5 shift, 7-day week roster.

“Jewellery Manual” Dennis developed a training programme for Asian vendors on the Waterford quality standards on DC ROM. This was an outstanding breakthrough with all the vendors trained to the same high standard. It cut out endless misunderstandings on quality. The training programme helped introduce a right first time system, which benefited the vendor and the company.

International Crystal Federation, he produced a CD ROM, which included all the presentations at Annual Conference, which was then disseminated to the 160 member companies around the world.

Company Intranet, he developed and designed the intranet, which is a key communications tool in the company.

Business Planning Resources, he was involved in a review of total home-sourced planning process was carried out in 2002. He developed and delivered training programmes on the new process devised to improve performance.

SAP (Enterprise Resource Planning), he trained relevant personnel on reports essential for the smooth running of the SAP System. He was appointed as a dedicated IT training programme for manufacturing.

The main supports available to him in developing an alternative career were the company and its very progressive approach to education and training and the opportunities afforded to him in transferring the learning. He has successfully built an employable skill base through the funding, study leave, classmates, study groups, network of learners, and most of all his family who have been fully behind him since he started out many years ago.

The main obstacles have been – organising the time, not having a Leaving Certificate standard education. In the beginning he suffered from a lack of confidence and dealing with the fear of the unknown.

His preferred career choice is to be a Web Programmer. In hindsight he should have completed his Leaving Certificate and completed a third level degree course. As a result of his education he is much more confident, can communicate better and his self esteem is much higher. He is conscious that he has set a standard and example for his children in choosing challenging career paths. Completing his degree has been a cause of great celebration in the family.

The most important skills in achieving employability status and business competitiveness from his standpoint are Information Technology, Engineering and Teamwork. To achieve and retain competitiveness the company has to improve its cost base and increase its market share. He is in no doubt that employee capability is a key source of sustainable competitive advantage. He is convinced that every employee must fully engage in improving the cost base, improving quality and productivity. By working together as one Waterford team the company can make progress and survive and prosper.

A major milestone in his working life was being selected as an IT Champion. Through this programme he broadened his knowledge of Computer Networking and PC Maintenance. Working in partnership with the IT Department he serviced PC users, solving hardware and software problems. After completing many in-house courses, as part of this programme he went on to do three City & Guilds certificates in Information Technology subjects, an ECDL certificate and an ECDL tester certificate. This he feels gave him the confidence, the self-belief and the determination to try to achieve a third level qualification.

Tony Tracey

Company:	Waterford Crystal
Job Title:	Process Software Engineer
Marital Status:	Married
Age:	38
Years of Service:	20

Starting Position	Current Position
Apprentice Blower	Process Software Engineer

Most Significant Career Developments

- (1) Qualified as a blower
- (2) Became a leading member of the Information Technology Champion Team
- (3) Appointed as a full time trainer and member of the Company's Training Team.
- (4) Achieved a first class honours degree in Commercial Software Computing
- (5) Developed new data base systems, which have been proved to be extremely effective.

Tony joined the company on the 15th October 1984 as an apprentice blower. Prior to this he was employed as an apprentice fitter with ANCO in Waterford. The best forecast for job opportunities for fitters was bleak at the time. He is 38 years of age and is married with two children aged 10 and 4 years. His father was employed as a master blower in the company but he says that this did not influence his decision to join. At the time Waterford Crystal was the best employer in the region and it offered security and opportunity for advancement to him.

He worked as a bit gatherer on a four man blowing team for 14 years. In 1987 the company underwent a major rationalisation which involved reducing the workforce by 1,000 employees improving work practices and in the period 1987 to 1992 taking £1R35M out of the cost base. In 1990 a 14 week strike occurred which was followed by extensive short time working during the remainder of 1990 and 1991.

Having successfully completed a one year part time City & Guilds Computer Course in the Waterford Institute of Technology and having enjoyed the experience he decided to enrol in a three year National Certificate in Computing, Computer Applications. He found this course extremely difficult. It involved three assignments per subject and four subjects per year. He had to study seven nights per week from

January to May each year to keep up with the demands of the course but he successfully completed it and achieved a distinction. Tony emphasized how difficult returning to education is for employees by explaining that ‘ **in my class thirty-six students started out on this course and only twelve students completed it**’.

During the third year the company developed a team of Information Technology Champions in an attempt to build computer literacy company-wide. The strategy involved selecting 12 employees from across the company to be trained as tutors, coaches and trouble-shooters in Information Technology. Tony became a leading member of the IT Champion Team. Working as a blower during the day he tutored employees in ECDL at night in the Company’s Learning Centre. In 1998 as the demand for IT skills grew he became a full time trainer and a fully-fledged member of the Training Team. He was given responsibility for developing the IT Champion Panel, which increased to 42 champions. The IT team trained 1,300 in ECDL over a two to three year period. They also provided additional training in one or more of the 64 software packages used in the company.

He completed the Diploma in 2002 and once again achieved a distinction. He has since completed a BSc in Commercial Software Development in May 2004 and graduated with a first class honours.

He became the leading trainer in the company on machine software training machine operatives and technicians. A new production tracking system, shop-floor control system was introduced into manufacturing. He was assigned to develop and design the training programme training ten employees on it. A time and attendance system was introduced to meet the requirements of the Working Time Act. He was selected as the trainer and was responsible for developing a training programme for 160 employees company-wide, thus ensuring a successful implementation.

As an additional specialist interest he responded to requests from the tank furnace management team to develop databases to aid management. The databases helped track and collate key information on production and quality to enable a continuous improvement process to be established. He has since specialised in the development of customised databases for different processes and departments in manufacturing.

From this work he has progressed to becoming a process software engineer working in process engineering.

If he were starting out again he would complete a third degree course but at that time he had no such ambitions and disliked school. Having failed his Leaving Certificate he was very apprehensive about entering college. It was the uncertainty in the company in the late 1980s and early 1990s that prompted him to focus on education as a means of acquiring a national, transferable qualification.

He is adamant that through education he has become a much more competent and confident person. He is now much more articulate and better at communicating with people. His self-esteem is now much higher and he feels much better in himself and about himself. He is not in any way intimidated by people in higher positions and can hold his own at any meeting, management and project.

If he were starting again he would like to become a carpenter or plumber and have his own contracting business. He has always had great pride in his work and his own business would guarantee employment for his life all going well. If the opportunity for redundancy arose he would give it every consideration.

He states that information technology, communication skills and a willingness to continually learn and develop are the essential skills required to establish employability status. Continuing education, the capacity to adapt and a preparedness to change are essential requirements from employees regardless of where they work and at whatever level they are employed. For the company to achieve its goals he believes that everyone will have to work better together as a team. The culture of functionalism and individualism will have to be removed and replaced with a more integrated and cohesive agenda on competitiveness.

He believes he is employable on the basis that he has qualified as a craftsman, has an engineering degree and a wide range of valuable work experiences.

Pat Walsh

Company:	Waterford Crystal
Job Title:	Technical Draughtsman
Marital Status:	Married
Age:	48
Years of Service:	34

Starting Position	Current Position
Apprentice Blower	Technical Draughtsman

Most Significant Career Developments

- (1) Qualified as a master blower
- (2) Worked as an advisor across all disciplines in the blowing department.
- (3) Represented the company as an Artisan.
- (4) Experience gained from outside property interests (renovations), which he has used to good effect in the company.
- (5) Appointed as a Development Technician

Pat joined the company as an apprentice blower in November 1970. He began his working life as trainee chef in the Ard Ri Hotel in the Summer while applying to the company for an apprenticeship. He was 15 years of age and had just finished first year secondary. He is married with three children and is 48 years of age.

He qualified as a blower and graduated to master craftsman in the stemware section. He worked across all blowing disciplines filling in for absence on heavies, light heavies, wines, tumblers and jug making. He learned a variety of skills and became a temporary supervisor, advisor and training instructor. His job as an instructor was to upgrade the skills and assist in achieving maximum output in the different blowing departments. He gathered the information from the cold end of the process and worked to eliminate the flaws at source and the skill gaps that caused them. In 1993 he applied for a position in the Research & Development Department and was successful.

His job involved working as a Development Technician in planning and designing new technologies in blowing, cutting, acid polishing and environment. In the mid '90s the R&D department changed to the Process Improvement Department. Its brief was

widened and it covered all aspects of the business including all new process development, new work layouts, new equipment, buildings and factory surveys.

He learned his skills in the building and layout areas in large part through his outside interest in purchasing and renovating old buildings. He always had an interest in this line of work. He learned everything about the drawing up of plans and layouts through working with specialists and by implementing the drawings. He completed a CAD course in Manchester, a Project Management course and ECDL. Other than that all his skills including his original blowing craft skills were picked up in a trial and review process, in observing others and in learning from them.

He did not meet with any barriers and he admits to being lucky moving into positions, which provided him with many interesting experiences and new learning opportunities. He liked working and learning with other people and had a capacity to pick up methods and techniques easily especially in the construction, mechanical and technical areas. The supports were the company and its willingness to give him so many opportunities to build up his skill base in alternative work areas. It took some faith to re-deploy him to become a Technical Draughtsman. He believes he has repaid the company's faith in him over the years. His broad craft experience has helped him knowing the production process so well and what is needed to achieve maximum performance.

In hindsight he would have preferred to progress further while at school. His preferred career choice is accountancy. He would like to own a business and improve his administration skills.

His varied career has given him confidence and has become more outgoing through meeting so many different people every day. He is expert in computers through using different equipment in administration. He attends meetings at which decisions are made and plans drawn up for new developments.

He hopes to continue to develop in his job and is looking forward to new challenges. He has represented the company as an artisan and enjoyed it immensely. The most important basic skills for industry are information technology, CAD engineering, problem solving and people skills.

The company could improve its competitiveness by concentrating on marketing to gain orders for longer production runs and by introducing improved technology to get better results.

Employability is becoming multi-skilled and flexible. He believes he is eminently employable and has worked with German, Italian, Dutch and Belgian professionals on joint research and development in glass technology. He spent three years at Stuart Crystal in UK, which broadened his horizon further. His current boss is extremely supportive and acknowledges his contribution. He admits to being a workaholic and often works twelve hours per day.

Ray O'Brien

Company:	Island Lane Ltd.
Job Title:	Director
Marital Status:	Married
Age:	45
Years of Service:	25 with Waterford Crystal

Starting Position	Current Position
ApprenticeCutterat Waterford Crystal	Director of Island Lane Ltd.

Most Significant Career Developments

- (1) Qualified as a master cutter
- (2) Qualified as a trainer and participated at the front line in several restructurings.
- (3) The work ethic he developed as a cutter working on a piece rate system.
- (4) Appointed as a Sales Representative.
- (5) Opened and developed a very successful business.

Ray joined Waterford Crystal in November 1975 as an apprentice cutter having completed one year as an apprentice printer and prior to that 6 months working in pubs as an assistant barman. He was attracted to the company by the remuneration package available at the time, which was exceptional for all grades and categories of Crystal employees. He is now 45 years old and is married with three children. His story is of exceptional interest as he graduated to setting up his own successful business using much of the learning and experience gained during his career in Waterford Crystal.

He qualified as a glasscutter in 1980 and then moved on to become a master cutter. During this period he chaired the union piece rate committee and played a key role in the negotiation of new work standards, which resulted from the introduction of new technology in the cutting shops company-wide. In 1991 Ray was appointed to Training and Communications. Following training and certification, he was appointed as an instructor and worked at retraining employees who had opted for redeployment and whose job specifications had changed. At that time the training instructor was a key facilitator whose roles included trainer, change agent, problem solver, communicator, confidant, mentor and liaison between shop floor and senior management. The role was very challenging and political as unionised instructors were seen by some to be carrying the management's message. The training instructor agenda was to help and facilitate the employees, adapt to the major changes that were being implemented and to secure the future viability of the business. In 1993 he was appointed to lead a project on co-ordinating the supply of product to specialist Waterford Wedgwood retail stores in the US. A significant opportunity was unearthed at the early stages of the project that had the effect of improving supply to the retail stores and generating significant incremental revenue for the company. In 1995 Ray was sent to UK in a sales capacity for a five-month period. Upon his return he was appointed to the Irish Sales Team. During his tenure as an Area Sales Manager he received extensive training in information technology, sales techniques, and most importantly negotiation skills, which he says, have been of huge benefit to him. In 1999 he established a successful retail giftware and jewellery business, Island Lane Jewels and Gifts, in Ardkeen Shopping Centre on the outskirts of Waterford. In 2000 he departed Waterford Crystal to work on the development of an Internet business-to-business platform specifically tailored for the Irish giftware industry. He is currently working on other initiatives prompted by the success of Island Lane.

Barriers to development included lack of formal qualifications, little experience with other companies, minimal commercial exposure and relatively long service. Long service can be a handicap when a company is (quite justifiably) engaged in recruiting new blood and fresh thinking. Supports included mentoring from a senior executive, which resulted in the sales appointment. High quality training and education in the

key management disciplines, provided through the Training and Communications Department, and funded by the company

He believes that his experience of working with Waterford Crystal has rounded him considerably. He attributes his business success in greater part to the “indispensable” sales, marketing, financial, operational and human resource experiences he encountered while with the company. He has an extremely keen interest in all matters commercial, and regularly finds himself offering advice to start-up, and mature, businesses. As his business is now on a sound footing, he would like to become more formally involved in business consultancy and is currently working to achieve that goal. His main motivation in progressing his career was ambition and he has become a more mature person from a personal and commercial perspective as a result of his development experiences. He is much more open to change and enjoys the challenges of a changing business environment.

He strongly believes that the following questions are entry fee issues for employees in any company engaged in the pursuit of commercial success:

Are you willing to adopt “the proprietary view” – will you consider the impact on the organisation of all of your actions/inactions?

Are you willing to learn - to understand the organisation’s business, structure, customers, products, processes, objectives, challenges, and competitors?

Do you acknowledge the importance of professionalism and courtesy when dealing with other employees and customers?

Has lack of academic achievement been compensated by success in other arenas?

Based on experience, the above questions give a guide to providing some indication of a person’s intelligence and, more importantly, emotional quotient in an occupational situation. There is extensive proof that academic achievement is most potent when combined with emotional balance. There is also a wealth of evidence to indicate that lack of formal qualifications have failed to deter the determined entrepreneur. Given his experience with third level institutions and degree courses, he is firmly of the view that the existing regime requires serious examination. Employees exposed to fundamental business principles can be a powerful exercise in terms of adding real value to a business. Many people, unfortunately, are scared or deterred by

the sacrifices inherent in attending part-time education courses. He believes there is a strong case for a more fundamental approach to improving business literacy company wide, involving all functions and levels.

Tim Byrne

Company:	Self Employed
Job Title:	Industrial Engineering Services Manager
Marital Status:	Married
Age:	49
Years of Service:	16

Starting Position	Current Position
Contract Industrial Engineering	Industrial Engineering Services Manager

Most Significant Career Developments

- (1) Achieved a Bachelor of Business Studies Degree in 1997.
- (2) Decision to focus on Industrial Engineering as it suited him and his aptitude.
- (3) Became an officer in the Institute of Industrial Engineers
- (4) Appointed Industrial Engineering Services Manager in 1997.
- (5) The decision to depart the company and set up his own Consultancy Business

Tim joined the company in November 1988 as a contract industrial engineer and is 49 years of age and is married with two children. He graduated from Mount Sion Secondary School at 16 years of age with his Leaving Certificate. He started out as clerk in CIE in 1972 and stayed until 1978. He then moved to a private transport company for one year and went back to college at night. He completed a certificate in industrial engineering in 1977. He joined Waterford Stanley in 1978 as a trainee industrial engineer. He was sent to the UK for 4 weeks training. He married in March 1979 and started his own retail sports business while continuing to work in Waterford Stanley. In 1980 he decided to work full time at his own business until 1987. During this period he also worked as a contract industrial engineer. In 1987 he rejoined Waterford Stanley and worked for Pierce of Wexford, which was owned by them. He completed six months period in each of their businesses.

In November 1988 he joined Waterford Crystal and returned to the Waterford Institute of Technology to update his qualifications and completed his Diploma in Industrial Engineering. He also completed a one year City & Guilds Certificate in

Quality Assurance and then a Diploma in Quality Management. He was invited by the Waterford Institute of Technology to lecture in Work Measurement and in Management – Theory and Practice.

He attended Carlow Institute of Technology to complete Just-in- Time and Total Quality Management Courses. He was appointed to a permanent post in the company in 1992 and worked as a Plant Industrial Engineer covering Methods Engineering, Ergonomics, Employee Relations, Product Costing, Plant Layout, Project Evaluation, Cost Benefit Analysis, Manpower Planning, Budgeting and some Data Management. He was responsible with the team for re-evaluating all incentive schemes and recruiting additional industrial engineer trainees from the shop floor. These employees had completed a diploma in industrial engineering and were ready to move into the department. They knew the organisation structure and the job specifications involved. He was promoted to Senior Industrial Engineer for Kilbarry and Butlerstown in 1995. In 1997 he was appointed Industrial Engineering Services Manager.

He was responsible for developing the Bachelor of Business Studies Degree Course in the Waterford Institute of Technology, which was to become the follow on qualification to the Diploma in Industrial Engineering. He lectured in the college from 1992 to 1998. He completed the degree course and achieved 2.1 honours. He has been involved in the industrial engineering council since 1977 and was National Chairman for two separate 2-year periods. He is currently Education Officer. In 1999 he was invited to become a member of the Council of Industrial Engineers, the Advisory Body /Practitioners for the American Institute. He is an elected a fellow of the Irish Institute of Industrial Engineers.

In 2003 he was appointed Director of the International Steering Committee of American Institute. Currently he is being proposed for a fellowship of the Academy of the World Confederation of Productivity Sciences and is an external examiner for the Limerick Institute of Technology. In May 2004 he was awarded a Fellowship of the American Institute of Industrial Engineers, the first European to receive this award.

The barriers have been making time and managing work and family commitments. The supports have been family and company who funded and encouraged participation in study and in networking. He is considering completing a master's degree as his next objective. In hindsight he should have returned to college much earlier but family circumstances did not allow it following the completion of Leaving Certificate.

He says that he gained a lot from working and then studying. He believes that part time education has its benefits, as all the participants want to be there and bring a lifetime of experience to share with the class that enriches the overall learning experience. They can apply what they learn immediately on return to the workplace. As a lecturer he learned as much from the class as they did from him. There are too many lecturers and not enough teachers. Lecturers tend to walk students through the course while teachers get more involved and try and make it more relevant providing examples to bring the subject alive. In industrial engineering it is vital to have practitioners, as lecturers as the practical experience is invaluable in helping students understand how the principles, methods and techniques work in practice.

Returning to education has made a huge difference to him in securing a livelihood and providing focus and direction, which has boosted his confidence. His career choice would be an Industrial Engineer while his secondary school choice was to become a doctor.

The company could improve its competitiveness if it invested heavily in developing the skills of its workforce and providing clear career paths for them. Employability is being adaptable enough and having the core skills to perform in different employment situations and business environments. More people need a broader skill base from which to progress on to specific disciplines and skills. Tim is employable having achieved a valuable set of qualifications and work experiences.

Tom Brennan

Company:	Waterford Crystal Ltd.
Job Title:	Branch Manager, Bank of Scotland.
Marital Status:	Married
Age:	34
Years of Service:	18

Starting Position	Current Position
Apprentice Blower	Branch Manager Bank of Scotland.

Most Significant Career Developments

- (1) Qualified as a master blower
- (2) Appointed to a position in Industrial Engineering.
- (3) Represented company as an Artisan
- (4) Graduated as a Bachelor in Business Studies Degree (Hon).
- (5) Promoted to Outlet Product Supply Co-ordinator.
- (6) Appointed branch manager Bank of Scotland.

Tom joined the company in July 1986 as an apprentice blower. His father was employed as a blower and the tradition was strong in the family. He had just completed his Intermediate Certificate in St. Paul's College when he decided to opt for an apprenticeship with the company. Tom is 34 years of age and is married with 2 children.

He qualified as a blower in 1991 and graduated to master in 1996 when he opted to re-deploy to become a machine operative in the restructuring of the blowing. As he was one of the youngest blowers he was way down on the seniority list. In future redundancy situations he would have least claim to retain his position in the event of job losses in his department. To retain an element of choice he opted to move to a position of interest to him in a voluntary capacity whenever the opportunity presented itself.

He was trained as a machine operative from worked in this capacity from 1996 to 1999. He was appointed to Industrial Engineering and remained there for 4 years until 2003 when he was successful in applying for his current position of – Product Supply Co-ordinator.

He went back to college in the early 1990s when he realised that the future of the craft and his own position came under threat from the introduction of new technology. While there are still many craftsmen in the company he needed to develop alternative employment options for himself.

He completed a Certificate in Supervisory Management 1995/1996, a Diploma in Business and Management Studies in 1997/1998 and a Degree in Business Studies over a three year period 1999/2001 which constituted seven years of dedicated study over three part time education courses. He was selected as an ambassadorial artisan and has travelled to such places as Italy, Germany & the USA over a period from 2001 to 2004. He has recently been chosen as the official spokesperson for Waterford Crystal on the QVC shopping channel in the US, with the first live broadcast delivered in September 2004.

His motivated to return to study resulted in large part from the rationalisation of the craft. He knew he could do much more and was aware of the many new opportunities opening up in the company as a result of ongoing restructuring. He completed ECDL in 1998.

The barriers mainly had to work on shifts. He was lucky that his manager accommodated him with time off to attend classes. It was a very stressful time and very tiring. He had at that time got married, was purchasing a home and in the process of settling down.

The supports were the funding and lots of encouragement from every quarter. The adult education service in the college was also extremely helpful.

In hindsight he should have completed the degree instead of the diploma. It would have taken him five years instead of a total of seven. He successfully applied for a branch manager position in Bank of Scotland after surviving a daylong series of tests and interviews. It has been the most outstanding achievement and a wonderful outcome to all his hard work over many years of education and job changes in Waterford Crystal Ltd.

His preferred career choice was always to become a senior manager. 'My return to education transformed my working and social life. I am a much more confident person and can converse more easily in a wide variety of work and social situations.' It has enabled him progress in employment and has offered him endless career opportunities in the future. He is a much more confident person as a result of his academic experience. He has a much broader vocabulary and in general a much better outlook on life, as he can understand much more and get more from it.

If the opportunity to work as a manager in the Bank of Scotland had not arrived he would have been content to work in the company until he retired. He is now on a new career path and is still very young so the education he received in Waterford Crystal has transformed his life and for that he will be forever grateful. He was given so many opportunities to progress while working there.

The most important generic skills for employees in industry today are: information technology, communications, interpersonal skills engineering and maths. The company could improve its competitive position by getting closer to the customer and implementing much internal efficiency.

An employee having both a specific qualification backed up by a wide range of support skills that enables movement beyond their current position best describes employability.

He considers himself eminently employable. He has travelled a difficult journey in self-development mixing qualifications with practical work experiences applying the knowledge he has gained. He is now at the beginning of a career in banking a completely different and exciting career experience.

He says that employees are the lifeblood of the organisation and much more could be done to keep them motivated and challenged.

Vinny O'Donnell

Company: Waterford Crystal Ltd.
Job Title: Training Officer
Marital Status: Married
Age: 43
Years of Service: 27

Starting Position	Current Position
Apprentice Cutter	Training Officer.

Most Significant Career Developments

- (1) Qualified as a Master Cutter
- (2) Achieved ECDL.
- (3) Qualified as a Training Instructor
- (4) Appointed Deputy Front Line Manager
- (5) Completed Diplomas in Training and in Front Line Management.
- (6) Appointed Training Officer, Dungarvan Plant

He joined the company, Dungarvan Plant as an apprentice cutter in 1977 having completed his Intermediate Certificate in the Dungarvan Technical School. He is 43 years of age and is married with three children. He qualified in 1982 and became a master in due course.

Following the strike in 1990 he opted for the redeployment package and transferred to the semi-skilled. This move enabled him to sort out his financial situation and it worked out well for him.

In 1997 he became a Training Instructor and in 2000 he was appointed as a Deputy Front Line Manager. He completed ECDL, Certificate in Training & Development followed by a Diploma in Training & Development, achieving merits in both training courses. He also achieved a distinction on completing a Diploma in Front Line Management. He has also participated in the "Expand" in-house development programme, which was specially designed to fast track employees who had shown an interest and ability in moving on within the company.

The barriers to education included, organising time off for class and study while holding down a full time and responsible position and catering for family needs.

The supports included his family and company with particular reference to the funding and encouragement he was given. The culture of learning that had been developed in the company was very supportive. With many others attending classes their managers were very helpful when difficulties arose. In hindsight he regrets not having completed his Leaving Certificate. He would have liked to have attended third level college and completed an engineering degree. His career choice would be a Computer Engineer.

He was encouraged to return to education following participation in a typing course held in the company – “All Fingers Go”. He enjoyed it so much, both the learning and the social interaction that he completed the ‘Train the Trainer’ course when it presented itself. He wanted to learn more and progress in the company as he always believed that he was capable of doing much more challenging work.

He is now much more confident and has a greater appreciation of his own potential and his self – esteem has been raised. He has also earned the respect of his peers with his success in college. He realised the mistake he made in not completing a second and third level programme. He is convinced it would have made a big difference to his career if he had completed a third level degree.

He hopes one day to become a front line manager and if not an industrial engineer or computer maintenance engineer. He would like to remain in the company until he retires. He also believes that the education he has undergone will stand to him for the rest of his life even in retirement. The most important basic skills needed in industry today are – a good education – information technology skills, to be flexible and adaptable and to be open to continuous learning and managing change.

He believes that to become more competitive the company needs to reduce the number of items. The product range is too diverse and as such, it is difficult to produce short runs and maintain quality to the highest standard. The cost of producing so many varied products is too great.

His definition of employability is having a broad range of skills and knowledge to carry out a wide range of jobs and having the ability and interest to change and learn. He considers himself employable as he has changed his job several times in his career to date and has been successful in achieving a number of work related qualifications.

Martin Croke

Company:	Waterford Crystal
Job Title:	Design Manager
Marital Status:	Married
Age:	49
Years of Service:	34

Starting Position	Current Position
General Operative	Design Manager

Most Significant Career Developments

- 1 Qualified as a master cutter.
- 2 Served as a shop steward
- 3 Appointed as a designer
- 4 Achieved a High Level of Computer Literacy in Design Software Packages
- 5 Promoted to Design Manager

Martin joined the company in 1970 as an apprentice cutter at the age of 15 years. He had previously been employed in a small cottage type glass industry for a few months. With many other apprentices he joined the workforce due to economic circumstances. He had attended the Central Technical Institute where he had shown a flair for art and design.

He holds a deep interest in left wing politics and it became the foundation for securing an alternative education. He always had an interest in reading, debating and learning and his subjects of interest included, politics, current affairs, economics, (Irish and World) history and art, which he believes has served him well down the years. He readily agrees that he would have liked to complete a third level degree in either architecture or in the humanities including art and English.

He feels that he was lucky to join such an open-minded company with a strong and democratic structure. The close integrated nature of the working environment and

workforce facilitated the development of close links between senior management and the shop floor.

In the 1980s he became a shop steward and served on piece rate pricing and shop stewards committees. Union representative responsibilities were a rich source of educational opportunity. Learning new concepts and skills and gaining new insights into operational issues became a constant throughout his working life. The transformational change-taking place in the workplace and the career path he chose to follow presented new challenges and opportunities to learn throughout his career.

He is married with three children. The challenge of rearing a family combined with developing a number of careers has built a level of capability and confidence, which has helped him realise his potential in the design field, in which he is now a specialist.

In the mid 1980s while working with a team of cutters he was given the opportunity to design and produce a limited range of product for the market, which was a commercial success. Shortly after the conclusion of this project a vacancy arose in the design department and he successfully applied for the position. The transition from craft to staff required a change in mindset. This was also at a time when the company was moving its manufacturing process from craft to techno- craft and the product range from classic crystal to a much wider range of crystal products and other brand extensions such as Linen, China, Holiday Heirlooms, Writing Instruments, Jewellery and Christmas Decorations. Engineering and Design were gradually becoming more central to the manufacturing operation.

Shortly after joining the Design Team (team of seven) he attended a course in technical drawing in the Central Technical Institute. This was just prior to a major rationalisation programme in 1987 during which 1,000 employees departed the company. A university of craft knowledge and skill became redundant. The new design team was tasked with the job of completing a detailed library of paper-based drawings of all products and moulds.

The design team operated at the centre of the change process and in the transformation from craft manual to techno- craft information technology based work.

Recognising the urgency of the situation the design team attended a computer aided design course in the Waterford Institute of Technology. The team developed the skill set necessary to transfer the paper drawings on to a new shop floor based CAD system. The CAD system was accommodated in a network of booths located on the factory floor and accessible to all categories of employees. The newly installed system filed a complete record of all product specifications, associated tools and equipment. The CAD based knowledge bank was updated on a consistent basis. In any one-year up to 1,000 new product drawings are produced including all the brand extensions, and between 200-300 new products being launched into the market place each year.

He was promoted to Design Department Manager in the late 1990s. He became responsible for all design development and its associate responsibilities. He had to visit and deal with the US Marketing Team and work with them at the leading edge of product development and consumer preference. Since the early 1990s he has worked with external designers, independent design companies and has supported the development of the Marquis brand, John Rocha, Stuart and other ranges of crystal product. He has developed the ability to touch type on computer and has become expert on Microsoft packages, photo-shop and light ware 3D packages. Transition students have been accommodated in design on an annual basis. Some of them have remained on in third level and have chosen a career in design. He believes in the Darwinian theory that if you don't adapt, you die and he has been involved in several transformational changes and adaptations throughout his working life.

He was driven to succeed by the belief that he could do much better in the art and design in an academic context. He was always interested in reading and debating. The level of democracy, which was a key element of company culture, opened the way for many employees to engage in problem solving activities. He has always felt that the absence of a third level qualification has hindered his progress in development and career terms. In hindsight he would have pushed harder for a third level qualification in earlier life.

He is looking forward to new and challenging projects and he has many new ideas to bring to fruition in the future. He advises that key generic skills required by

employees include becoming a good team player, being able to identify opportunities and problems and respond in a proactive and successful way. Understanding the business is essential as the context and implication of decisions and initiatives need to be fully appreciated by all. A final critical competency is to be equipped to learn and adapt to change.

For the company to achieve competitiveness it has to be able to give the customers what they want when they want it. Management needs to understand in great detail the business environment in which the business is operating. If the company as a community of interest can arrive at a common understanding on the opportunities and problems facing it, it can address them more successfully on a collective basis. Waterford has been a unique working experience for many employees. They have been educated through the learning opportunities afforded to them by a dynamic and ever changing business operating at the front edge of a fiercely competitive and global economy.

There has always been a close relationship and communications link between the shop floor employee and executive management. The opportunity for continuous dialogue between all levels and functions has been an outstanding feature of working in Waterford in particular in the 1990s to date. An unusual level of openness and connectedness has been promoted throughout the company. It has formed the basis for continuous and life long learning for all who work with Waterford. He emphasizes that he has gained substantially through this open communications and learning process

Michael Kenny

Company:	Waterford Crystal Ltd.
Job Title:	Multi-Media Technician
Marital Status:	Married
Age:	52
Years of Service:	35

Starting Position	Current Position
Apprentice Blower	Multi-Media Technician

Most Significant Career Developments

- (1) Qualified as a Master Blower.
- (2) Developed Photography Skills outside of Work.
- (3) Represented the company as an Artisan
- (4) Appointed as a Training and PR Video Producer
- (5) Developed a wide range of skills completing many high quality video productions in partnership with national television companies in Ireland, UK, US and Australia.

Michael is 52 years of age and is married with 5 children. He is a member of a family of 11 children His father died when he was 16 years of age. He left school at 12 years of age and attended the local Technical School for one day each week to fulfil his legal educational obligation. He initially held a position delivering papers and at 14 years he became a trainee chef in a take away restaurant. At 17 years he began to review his career and set himself an objective of achieving a stable, long-term position. He joined Waterford Crystal as an apprentice blower in 1969. He was a good learner and became immersed in learning the craft in which he became an expert. He developed skills in many different aspects of the craft from producing wine glasses, bowls, decanters and trophies.

He qualified as a master blower in 1977. In 1993 in the midst of a significant rationalisation programme including the redeployment of surplus craftsmen he sought out an alternative position for himself. He became acutely conscious of the uncertainty and the insecurity surrounding his craft position. Having being involved in photography as a hobby and providing a photographic service for weddings in the locality for a number of years he applied to become a video producer in the company. He was aware of the huge emphasis being placed on education and training and on

how the use of video could capture the skills of the craft. He also noted how in restructuring the manufacturing process the video could capture all the movements and provide a record of how the different equipment was assembled.

The Training Department, in leading the new learning dynamic in the company sent him to FAS in Baggot Street in Dublin for three months training in multi-media techniques. On his return he approached the manufacturing director and requested an opportunity to film a manufacturing process. He was granted his wish and produced a video on pot setting, which captured all aspects and steps in the process, which facilitates continuous study and improvement.

Since then he has worked full time on video and CD ROM production. The company quickly established its own multi-media unit. He has developed training videos, public relations videos and presentations for communications for the employees and for the board incorporating many new developments. He has produced videos capturing the building of the tank furnace and special events, which needed to be recorded. Another area of responsibility was to record and document all world sports trophies and events. He has supplied television companies worldwide CNN, NBC, BBC, RTE, ITV, Australian Networks and European Networks with film for programmes. He also documented Waterford Trade Fair Displays and over the past seven years he has recorded on video the local community's contribution to the Chernobyl Project and the company's involvement. He has also assisted in other corporate social responsibility projects sponsored by the company.

He completed ECDL, a one-year course on Music Theory and Guitar Playing, Certificate in Electronic Engineering and a three-year course in Photography since he redeployed into his current position. He emphasises that he faced few barriers in his development. Everyone was more than helpful. The company was particularly helpful providing training and work experience opportunities. At the time the blowers and other craftsmen were being encouraged to develop alternative skills. In hindsight he would have completed his Leaving Certificate. His career choice would be filmmaking and especially making documentaries for television.

The driving force in taking the initiative was to achieve security for his family. Given his early work experiences he always held a deep fear of unemployment. He worked hard at his blowing craft only to see technology supplementing the production process, leading to a reduction in numbers. His success has given him great confidence and he believes he can master any challenge, as he is a fast learner. He is convinced he would have achieved good results in the Leaving Certificate. He also thinks that his fellow craftsmen are capable of developing alternative careers as they have a very good work ethic and are highly skilled and intelligent.

He would like to progress further in the company but he is also very qualified to secure employment elsewhere if the demand for his qualifications diminishes. His view on generic skills is that what people need most is an inner confidence supplemented with a measure of assertiveness, computer literacy and a broad set of skills. For the company to become more competitive it needs to develop employee skills provide third level education opportunities and new work experiences for those who show interest in moving on in their careers. Employees want to take on more responsibility. Employability is about being able to work in several areas of employment and in possessing a wide range of skills. It is critical that employees should become business literate and are fully informed on key aspects of business performance.

The most outstanding feature of what he has achieved to date has been the support he has received from family and company, the compliments he has received from the professionals i.e. television companies and the contribution he has made to the transformational change process.

Michael Vereker

Company:	Waterford Crystal Ltd.
Job Title:	Manufacturing Quality Manager
Marital Status:	Married
Age:	44
Years of Service:	29

Starting Position	Current Position
Apprentice Wedge Cutter	Manufacturing Quality Manager

Most Significant Career Developments

- Qualified as a Master Cutter
- Appointed a Training Instructor.
- Completed a Number of Professional Courses.
- Promoted to Manufacturing Quality Manager.
- Appointed to lead the LEAN manufacturing process implementation team.

Michael joined the company in 1975 at fifteen years of age as an apprentice wedge cutter. He qualified in 1980 and graduated to become a master craftsman in 1985. In the early 1990s he was recruited as a training instructor and was assigned to writing up the training instructions for the ISO 9000 quality system which was being introduced into the company.

The trainer filled many roles in the transformation of process, product, business operations, work methods, practices and systems. The trainer was expected to adapt quickly to change and to take others with him/her by producing quality training interventions that had the capacity to ease the fears and build up a new skill base that enabled the employee to earn a good wage in a new work environment.

In 1995 due to his outstanding performance as trainer he was appointed as Manufacturing Quality Manager for Butlerstown Lighting ware Plant. In 1997 he was given added responsibility for the wash –acid polishing- packing area of the plant. In 1999 he was appointed to head up a rework technology project aimed at reducing rework to its lowest level through quality first time processing. Part of his brief was to source the best materials and equipment from European and US suppliers and to establish the most efficient and effective work methods and techniques to produce quality work. He was also responsible for training the rework operatives in the new equipment and methods. In 1999 he was appointed Manufacturing Quality

Manager for all three plants , Kilbarry, Dungarvan and Butlerstown. He was also seconded to establish a manufacturing quality function in Stuart Crystal Ltd in the UK.

To improve his managerial skills he set out to improve his qualifications and he completed the following courses.

- (1) He spent two years in the Waterford Institute of Technology studying maths and physics. He followed this with a certificate in materials requirement planning and in capacity planning.
- (2) He completed a Certificate in Personnel Management from the Waterford Institute of Technology.
- (3) Completed Finance for the Non- Financial Manager course with the Irish Management Institute.
- (4) Participated in a two –year team effectiveness programme in-company.
- (5) Completed his ECDL and then the company’s quality management software package Q-sys.
- (6) He was selected as a facilitator for the company’s culture programme ‘Waterford Way’.
- (7) Completed the ‘Crystal Economics’ a customised course on financial management developed between the company and the Waterford Institute of Technology.
- (8) He completed a range of supervisory management and personal development soft skills courses.

In 2003 he was appointed to the LEAN Manufacturing Development and Implementation Team. He trained and facilitated the area managers and coached and mentored them in the principles and practices of the new system. LEAN is a massive change programme and is based on the Toyota production model. The main principle is that all employees are totally proactive in identifying improvements and implementing them.

The main barriers to self-development and education courses was time management as he had been a leading member of the Waterford Rowing Club for 20 years. After

he finished rowing competitively he served in the positions of head coach, captain and president. He credits his involvement in sport as being a key development experience.

The main supports were the company who funded and encouraged the learning in every way, the learning environment created and supported by the training team and management , and his family who were very helpful and considerate. The series of promotions at regular and opportune times helped to maintain his commitment to study and he continued to improve his managerial capabilities.

In hindsight he would have liked to have set up his own business. He is very confident that if he put in the same effort into setting up a business as he did in progressing his career in the company he would have been very successful. He also regrets not having stayed on in school and completed his Leaving Certificate. He would have wished to complete a third level degree in information technology prior to entering employment. The lack of a good degree is a major handicap to him as he makes his way through management.

He was motivated to return to education on witnessing the reduction in craft number and the capacity of technology to produce quality work in high numbers. The courses completed has made a massive difference to his career. He is much more business literate and skilled. He has grown in confidence having gained so much experience in a variety of positions and having transferred the learning from the courses to the job. He acknowledges that he was facilitated by senior management to move around the entire manufacturing process and then into heading up the manufacturing quality function.

He got great exposure with executive management when serving on a number of project teams. His next ambition is to become a Plant Manager. He would to move on to new challenges in the years ahead and to gain the broadest training and experience. He would like to continue to improve his academic qualifications as he can see how vital that is in today's work environment.

The most important basic skills in industry according to Michael are communications, computer literacy, a willingness to adapt to change and a good secondary and third level education. The competitiveness of the company need a thorough overhaul and

restructuring. All employees need to become expert in technology to complement their craft based glass making skills. He is convinced that a 20/30% improvement could be made in productivity if employees were trained to work smarter. There is a need to widen the appeal of Waterford in the US by launching a new brand and investing more on advertising campaigns on our core product ranges.

Employability to Michael means having the skills, experience and confidence to work successfully in a number of different areas internally and in companies, a willingness to continually learn and to have a portfolio of skills and qualifications that are attractive to employers.

Miriam Moloney

Company:	Waterford Crystal Ltd.
Job Title:	Executive Secretary
Marital Status:	Married
Age:	40
Years of Service:	23

Starting Position	Current Position
Receptionist	Sales Administrator

Most Significant Career Developments

- (2) Qualified as a Training Instructor
- (3) Completed the Diploma in Health & Safety
- (4) Invited to lecture in the Waterford Institute of Technology (part-time).
- (5) Completed the Education Counselling Course in UCC
- (6) Appointed Executive Secretary
- (7) Appointed as Sales Administrator

Miriam joined the company in 1981 as a receptionist in the medical centre having completed her Leaving Certificate at the age of 16 years. She was considered too young to attend third level college at the time and as an alternative she completed a secretarial course in St Paul's college. It was the very first secretarial course run by the college. As it was a pilot interviews were held to select the most suitable participants. Part of the course included two weeks work experience in Waterford Crystal. On completion she was invited to stay and returned after Easter to the college to complete her exams. She is aged 40 and is married with two children.

From 1981 to 1985 she worked as receptionist and then moved to industrial engineering as a clerk until 1987. She then moved back to the medical centre where she took on additional responsibilities in administration. In 1993 she was assigned to training in a part time capacity as part of the ongoing rationalisation programme. She covered both medical and training administrative until in the mid '90s she transferred full time to Training and Human Resources. In 1999 she was granted leave of absence to attend full time a Diploma in Education and Career Guidance Counselling in University College Cork.

On her return in 2000 was appointed as an executive secretary, which is her current position. She also completed a Diploma in Health & Safety and in Training & Development. She has lectured in the Waterford Institute of Technology on health & safety on the Certificate and Diploma courses.

In hindsight she should have taken a job she was offered outside the company in the area of education counselling. On returning to the company she was unable to get a position that would have provided her with the opportunity to use the knowledge and qualification she has gained. She was promoted to executive secretary but this is a purely administrative role. She said that there would have been greater challenge and satisfaction from the education-counselling role. She would have loved to attend third level college. Her preferred career choice would be to become a teacher, as she likes working with people and in particular with young people.

The benefits from education have been many. '*I can now can look at things more laterally and make more informed judgements and decisions*'. But in improving one's knowledge base a person can become very restless. They often need an outlet to transfer the learning to a more challenging work situation.

The barriers to completing her education were finding time for study and classes. Trying to juggle work, home and study was a difficult challenge. The main supports were the company in paying for her education and the huge encouragement she received from employees many of who had completed courses and were in a position to provide good advice and support. The study group concept was critical in building up her confidence and a strong determination to stay the course. Much of the learning

was collaborative, sharing ideas, information and resolving the most difficult issues and concepts.

The most important skills required for industry today are –the ability to learn, flexibility, information technology and communications.

For the company to become more competitive it needs to decide what exactly is its main purpose and confine itself to its core business. It should settle for a narrower range of product lines and become expert in producing and selling them. It should also control indirect costs as overheads are out of line with the size of the business. The profit share is important as it encourages involvement and ownership and what gets rewarded gets done.

Employability means having the qualifications to move between jobs and progress upwards as the opportunities arise.

She believes she is employable as she has qualifications that are very relevant in the economy and she has proven her willingness to adapt to change on several occasions. In her current position she would like to be more involved in decision-making.

Pascal Roche

Company:	Waterford Crystal
Job Title:	Human Resources Officer
Marital Status:	Married
Age:	46
Years of Service:	31

Starting Position	Current Position
Apprentice Cutter	Human Resources Officer

Most Significant Career Developments

- (2) Qualified as a Master Cutter.
- (3) Appointed deputy Front Line Manager.
- (4) Trained and acted as Training Instructor
- (5) Represented the company as an Artisan
- (6) Promoted to Communications Manager
- (7) Role extended to Human Resources Officer (responsible for the co-ordinating of US Artisans Programme)

Pascal is married with 2 children and is 46 years of age. He left Mount Sion Secondary School at the age of fifteen years in February 1973 to join the company as an apprentice rheintour cutter. In retrospect, he acknowledges that the authoritarian approach to education that existed at that time did not suit him. Five years after joining the company, he qualified as a cutter. Five years later he became a master cutter. For many years, the regular paycheck, combined with a pride in his craft, meant that Pascal was quite happy and comfortable in his job.

However, on witnessing the transformational changes taking place in the industry in the late 1980s and the early 1990s, which included a 13-week strike, he identified the need to become more employable. He decided to reject the voluntary redundancy package on offer and to stay and progress within the company. Having completed a number of in-house computer and trainer courses within the organisation, in 1991 he became temporary front line manager in the rheintour cutting department. During the two and a half years in the role he commenced a three-year, part-time Diploma in Industrial Engineering in the local Waterford Institute of Technology.

He selected this course for a number of reasons:

- (1) Available locally

(2) Changes in work practices meant an increase in the number of industrial engineers required and the course offered a broad insight into the running of a manufacturing company

(3) Qualification is nationally recognised, and included the option of pursuing a degree in general management. There were exemptions on some subjects, which reduced the degree time by one year (two instead of three years part-time needed to complete it).

He identified a number of barriers that needed to be overcome:

(1) Organising time for study, family and work.

(2) Understanding how best to use the time available for study.

(3) Adjusting to the new academic language. The exam structure was so different to workplace operations, procedures and culture. The academic disciplines required took some time to master.

The supports included the:

(1) Encouragement from family and training department.

(2) Support from industrial engineering department.

(3) Company funding, such as course fees and support materials, in addition to time off for study and exams

(4) Mentors provided when needed

After achieving an honours grade in the Diploma in Industrial Engineering he had to wait a year before participating in the degree in general management. In the waiting period he completed a two-year Certificate in Sales & Marketing. This was completed in one year carrying a number of exemptions from the diploma in industrial engineering course. In 1996, he was appointed project manager of a EU Adapt Project: KTCEP (Knowledgeable, Technically Competent Employed / Employable Person). This two-year project examined the issue of employability in company. It developed a number of innovative responses that had a dramatic effect on the employability status of a large number of employees particularly in building information technology literacy. The project was timely one and promoted the concept of employability and helped employees become flexible and adaptable in the workplace. In order to create a competitive platform for the industry employees were

expected to embrace and master the new technological innovations introduced into the company.

In 2000, he was appointed Communications Officer. In 2003, he was responsible for developing a new communications strategy and was appointed Communications Manager following its publication. In hindsight, he should have returned to part-time education much earlier. Through his involvement in education, he has developed a broader view of business and the global business environment. As a result, he was willing to change and adapt to a number of new and different roles over the past decade. Education has helped him understand the changes taking place within the company. In his communications role, returning to education improved his writing skills, analytical and comprehension skills.

The key basic skills in industry today are the ability to work in a team, information technology skills and communications skills.

The company can improve its competitiveness by maximising its use of current technology and getting all the functions working together in pursuit of common business objectives. Employees have the capacity to contribute much more if given the opportunity. Many of the best ideas and solutions to problems are with the jobholders.

His next challenge is to develop his human resources generalist skills through greater involvement in recruitment and management development planning and delivery. In 2004 he was appointed as a human resources officer while maintaining his communications responsibilities.

He hopes to progress further within the company. If this does not happen he would like to move on to a new job with new challenges and improved benefits elsewhere. He has travelled extensively and is an international basketball referee. Few challenges will cause him a problem at this stage of his career.

John Palmer**Company:****Job Title:** Manufacturing – Systems - Manager**Marital Status:** Married**Age:** 57**Years of Service:** 38**Starting Position**

Trainee

Industrial

Current Position

Manufacturing Systems Manager

Engineer

Most Significant Career Developments

- (1) Qualified as an Industrial Engineer
- (2) Appointed as Data Processing Manager
- (3) Promoted to Head of Information Technology
- (4) Transferred from Commercial to Technology Driven Computing.
- (5) Awarded a Fellowship of the Irish Computer Society
- (6) Promoted to Manufacturing Systems Manager

John joined the company in 1966 in Johnstown as a trainee industrial engineer. He replied to an advertisement in the local paper and was successful at the interview. He had spent two months working in a local garage in a clerical position having completed his Leaving Certificate in Mount Sion CBS. On joining the company he worked with PA Consultants who were employed by the company to study the cutting jobs and develop a new piece rate system. John is 57 years of age and is married with three children. He completed his training with the Irish Work Study Institute over a two-year period and continued to work in the company with PA Consultant for eighteen months until their contract was completed. He transferred to a clerical position for six months when the company decided to set up an internal Industrial Engineering Department. He was appointed as one of two industrial engineers in the department.

When the Kilbarry Plant opened in the late 1960s with massive expansion in staff numbers there was a huge need for industrial engineering across the full width of the discipline – time and motion studies, plant layout, ergonomics, routing of product, work methods, pricing of product. IE studies were carried out from the Batch to Despatch and bonus systems were installed in all areas with the exception of craft

areas where new piece rate systems were developed. In 1973 he successfully applied in response to an advertisement in the Information Technology Department for a trainee Systems Analyst. He was sent to train with IBM for ten weeks and on return was directed to take on programming so as to understand both systems and programming. He progressed to become chief programmer.

There were twenty employees in the information technology department at the time including 10 data preparation staff that prepared the data to load on to the main frame. The first computer, with terminals, was the IBM System 34 with just three support screens. In 1986 the company purchased the IBM System 38 with 50 to 60 green screens around the factory linked to it. In converting from System 34 to System 38 he was trained for one month in UK. He had to convert all systems to the new platform and establish Wide Area Networking with the Dungarvan plant and also with our subsidiaries in the USA, UK, Far East and Australia in order to maximise benefits from the new Technology

The data processing manager's position was changed to report into the Financial Director. He was responsible for introducing the local area network into the company, wide area network, business processing and control system, and the first enterprise resource planning system the company used. He headed up the team that introduced CAD and video conferencing. He also recognised the potential of the Internet at an early stage by securing "Waterford" as the domain name for the company and for the WWW address. He led the change away from bespoke software in which every system was developed and designed in house to being able to purchase software from external software vendors, which they continuously improved and upgraded.

In 1999 he moved from head of information technology to take charge of all non-commercial computing in manufacturing. This included all engineering technology, tank furnace, auto cutting, marking, sandblasting, new product engineering, effluent monitoring, environment, acid polishing. These areas were supported both in Kilbarry and Dungarvan. His responsibility is to maintain, support, develop and improve.

He has lectured in computer science in the Waterford Institute of Technology for seven years on day release from work two days per week. The college at the time was

building up its information technology department and were seeking help from industry to do so. He completed a diploma in management information systems from the Irish Management Institute. He is a fellow of the Irish Computer Society a recognition of which he is extremely proud.

The main barrier to advancing his career through education was allocating the time to study while working and managing family responsibilities. The main supporters were both family and the company who funded and encouraged employees to return to education and to adapt to and manage the change process. The many examples of employees being promoted as a result of their success in education provided incentive to every employee to focus on developing new qualifications. In hindsight he would like to have started his own business in the information technology field. His career choice would be to run an information technology business.

He was always motivated to return to education by the ongoing job opportunities and by the opportunities to improve his earnings. The difference to him in terms of education has been an increase in self-esteem and in self-confidence. His next step in personal development is to complete a course in networking. The key issues to be addressed to accommodating employees returning to education are funding, support from employers, the provision of progression routes and the development of career paths. The basic skills required by employees entering industry are a good education, communications, information technology and high personal commitment.

The company can improve its competitive position by up-skilling the workforce and maximising the use of technology.

His understanding of employability is that an employee should have acquired a good education, has a dynamic and positive attitude and is capable of working at a number of jobs. He considers himself employable as he has many experiences, is highly qualified and has an outstanding track record of achievement.

Ken McEvoy

Company: Waterford Crystal Ltd.
Job Title: Sculptor
Marital Status: Married
Age: 45
Years of Service: 29

Starting Position	Current Position
Apprentice Engraver	Sculptor

Most Significant Career Developments

- (2) Qualified in three crafts, Wedge Cutting, Engraving and Sculpting.
- (3) Produced a special Sculpted Piece for an art collector of glass valued at €8,000
- (4) Represented the company as an Artisan.
- (5) Graduated from University College Dublin with a Certificate in Health and Safety.
- (6) Produced an exact replica of the Twin Towers for an American Company.

Ken joined the company in January 1975. He attended the Central Technical Institute. After completing his Group Certificate he joined as an apprentice engraver and transferred into wedge cutting after five months. His father and brother were employed as blowers. Ken was conscious of the craftsman's pay and benefits package. He was delighted to be working in such a well-paid job in a great company. He qualified as a wedge cutter and graduated to master status. After thirteen years he redeployed to engraving to fill a vacancy that was advertised. He qualified as an engraver having spent nine years working at the craft. When the sculpting department opened he saw an opportunity to expand his knowledge of glass and transferred into the craft. He was anxious to develop a broad experience in glass making. He is currently in the sculpting department and has been there for eight years. He loves the creativity involved. He has made some outstanding pieces of crystal; one of these involved travelling to New York to install a replica of the Twin Towers, which was commissioned by Aon.

He has travelled to the customer in many places around the world for hand over ceremonies of specially commissioned pieces. This development and delivery of customer briefs has given him great satisfaction. The overwhelming response from the customer has been very motivational.

He completed his Group Certificate, European Computer Driving Licence, Certificate in Health & Safety from UCD, several Calligraphy courses, and an Introduction to Mathematics and a Computer Aided Design course in Waterford Institute of Technology. The completion of associated courses has improved him as a craftsman. He also attended a gardening course, and has created a number of sculpted pieces for the garden.

He was selected to represent the company as an artisan and has travelled to the United States on several occasions to host promotional events. On these trips he explains how the glass is made and the process involved in forming a design. He has inscribed his name on products on request to personalise and enhance the gift. The customer often requests specific messages such as congratulations and best wishes on products to enhance the gifting occasion.

He has worked with numerous visiting glass artists over the past seven years. He has designed a variety of artistic pieces, which are displayed on the tourist trail. He has also designed production pieces, which has been well received in the market. He is engaged in many innovations in the sculpting department one being a system on the Internet where he can send images of the different stages of development of the product to the customer and explain what is involved and when the customer is likely to receive it. This has proved a great success with major customers involving themselves in the development process thus adding to their experience as a collector of Waterford.

It is an authentic and transparent form of customer service and leads to the development of a strong bond between creator and purchaser. He has also maintained a library of photos of the pieces produced on his computer to show to customers who visit the plant. He admits to being very lucky with the opportunities that have come his way. He has been in the right place at the right time on many opportune occasions.

He is the only craftsman in the company to qualify as a wedge cutter, engraver and sculptor and has distinguished himself in all three crafts. He is an outstanding ambassador for the company taking great pride in his work and in the company. He is forever learning new techniques and knowledge relating to the craft. The restructuring has provided him with new opportunities to develop as a craftsman and he has made

the most of them. He loves the work and the interface with the customer. His preferred career choice is to be a Master Sculptor in Waterford Crystal, the most famous of world luxury gift brands in the glass industry in the world.

The main barriers to education are balancing family, work and study responsibilities. The main support was from the company in funding his studies and encouraging him to learn and develop. He has always felt challenged in producing new and exciting products and concepts. He says that there is a great learning culture in the company and everyone is eager to help each other on education and training programmes. He was motivated to return to education and learning in order to achieve more in the craft. He has always been interested in the design element of the crafts and has continuously strived to improve his skills and knowledge.

He has become more confident and competent as a result of completing exams, which he found daunting and sometimes difficult. He has many new and innovative ideas to explore and develop in sculpting. The key issues for employees returning to education are being able to transfer the knowledge directly into the workplace, with the company and individual benefiting directly. This transfer and outcomes encourages continuing learning. He only wants to work in the company for his entire working life and retirement is never on his mind. He loves his work and is interested in improving and learning new aspects to his craft all the time.

The most important generic skills in the industry are: Information and technology, the ability and capacity to learn, strong interpersonal skills and communication skills

The company can improve its competitive position by knowing the competition and improving its processes systematically on a continuous basis.

Employability means being open to change, being adaptable, willing to learn, having a good basic education and having a good attitude to work and to working with other people.

He believes he is employable having developed a wide range of experiences in the craft, art and design fields.

Pat Lenane

Company:	Waterford Crystal
Job Title:	Engineering Technician
Marital Status:	Married
Age:	49
Years of Service:	34

Starting Position	Current Position
Apprentice Cutter	Engineering Technician

Most Significant Career Developments

- (2) Qualified as a Master Wedge Cutter
- (3) Appointed Senior Technician in Cutting Technology.
- (4) Appointed a Temporary Supervisor
- (5) Involved in Research in Process Improvement
- (6) Trained in Germany with Suppliers of Technology
- (7) Deployed to Stuart Crystal UK to Improve Processes
- (8) Promoted to position of Engineering Technician

Pat joined the company in September 1970 as an apprentice cutter having completed one year in secondary school in the Technical College in Dungarvan. The company had just set up a new manufacturing plant in Dungarvan and were recruiting apprentices in the area. He is married with three children and is 49 years of age.

He achieved many firsts in the Dungarvan plant. He was the first qualified wedge cutter and master cutter. He achieved the highest standard in the three test bowls on completing 3rd, 4th and 5th year apprenticeship. He was appointed to manage the first team of cutters and his was the first team to move to individual piece rate in the late 1980s. They were the first group to move on to diamond cutting technology. He also became the first trained instructor in the Dungarvan Plant. He was quickly appointed as an advisor on the new diamond wheel system having also served as an advisor on the old ceramic wheel system. He was the first to train cutters in the dual crafts of wedge and rheintour cutting and also to train cutters to move between Dungarvan and Kilbarry and vice versa. He was appointed as a temporary supervisor for about nine months to complete a project on rework.

He was identified early as having an outstanding aptitude for mechanical equipment and was naturally gifted in adapting it to the needs of the production process. He was

appointed as a liaison person between the factory and the suppliers of the cutting technology and became the in-house expert on this equipment. He was trained in Germany with 'Winter', and 'Effgen Gmbh', both suppliers of cutting equipment. The company appointed him as a tool tester, testing and adapting the tooling to the manufacturing requirements. When new cutting technologies were introduced he was the first to examine, understand, adapt and commission each piece before it was used. He was also trained in the software applications and spent several periods in Germany working with the manufacturers of the new technology. He spent an extended and concentrated period of time in Kilbarry leading the change over from craft to techno-craft, which was part of the company's strategy to improve competitiveness. The aim was to marry the best of the craft skills with the sensible use of technology maximising efficiency and extending its capacity to produce many diverse and outstanding concepts and products.

He became a researcher/developer, commissioner, tester, trainer and mentor. He worked with master's students from the college who were completing master degrees and writing thesis in the engineering area. He was sent to work with Stuart Crystal in UK to upgrade their processes in cutting and finishing areas. His role involved dividing his time equally between researcher/developer of the next generation of technology and managing the cutting technology area. He provided supports in producing machine calibration manuals and programming manuals. He works on a 24-hour, 7-day week call-up for mechanical and software back-up support. He completed ECDL, a Certificate in Glass Technology and is an Information Technology Software Expert on Crystal manufacturing Equipment and Diamond Tool and Abrasive Wheel Technology.

He is mostly self-taught and has undergone many training programmes with suppliers. His father worked with mechanical equipment as an agricultural contractor with combine harvesters, tractors, steam engines and threshing machines. Pat says '*I inherited my father's interest in mechanical appliances*'. He remembers getting his first, second hand bicycle, stripping it down and rebuilding it again producing a much better and newer model. He drove his first car, a Lotus twin cam for 12 months until the engine broke down. It was a very complex engine. He bought a manual, researched the information and reconditioned the engine at a cost of £1R500.

The barriers were very few as the opportunities opened up for him on a continuous basis. He says he always seemed to be the right man in the right place at the right time. He was involved at the beginning of the technological revolution in the company becoming the first non-qualified engineer to be given responsibility for a range of manufacturing processes, which used highly complex and expensive equipment. The support he received in the company opened up many opportunities for him. Two manufacturing directors in succession provided him with resources to enable him to contribute to in line with his full potential.

In hindsight he should have returned to education in a part time capacity much earlier. His career choice would be a mechanical engineer. He was motivated to learn and educate himself in having an inquisitive mind. He loved being involved in developing new technology. He also liked passing on knowledge to others. He enjoyed his training instructor role and sharing the information he had accumulated through involvement in research projects. His progression in the workplace helped build his confidence, improved his self-esteem and provided him with a varied, interesting and challenging working life.

He hopes to stay in the company and enjoy the variety and the creativity of researching and developing the next generation of cutting related technologies. The best way to help employees engage in education is to cover the cost which is for many prohibitive at a time of great demands on their disposable incomes and provide them with time off to attend class and study if on shift-work.

The most basic skills for industry are information technology, interpersonal skills and a good basic education. The company can improve its competitive position by carrying out an in-house audit on every job and its relevance and value. They should then audit employee skills and knowledge and match the relevant skills to the relevant jobs. A restructuring process is needed to eliminate surplus products and unnecessary work that produces little added value.

Employability means people with a willingness to apply them to the task in hand and who are anxious to learn from others. He believes he is employable and has a proven

track record in leading change and in helping others to come to terms with it and develop successful careers.

He firmly believes in the general capacity of employees to rise to the challenge once given the responsibility, space and freedom to perform. He has seen so many employees grow in this empowering environment and so many others stifled by a more autocratic management approach. He thanks god he was so well supported by a succession of bosses.

Lisa Hayes

Company:	Waterford Crystal Ltd.
Job Title:	Industrial Engineer
Marital Status:	Married
Age:	31
Years of Service:	7

Starting Position	Current Position
General Operative	Industrial Engineer

Most Significant Career Developments

- (1) Moved from Hasbro Ltd to Waterford Crystal.
- (2) First woman to complete a Diploma in Industrial Engineering in the Company.
- (3) Completed a Bachelor in Business Studies Course.
- (4) Deployed to Data Management on SAP Project.
- (5) Appointed a Trainee Industrial Engineer.
- (6) Qualified as an Industrial Engineer

Lisa joined the company in 1997 as a general operative in the Packing Room. She had previously worked in Hasbro for six years as a line assembly operator. She was holding down a seasonal job from February to November only. Her partner was also employed there. Both of them felt very vulnerable in working for the one company and their ability to cover the mortgage in the event of a downturn. She was successful in applying to Waterford Crystal at the dawn of the millennium. She is 31 years of age and is married with two children.

She did not have any confidence when attending secondary school, as there was no history of completing exams in her family. She left secondary school during fifth year. An Education Guidance Counsellor took a special interest in her progress and

convinced her to return to school and complete sixth year. She completed the Leaving Certificate gaining three honours and two passes and was delighted with her success. Her career path with Waterford Crystal began in the Packing Room, badging, packing and examining the product. In her first year she started her Diploma in Industrial Engineering. She passed all her exams in the three years. She completed ECDL and was trained as a training instructor and an information technology champion

While completing her diploma she was in contact with the industrial engineering manager seeking out opportunities for advancement in the department. A position as data management administrator was advertised as part of the SAP project brief. She was successful in her application. The data had to be validated before it could be entered on to the SAP system. When she completed her Industrial Engineering course, she decided to continue with her studies and returned to college to obtain a Bachelor of Business Studies degree.

Lisa spent two years on the SAP project and physically had to examine the packed product with manufacturing quality and new product development teams before it could be entered on to the new SAP System. She was also given responsibility for the maintenance of SAP and the old computer system for all changes on the customer and vendor master in the changeover period. She was also involved in training all users in the newly developed procedures for SAP.

Greater control was needed to ensure accuracy and consistency within the data management team. Due to its critical nature a permanent position was agreed and due to employee relations agreements only permanent employees could apply for it. As a contract worker she was declared ineligible for the position.

At that time Finance was seeking an additional person as an Assistant Cashier to take responsibility for employee expenses and to interact with vendors. She was seconded to this position and after a period of time it became a permanent position and she applied and was given the job and made permanent in the company in December 2002.

From 1999 to 2004, Lisa completed the diploma and degree. In that period she changed jobs four times, gave birth to two children and acquired a new home which was the most pressurized but exhilarating period in her entire life. Her most recent job move was in 2004 when she was appointed as an industrial engineer as part of the restructuring of the industrial engineering department. She also completed ECDL and a Project Management and Problem Solving Course. In 2006 she qualified as an industrial engineer.

Lisa returned to education to improve her employment status and she knew she could do much better in the company. During her time in Hasbro she became very interested in work-study techniques. ‘ *A major event which influenced her life was the untimely death of her mother when she was four years of age*’. Her father had to rear a family of three girls and a boy. She was chosen by the family to take on major responsibility as they turned to her for guidance and support.

The main barriers were covering a five-shift rota, building a house direct labour, and carrying two pregnancies while completing her studies.

The supports were her husband and birth family, the company in funding the courses and the managers who released her for classes and study. Her study group provided a rich source of information and where every problem was solved and concept understood.

Lisa intends qualifying as an industrial engineer and becoming proficient at her job. In hindsight she would have preferred to gain a degree in industrial engineering but there was none available. There was too much theory in the business studies degree and not enough practical work in it for her liking.

Her preferred carer choice is to qualify as an industrial engineer. If she can continue her career progression she would like to stay with the company as it is a very interesting work organisation with a wide variety of jobs and processes to learn about and master.

The most important skills/characteristic required by employees in industry today are, developing a wide range skills and the ability to apply them on the job.

The company can improve its competitiveness by using all the skills and abilities of the current workforce. It is essential to use the experience and skills of the locals in marketing the product as they have the knowledge and passion to make really effective marketers and sales persons.

Employability is having the ability and qualifications to do whatever job is needed at the appropriate time and to do it willingly and very well.

Maria O'Grady

Company:	Waterford Crystal Ltd.
Job Title:	Department Head of Visitor Centre
Marital Status:	Married
Age:	39
Years of Service:	21

Starting Position	Current Position
General Operative	Department Head of Visitor Centre

Most Significant Career Developments

- (1) Secured a position on staff after 14 years of trying.
- (2) Appointed to a Supervisory Position.
- (3) Employed as a Trainer for the Retail Staff.
- (4) Joined a Consumer Lobby group as Spokesperson.
- (5) Completing a Diploma in Social Studies from UCC
- (6) Promoted to Department Head of Visitor Centre

Maria joined the company in 1983 as a general operative having completed her Intermediate Certificate in the Presentation Convent. Her father was employed with the company so she applied for a position and was successful. She is married with one child and is 39 years of age.

She worked as a general operative for 14 years in the Blowing, Washing and Packing areas. In 1997 she applied for a Retail position in the Gallery having completed a City & Guilds Certificate in Marketing in the Waterford Institute of Technology. She had also completed two City & Guilds Certificates in MS Office and in Desk Top

Publishing. She completed a typing course “All Fingers Go” in-company and she practised until she became proficient and fast.

She started out as a junior retail assistant and was trained by external consultants. She also completed the “Train the Trainer” Programme and became a Trainer for the Retail Area. She was then promoted Chief Cashier for the Visitor Centre. Her manager arranged a Customer Focus Training Programme for staff in collaboration with the local Chamber of Commerce. She helped produce a training video for retail staff in the UK and US and participated in role-plays for the video production. She is currently studying for a Diploma in Social Studies with UCC.

Following her annual performance review in 2001 she was appointed to take charge of ‘Over the Counter Sales’ staff which numbered ten of which four were full time and the others were seasonal /contract.

The barriers were always lack of opportunity in her first 14 years as a general operative and the lack of a Leaving Certificate. Maria said *‘Up to the early 1990s the company’s recruitment policy for office based staff positions required a Leaving Certificate. I applied for several staff positions but was ruled out of contention due to this policy’*.

The supports were the company in funding her education and the Training Team who trained her in ECDL and encouraged her in making up her lack of formal education. Personal initiative was the important ingredient and she was given every support to use it and become whatever she wanted to be. There were no glass ceilings placed in her way from the early 1990s and she thrived in the more open and egalitarian environment.

In hindsight she should have completed her Leaving Certificate and have gone back to part time education earlier. She does not think she could have continued to third level, as she needed a job and the finances. Her career choice would be to become a training consultant and specialise in management training. She is anxious to move on to better things and believes she has exhausted all the opportunities available in her current

position. She feels she has much more to offer and is engaged as an advocate for a consumer group in highlighting excessive pricing in retail outlets in the City of Waterford.

Having completed a number of education courses she is now more confident and competent, is computer literate and has the ability to sort out many of the information technology problems in her department. Her next ambition is to become a full time trainer and continue with her part- time political career representing consumer interests.

She is engaged in completing a diploma in social studies to help her develop a broad competence in public affairs. She would like to move on to a new career that would provide her with new challenges.

The most important skills for employees in industry are a good education – Leaving Certificate, information technology and communication skills.

The company could improve competitiveness by appointing internal auditors and improving costs throughout the organisation.

Employability concerns demonstrating initiative and flexibility, taking a genuine interest in work, having a good attitude and developing a wide range of skills.

She believes she is employable. She is an honest, adaptable, capable of working in many employment situations in particular in training, information technology, in a supervisory role and in politics.

Martina Wilmott

Company: Waterford Crystal Ltd.
Job Title: Executive Secretary
Marital Status: Married
Age: 42
Years of Service: 23

Starting Position	Current Position
General Operative	Executive Secretary

Most Significant Career Developments

- (1) Promoted to Finance Function.
- (2) Appointed Information Technology Champion
- (3) Appointed Executive Secretary.

Martina joined the company in 1981 as a general operative in the packing room. Having completed the Leaving Certificate in 1979 she completed a course in FAS in Business Organisation and Typing Skills. She worked in Kromberg & Schubert for a few months followed by a period of employment in a local veterinary practice. She always wanted to work in administration. On joining the company she found it hard to acquire an administrative position in the office. Martina is 42 years old and is married with one child.

While working on the factory floor from 1981 to 1991 her desire to move on to administrative and clerical work increased throughout the years. Having made enquiries from a number of sources she was advised to develop her computer skills. She quickly proceeded to become very proficient in them and achieved a City & Guilds Certificate in FAS.

In 1991 she was offered a position in Share Registration and was one of the first of many women to move from the shop floor to a staff position. She found a major difference in the culture. The work was hard and very different to what she had been used to. It was more appealing and challenging to her. She liked the new responsibility and the personal nature of it. On the shop floor she had worked as a member of a team and often the best individual effort was lost in the team effort.

In 1996 the Finance Function advertised for an executive secretary and she was successful in applying for it. This move was a much more challenging role. She was responsible organising the schedule of a very busy executive director. She organised all aspects of his daily work schedule, travel, meetings, reports and incoming correspondence. She was thrown in at the deep end and had to learn very quickly. The executive team were also heavily dependent on her ability to organise and communicate. Being placed in a position of trust, her morale and confidence soared. She got a feel-good factor and her satisfaction in doing a professional job was very high. Opportunities to display personal initiative were frequent. She completed several development programmes such as Executive PA, ECDL, Information Technology Champion and Tutor.

Through the technical skills development and experiential learning in the work situation she became supremely confident and competent in her position. Her appointment as Information Technology Champion in the Executive area required her to provide training in advanced IT for executives and their secretaries. She thoroughly enjoyed this role. She currently acts as IT support in computer skills training for the executive team. She has also taken on executive administrative work for Corporate Affairs and Sales & Marketing Directors. The ongoing restructuring process has led to a cut back in staff numbers. She feels equal to the challenge having being afforded the opportunity to develop her skills to a very high level.

The barriers she encountered during her career to date have been in the earlier years when there was a distinct lack of opportunity open to shop floor employees to move on within the company. It took a long time and a lot of trying by her to move on to a staff position.

The support mainly came through the good office of her boss who gave her the space and responsibility to develop to the maximum. She thrived under a very challenging but supportive management style.

In hindsight she should definitely have completed a degree course and it would have made a huge difference to her career path. Her preferred career would have been as a social worker. Her motivation to improve her qualifications came from a belief that

she could do much better for herself and didn't like working in the factory. She loves reading and reflecting. The work on the shop floor was repetitive and did not require any great intellectual input.

Martina states '*my learning and development experiences have given me great confidence*'. She has had the opportunity to deal with all kinds of people and many different situations. She says that she has become much more assertive and confident. Her job brings something new every day and the variety and deadlines make the position so interesting and enjoyable.

The basic skills and competencies required for the workplace include, having a personal desire to be the best that one can be, a good level of literacy and numeric skills, a high proficiency in IT skills and a good education to facilitate continuous learning.

The company could best improve its competitive edge by providing greater equality of opportunity for women. Many of them are highly competent but lack the confidence to do justice to themselves at interviews. There should be incentives for employees to work hard at gaining relevant qualifications. Employees, where possible, should be moved around the organisation to help gain many experiences.

Employability is all about having a good qualification and the personality and character to use it best, in any work situation. She has always been appreciative of the fact that she completed her Leaving Certificate before joining the workforce. It gave her a head start in developing new skills later in her career. She considers herself eminently employable due to her qualifications and the experiences she encountered throughout her career and her proven track record at work.

Jim O'Leary

Company:	Waterford Crystal Ltd.
Job Title:	Director of Design
Marital Status:	Married
Age:	60
Years of Service:	44

Starting Position	Current Position
Apprentice Wedge Cutter	Director of Design

Most Significant Career Developments

- (1) Qualified as a Master Cutter.
- (2) Appointed to the Design Department under Miroslav Havel
- (3) Established the Artisan Programme.
- (4) Appointed Lead Ambassadorial Artisan to the US.
- (5) Appointed Director of Design.

Jim joined the company in October 1960 as an apprentice wedge cutter having been recruited from the Central Technical Institute. He was sixteen years of age and excelled in art and technical drawing while at school. His teacher Mr Burke recommended to him to apply for a craft position in Waterford Crystal. It was a time of rapid expansion in the company. He is 60 years of age and is married with two children.

In serving his apprenticeship he displayed outstanding skills and achieved an A mark for his five year qualification exam piece. In 1963 he was chosen to represent Ireland at the international trades competition in Portugal. He quickly reached master cutter status. In 1983 the company began to expand the design department and he was appointed to a position under world famous glass designer Miroslav Havel. He proceeded to complete a Marketing Course in the Institute of Marketing in Dublin. He spotted an opportunity to touch the customer at a very personal level in the US, which led to the development of the artisan programme. In organising promotional events with a visiting artisan as the main feature the major stores in the main cities of the world increased sales substantially during the events. These promotional events were unique opportunities to sell the magic of Waterford face to face with the customer. The artisan was trained to explain the manufacturing process and build an

appreciation of the value and distinctive features of the product and the many different concepts and product streams on offer.

The artisan assisted store management to develop in-store promotional activities that glamorised the brand and product and created a special aura around the product, which no other company could emulate. The consumer was able to relate the product to faces and personalities. It created a human story and gave credibility to the handcrafting and mouth blown processes, which had been in existence since 1783.

Jim invented the 'Romance of Ireland' series of giftware products that was fashioned and cut in a manner that told a story about a particular place in Ireland e.g. The 'Rock of Cashel' vase which sold 100,000 pieces and which he personally designed.

In collaboration with the US marketing team he was responsible for establishing the 'Waterford Collectors Society'. Today 30,000 aficionados around the world subscribe to it as members and are updated on a regular basis on new product developments and are offered access to a range of special items designed for their consumption only.

He was appointed to a major ambassadorial role and quickly became known as the face of Waterford in the US. This allowed him access to radio, TV and Press in the US, which in itself became a major marketing tool for the company and a free advertising outlet.

He was part of the creation of a crystal 'Times Square Ball' which was originally launched on New Years Eve in 1999 and was subsequently contracted to run for seven years until 2006. This event is seen by one million people in Times Square and by billions around the world on TV. The event is mentioned on Press, Radio and TV more than 300 times in 24 hours.

The ball is a sphere constructed of light weight aluminium in a geodesic design that carries 504 triangles of beautifully cut crystal illuminated from within and without by over 600 specially designed bulbs. These bulbs are lighted with primary colours and are controlled by computer to provide a fascinating lighting display. The ball weighs over 800 lbs and is kept at number one Times Square and erected each year two weeks before the event and taken apart again on New Years Day. A new theme is designed each year representing, hope, peace, health, prosperity, unity, courage and

wisdom. The wishes combine to make up each year a quilt of world wishes and dreams and are celebrated through this New Year Event.

He has visited and worked as an Ambassadorial Artisan in Thailand, Singapore, China, Malaysia, Canada, US, Australia, New Zealand, Germany, France, Italy Austria, Caribbean and UK. Every year he designs special high quality limited editions for the top end of the market. He also gives seminars on design, the making and promoting of a lifestyle use of crystal products. He works outside of Ireland as an artisan for six months each year. He was trained in public speaking, radio and TV interviews and marketing and promotional activities. His natural artistic drawing skills opened the door for him to become eventually director of design. He is a completely self-made and has took many of the opportunities that were opened to him

In hindsight, Jim would recommend ***'that every child should aim at gaining a third level education or a trade, craft or traineeship'***. He believes he was extremely lucky but opportunities such as he got are unlikely to repeat themselves as the world of commerce has become knowledge based and internationally mobile. His preferred career choice is to lecture in English literature, as he loves reading and poetry is of special interest to him. He is happy to serve the company until he retires at 65 years of age. He is indebted to his master cutter who taught him one thing, that perfection will bring with it many rewards both material, psychological and spiritual. Jim says ***'my education has been a continuous stream of select work experiences blended with a number of appropriate courses and training programmes'***. His success has made him more confident, professional and content with work and life. The key issues to be addressed in encouraging employees to return to education are, awareness of the options, incentive to improve at work, funding and support in the form of mentors.

The most important basic skills for industry are, to be proactive and willing to work in whatever situation you are in. You should strive to get on well with everyone. It is important to be interested in sport, gardening, reading and music, which are universal languages through which many friends can be made. Developing a positive attitude, being willing to work hard and having a good rounded basic education will enable people to achieve what ever they wan from life.

The company can become more competitive by investing in advertising to maintain the magic of the brand and to focus on non- people cost improvements given what has already been achieved through people cost reduction.

Employability is about perfecting the skills suited to your ability and that will take you forward to the next level of competence. The company should help you with company related skill development. He believes he is and has always been an employable person. He has at all times being willing to learn and take a risk, a calculated risk to further his career at ever stage.

Jim O'Neill

Company:	Sun Life Financial Ltd
Job Title:	Special Projects Director
Marital Status:	Single
Age:	43
Years of Service:	27

Starting Position	Current Position
General Operative	Special Projects Director.

Most Significant Career Developments

- (1) Commenced adult education in the 1980s which led to a job in the I.E. Department.
- (2) Appointed Head of Industrial Engineering.
- (3) Appointed Corporate Performance Analysis Manager
- (4) Recruited by Sun Life Financial as Special Projects Director.
- (5) Appointed Senior Solutions Manager in AOL Ltd

Jim is 43 years of age, single and joined the company in August 1977 as a general operative. He started in the blowing room knocking off the hot glass from the blowing iron on to a conveyor belt. He remained in this position for two years. He then moved into the Lehr as an attendant where he was employed for the following eight years. His task was to transfer the hot glass from the conveyor into the Lehr for cooling. He was a student in Mount Sion CBS and was in fifth year when he decided to leave to join the workforce to support his family. He was the eldest son in a family of ten children. Staying on in school was not a realistic option as the needs of his family was a more pressing issue.

While working in the Lehr he completed his Leaving Certificate in 5 subjects over a two-year period in the Central Technical Institute in Parnell Street Waterford. He continued to pursue his education part time and completed a Diploma in Social Studies from University College Cork in the CTI, a Diploma in Industrial Engineering in Waterford Institute of Technology and a Diploma in Personnel Management from the International Correspondence School in London. He moved from the Lehr into industrial engineering as a trainee IE in the mid 1980s. He became the Work Study Manager in 1989. Jim was appointed Production and Engineering Manager in 1990. He served on the company's Turnaround Task Force from 1990 to 1994. He led the development of new payment systems for all jobs during a time when 4 major industrial relations agreements were negotiated taking £35M out of the overall cost base.

He was responsible for enlarging the scope and responsibility of the Industrial Engineering Function. This was needed to provide new services and expertise at a time of transformation in manufacturing. Central to the success of the enlarged and influential function was the ability to source shop floor employees and train them to the necessary level. This practice brought huge credibility and transparency to the function. It also fast tracked many of these people who had a wide experience of the business. Many of those recruited to Industrial Engineering used their term there, as is passport to up skill further as they were encouraged to strengthen their professional skills. In gaining promotion they were located right across the organisation. Some of them were later headhunted by leading international companies. The IE department took on the added task of planning plant layout and development. Business Process Re-engineering was introduced in 1995 in order to re-engineer business processes to support the strategic direction set for the business. He was also assigned the responsibility for data management, which was gaining in importance as the business became more complex and large. Information and knowledge became central to informed company wide decision- making. In 1998 he became Divisional Manager of Industrial Engineering including Stuart Crystal UK and ALL CLAD in US.

He was appointed Corporate Performance Analysis Manager in 2003 and in 2005 he was recruited by Sun Life Financial Ltd as Special Projects Director.

From 1992 to 1997 he completed an MBA from Henley and was nominated for the best dissertation award. In 1999 he was made a Fellow of the Institute of Industrial Engineering and was responsible for establishing a branch of the American Institute of Industrial Engineering in Ireland in the mid 1990s. The business had moved from being a single source supplier to being a multi-source supplier and from predominantly craft manufacturing to techno-craft manufacturing. In the early 1990s the company broadened its product range through its brand extension strategy to include China, Writing Instruments, Linen, Christmas ornaments and Jewellery.

Jim introduced and implemented a company-wide suggestion scheme. He also introduced and designed the new CAD system for new product development. He became the head of the internal cost monitoring task force in 2000. In 2001 he became project leader for the installation of the new enterprise resource planning system SAP. This enterprise resource planning system cost €7m to purchase, install and operate including all the training and development needed by the many users throughout the company. He continued his journey through responsible management positions and became Corporate Performance Analysis Manager in 2003.

In 2005 he was recruited by Sun Life Financial to become Special Projects Director and in May 2006 he was appointed as Senior Solutions Manager with AOL Ltd.

Jim considers his most important achievement to be the establishment of the IE Function at a critical time in the early 1990s and the gaining of company wide confidence in the integrity of its operation. It was a most sensitive and challenging time for all involved and the continuous cost improvement programmes became the basis for the growth that followed from Waterford '250' business plan 1996 – 2000.

The recruitment of the IE team from both within and outside the company and their development into a highly efficient and effective team is another achievement that he is very proud of to this day. The IE team were at the centre of all the change that happened in the company since 1990. In many instances they were leaders in driving the change. They supplied the information needed to make the key decisions. They studied, designed, planned, implemented and controlled changes in the bonus

schemes. They restructured plant layouts, new processes and systems which were at the heart of the competitive overhaul of the company over the past 14 years and which served to upgrade every aspect of business performance.

His preferred career choice would have been a doctor. It would have provided him with a most challenging job and from a humanitarian perspective it would have been hugely satisfying. He returned to education as soon as he possibly could on joining the workforce. At that time he needed the money to pay for it. Jim says '*I strongly held the view at that time that unless I achieved worthwhile qualifications I would make little progress in both personal and employment terms*'.

His re-engagement in education has made a real difference to his confidence, sense of self worth along with endorsing his intellectual capability. He is glad to have been given the opportunity to move to a new challenge in a new company. He feels that he has a lot to offer the company in the form of specific expertise, experience and commitment. The most critical support he received on returning to education in Waterford Crystal was the education and training department and the company's general commitment to employee development. The greatest obstacle has been resistance from old style management and the difficulty in making time for it. The cost at the start was also a big barrier (he returned to education prior to the company establishing its part time education grant scheme)

The key generic skills and competencies required of employees going forward in a changing work environment are, adaptability, flexibility of mind, information technology and good communications skills.

Jim Walsh

Company:	Waterford Crystal Ltd.
Job Title:	Purchasing Services Manager.
Marital Status:	Married
Age:	41
Years of Service:	25

Starting Position	Current Position
Clerk	Purchasing Services Manager.

Most Significant Career Developments

- (1) Promoted to Charge-hand Store man
- (2) Completed a Diploma and MBA.
- (3) Head hunted by Stafford Miller to fill Purchasing Manager.
- (4) Appointed Purchasing Services Manager of Waterford Crystal.
- (5) Spent six months in the USA setting up the Turnkey (packing operation).

Jim joined the company in January 1979 as a clerk having completed his Leaving Certificate in Dungarvan CBS. There was not a wide choice of employment options available at the time. He is married with one child and is 44 years of age.

He worked as a wages clerk until 1987 and became a charge-hand store man from 1987 to 1990. In 1990 he was appointed manager of the store – goods inward. He was selected to participate in the Diploma in Business Studies through Henley as part of the MBA Programme for middle and front line managers in 1991. In 1994 he completed the Diploma and in 1996 he completed the MBA one of only five participants to complete the Diploma and MBA programme. In 1996 he was transferred to Kilbarry as a Buyer in the Purchasing Department and in 1999 he departed the company to become Purchasing Manager of Stafford Miller in Dungarvan.

In February 2001 he returned to Waterford Crystal as Purchasing Services Manager and he completed a Certificate in the Irish Institute of Purchasing and Materials Management. The main barriers were time and balancing the different responsibilities, work, family and study. The main supports were the company who were excellent in initiating the MBA programme, funding employee education and supporting every employee by showing interest in how the employee was progressing on the course.

In hindsight he has no regrets. He says that ‘ *the MBA was the most informative and helpful qualification that he has ever attained*’. He believes that it gives an advantage in knowledge but also in status. The general body of managers appreciate the qualification and accept you as a professional. He is now a much more confident person as a result and is comfortable in managing difficult and complex issues in his work. He can analyse data and understand much more of the business, the strategy and the reasons behind the decisions and the overall purpose and mission better.

His motivation for engaging in education while in work was that the future appeared bleak in the early 1990s following the Strike. He was not very employable and he wanted to do better. He had always wanted to attend third level but being one of a family of nine children his options in this regard were limited. On completing second level education he was expected to enter the workplace and earn a living. His career choice would be his current role as Purchasing Services Manager. It is interesting, varied and challenging and there is something to tackle every day. He would liked to have been in the job 15 years earlier.

His next aim is to make further progress in the company over the coming years. The most important generic skills for an employee in industry are, a good overall appreciation of the business as it offers many employment and development options to employees, a good business based qualification and good people skills as the future success of any enterprise depends on well people can work together.

Employability is being able to get a job wherever you are and having the skills and qualities to respond to job market needs. Jim says that ‘ **becoming a more rounded person through access to continuing good education is the key to employability in the future**’. It is vital to provide educational opportunities for all employees to enable them to grow in understanding and competence.

John Connolly

Company:	Waterford Crystal Ltd.
Job Title:	Chief Designer / Manager of Special Projects
Marital Status:	Married
Age:	56
Years of Service:	40
Starting Position	Current Position
Apprentice Cutter	Chief Designer / Manager of Special Projects

Most Significant Career Developments

1. Qualified as a Master Cutter
2. Transferred from Master cutter to Chief Designer and Manager
3. Successfully launched the John Rocha range of product.
4. Involved in launching the Waterford 'W' Collection.
5. Represented company as an Artisan

John joined the company in 1964 as an apprentice cutter and at that time regarded the craft as an outlet for artistic expression. He is 56 years of age and is married with two sons both of whom are in marketing. He always had a special interest in art and developed an extensive portfolio of paintings and drawings of which he is still very proud. The Irish Industrial Revolution had just begun and Waterford with its magical craft skills was a huge attraction for many young aspiring craftsmen. The brand, the crafts, the pay and benefits package were very enticing when he joined as apprentice cutter. He had completed his Group Certificate in the Central Technical Institute when he got the opportunity to join Waterford. In joining the company part of his apprenticeship was to attend art and design classes one day per week, he enjoyed this element of his training immensely. Mr Havel the company's head designer was giving the lecture on design and another famous teacher Mr Burke gave the art lecture. John qualified as a cutter in 1969 and then as a master some years later. He was appointed to the Design Team in 1987 following a period working on alternative design for special pieces a project that was deemed very successful, and being the forerunner to a new concept in design the 'archive' piece.

In 1990 the new Design Centre was opened and for the first time CAD was introduced. The entire Design Team voluntarily returned to college to study technical drawing and they also completed a comprehensive programme on CAD training.

In 1991 outsourcing of product began and the team had to prepare all drawings with complete sets of specifications for tendering purposes. Also all designs had to be transferred from paper copies to CAD where all the craftsmen and other employees had access to CAD stations on the factory floor to check on specification including design and dimensions. This period of organisational transformation witnessed the start of the new product development program, which reached 500 new products per year at the height of the millennium sales program. New product was developed to excite the market place and attract new and younger consumers to the brand. It was a period of regeneration and the design department were working at the cutting edge in winning a greater share of the market for Waterford.

The company also launched a new brand Marquis by Waterford, which was aimed at the middle end of the market and challenged competitors who were snapping at Waterford's classic range and were selling under them. It was a cover strategy for Waterford and it worked for them as Marquis quickly built up its own customer base and did not cannibalise the Waterford sales but checked competitor progress.

He has been responsible for many of the most outstanding developments in design over the years, which include stemware patterns; Lucerne, Wynnewood, Overture, Crosshaven, Kerin, and gift wear collections Balmoral, Overture, Killeen, Killarney and Clarion. He has been managing the successful introduction of John Rocha at Waterford Crystal, and supporting the continued success of the brand since.

He designed the millennium-toasting flute and with the creative support of three members of the design team made this collection the greatest success story in the history of the industry. The cutting pattern depicted five themes, love, happiness, prosperity, health, and peace. He also designed the Celebration Flute Collection the themes were, Love, Joy, Dreams, Friendship and Success. In 2001 he managed the launch of Waterford 'W' in his words the evolution of a classic, designs reflecting modern life style with the benefit of wonderful new colour. His latest collection Siren and Eclipse stemware were introduced in 2004 at the Waterford re launch in Dublin.

He attended numerous education and training programmes to help him progress with each stage in the company's development. The need to keep abreast of the market place and to continuously innovate in creating new designs required a wide perspective on consumer trends and an analysis of what the market was reporting back. He also travelled extensively to the market place and to the major Gift Fairs in the US, Frankfurt, Birmingham and Dublin to study developments and to assess competitor initiatives in the market.

He has no regrets in regard to his career choice or his development and progress in the company, he admits its been much more rewarding and exciting than anticipated.

John says that 'in hindsight it would have helped him to progress with more confidence if he had returned to college and completed a degree course' (on a part-time basis in the 1970s). It would have helped him in dealing with high-powered business people engaged in marketing, sales, logistics and manufacturing. The supports came from the company's training team who helped in every way. The extensive travel provided him with many learning opportunities that broadened his perspective on many issues.

As a career choice he would like to manage his own business in product design. His main motivation for returning to education was necessity and the rapid changes taking place in the company, and his desire to progress into his present position. His development has given him a broader view of the entire business and has made him a much more confident and competent person.

He strongly believes that there should be television programmes explaining what is happening in the workplace and what young people need, to make their way successfully in employment. There are so many opportunities available but they need to be informed and giving direction all through their career. The basic skills required for employees are a good education, information technology skills, common sense, knowing your job well and how the entire business works, staying in touch with best practice and good communications skills.

Waterford faces a most demanding product development period in 2005. He is looking forward to that challenge with his creative ability and knowledge of all our

production processes he feels fewer introductions but more innovation and customer focus is needed. The company needs to reduce its range of product and concentrate on market support of the core range and seek to do it exceptionally well and to develop and maintain a market led ethos. Employability is being able to add value to the employment situation and possessing that wide range of skills and knowledge that enables this to take place. He believes he is extremely employable given his development and achievements over forty years with the company.

John O’Riordan	
Company:	Waterford Crystal Ltd.
Job Title:	Training Manager
Marital Status:	Married
Age:	40
Years of Service:	25
Starting Position	Current Position
Apprentice Cutter	Training Manager
Most Significant Career Developments	
<ol style="list-style-type: none"> 1. Qualified as a Master Cutter 2. Trained as a Training Instructor. 3. Completed a Bachelor in Business Studies Degree. 4. Represented the Company as an Artisan 5. Covered for Plant Superintendent 6. Appointed Training Manager. 	

John joined the company in 1979 as an apprentice cutter in the Dungarvan Plant at 15 years of age having completed his Intermediate Certificate. He is 40 years of age and is married. He did not enjoy being in school and was on the look out for a job and a means of making some money. Job opportunities were scarce in Dungarvan at that time and he was delighted to get a chance to serve his apprenticeship with Waterford Crystal. He qualified in 1984 and graduated to master cutter having served his time. He was always interested in technical issues and was particularly interested in computers. As a master cutter he became involved in research and development projects on wheel testing and other technical issues with external vendors from Europe.

In 1995 he was selected and trained as a training instructor for the cutting section. He was the youngest applicant for the position. He had seen how the trainers who had been appointed in the early 1990s had performed in Kilbarry in the company's transformation. The many opportunities that came their way having been involved in so many different areas, changes and projects. He could also see that this was a wonderful learning and development experience for them. They were challenged with many different responsibilities that provided them with great learning opportunities. He looked forward to developing his skills and experience of the business as a trainer.

He was provided with an office in the learning centre in Dungarvan to plan, design, deliver, record and evaluate training programmes in collaboration with the management team. As one of his first initiatives and to promote a culture of learning he organised a National Irish Institute Of Training & Development Certificate in Training & Development Programme in the Learning Centre for 15 participants, thirteen from the Dungarvan Plant including him and two from local companies. He then completed a Diploma in Training & Development with the Irish Institute of Training & Development.

In 1998 he became Training Co-ordinator for the Plant and was responsible for selecting and developing a team of 16 instructors representing all the key processes and skill sets. He then joined a NUIG – National University of Ireland Galway / FAS Degree in Training & Development Programme. He completed one year and achieved high marks before transferring to the Waterford Institute of Technology to complete a Bachelor in Business Studies. His main reasons for making the change was that the BBS was more challenging and was more broadly business based. It provided him with a wider perspective and insight than the specialist training degree would offer. He completed the BBS in 2002 achieving a second class honours of which he is very proud.

At the start in 1995 it had been a slow process gaining full acceptance for training and development as a legitimate business function. Over time it proved itself and the results in production and in the increasing skill levels of managers and operatives convinced the doubters. Training moved centre stage for all future changes and developments. In 1997 a new plant manager was appointed who was very supportive

and appreciative of the training input. He saw it as a means of implementing change and improvements. John was given an extended brief, which included introducing manufacturing efficiencies, and in participating in problem solving projects. The role of the trainer included problem solving, trouble-shooter, trainer, coach, advisor, change agent and tutor. He was assigned to a number of projects as facilitator to help successfully introduce more efficient and effective procedures and work methods. On the introduction of SAP he was particularly gifted on information technology and quickly became an expert and a leading implementer of the system in the Dungarvan Plant. He became SAP Co-ordinator for Dungarvan as part of the Company's overall SAP Team. He trained Front Line Managers to process a number of key reports, which they needed to improve the management of the Plant.

He also delivered a training programme on SAP documentation and system management from Order to Customer. This training programme showed clearly how the paper and software trail converged which is so critical for decision making and overall supply chain efficiency. In 2002 he was appointed to cover for the Plant Superintendent who is second in command to the Plant Manager. He has also represented the company as an artisan and has travelled to the US on three occasions.

He returned to education when the opportunity presented itself. John said that '*he knew he needed to educate himself if he was to progress his career within the company*'. The company had been in the process of transformation of its operational based since the early 1990s and the old skills were no longer as dominant as heretofore. A new skill base was required and it was up to all employees to develop it. The main barriers were finding the time to attend college and to study, and his level of formal education, which served to undermine his personal confidence. The main supports were his manager, and the company funding the programmes providing him with the comfort of knowing he could fail and repeat exams without suffering any penalty. Failure though for him, was not an option. He knew he needed to perform exceptionally well to progress his career. The opportunity to transfer the learning immediately on returning to the work place and being able to share experiences and knowledge within groups was extremely helpful.

Education improved his ability and confidence to converse and engage at a higher level with senior managers and with external consultants. It increased his level of competence and confidence and he was in a better position to solve problems and help other people, particularly those who decided to return to education with projects and general advice. It also widened his ambition as the more he learned the greater the capacity to influence and implement.

In hindsight he would like to have completed a full time third level business course. His preferred career choice would be a general manager in manufacturing. He is aiming to progress within the company and would move on if his career path was stymied in Waterford. He is planning to complete an MBA in the future and is looking forward to it.

The most important generic skills for industry are, information technology, communications, business acumen and awareness, appreciation of systems and processes and being competent and confident as an individual. For the company to improve its competitiveness it needs to work smarter with current technology and get everyone on board in contributing to his or her maximum potential. Employees all want to do better and just need direction and support.

Gabrielle Mackey

Company: Waterford Crystal Ltd.
Job Title: Quality Systems Manager
Marital Status: Married
Age: 36
Years of Service: 17

Starting Position	Current Position
Packing Operative	Quality Systems Manager

Most Significant Career Developments

- (1) Post strike realisation of her Employability Status.
- (2) Trained as a Training Instructor
- (3) Completed a Diploma in Quality Management
- (4) Participated in the Horizon Project
- (5) Selected and installed Quality Software Package
- (6) Appointed Quality Systems Manager.

Gabrielle joined the company in January 1987. She had completed her Leaving Certificate and a Secretarial Course. She is 36 years of age and is married with one child. She started in the Packing for 6 months and then moved to the Lehr for 12 months and then to second stage sorting for 18 months. Her mother was employed in the company for a number of years.

The 14 weeks strike in 1990 opened her eyes to the vulnerability of her employment situation. She vowed that when she returned she would develop her skills and move on to more secure and rewarding work. She attended Waterford Institute of Technology and completed a City & Guilds Certificate in Quality Assurance. She took the initiative to prepare curriculum vitae and submitted it to Personnel requesting a transfer to office work.

When a project in Quality Assurance on the analysis of the weights of products came along she was seconded to it for six months. Following this she applied for an administrative role with Quality Assurance and was successful. She was selected as an internal auditor for ISO 9000 and was trained for this role. She returned to college to complete a computer course, a Cambridge Certificate. She then completed a Certificate and Diploma in Quality Management over a three-year period.

In the mid 1990s the key quality project was the implementation of ISO 9000 Quality System in the Kilbarry, Butlerstown and Dungarvan Plants. She was appointed assistant to the Project Manager. She also acted as training instructor on ISO 9000 and was trained as a trainer. In ISO 9000 she was responsible for researching, developing and implementing a documentation package, appropriate software package Q-SYS. She was expected to train the key operators in it. After the success of the project in Waterford she was seconded to Stuart Crystal to assist with ISO 9000 implementation in the UK plant.

With her systems background she was seconded to support plant engineering with Integrated Pollution Control licensing and implementation of ISO 14001. She also championed the re-registration of ISO 9000:2000 in 2002/3

She did not face any real barriers in returning to education, as everyone was very helpful. The main supports were the company who funded all courses and the managers who offered every encouragement. If you ever wanted help on sourcing information or on completing a project or in securing facilities there was never a problem. Gabrielle says that *'Employees returning to education were given priority attention'*.

In hindsight she should have gone back to college much sooner and should have completed a degree course in the early 1990s. She regrets it now. Her career choice would be to be a nurse or a banker as she liked working with people on social issues and is also very good with figures and money.

Her return to education was prompted by the consequences of the strike for future employment. She found she was not very employable and she didn't want to remain working on the shop floor. It was not stimulating, developmental nor mentally challenging.

Education has made her more employable and without it she would not have progressed in her job. She likes studying and very much enjoyed the social side of learning. She loved been busy and enjoyed that sense of achievement on completing

the course. She would need access to continuous progress and learning to remain in the company. The most relevant skills for industry are a third level qualification, computing and a wide range of soft skills such as communication and interpersonal skills.

The company can improve its competitive position by developing a realistic plan and getting everyone to unite in support of its implementation. The company is currently not utilising the full range of abilities of its employees. The contribution of the employee is hugely important and executive management must provide the right leadership to get the best from them. She has had over the years a range of external auditors visiting the company to audit the quality standards under ISO 9000. Not one employee has ever left her down on any commitment made to her. Employees have great pride in the company and every job is well done.

Employability is being suitable for a broad range of work tasks, being qualified and adaptable and being able to do a number of jobs. She considers herself very employable as she has a good track record of solid achievement in the company, has developed a broad set of qualifications, likes dealing with change and wants to improve all of the time.

George Brett

Company: Bausch & Lomb
Job Title: European Health & Safety Manager
Marital Status: Married
Age: 40
Years of Service: 22

Starting Position	Current Position
Apprentice Cutter	European Health & Safety Manager Bausch & Lomb

Most Significant Career Developments

- (1) Qualified as a Master Cutter
- (2) Completed a Health & Safety Diploma through UCD.
- (3) Represented the company as an Artisan on seven occasions in the US.
- (4) Appointed Health & Safety Officer
- (5) Appointed Environmental, Health & Safety Manager of Bausch & Lomb, Waterford.
- (6) Appointed European Health & Safety Manager, Bausch & Lomb.

George joined the company in October 1976 as an apprentice wedge cutter. He did not like school and he left Mount Sion CBS in his fifth year to earn some money. He qualified as a cutter in 1981 and progressed to become a master cutter in due course. During the 1980s he returned to complete his Leaving Certificate in the Central Technical Institute through night classes.

In 1990 he completed a Diploma in Health & Safety with University College Dublin via the Waterford Institute of Technology part time programme. In 1993 he was provided with some work experience as a Health & Safety Officer and before the term was completed he was appointed to the position full time. In 1994 and 1995 he completed a Diploma in Human Resource Management from the National College of Industrial Relations in Sandyford, Ranelagh.

He was selected as an Ambassadorial Artisan and represented the company on seven occasions in the US. He found this responsibility to be a great learning experience for him as it opened his mind to what the customer wanted. In 1996 he was appointed Human Resource Manager of the Dungarvan Plant. In 1998 he was appointed Health & Safety Manager of Bausch & Lomb in Waterford with a workforce of 1,700 employees.

He completed a Diploma in Environmental Management over a three-year period comprising four one-week blocks each year from the International Institute of Risk and Safety Management.

He is currently finalising his thesis having completed all the exams in a Degree in Environmental, Health & Safety Management from UCD. The degree course required two further years to add on to his diploma. He has just begun a Certificate in Training and Communications from NUI Maynooth. This will be his last formal education programme for some time. He will have a rounded off a complementary set of key qualifications.

The main barriers were time and family commitments. The main supports have been the two companies who have funded and encouraged him to pursue job related educational qualifications.

In hindsight he should have completed his Leaving Certificate. He does not think that at the time a third level education was a real option for him. He needed to join the workforce and earn money to support himself and his family at that time. His career choice would be to become a barrister. In his dealings with health and safety issues and in particular court cases he has developed an expertise in the legal area. He would like the opportunity to influence change in the claims culture on behalf of companies that are being damaged by spurious claims and the subsequent rise in insurance costs.

George says that His motivation for returning to education was fear of being unemployed in the future. Waterford Crystal was experiencing difficult times in 1990 when he decided to take on the Diploma in Health & Safety. He needed to provide for his family and felt very vulnerable being qualified in a specialist craft that was specific to one location.

His next aim is to make a success of his current position that poses a major challenge to his capability. He is extremely satisfied to have made such progress and hopes to continue to learn and develop all the time.

The issues to be addressed to encourage employees back to education are – that employers need to be more accommodating and government should provide

incentives to employers to develop the skills and competencies of their employees. He would hope to retire from Bausch & Lomb but if the right opportunity came along he would take it.

The basic skills required by employees in industry include – a good education, work experience in any situation, information technology skills and good people / social skills.

Companies can become more competitive by fostering innovation and applying advanced technology wherever possible. Employability is about having a good broad education that can facilitate adaptability and flexibility and to be multi-skilled to be able to cope with a variety of work disciplines.

George believes he is employable as he has a great depth of experience in a number of industrial contexts and he also has a range of work related and relevant qualifications.

Ger Grant

Company:	Waterford Crystal Ltd.
Job Title:	Production Engineer
Marital Status:	Single
Age:	31
Years of Service:	15

Starting Position	Current Position
Apprentice Blower	Production Engineer

Most Significant Career Developments

- (1) Qualified as a Glass Blower.
- (2) Completed Technician Course with Distinction.
- (3) Appointed a Technician
- (4) Appointed Production Engineer.

Ger joined the company in August 1989 as an apprentice glass blower in the Dungarvan Plant. His father was a master glass blower and front line manager in the plant. He attended St Augustine's college and left after completing his Intermediate Certificate, his 4th year. He disliked school and found it difficult to make progress in some of the subjects. The glass blowing apprenticeship with Waterford Crystal always held an interest for him and he wanted to try it out. Working with his hands appealed

to him. He fitted the role very well and found the craft interesting, rewarding and enjoyable. Being paid for something you enjoy doing is a bonus so there was no going back to school. Or at least that's what he thought at that time!!

He categorically states that 'school was something he never really enjoyed as far back as he could remember'. He was not sure why he disliked it so much. He always tried to do his best but was often left behind in certain subjects such as Maths, Irish and English. He excelled in technical drawing, metal work etc, and because of that he enjoyed them a lot more. In hindsight, if he didn't like a subject he probably didn't put as much effort into it as the ones he enjoyed. Going back to college was a big undertaking for him, but he realised that glass blowing was a dying craft and that he would have to learn something new to remain employed. In returning to education to gain a third level qualification he had the best chance to secure his future. He was committed to studying subjects he enjoyed to ensure he did well and completed it. He joined a part time course in Maintenance Technology and soon realised that this was a subject and career that suited him. There were subjects that he originally thought beyond him such as Maths, but by working hard and asking for help he was able to master them. He was amazed with the number of people willing to help a person who was willing to help himself. That was the key for many as all of them appreciated the effort he was making. It was during this period of studying for the maintenance technology course that the opportunity to avail of a scholarship arose.

Ger qualified as a glass blower in 1994 and in 1997 he was awarded a scholarship to participate in the Accelerated Technicians Programme full time in the Waterford Institute of Technology. He passed with distinction in 1999. He says it was a brilliant experience. It consisted of 18 months in college, which was difficult at first, but he gradually settled down and worked hard. He could relate much of what he was learning to his own workplace. The project he completed was job related. He received tremendous help and advice from the company and the managers involved. He was provided with a work placement in the Kilbarry Plant during which he worked on his project. The project was to commission a three stage Press Machine. His had to adapt it to manufacturing needs, establish the operating procedures, develop a training manual and act as a trainer for all future users post project completion.

The course experience changed his working life and it gave him a huge boost in confidence. He believes now that he could tackle any project or education course. It has opened up a whole new world of opportunity and possibility for him at work. Since finishing the course he has worked as a shift technician on the Tank Furnace. He has covered as a Front Line Manager. He has been employed by Stuart Crystal in the UK and has worked as a technician in the Salzle Acid Polishing Department. He now wants to further his career and become a department manager. He completed a certificate in ECDL and a range of other courses including a certificate in training & development with the Irish Institute of Training and Development. He has also completed Project Management, Problem Solving course that he found extremely relevant.

The barriers he faced were, his absence from the education system for 8 years and that was a system that he did not like. Coming to terms with full time education in third level and loving every minute of it even though it was extremely demanding. Having to sit down and concentrate on studying was the most difficult part. The practical work was brilliant.

He was supported by the company being selected to participate and then accommodating him with time off from work. The lecturers in the college were great and understood where the class (which was made up of full time employees) were coming from.

In hindsight he would not change anything, as he believes that the experience of college having worked in industry was particularly beneficial to him.

His career choice would be to become an entrepreneur and manage his own business.

His motivation for returning to education came from a few different factors. One motivating factor was that major changes were taking place in industry and that a new technological age had arrived. In looking to the future he realised that being the youngest glass blower with least service he needed to develop alternative skill sets if he was to remain in employment. He also realised that in taking part in some part time courses he gained sufficient confidence to continue and complete the Technician Programme. He wanted to get on with career. He is hard working and ambitious,

which is a great driving force. His next goal is to become a front line manager in the technology area. He is working hard gaining the skills and experiences to enable him become an effective manager.

Issues which need to be addressed, to enable employees to return to education are: funding, information on what is available and the steps to take, a mentor to help guide and support the learner, especially through the many difficult periods of self doubt on having to solve new, difficult problems and concepts. In developing his career path he intends to stay in the company for as long as he can realise his ambition and goals.

The most important generic skills for industry are information technology, problem solving, people skills and team working skills.

The company, to remain competitive needs to audit all processes and identify new efficiencies. It needs to involve all the employees in improving its performance. The solutions to most problems can be found in the heads of the employees who are involved in the relevant areas and processes. Employees have many great ideas that would aid the competitive journey.

Employability is having a good basic education that accommodates continuous learning and training that will master more complex concepts and systems. He believes he is eminently employable. He has progressed to the position of production engineer, has a good measure of industrial experience, a professional technician qualification and the ambition to move forward to further challenges in the years ahead. He has been working at the leading of the technological change process in Waterford over the past 7 years. He has gained many insights and has developed a range of new skills that has set him out on a new career path.

Gerry Walsh

Company:	Waterford Crystal Ltd.
Job Title:	Industrial Engineer
Marital Status:	Married
Age:	43
Years of Service:	21

Starting Position	Current Position
General Operative	Industrial Engineer

Most Significant Career Developments

- (1) Qualified as a Cabinet Maker
- (2) Completed a Diploma in Industrial Engineering.
- (3) Participated in the Maguire Programme, Recovery from Stammering.
- (4) Redeployed to the Customer Service Department
- (5) Promoted to Industrial Engineer.

Gerry joined the company in 1983 as a general operative. He was unemployed at the time having been made redundant. On leaving school at 15 years of age he joined Arco and qualified as a cabinetmaker. He is 43 years of age and is married with two children.

He worked in the cullet department as a general operative and after 7 years moved to the Finishing Department where he availed of overtime to improve his earnings. He remained there for five years working on shift before moving on to the Distribution Centre as a general operative. He then moved on to semi-skilled in Salzle on shift for one year before being appointed to the customer service department in a staff position in 2002. Finally in 2004 he was successful in applying to become a Trainee Industrial Engineer. It was the position he had focused on achieving since he decided to pursue part time education studies in the early 1990s. He is now a fully qualified industrial Engineer.

In 1990 he completed the Leaving Certificate in Maths with the intention of pursuing a course in Industrial Engineering. In 1991 he joined the Diploma in Industrial Engineering course and successfully completed it in 1994. He completed a Certificate in Training & Development in 1996 and a two year Certificate in Humanities (Philosophy) in St John's College in 1997/1998. He completed ECDL in 1998 and a

one year Advanced Spreadsheets, City & Guilds Certificate in Waterford Institute of Technology.

Gerry explains 'All my life I have suffered from a severe stammer and I will be forever grateful to the company for helping me to overcome my disability through funding my participation in the Maguire Institute recovery from stammering programme in May 2000'. He was very successful and he was appointed as course organiser and training instructor on the programme. He has since presented papers at conferences on the Maguire Programme.

The barriers were a fear of failure, the time factor involved and the stammer. The stammer always held him back both at interviews and in the classes. He was reluctant to engage in debates and in questioning concepts and statements. The supports were the training team who supported him and encouraged him to educate himself and provided support and direction. His family were very supportive and wanted him to realise his potential. The learning environment developed in the company promoted and facilitated a return to education for everyone who wanted to do so.

His participation in education has made him more confident and fulfilled. Getting the chance to use the knowledge that he had acquired was the main breakthrough for him. He has completed a range of courses and had for a long time failed to move on in parallel. Once he made the break from shop floor to staff he never looked back and being able to control his stammer was a wonderful boost.

He acknowledges the contribution of the company in sending him on the Maguire Programme to gain control of his stammer. He also attended an assertiveness training programmes that helped him gain the confidence he needed to change jobs several times in particular in dealing directly with the customer face to face and over the phone. He knew he was intellectually capable of managing the course but the stammer created a fear factor when dealing with customers.

The motivation for returning to education was that he felt he had completely under achieved. He had left school immediately after completing his Intermediate Certificate. He believed he could do much more and knew that he needed to return to education and acquire further qualifications if he was to progress within the company. The CEO of the time, in the late 1980s and early 1990s stated that the company would

be overhauling all its work systems and installing BSI standards. That is why he chooses the industrial engineering diploma programme. He knew that he had a mathematical and logical mind and that there would be new opportunities in this expanding area of work in the future.

He likes the company, people, and environment, its reputation and wants to make a success of his new position and qualify as a competent Industrial Engineer in the next few years. In hindsight he should have stayed in college and moved on to complete a third level degree in engineering.

His career choice would be to become an Industrial Engineer.

The most important basic skills for industry are, adaptability, willingness to change, possessing a spirit of co-operation, information technology and inter-personal skills.

To improve its competitive position the company should produce new products to attract the younger generation and improve its cost base with the introduction of new technologies. It should re-examine the employee relations structure and seek to change the thought processes by encouraging commitment to ongoing personal development and in particular to becoming more business literate.

Employability means, possessing the skills and attitude to compete in an ever-changing environment.

He believes he is an employable person. He identified early the skills required to compete in the world of business and developed the determination to complete the courses required.

Jason King

Company: Access IT
Job Title: Manager of Access IT
Marital Status: Married
Age: 28
Years of Service: Seven with Waterford Crystal, three with Access IT

Starting Position

General Worker

Current Position

Manager of Access IT (Social Economy Project)

Most Significant Career Developments

- (1) Participated in the Leonardo da Vinci "Sesame" Project.
- (2) Appointed Information Technology Champion.
- (3) Participated in 'Sesame' Project
- (4) Trained Shift Team in Information Technology
- (5) Completed a National Certificate in Computer Applications
- (6) Seconded to Logistics Function on Contract
- (7) Appointed Manager of Access IT in Ballybeg, Waterford.

Jason joined the company in April 1994 and worked as a general contract worker in the cullet department for two years. He then moved to work for Noonan Cleaners who were the contracted to the company for a 12 months period. Prior to joining the company in 1994 he had completed his third year in secondary school in St Paul's but did not sit his Intermediate Certificate. In working as the contract-cleaning firm Jason was befriended by a manager in the company. An interview was arranged for him with Personnel after which he was offered a contract position in the cullet department. Jason is 28 years of age is married with one child.

Jason quickly moved into the finishing department as an examiner. In 1998 he was transferred into the Salzle Acid Department on shift-work. In 1998 he purchased a house. He had a great interest in computers and he completed ECDL in the company. He was invited to become an Information Technology Champion and received special training to become a tutor, coach and trouble-shooter. He was appointed in a part-time capacity to tutor his shift team members. Over a twelve-month period he trained all of them in information technology skills usually for one or two hours prior to start of shift.

In 1997/1998 he was involved in the EU Leonardo da Vinci Project 'Sesame' which was a foundation course for entry into third level education and the equivalent of the Leaving Certificate. *Jason states ' my participation in the Sesame project was a life changing experience for me as through it I gained the confidence to believe that one day I would complete a degree course in third level'*. Following this seminal experience in college he went on to complete a three year National Certificate in Computing & Computer Applications from 2000 to 2003, and achieved a Merit 1 Grade. In 2001 he was seconded to the training department as an ECDL trainer/co-ordinator and delivered ECDL Advanced to a range of employees from all functions. This helped him immensely and was a great developmental experience for him. He also trained on Peoplesoft, which were the Human Resources software package used in the company.

On completing 12 months with the Training Department he was transferred back into the Salzle Acid on shift. He didn't like it at the time as he had moved on domestically and had responsibilities with a partner, one child and a home to support. He successfully applied for an eight-month contract position in the Scheduling Department. He was responsible for reporting on inventory the SAP system using MS Excel. After six months in this position, and aware of the difficulty in achieving a permanent position in the company he began to seek an alternative position outside. He successfully applied for the position as information technology trainer with the Computer Access Co-operative, an IT Training Centre based in a local community in the city.

He started in this position in November 2001 and worked at it for two years. The manager of Access IT retired in October 2003 and he applied for the position. He was successful and since 2003 he has filled the position as manager of social economy company. He is responsible to a board of directors and is in charge of seven employees whose remit is to promote and deliver information technology programmes to people in communities, schools and businesses and make the business sustainable over a three-year period. FAS support the project.

His motivation to return to education came from his girl friend completing a degree in Social Studies. She became a Social Care Worker with the South Eastern Health

Board and this development acted as a wake up call for him. He was very confused on leaving school. The morale boosting work experiences he completed in the company caused him to consider attempting a more substantial education programme to improve his employment situation. His new domestic responsibilities added some urgency to this process. He was also a witness to many employees from low education backgrounds and achieving all kinds of qualifications in college while in the company.

The barriers were the difficulty in achieving a balance between family, work and study in particular trying to handle shift-work and attend college while caring for a young family. His main supports were his wife and the company who provided funding, time off for exams and classes and massive encouragement in all sorts of ways e.g. managers, learning centre resources, special mentoring sessions and support with projects and assignments as needed.

His career choice would be to set up a business preferably an outdoor pursuits store. He has carried out some feasibility studies on this venture and he believes he can make a success of it. He would be enthused by the idea of working for himself and creating employment for others. He says 'I know it would be tough, but I'd relish the challenge'.

Returning to education has made him more aware of what is happening in the wider world and in business. It has broadened his choice of career and has been a great confidence builder. It has helped him socially. He has learned a lot from others in the class and from his teachers. He has noted the motivation of his fellow students and the way they have progressed. It has inspired him to work very hard.

The next objective for him is to complete a business degree. It would help him in his current role and eventually to set up his own business. The most important generic skills required in industry today are information technology, communications, writing skills and the ability to continuously learn and develop.

Companies can be more competitive if they pay more attention to developing the skills and competencies of their employees. Employees have the capacity to make a real difference in influencing the performance of the business.

Employability is being fit and capable to work in several areas and jobs. He considers that his development journey to date has made him employable. He has proven his ability to learn, work hard, and adapt to change. He is flexible, has a great attitude and is determined to acquire a degree in business and progress further at work.

Carl Phelan

Company:	Waterford Crystal Ltd
Job Title:	Manager of Information Technology
Marital Status:	Married
Age:	42
Years of Service:	22

Starting Position	Current Position
Trainee, computer programmer	Manager of Information Technology Dept of Environment Wexford

Most Significant Career Developments

- (1) Qualified as a Computer Programmer.
- (2) Achieved a Degree in Information Technology from DCU
- (3) Implemented a new Business Planning & Control System into the company
- (4) Promoted as Head of Information Technology and Business Process Re-engineering.
- (5) Recruited to the position of Manager of Information Technology, Dept of Environment

Carl joined the company in 1982 as a trainee computer programmer. After eighteen months he became an Analyst Programmer. He completed his Leaving Certificate in Waterpark College and a one-year Certificate in Information Technology in what is now the Waterford Institute of Technology before joining Clover Meats as a credit control clerk

He is 42 years of age and is married with 2 children.

In the early 1990s the company began hiring graduate engineers and others in an effort to restructure management to have the skills available to manage the technological revolution-taking place in what was previously a traditional manufacturing industry. The general manager advised him that the future of the company required employees where possible to acquire third level qualifications. It was imperative that those who wished to operate at management level in the future had to gain the appropriate qualification. This development gave him the impetus and

motivation to return to college. Over the following five years he completed a distance education degree course in Information Technology from Dublin City University. He found this to be a challenging but rewarding experience. He believes that there is a major advantage in studying while working. While working the theory can be applied in conjunction with the learning and improve competency levels.

His older brother had gained a degree. It was a need that was always burning inside him. He badly wanted to test his mettle in third level college. Having entered the workforce returning to education was a long held ambition with him

In the mid 1990s he became Systems Development Manager. In 1999 he was appointed Head of IT. In February of 2004 he was allocated additional responsibility for Business Process Re- engineering. In January 2005 he was recruited by the Department of the Environment in Wexford as Manager of Information Technology.

The barriers he faced in returning to education were his heavy involvement in and passion for rugby. Carl says 'In the first three years of the distance learning degree course he had to retire prematurely from playing rugby and at the time it was a huge sacrifice for him to make'. In the final two years he managed to cope with the two interests, study and playing rugby. Another barrier was the loneliness of the learning mode. Even though there were twenty people registered on the degree course in the Waterford Region it was very much down to each individual to make the effort to complete assignments and keep up to date on study. The supports were the company who funded the course and provided plenty of encouragement. His manager always enquired how he was doing and advised and motivated him to stick at it. His father had passed away when he was 11 years of age and his mother was very supportive during those years of study, which was before he was married.

In hindsight he should have completed a third level degree course before entering the workforce. He feels he missed out on something special and beneficial in not spending four years at third level and the experience he would have gained.

His career choice would be to have become a sports manager/ coach / trainer. He has through education gained great confidence in his own judgement and decision-making. Attending an education course as an employee has been an outstanding experience for him. Being able to use the learning is instantly gratifying and highly

motivational in particular if it brings with it promotion and recognition. His experiences to date have encouraged him to move on and broaden his work experience and his new job in the department of the environment is exciting and challenging. He is currently settling into his new job in Wexford.

The most important generic skills includes in the workplace include, IT literacy, the ability and willingness to learn, respect for other people and their views. He strongly recommends that people should listen with care and attention. There is so much to be learned from others and the opportunity to build relationships and make friends is great.

The key to competitiveness for the company is, the ability to grow sales, to improve costs and introduce efficiencies throughout the business.

Employees can contribute more by taking responsibility for their own development and in being interested in their work and how they can add value. Employability is having the skills and abilities that employers need and are willing to pay for it. That means having a broad skill base that facilitates adaptation to change on a continuing basis. The contribution of the employee is critical as everything is achieved through people.

His abiding principle is to keep trying and building a broad skill base around a preferred career path. In this way adapting to change will become a welcome and interesting experience rather than a pressured and fearful development, which can destroy confidence and in many cases careers.

He advises his fellow employees to do it for themselves. There are a variety of reasons to want to gain knowledge, acquire qualifications, and achieve a goal and advance in work. In Waterford all one had to do was indicate an interest in following a course of study and all the resources were allocated to help achieve it. The benefits to the employer are manifold not least an appreciation by the employee of what has been done. Waterford had so many pioneers across all the work disciplines that many were encouraged on the basis that there was help at hand if needed. If the education journey is going to be long, then try to find a method of achieving accreditation on a

progressive basis. He first got a certificate, then a diploma and finally a degree as part of the same programme.

To those who can influence policy and practice in further education he advises that there are many people in the workforce that have the potential to achieve greater things and contribute much more in their companies. Upon leaving school many people make wrong career decisions and some leave early to get into a job to make some money. As they grow older and take on family responsibilities the future looks different and they end up seeking out advice on education and employment options. In many cases they are tied up with responsibility and have to make serious efforts to gain a qualification to help in their work. If a stronger support system existed to drive further education at a national level, then Ireland would have a more marketable workforce. At a national planning level an opportunity exists for employers, unions and the government to use further education to create and sustain more jobs in Ireland.

Conor O'Neill

Company:	Waterford Crystal Ltd.
Job Title:	Computer Programmer
Marital Status:	Married
Age:	38
Years of Service:	18

Starting Position	Current Position
Lifeguard at Waterford Crystal Sports & Leisure Centre.	Computer Programmer

Most Significant Career Developments

Qualified as Lifeguard and Swimming Instructor.
Transferred to Kilbarry as a Trainee Programmer.
Completed a Certificate in Information Technology
Completed a Degree, BSc in Commercial Computing
Completed a Masters Degree in Commercial Computing in 2005.

Conor is 38 years of age and has two children. He completed the Junior Certificate in St Paul's College and worked part time for three years in general operative type jobs. He admits to being disinterested in school. He left school to work for City Council as a general operative on an archaeological dig at the corner of High Street and Exchange Street. He also worked at night as a contract cleaner. He has had the experience of being on the dole for one year, which he says, was a real wake up call for him.

He also worked part time in the Waterford Crystal Swimming Pool for eighteen months before joining full time in 1986. He joined as a lifeguard and swimming instructor. He liked the security of the job and the swimming instructor role. There was a great camaraderie among the staff there. He worked in the Sports Centre for ten years until 1996 when he transferred into the main factory in Kilbarry as a trainee programmer. He spent five years attending night classes in information technology and gained several certificates while working as a swimming instructor. He liked working with computers

Under the company's Part time Education Scheme he completed a number of IT courses that were available in the company and in the Waterford Institute of

Technology. These included a number of 10 to 12 week courses and a City & Guilds Certificate over three years. From 1993 to 1996 he completed a Certificate in Information Technology. This qualification enabled him to apply for the Trainee Programmer at a time of great change and restructuring in the company. He then went on to complete a diploma from 1996 to 1998 and then a degree, BSc in Commercial Computing specialising in software development in the Waterford Institute of Technology. He achieved a 2.1 honours mark in his final exams. He had previously achieved a distinction in the certificate and diploma courses.

In 2000 he was seconded to the SAP Project, which involved the introduction of a new enterprise planning and reporting system. He learned the new language over a two-year period during which the new system was successfully implemented. In 2003/2004 He began a masters degree programme in Dublin City University completing two subjects each year. He finally completed the degree in September 2005 and graduated in March 2006.

The barriers he has encountered included lack of confidence at the start and trying to balance family and work commitments especially taking into account all the changes that were underway in the workplace. The support he has received includes his family who have been very encouraging and the company who have provided him with the financial and moral support necessary to get him successfully through each course he completed. He says that the learning environment developed in the company was great for him as so many people were encouraging him and willing him to do well.

He feels that the main reason that he has been so committed is that his performance in school was always an issue with him. He believed deep down that he could do better and he always had a keen interest in computers. In hindsight he regrets that he did not perform better at school and had continued until he completed a third level degree full time. His preferred career choice would be to become a teacher.

His success in part time education has meant a lot to him. It has given him more confidence. He feels a great sense of achievement and great personal fulfilment. He is

looking forward to completing his master's degree in 2005. He is very happy in his current role as a computer programmer.

His advice on generic skills include communications, people skills, computer literacy and a broad understanding of business, in particular financial management which is at the heart of business decision making.

The issue of employability is important to him, as he believes that it relates to how much an employee can adapt and fit into new roles as required. It is all about the willingness and capacity to adapt to change and to have the skills to do so. The contribution of the employee is critical as it is only the employee that can achieve the success the business requires.

Education has made a huge difference to him. It has provided him with the incentive to change his attitude and work hard. His one-year experience on the dole and achieving a primary degree, were real milestones in his development.

The degree represented a serious confirmation of his ability and capacity to achieve at a high level. He doesn't think anything will ever faze him again in the future. He loved going to college. He made many friends. The group learning helped him to grow and develop as a person and an employee. He is now looking forward to the rest of his working life with so many options opening up for him and the security of having achieved an education that will carry him and his family through on a decent standard of living.

Fred Curtis

Company: Waterford Crystal Ltd.
Job Title: Designer / Sculptor
Marital Status: Single
Age: 49
Years of Service: 33

Starting Position	Current Position
Apprentice Wedge Cutter	Designer / Sculptor

Most Significant Career Developments

Qualified as a Master Cutter
Appointed as the first Glass Sculptor.
Commissioned to Design Special Pieces for Important Presentations and Events
Represented the company in US as an Ambassadorial Artisan.
Appointed Designer / Sculptor

Fred is from Wellington Bridge in County Wexford. In the year 1970 he was a first year boarder in Rockwell College. At the start of Summer Holidays he visited Waterford Crystal in Johnstown seeking a Summer job. In a mix up on job applications he was given a wedge-cutting test for an apprenticeship, which he passed with flying colours. On being offered the job he announced that he was only there for Summer work and would be returning to college in September. In discussions with the company in early September he was given one month to make up his mind on the job offer. Shortly afterwards he agreed to accept the position and officially started in the company as an apprentice wedge cutter in November 1971. He is 49 years of age and is single.

He qualified as a wedge cutter in 1976 and graduated to master standard later. In 1986 he applied for a job in design. In the interview he was asked if he was interested in working with Mirik Havel designing and sculpting special commissions. Mr Havel was due to retire the following year. Fred was given the job and in 1987 he ended up working on his own in the sculpting department for eighteen months. The orders began to grow and he was asked to select two other people to make a team of three. The sculpting department in time developed into two different streams of sculpting, glass sculpting and clay modelling sculpting for animals and complex shapes and designs that were production friendly.

He was transferred to marketing and was appointed as an exclusive artisan to the Federated Stores Group in the US. He was commissioned to produce exclusive designs for this group and limited editions of various quantities, also single unique pieces. He would produce a number of such items each year. He would travel to the US and host promotional events in the stores for at least six months each year. The events would involve breakfast design seminars and craft demonstrations to an invited customer group. He would explain how the design is developed, the inspiration for the theme and concept. He would inscribe his name on each piece purchased during the day for each customer. He has completed the certificate in ECDL. His progression from wedge cutter to design /sculptor has been based on his own craft ability and instinct.

The barriers have been the difficulty in promoting new and imaginative concepts within the established system in the company. On the other hand there is support for developing exciting new opportunities for brand image and marketing through the artisan programme. A balance has to be maintained between production pieces and high-end artistic concepts. The high-end pieces act as great advertisement for all products as they attract so much admiration and publicity.

In hindsight everything has worked out extremely well for him and he does not regret missing out on a college education. He has travelled the world and has achieved an interesting and changing career path to date. His career choice would be to work in the creative area of medical research as the working of the human body has always fascinated him.

His motivation to progress in his career was to achieve a position in which he could express his creativity. His career has provided him with immense satisfaction and his next objective is to continue to expand the existing boundaries and create new concepts and products, which he believes has limitless scope. Many connoisseurs of crystal crave the unusual and unique and he has so many new ideas to produce in the future.

The main issues in helping employees return to education is to provide the best possible educational / career guidance service in schools. To be able to liaise with employers across the full spectrum of employment would be an essential experience for students prior to joining the workplace.

He is very interested in continuing his work in the company as working with crystal at the high end is an abiding passion with him and he gets so much pleasure from it. The most fundamental requirements for people entering industry are a good education, information technology and team working, in particular good interpersonal skills.

The company could improve its competitive position by fully exploiting the Irish connection to the brand in the US and romancing the product in a way that attracts the younger generations to it.

Employability requires a broad set of qualification and a good work ethic. He regards himself as employable. He is open to change and to new ideas and is willing to try anything in the broad artistic field of work.

Brendan O'Donoghue

Company:	Waterford Crystal Ltd.
Job Title:	Human Resources Manager - Kilbarry
Marital Status:	Married
Age:	54
Years of Service:	37

Starting Position	Current Position
Production Clerk	Human Resources Manager, Kilbarry

Most Significant Career Developments

Appointed Assistant Head of Wages and Benefits
Completed a diploma in Personnel and Industrial Relations Management.
Appointed Personnel Officer.
Appointed Human Resources Manager.
Leading member of HR Team who designed and implemented the 2003 Agreement.

Brendan joined the company in July 1967 having completed his Leaving Certificate in Mount Sion CBS in Waterford. The company were recruiting at the time and he successfully applied for a clerical position. He is 54 years of age and is married with two daughters.

He worked as a production clerk in the Blowing Department for eight years. He then transferred to the Industrial Engineering Section in an administrative capacity. He performed time and motion studies and introduced new work methods and standards over the next five years.

In 1980 he transferred to the Wages Department again in an administrative role and was promoted in 1985 to a staff position as the assistant to the Head of Wages and Benefits.

In 1990 he moved to the Human Resources Department (at that time known as the Personnel Dept.) as Personnel Officer for Plant 1 in Kilbarry and also Butlerstown. In 1992 as part of a restructuring programme the HR Manager for Plant 2 retired and Brendan was appointed Personnel Officer for the entire Kilbarry Plant. In 1999 he was promoted to the position of Human Resources Manager a position he holds today.

During the 1970s he completed a supervisory course from the Irish Management Institute of two 2 years duration in the Central Technical Institute in Waterford. He also completed a work-study course through Distance Learning from the UK. In the mid 1990s he completed a three year National Diploma in Personnel Management from the National College of Industrial Relations in Dublin. With a colleague he travelled each week to the college for Friday evening tutorials plus a full day Saturday, which was a huge commitment.

In 2000, Waterford Crystal embarked on a Corporate Culture initiative called the “Waterford Way” which was a blueprint to guide the company in the future. It continued to develop and evolve to a more enlightened, values led and commitment based culture geared to improving performance through changed behaviours across the company.

He was appointed as one of twelve facilitators for the “Waterford Way”.

The barriers to further education were making time available, managing family commitments and having a passionate interest in music as a well-known musician and singer in a local folk group.

The family were of great support during the three -year diploma course giving him the time, not only, to be away each weekend but also allowing him the freedom to study in a quiet atmosphere in the home. His daughters who were both in third level education were also a great help to him in helping him structure the content of projects. He had little experience of assignments and projects prior to participating in the diploma. The company supported him with funding and providing time off for classes and study.

In hindsight, because of his great love of music he would have liked to complete a third level degree course in music. His choice of career would be to become a Music Teacher while continuing to perform in the cabaret scene locally and maybe beyond.

His motivation for returning to third level education was to progress in the job. He wanted to secure a responsible position in Human Resources. For a long time he had the job but no recognised qualification. He was delighted to put that right and progress to new positions. His next ambition is to consolidate his current position within the company. He has been so long in the company that he knows most of the employees and all the structures and processes. He hopes to remain and contribute in a senior position for the remainder of his career having completed 37 years to date.

The best way to encourage employees with family and work commitments to return to education is to provide funding and also a network of supports to ensure that they are not isolated and begin to lose heart. The basic skills needed in industry are a good education, information technology skills, good interpersonal skills and project management skills.

The best way for the company to improve competitiveness is to address the overheads and to reduce the product range providing more resources and focus on the main selling product categories.

Employability means having a good education, being flexible and adaptable through being multi-skilled. He believes that he is employable having built up invaluable set of experiences, qualifications and a good track record of achievement.

Brian Mulvihill

Company: Waterford Crystal Ltd.
Job Title: Master Wedge Cutter
Marital Status: Married
Age: 41
Years of Service: 26

Starting Position	Current Position
Wedge Cutter	Master Wedge Cutter

Most Significant Career Developments

- (1) Qualified as a Master Cutter
- (2) Participated in the 'Sesame' Project
- (3) Completed a Diploma in Professional Studies – Managing Diversity from UCC
- (4) Represented the company as an Artisan/Master craftsman.
- (5) Completed a Bachelor of Arts Degree in Humanities in University College Cork
- (6) Is currently employed as a teacher.

Brian joined the company in September 1978 as a wedge cutter in the Dungarvan Plant. He was one week into his fifth year in St Augustine's College when the opportunity came for him to take up a position with Waterford Crystal. He is 41 years of age is married with one child.

In 1983 Brian qualified as a wedge cutter and went on to graduate as a master cutter. He was chosen as a member of the ambassadorial artisan panel in 2001 and travelled to the US to host promotional events there. The artisan ambassadorial programme is one of a number of sales & marketing strategies aimed at promoting the crystal product in the market place. The artisan works with the major stores on promotional events. Visiting artisans/ craftsmen meet the customer and demonstrate the art of cutting and engraving while answering questions and explaining the production process. They explain how the design is developed which is of great interest to the customer. The job of the artisan is to romance the product, the heritage, design, quality, and craftsmanship. Their role is to tell the story behind the name of the suite or the bowl i.e. Heritage of Ireland Vases etc.

In 1997 Brian was chosen to participate in a EU Leonardo da Vinci Project "Sesame" managed by the company's Training & Communications Department. The Sesame project sponsored a foundation course for entry to third level for those without their

Leaving Certificate and who wished to move on with their personal development. Subjects on the course included for example maths, history, and information technology and business studies. Thirteen employees, eight men and five women completed this foundation programme in the Waterford Institute of Technology.

Brian also participated in the Employment Horizon Project named CODE –Creating Options for Disabled Employees. This project was aimed at providing special business related training and work experiences for the company’s disabled employees. Twenty-five disabled persons from outside the company were also included. The project involved the training of 23 training instructors and the development of a Diploma in Professional Studies – Managing Diversity. *Brian explains ‘that in completing the diploma in professional studies – managing diversity from University College Cork he was inspired and motivated by the interest and approach of the lecturing staff who helped him gain the necessary confidence to believe he could complete a primary degree course in the college at some time in the future’.*

For the past five years Brian has been attending University College Cork on a part time basis and is due to a BA Degree in Humanities (History, Psychology and Sociology) in June 2006.

The main barriers prior to undertaking the first course (Sesame) had been fear of failure, a lack of confidence in his ability to complete the course and trying to balance family responsibilities with work and study. Each succeeding course the diploma and degree has become more achievable as his confidence grew his determination to achieve something substantial and make himself more employable. In 2005 it was announced that the Dungarvan Plant was being closed and he has just moved into 27 years of service. He is glad he found the courage to engage in education in the 1990s. The main supports have been his family, the company with its support funding, including time off from work when he needed it and the encouragement he received from managers and peers and the interest they showed in his progress.

In hindsight he feels he should have completed his Leaving Certificate and he would have liked to complete a third level degree, which he is currently completing. His career choice would become a teacher.

The motivation for going back to education was the changes that were taking place in the company at the time and the realisation that he was not very employable with a craft that was location specific. His educational experience has provided him with increased confidence and has improved his self-esteem and morale. He hopes to complete his HDip in the future. He is currently working as a relief teacher.

The main issues in attracting employees back to education is to provide them with full information on what is available and the benefits to be accrued through participation. There is a need to provide funding support, mentoring and the participant can benefit from a strong base of employability, job security, promotion and career change.

He is open on his future career and has the option of redeploying to Kilbarry or taking voluntary redundancy and seeking a job elsewhere. He believes the most important skills for industry today are a good education, computer skills and strong interpersonal skills.

The company could become more competitive by becoming more innovative in producing products that attract the young consumer. Some new concepts have been created in recent years and have been successful. More is needed, as the future success of the company is dependent on attracting the younger generation to the product.

Employability is having a wide range of skills and a good attitude. He considers himself employable because he has a good work ethic, is qualified in an number of areas has worked in various departments within the company and can easily adapt to change.

Eddie Meaney

Company: Waterford Crystal Ltd.
Job Title: Technician- Dungarvan Plant
Marital Status: Married
Age: 40
Years of Service: 24

Starting Position	Current Position
Apprentice Wedge Cutter	Technician- Dungarvan Plant

Most Significant Career Developments

- (1) Qualified as a Master Cutter.
- (2) Redeployed from the Wedge Cutting to the Cutting Technology Area.
- (3) Appointed a Training Instructor for the new Technology.
- (4) Completed National Certificate and Diploma exams over a 5 years period with distinction.
- (5) Appointed a Technician
- (6) Completing an Engineering Degree in Manufacturing Technology

Eddie joined the company as an apprentice wedge cutter in Dungarvan Plant having just finished his Intermediate Certificate in St Augustine's College Dungarvan in July 1980. He came into the company hoping to become an engraver but there were no vacancies in this department at the time. He took up the offer of an apprenticeship in the wedge cutting with the clear objective of moving on into the engraving at the first opportunity. He is 40 years of age and is married with four children.

He qualified as a wedge cutter in 1985 and graduated to master status before redeploying into the Blowing Department on a temporary basis due to the development of a surplus of cutters. After the strike period in 1990 he returned to the wedge cutting. As he was in a group of 10 to 12 cutters with the least service he was transferred into the semi-skilled.

In 1997 he applied to become a technician and was successful transferring to Kilbarry for two years before returning as a technician to Dungarvan in 1999. To develop his skills and knowledge as a technician he started a three-year part time National Certificate in Manufacturing Technology in 1999 in the Waterford Institute of Technology where he graduated with a distinction. He then moved on to complete the diploma in 2004 also with a distinction. He then moved into the engineering degree

programme and is due to qualify as an engineer in May 2006 after seven years of continuous study in a part-time capacity. He has been trained as a training instructor and has completed ECDL.

The main barriers have been shift working and having to arrange time off from work at many different times as shift patterns changed. *Eddie says ' that the course structure and content was geared towards full time Leaving Certificate students and it was not very accommodating to adult employee students who had been away from learning and class room for a long number of years.* The other major barrier was matching family, work and study commitments.

The supports were the company who funded and encouraged engagement in education. The group support was brilliant and saved the day on many a problem and concept. He was conscious of what other class colleagues from other companies had to do. Their struggle included having to pay the fees and work on their own was a tremendous effort and they deserve the highest praise for taking it on. There was a great sense of shared commitment in the class and everyone helped each other during the five years of study.

In hindsight he should have continued on and completed his second level and third level education. For a career choice he would have liked to study art and become qualified in new product design.

What prompted him to return to education was a burning desire to achieve a higher-level qualification. The gap in academic attainment bothered him all the time as he worked in the craft and semi-skilled areas. He became very dissatisfied having missed out on a third level education. He met some of his teachers in later years and they always reminded him that he should never have left school. He was tops in his class for Science and a number of other subjects. His father worked in the company and he fell into the job. It was an easy option for him and he liked the freedom and the money at the time. It did not take too long for the attraction to wear off.

Education has made him more confident in his own ability. He has a much better knowledge and understanding of engineering. He is now able to look at things in a

different way and he takes more out of every situation. He is able to contribute much more to problem solving and process improvement.

He hopes to complete his degree in engineering next year. The key issues to be addressed in attracting employees to part time education are some form of funding and establishing a new understanding with industry on time off for study. The case for higher qualified employees improving performance has to be made. It can become a real source of sustainable competitive advantage. He thinks that the employee should pay for the course and on successful completion the government should refund the cost. There should also be special training for the teaching of adults as there are special needs to be catered that can make all the difference.

Due to the impending closure of Dungarvan he has to decide on redeploying to Waterford or taking voluntary redundancy. The most important basic skills for industry are: communications, information technology, adaptability and flexibility, a good attitude and being able to get on well with people.

The company could improve competitiveness by tapping into the experiences and good will of people on the shop floor as many of the best ideas and solutions can be found there.

Employability is being educated and adaptable, the higher the qualification the more employable the person in most cases provided there is a modicum of experience to back it up. He believes he is more employable as he is educated, adaptable has proven his capacity to work successfully in a number of jobs and has made a number of major changes to his career.

Eugene Tobin**Company:** Waterford Crystal Ltd.**Job Title:****Marital Status:** Married**Age:** 46**Years of Service:** 6

Starting Position	Current Position
General Operative	

Most Significant Career Developments

- (1) Appointed Laboratory Assistant Technician in Waterford Foods.
- (2) Completed Certificate and Diploma in Manufacturing Technology with distinction.
- (3) Achieved an 'A' grade in final year of the Diploma work based project
- (4) Acted as an EDCL tutor for all shift teams in Dungarvan Plant.
- (5) Acted as a facilitator/tutor during study sessions on both the Certificate and Diploma in Manufacturing Technology courses.
- (6) Completed a BSc Degree in Manufacturing Technology

Eugene is 46 years of age, married with four children. He joined the company in 1998 as a general operative having been made redundant following the merger between Waterford Foods Ltd and Avonmore when Glanbia Plc was established. He was employed as a laboratory assistant in Waterford Foods without having any formal qualifications. He joined that company in 1976 on summer work at the end of 5th year, in Dungarvan CBS. Jobs were scarce in the region at that time and when offered a full time position in the Laboratory in 1977 he was glad to take it up.

Having taken up a general operative position on the Tank Furnace on shift in Waterford Crystal, he remembers that after about three weeks he was determined to move on to something better. He looked around to see if there was anything he could do to improve his position. He was the first employee to complete ECDL in Dungarvan Plant. He then became an IT Champion and acted, as a tutor on shifts helping others to gain the new skills required by them.

In 1999 the company training team developed an engineering ladder of opportunity with Waterford Institute of Technology under a EU ADAPT Project. This ladder showed how an employee in the Waterford area could progress from a general

operative position to become a qualified engineer and it was advertised widely throughout the company. He applied to become involved and completed an introductory mandatory, one-year course in manufacturing technology. He then moved on to complete a national certificate and diploma in manufacturing technology. In May 2006 he completed a degree in manufacturing technology and qualified as an engineer, which represents an outstanding achievement. *Eugene says 'that he is very proud of his achievements in education and that the same opportunity should be afforded to every worker in the country'*. It would make a huge difference to economic performance if the skill base were improved to this level. He always had a special interest in electrical and mechanical equipment. While in Waterford Foods, he specialised in calibrating laboratory equipment such as small infra-red analysers and test equipment. While not having any formal qualifications in this area he was able to produce calibrations that could not be bettered by high performing engineers. He developed solutions to problems in the utilisation of test equipment. He was assigned all new test equipment and asked to test it and ensure its effectiveness before being used by process personnel in the company.

When the opportunity to improve his employability status in Waterford Crystal came he grasped it with both hands.

He has a deep interest in computers and as a hobby he repairs computers with his friends. He passed the three - year national certificate with distinctions in all subjects over the period.

On completing the diploma and achieving distinctions in his final year exams he decided to move on to the final stage and has completed one year of the final two years in an engineering degree course, a BSc in Manufacturing Technology.

Back in 1999 he was appointed as a basket loader and relief operator on Acid Polishing. He then progressed to Acid Operator. He applied unsuccessfully for a number of positions. He is currently an Acid Operator.

He feels that the greatest barrier in returning to education is the availability of the time to do it, being away from the home and kids, not being able to do the things he would like to do. The garden is in a mess at the moment. He loves gardening, growing organic vegetables, handball, walking and touring.

His best support has been his family who have been very patient and accommodating. The company has paid my fees and his supervisor has been particularly helpful and

has supported him all the way. The student group from the company – Dungarvan and Kilbarry have been extremely supportive and have been very willing to share ideas and help each other. There is great learning from the group dynamic and everyone has their own strengths and experiences relating to the different subjects. Without the help and support of his fellow students the course would have been much more difficult.

In hindsight it would have nice to have gone on to third level and studied chemical engineering. This degree would have had a significant research and development involvement and would be his preferred career choice. His involvement in education has opened up many new perspectives and options on future my employment prospects. He has grown in confidence and believes that there is little in the engineering area that he could not strive to achieve.

He has built his own workshop at home and is into fixing things in particular computers both hardware and software. He hopes to remain in the company and now that Dungarvan is being closed he will have to consider redeployment to Waterford or take voluntary redundancy. If he cannot get a job to challenge his intellectual capacity he will have to look outside of Waterford Crystal for a position. He is confident that giving the direction that Manufacturing is heading he will soon get a more challenging and interesting job.

His greatest achievement in work has been his capacity to study and research the workings of technical machines so as to calibrate them, and write up procedures for their operation. The other achievement he is most proud of is completing both the Certificate and Diploma in Manufacturing Technology and achieving the high grades in every exam. When he was at school he wasn't the most studious type. He didn't like school and he never studied hard. He just barely scraped through all exams. He is now working with subjects that have a great interest for him. He can put into practice much of what he is learning. He actually loves the learning, teaching/tutoring at this point of his career.

The greatest shock to him was in 1998 being made redundant in Waterford Foods with no qualification. He was not formally qualified to do a job he had been doing for 20 years and in which he was regarded as an expert in this field. His track record

shows how well he performed in the laboratory technician position. He worked as a laboratory technician and was an excellent one but had no qualifications to prove it. The opportunity he got in Waterford Crystal has helped him tap into a rich vein of interest and his practical capability matched with learning the theory and practice has been really exciting for him.

The generic skills and competencies required by employees in the future include a basic third level qualification, IT skills, Maths, Communications and Writing Skills. To progress every employee must have ambition, for without it the right choices will be not be made and dedication will wane. For the company to become more competitive there is a need to tighten up on all procedures and to draw on all the skills and knowledge of the entire workforce. Employees can make a huge difference to performance but to release this dormant potential it is essential that the cross functional barriers are removed and that everyone can engage in discussions and in collective problem solving.

Angela Cuddihy

Company:	Waterford Crystal Ltd.
Job Title:	Clerical Officer - FAS
Marital Status:	Married
Age:	38
Years of Service:	17

Starting Position	Current Position
General Operative	Clerical Officer -FAS

Most Significant Career Developments

- (1) Returned to college and passed several exams with flying colours.
- (2) Promoted to Switchboard Operator.
- (3) Recruited to Customer Service
- (4) Participated in the 'Expand' Programme
- (5) Promoted to Sales & Marketing as Co-ordinator of Irish Sales Team.
- (6) Departed company and joined FAS on contract as a Clerical Officer.

Angela joined the company in 1987 as a general operative having passed her Leaving Certificate in the Presentation Convent. She was working part time in a local shoe shop when the job in Waterford Crystal presented itself. Angela is 38 years of age and is married with 2 children.

She worked in the Finishing Department for six months and then moved to Quality Assurance as a Lehr Sorter. After the Strike she felt vulnerable and in 1990 she went back to college and completed a beginners and Advanced Typing Courses in the Central Technical Institute. She also completed a City & Guilds Course in the Waterford Institute of Technology. She was promoted to switchboard operator / receptionist for one year and from there to Customer Service for three years and then on to sales & marketing.

She was selected to participate in the Expand Programme, which was a fast track development programme for employee with the potential to quickly move on in the company. Angela confirmed the value of this programme saying that *‘ through it I gained a wide range of new and relevant insights into the entire business through completing a selection of development modules which helped me to build a portfolio of skills that enabled me to move to an alternative and preferred position in the company’*.

She was also elected to act as a staff representative on the Staff Representative Committee, which is a responsible and demanding position. She was secretary and communications officer on the committee. This position gave her a broad perspective on the company and its operations. She was trained as a staff representative along with the committee members as staff representation was a new development in the company. She had to take on responsibility for negotiations, report writing and become a member of a very responsible team.

The barriers were managing a pregnancy while trying to complete exams one week before she was due to have the baby. Also matching her work responsibilities with home and a husband on shift-work who between them managed the children.

The main supports were her extended family that gave her every support and made it possible for her to do so much in such demanding circumstances. The company was also supportive funding her studies and providing a number of opportunities for advancement.

In hindsight she should have repeated her Leaving Certificate and would have liked to be trained as a nurse or for any other of the caring professions. The strike was a wake

up call as everyone felt very vulnerable especially those who had not any great qualification.

Her return to college helped her to move on in her career and gave her more confidence in her ability to adapt and make a success of new opportunities. She is delighted she made the effort and believes she is a good role model for her own children. She believes that determination is the key to achieving goals in education and at work. It is getting started that is the most difficult thing.

She was delighted to get the chance to leave the company as it suited her family circumstance and she is convinced that her education while in Waterford Crystal helped her to immediately secure another job as a contract clerical officer position in FAS.

The most important generic skills are to be a good communicator, a good listener and team player. It is critical to have a good qualification in an area in which you have a great interest, as you will always perform best at what you like best.

The company can improve its competitive position by investing heavily in developing the skills of its employees. In doing so it will boost morale and will motivate people to achieve extraordinary things.

Employability is being qualified and flexible. The opportunity to train and develop and have permanent access to education is critical for all employees operating in a continuous change work environment.

She believes she is employable having moved successfully to a number of positions and having developed her competencies while working and managing family responsibilities. Her experience in leaving the company and securing a contract position in FAS based on her portfolio of skills is proof to her of her employability status.

Brian Power

Company:	Waterford Crystal
Job Title:	Plant Scheduler
Marital Status:	Married
Age:	39
Years of Service:	20

Starting Position	Current Position
General Operative	Plant Scheduler

Most Significant Career Developments

- (1) Completed IPICS (Irish Production & Inventory Control Society) Certificate.
- (2) Involved in the Business Planning Control System cut over from manual paper system
- (3) Selected as a member of the SAP Project team.
- (4) Completed Diploma in Information Technology
- (5) Promoted to Plant Scheduler.

Brian joined the company in 1984 as a general operative. His father was a manager in the blowing room .He had completed his Leaving Certificate in Mount Sion CBS and had a certificate in commercial computing in the Waterford Institute of Technology. Employment was difficult to find in Waterford at the time so he was glad to get the opportunity to work in the company. He is 39 years of age and is married. He began working in the warehouse as a general operative for two years. When a vacancy arose in the clerical section due to maternity leave he was seconded to back-fill on a temporary basis.

He never went back to general work. At the time the company were introducing personal computers and the clerical section was transferring over from handling tickets with production to the central computer. A new BPCS Business Processing Control System was introduced in 1990, which provided an integrated network of all production information on the central server. He was ideally qualified to play a major role in the change over from paper to computer.

In the mid 1990s he moved into planning, scheduling and forecasting and has remained in this area of work up to today. In 2000 he was seconded to the SAP team, which transferred the information from BPCS (Business Planning & Control System) to SAP, which was the new state of the art business reporting system. In June 2001 SAP went live and following a settling down period of six months he was redeployed

to Business Process Re-engineering where he has been employed for the past two years.

His specific role is to manage planning and production requirements for Plant 2 in Kilbarry to meet customer orders.

He completed a Diploma in Information Technology from Dublin City University over a three - year period by distance learning. He completed ECDL and a Certificate in IPICS (Irish Production & Inventory Control Society) over three years 1998 to 2001.

Brian says '*that there were no real barriers as it was a time of great change and learning was supported in every way in the company*'. Brian was single at the time and living at home. He didn't mind allocating the time to pursue his studies. His studies were directly job related and tremendously beneficial to study and apply the learning at work in parallel. The learning cycle was complete for him.

The supports were the company who funded and encouraged every employee to return to education to help them adapt to the production process. In hindsight he has no regrets as his career has worked out well. His preferred career choice is to be working with computers in particular designing new systems, developing new solutions and solving problems under the business process re-engineering agenda.

What prompted him to continue in education was the feeling of being able to do much better and that he should be doing more to progress in his work. The learning environment provided ample opportunity to get back into the system and his movement within the job encouraged him to stick at it. The company were showing great commitment to education and training at the time.

Education has made a big difference to him. He has become more open minded, more confident and more competent. He has been able to progress in the job and is looking forward to improving his position in the future. He likes the job, the people and the product.

The most important basic skills needed in industry today are information technology, a good Leaving Certificate or Primary Degree, Good communication / speaking skills. His involvement in the SAP project helped him to develop his presentation skills. He had on numerous occasions to present a training programme or a presentation on the progress of his work to senior management.

The company can improve competitiveness by reducing the number of products, which are spreading manufacturing resources too thinly and become more disciplined in using the information systems.

Employability means being able to offer a company a set of skills that it needs, in other words to be highly skilled and motivated.

He believes he is employable, as he has developed a broad skill base, has a good track record and is highly motivated.

Brian Russell

Company:	Waterford Crystal Ltd.
Job Title:	Packaging Engineer.
Marital Status:	Single
Age:	36
Years of Service:	17

Starting Position	Current Position
General Operative	Packaging Engineer

Most Significant Career Developments

- (1) Worked as an Apprentice Mechanic.
- (2) Completed a National Certificate and Diploma in Manufacturing Technology.
- (3) Appointed Packaging Engineer
- (4) Completed a BSc in Manufacturing Technology.

Brian joined the company in 1987 as a general operative having worked as an apprentice motor mechanic and as a service receptionist in the motor trade for a number of years. At that time the motor trade was in recession and apprentices were being made redundant. There did not seem to be any future as a mechanic. Brian is 36 years of age and is single.

He worked in the Blowing Room and Tank Furnace area as a general operative. It was a boring job. The only saving grace was that it was permanent and earned him a reasonable wage. Although he obtained a better position within the company in 1997 in the maintenance department he still experienced a sense of underachievement. The change to maintenance was instrumental in his decision to return to collage. Working in maintenance opened up new opportunities for him, as he was interested in mechanics and electrics. Over time he had become restless and he decided to go back to college and improve his employability status. He didn't want to vegetate in a low skilled job for the remainder of his working life.

During his time as an apprentice mechanic he had passed all of his trade exams (Junior & Senior). On investigation and on application he was granted 2 years of exemptions from the three years National Certificate in Manufacturing Technology, which he then proceeded to complete. He then completed the National Diploma in Manufacturing Technology. In 2005 he was appointed as packaging engineer. He completed his engineering degree in the Waterford Institute of Technology in May 2006.

Brian says that 'the main barrier to further education for him was that he left school at 15 years of age without a good basic education foundation'. In returning fifteen years later at 30 years of age he was very far behind in subject and study disciplines. He had been out of the education/study loop for too long and it was a major transition for him to get back into formal education again. The engineering aspects of the course were not a problem because of the mechanical grounding already achieved. The trade exams were different to third level exams in so far as they were much more hands on which suited him better.

The third level exams were more academic in content rather than practical. He never really liked school and he found maths very difficult. He enrolled in a foundation Maths course run by Waterford Institute of Technology, which was a great help to him.

The supports were the company funding and general support in the form of encouragement for everyone returning to education. Given his work experience to date he was driven to prove to himself that he was capable of much better than his school results had showed. The other major support was the group learning. There

were five employees in the Waterford Crystal group who worked together. It was possible to arrange study sessions prior to shifts and on time off. The mix of abilities and the individual contacts and experiences when pooled together represented a massive support bank from which all of them could draw.

There was great camaraderie within the group and every new and difficult concept was sorted out through the group input. When any one of the groups met a difficult and challenging issue or period the others picked him up and pulled him through. Without group support it would have been extremely difficult to achieve the certificate and diploma. There was one other strong group from Guidant in Clonmel. Participants from both groups achieved the highest marks overall in the exams and both groups agreed that it was of enormous benefit to them.

In hindsight he picked the wrong trade as it was in decline at the time. He should have chosen to be a fitter or electrician. Joining the company as a general worker was also a mistake as he vegetated for ten years in a position in which he was very unhappy. He is now committed to developing his qualifications and progressing as far as they will take him. Being recruited as a packaging engineer has been a great boost to his morale and has made all the study and work well worthwhile. He wants more challenging and rewarding work for the remainder of his working life. The engineering position is the start of something new and exciting for him.

His career choice would be to become a Civil Engineer. He is an outdoor type and would love to work indoors and outdoors in this very varied and challenging profession. Education has made him more confident and he feels much better about himself and his future at work. The courses provided him with the skills and confidence to upgrade and rebuild computers. He can also repair computers and is very good with pneumatics and hydraulics. He loves working as an engineer as he is best suited to hands on type applications. He hopes his qualifications and his new position provides him with many new experiences.

Since he moved into the packaging engineering position he has become more settled and satisfied. The variety of work makes his job very interesting. There is so much to learn. He is engaged in new projects and issues on a regular basis. He hopes to make a success of it and then move on to wherever his talents take him.

The basic skills for industry today are information technology, manual dexterity and an interest in how things work. Employability is about possessing a broad skill base and having choices on career, having received a good broad education that enables training for many different positions.

He rates himself as much more employable as he has upgraded his qualifications, has wide experience on industry and has achieved an engineering position in a major manufacturing company in which packaging plays such an important part. Given his success to date he highly motivated to continue to develop his skills and competencies.

Eileen Slattery	
Company:	Waterford Stanley Ltd
Job Title:	Marketing & Business Development Manager
Marital Status:	Married
Age:	40
Years of Service:	19 with Waterford Crystal 4 with Waterford Stanley
Starting Position	Current Position
General Operative	Marketing & Business Development Manager- Waterford Stanley
Most Significant Career Developments	
<ul style="list-style-type: none"> (1) Qualified as a Training Instructor. (2) Appointed as Personal Assistant to the Director of Manufacturing. (3) Promoted to Sales & Marketing as Business Development Manager (4) Recruited as Marketing & Business Development Manager with Waterford Stanley Ltd. (5) Completing an MBA through Open University 	

Eileen joined Waterford Crystal in 1981 as a general operative working in the Packing Room. She sought employment on completing her Intermediate Certificate. As Waterford Crystal was the largest and best employer at a time of high unemployment in the area she applied for the position and was successful.

She worked in the Packing Rooms at examining, wrapping, badging, stamping, box making and packing. It was the policy that all operatives could cover all the different jobs on the line. In 1991 after ten years in Packing Department she was appointed as the first training instructor in her area to facilitate the turnaround plan, which was being implemented at that time.

The Training Team was in the process of being established and the policy was to build up a powerful team of able instructors to facilitate the change and improvement process. It was an extremely difficult time. The old ways were being superseded with the introduction of a different business philosophy. New work practices were being introduced to support the new business approach. The company was haemorrhaging badly posting continuous losses for four years 1988 to 1991. It achieved a small profit in 1992.

Her responsibility as an instructor was to fully understand the wider business needs and the changes proposed in the Turnaround Plan of 1991 to 1994. She was expected to act as a change agent, coach, advisor, confidant, communicator and mentor to the many employees who were confronted with changes in their job specifications. This could involve a change of job, new and tighter bonus schemes, new working conditions, the formation of new teams, new product development and having to master the new challenges presented by the decision to outsource a proportion of the product line.

She was responsible for communicating the new strategy and operational structure. She had to provide training programmes to assist employees to develop the new skills, techniques and work methods to install the new work practices. A major objective in training was to build effective teamwork with new teams. Maintaining quality was paramount and the new quality standards were the subject of many a training programme at the time. There was a new need to appreciate and deliver a high quality customer service. The improvement of costs and the promotion of a culture of cost consciousness contributed to the overall transformation process. New area bonus schemes were introduced, in many cases serving to tighten up further the slack that had developed in the system. The fight to establish a new competitive base had begun

in earnest and the training instructor was the key facilitator in establishing the new operational standards required.

In 1994 after three years of dedicated and courageous effort to change skills, knowledge and attitudes she was appointed as Personal Assistant to the Manufacturing Director. She had to once again rise to the challenge and improve her computer skills. She was requested to learn shorthand and typing skills. She had to adapt to a very busy office situation and organise meetings, meet deadlines, plan travel arrangements, host visiting delegations and provide a administrative back up for manufacturing team meetings. Executive responsibilities were constantly under review changing and developing all the time. This change of job was a new experience. It was a new work situation requiring new competencies. Her factory experience was a tremendous help to her, as she understood the production system, product range, management team, business strategy and plans .She became a great support to the Manufacturing Director both in his internal and external business dealings.

In 1996 she was appointed Sales & Marketing Assistant and was promoted to Business Development Manager in 1998. She made her mark in the Sales & Marketing Function in setting up a new distribution and merchandising programme in 200 outlets in Ireland. She was head hunted by Waterford Stanley and joined them as their Marketing and Business Development Manager. While at Waterford Crystal she completed a wide range of education and training courses each one helping her to develop and grow in confidence and competence. She completed a NEBS Supervisory Management Programme, Senior Administration Programme, Negotiation Skills, Selling Skills, ECDL and many others. In Waterford Stanley she is in the final stage of completing an MBA through the Open University. It is a very challenging development programme and she expects it will open new career possibilities for her.

Eileen says ‘ *The main barrier to me progressing in the workplace was the lack of Leaving Certificate standard of education*’. The further she progress the greater the handicap her formal education level seems to become. She now operates at a high level in business and the training and knowledge acquired from completing a degree would she believes be of great help to her as she strives to progress her career path.

The main supports were the training team who encouraged her to acquire qualifications that would help her progress in the company. The company provided the necessary funding and created a learning culture in which so many employees were at ease in participating in learning. The change process provided the incentive and the forum for so much learning.

In hindsight she would have loved to complete a primary degree in full time studies and she firmly believes it would have made a major difference to her career.

As a career choice she would have chosen to become a psychologist. She is interested in the human psychology side of marketing and selling. She loves the interaction with people and observing and analysing what motivates and satisfies them. The gain from participation in education programmes has been a major lift in confidence and competence. She has gained a greater understanding of how business operates. She has developed deeper insights into life and broadened her perspective on many subjects that previously were of peripheral interest only.

Her next objective is to complete her MBA through the Open University through distance learning.

The best support for employees returning to education is the provision of funding, time out for classes and study, access to mentors and study groups. There are many difficult moments to be navigated for the returned adult student especially those that have a low formal education base. An expert and empathetic helping hand can make all the difference between success and failure for many who are prepared to take the first step.

The most important basic skills are, a good education, good writing and numerical skills, information technology skills and good inter personal skills.

Employability is having the ability to add value to the business, to become an asset and make a difference.

She believes she is eminently employable as she has huge practical experience in a number of important business areas, has a proud track record of achievement, is highly motivated and is a hard worker.

Gerry Foley

Company:	Waterford Crystal
Job Title:	Master Blower
Marital Status:	Married
Age:	49
Years of Service:	33

Starting Position	Current Position
Apprentice Blower	Master Blower

Most Significant Career Developments

1. Qualified as a Master Blower
2. Completed a Diploma in Social Science- UCC
3. Served as Senior Shop Steward for Blowing Section
4. Completed ECDL
5. Completed a National Certificate in Manufacturing Technology

Gerry is married and is 49 years of age. He joined the company in 1971 as an apprentice blower when the Dungarvan Plant first opened. It was an opportunity to work locally and even though he was in 5th year in Dungarvan CBS he decided at a time high unemployment that he should take up this new work opportunity. The job in Waterford Crystal carried an attractive pay and benefits package. The opportunity to produce a world famous product in Dungarvan was caused great celebration in the town. The people prized the new jobs in the plant.

In his early years he completed a Diploma in Social Science with UCC in the Dungarvan Technical School. He quickly became involved in union activities and became a senior shop steward for the Dungarvan branch of the ATGWU.

He was very committed to company performance and wanted all employees to be fully informed of developments. Having served his apprenticeship he progressed to becoming a master blower. He has become qualified in a wide range of blowing skills since he first started out in 1971 covering most products from stemware to tumblers to bowls and vases to the trophies.

In 1986 Dungarvan accepted the first major technological development in glass manufacturing in Waterford's history the introduction of a tank furnace and associated equipment, which replaced the old pot furnaces. He led these negotiations, which involved acceptance of a complete new set of working practices involving shift work for the glass crafts. This was the first time this was mooted in the history of the crafts. The managing director at the time addressed all the blowers in Dungarvan on the new technology and the implications for them. To accommodate this new change, 75 blowers had to either redeploy from blowing or accept a generous voluntary parting package. The investment was secured and the changes were implemented. Adjusting to a seven-cycle shift pattern was a huge change and challenge for the blowers and their families. With support and training the transition from day work to shift work was achieved.

Gerry says *'I received a first class education through my involvement in union activities'*. Many new subjects, skills and techniques were mastered and applied. These included, business literacy, negotiations, problem solving, managing people and influencing skills. The art and craft of running meetings, report writing, presentation skills, and communications, managing change were covered. Specialist knowledge areas like pension funds, labour law and practice, health & safety and environment, financial issues had to be studied as good representation depended on the ability of the steward to get on top of them. Other important developments included appreciating the principles and practices of quality, cost effectiveness, and customer service and in particular leadership. Every day this intense learning environment brought something new and challenging. The union representative had to be an expert in all areas while management had the advantage of employing many specialists. In times of great change and he has experienced quite a few of transformational change periods, the learning from the doing, debating and leading has been significant.

He has availed of opportunities to develop his portfolio of skills and completed ECDL in the company. He is high in his praise for the company's approach to promoting education and training. The tutors were professional and sensitive to the needs of long serving craftsmen who needed to become proficient on computers, which had become central to the new workplace. There was a great feeling of fellowship and of helping

each other to get through the courses. The many opportunities to learn both formally and informally served to establish a powerful dynamic and catalyst for change and improvement in company performance and in individual development and growth.

He began a new course in Waterford Institute of Technology in 1999 a Certificate in Manufacturing Technology Technician Programme. The company advertised in early 1999 for craftsmen to participate in an in-house developed training course - introduction to manufacturing technology. This course was designed to develop engineering, information/machine technology skills among the craftsmen who had redeployed to become machine operator. There was an expectation that many of them would attend the local Institute of Technology at some future date and pursue a National Certificate Programme (Technician). He enjoyed the experience and had a particular liking for maths, which was a great boost to him. In September 1999 he signed up for the National Certificate in Manufacturing Technology and completed it with distinction in 2002. He completed the Diploma in Manufacturing Technology and performed very well in the final exams.

This educational experience has been a revelation to him, as he cannot believe how well he adapted to it. He excelled at subjects in which he has had no previous experience. He has gained in confidence in his own ability and is very proud of what he has achieved. It has been a tremendous learning experience for him and has provided him with immense satisfaction. In hindsight he would have loved to acquire a third level education. In his youth he had little interest in school. All the subjects at secondary school were taught through Irish.

The barriers encountered on his return to education have been the travel to Waterford. A typical occurrence would have been to complete the 12 midnight to 8 am shift. He would drive home from work, shower, go to bed, get up at 4 pm before driving to college in Waterford to attend class from 7-10 pm. He would then drive back to Dungarvan to start work at 12 midnight. His work as a blower is difficult and strenuous and the five years have taken its toll physically on him. The company and his manager have been extremely supportive. The pressure at work and in college combined with union representative duties has been particularly hard this year due to the restructuring of the crafts. One hundred and eleven craftsmen have been

redeployed under the “Building a Competitive Platform” 2003 Agreement. This restructuring has been particularly difficult and traumatic for his members.

The main supports has been his wife who has encouraged him and the company who have paid the fees and provided the time off when needed for him to complete his exams. The group of seven employees from Waterford who participated on the course worked well as a team. The other class members also worked together to get through the most difficult subjects. There was a great sense of camaraderie prevalent between the Waterford Group. Each one was willing to share information, solve problems, study together, brainstorm and cover for each other in every way. Representations were made to the lecturers, the college and the company when necessary. He would have loved to be a Sales & Marketing Manager with Waterford. He loves the product, the company, its culture of caring and its work ethic.

With the impending closure of Dungarvan Plant he has to consider his position and is likely to redeploy to Dungarvan and finish out his career there. His greatest achievement has been in serving his fellow employees and the company as a union representative. His greatest disappointment has been that having made so many changes and improvements the company decided to close Dungarvan. There is still so much insecurity and uncertainty around but he believes that this will remain a constant in private industry in the future. The generic skills/ competencies required by employees going forward are computing, being open to change and flexibility. For the company to improve its competitive position it needs to invest wisely in marketing and advertising.

He believes he is employable despite being with the one company throughout his working life. He has developed strong leadership skills, computing, and engineering and people skills and could work at a number of jobs. He has been interested in sport and was a successful hockey coach with Dungarvan teams for a long number of years.

Jimmy Kelly**Company:** Waterford Crystal**Job Title:****Marital Status:** Married**Age:** 55**Years of Service:** 39**Starting Position**

Apprentice Cutter

Current PositionChief Convenor in Company and Chairman of ATGWU
General Executive Council based in London.**Most Significant Career Developments**

1. Qualified as a Master Cutter.
2. Served as a Shop Steward
3. Lead Negotiator on several Restructuring Plans / Agreements
4. Served as Chief Convenor
5. Elected Chairman of General Executive Council.

Jimmy joined the company in 1966 as an apprentice cutter. He was preparing for his Intermediate Certificate in Mount Sion CBS and was losing interest in attending formal education. Every subject was taught through the medium of Irish. Jimmy says '*I had great difficulty learning through the medium of the Irish language and a strong desire to start earning money encouraged me to seek an apprenticeship with the company*'. The family placed a strong emphasis on being qualified in a trade. It was difficult at the time to gain entry into the mainstream trades such as carpentry or bricklaying.

As an apprentice he worked with a number of likeminded colleagues and identified a number of serious anomalies in terms and conditions. In particular a power relationship existed between apprentices and master cutters. The cutting shop included teams of six including a master, a qualified cutter and four apprentices. The contentious issues related to pay scales, training, and allocation of work, level and equity of contribution from each team member. The control held by the master in taking decisions on how the team performed caused many problems. It was a very authoritarian team structure operating a very challenging piece rate system. A huge emphasis was placed on quality and payment was made on good product only. The team absorbed losses through breaks or rejects. The level of interdependency was high. This led in many instances to the building up of tensions between diverse

personalities on work ethic and different expectations on earnings and on quality issues.

The union committee, ATGWU, was at the time dominated by masters and qualified personnel so the conditions of the apprentice was not fully articulated or represented. This situation led to the development of an apprentice section, which set out to challenge the harder and least accommodating features of the system in cutting and blowing crafts. Craft numbers grew quickly throughout the 1960s and 1970s as the business expanded. The workforce reached an all time high in the mid 1980s when it numbered 3,300, which included 1,200 craftsmen. In 1987 the first major rationalisation took place. It included a voluntary parting package, which accommodated the departure of several hundred craftsmen from the company. The current number of craftsmen following the redeployment of 111 craftsmen under "Building A Competitive Platform" 2003 Agreement is 188 craftsmen including cutters, blowers, engravers, sculptors and mould makers. A further reduction has been negotiated under the 2005 Agreement and volunteers are being sought to meet the targeted reduction. Maintenance craft are in a different category and union - the TEEU.

He learned his union representative trade in a red-hot environment, a developing business with many apprentices to be represented. Achieving equality of treatment for them during the late 1960s was no easy task. Huge changes took place in the business and serious inroads were made on rebalancing the position and pay and benefits and working conditions of the apprentice sections. He graduated to shop steward of the cutting section. He then progressed to become chief shop steward. He then became overall Convenor of the 11/64 Branch of the ATGWU a position he still holds to day. He has consistently being re-elected on a bi-annual basis by the members who have great faith in his ability. His commitment and outstanding record of service has seen him receive many unanimous endorsements during the past 30 years.

He has always had a Waterford city, national and international dimension to his union interests. He took up positions on Waterford Trades Council and was elected president. In recent times he has contested the Irish position on the General Executive Council, which represents England, Wales, Scotland and Ireland. He was successful

in being elected for the 2001/2002 and again for the 2004/2005 periods. He has become the first Irishman to be elected Chairman of the General Executive Council. He is charged with the welfare of 850,000 members, 40, 000 in Ireland and 37 Executive Council members.

He was elected to represent Ireland on the General Executive Council of the Transport and General Workers Union for the third Bi-Annual period. In March 2004 he was elected as the Chairman of the General Executive Council. The union has now started to look outward at new opportunities. A programme involving an investment of £15 million over three years has been agreed. The new strategy involves achieving a 100% membership in organisations has been rolled out to our membership, officers, and staff. One hundred and twenty dedicated, full time organisers will be trained and appointed. The union has opened relations and are working with the Services Employees and Industrial Union SEIU in the United States.

Following extensive discussions, a special executive meeting in February 2005 decided to open merger talks with AMICUS and the GMB towards the objective of creating a New Workers Union.

Speaking after the executive meeting the chairman (Jimmy Kelly) said "Today we have grasped an incredible opportunity to make history, to be brave as our forebears were, to amalgamate with others to create a larger force for good in Irish and British society and around the world, changing the face of Trade Unionism as we know it and having an influence industrially and politically that we can only dream of today."

The new proposed union that will be by far the biggest Union in Ireland and Britain. It will be a union of at least 2.4 million members with an annual income of over £200 million and growing.

Throughout his entire career he continued to develop himself through attendance at numerous courses. He completed EDCL, team effectiveness, pension trusteeship, negotiations, leadership, union and business based course too numerous to mention. He had a great ambition to serve as a shop steward and his career choice would be a full time union leader.

The barriers to education in general are funding, arranging time off to attend college and providing employees who have been out of the education system for a long time with an introductory course to ease their way back. The barriers on funding and encouragement do not exist in the company. There are others such as organising the time and developing the discipline and commitment to complete a part time course.

The supports are both the union and company advocating and supporting engagement in education for everyone over the past 15 years. The skills needed in industry today are acquiring a good education, people skills, IT and communications skills.

He feels that because of his ideology and politics he might find it difficult to gain employment in industry but would be very employable within the union. He has great experience on a wide variety of industrial relations issues. In one typical week he chaired a session on UK, US union merger, of the union's education committee and of the union's international committee.

Employability means having completed a third level degree at this time. Working class people need access to third level. In a downturn the low skilled and qualified are very vulnerable and the first to be made redundant.

John Barrett

Company:	Waterford Crystal
Job Title:	Front Line Manager
Marital Status:	Married
Age:	40
Years of Service:	24

Starting Position	Current Position
Apprentice Cutter	Front Line Manager

Most Significant Career Developments

1. Qualified as a Cutter
2. Completed a Certificate in Engineering & Science – Glass Technology
3. Promoted to Manufacturing Quality
4. Completed the Maguire Programme
5. Completed a Diploma in First Line Management
6. Promoted to Product Introduction Co-ordinator
7. Promoted to position of Front Line Manager

John is 40 years of age and married with one child. He joined the company in 1980 as an apprentice cutter. He decided to leave the local Technical School at 16 years of age when his elder brother who was employed by the company arranged an interview for him. His reason for joining was that he was getting a chance to get a well-paid and secure job in a leading company. Having worked as a cutter for 13 years he redeployed into the semi-skilled section in 1993 as part of an overall rationalisation of the craft. He was one of a group of cutters with least service. He took a decision to voluntarily move to a more secure long-term position. This move became a catalyst in challenging him to assess his long-term future prospects within the company.

Since he joined the company he always had an interest in returning to college. He suffered from a serious stammer and lacked the confidence to join a class. He approached the Training department to help him attend the Maguire School, which focused on curing stammering. The training department negotiated time off and funding for him. *John says ' it was the best move I ever made and this very difficult remedial programme made a huge difference to my ability to communicate freely and my confidence levels soared.'* His disability was eliminated and his confidence and determination knows no bounds in joining in a range of personal development programmes in the following years.

He was advised by his manager to take up a course he liked and had performed well at during his school years. He joined a Department of Trades, Certificate in Mechanical & Engineering Drawing which was attended by many trade apprentices and some apprentice draughtsmen. He passed with flying colours and it gave a great boost to his confidence. He had believed that a Leaving Certificate was required to enter and survive in third level college.

The Training Department in the company at the time was aggressively promoting a return to education for all employees. The company had established in 1990 a very comprehensive Part – time Education Scheme which included advice on course relevance and content, fees, study time, books, exam fees and time off for classes, a library service and a team of mentors to which participants could approach for help at any time. At one stage up to 20 managers lectured in part – time courses in the WIT. A special effort was made to facilitate craftsmen who invariably had finished their

formal schooling at a very young age to join the company as apprentices. In the current competitive environment their long-term future as craftsmen was subject to constant review.

The chief executive had announced in the early 1990s that the future viability of the company was dependent on the workforce returning to education and training and upgrading their skills and knowledge. Future skills needs would be entirely different to the skills required to date. All employees were advised to take note and prepare themselves for a very different work environment that was expected to develop over the next 10 years.

As part of the transition to technology based skills the Training Department in collaboration with the Waterford Institute of Technology developed for the first time in the country a National Certificate in Engineering – Glass Technology. This course was customised to assist employees embrace the technological revolution-taking place in internal processes, systems and in research and development. The course was four years part time and included many difficult subjects for early school leavers including Chemistry, Materials Technology, Production Technology, Engineering Science, Quality Management, Mathematics, History of Glass Making, Technical Communications, Computer Applications and Manufacturing Technology.

He realised that he had to join the course as the CEO had made the public statement that the company “would never fall behind on technology again”. He ended up acting as class representative with company and with the Institute. Thirty-five employees started out on the course and eleven employees finished it. The course times were 7-10pm on Mondays and 3pm to 10pm on Thursdays plus every second Saturday morning from 9am to 1pm. The course was tough but the team spirit among the participants and the commitment of the college lecturers was outstanding. His leadership and ability to tackle issues that were causing problems for the class were central to the successful conclusion of it.

He always felt that his stammer was a handicap in articulating his case at interviews. It undermined his confidence in holding his own on teams on returning to education. He decided to take on the Maguire Programme with the full backing the company.

The programme is not a cure but it provides the participant with a technique to manage it. It requires great determination to engage fully in the challenges it presents. He had a very successful experience and is now fluent 98% of the time.

In 2002 he decided to develop his management skills and joined the National Diploma in First Line Management from the National College of Ireland. He completed his final exams in May 2004 and achieved a distinction. In May 2004 he was promoted to a new position, Product Introduction Co-ordinator. In 2005 he was promoted to Front Line Manager. He strongly believes the qualifications and personal development programme made all the difference to his career. If he had not returned to education he would have remained in the semi- skilled section on shift work. All the new and interesting experiences would not have happened for him.

The barriers in developing his potential included a lack of confidence, a fear of failure in completing exams and organising the time between shift-work and family commitments to attend classes and study at home. The supports included his family and the company who facilitated him in covering fees and accommodating him with time off. In hindsight he would have liked to return to education a lot earlier. If he had he could have availed of the many opportunities that became available in previous years. He is now planning to take a break from study and to master his new job. He is determined to return and maybe complete a primary degree. If he had a career choice it would be to set up his own business.

His involvement in education served to develop a broader view of issues and to acquire a more balanced understanding of the issues facing the business. Many of the certainties emanating from a very narrow and prejudiced view have been interrogated. He says that his whole outlook on life and work has changed. He can now look at the company from an owner perspective. He would like to continue working in the company as he has made good progress over the past few years. He likes working with the product. The people are great and he has had success in re-inventing his career path.

The key generic skills for employees are computer literacy, adaptability, developing an open mind to change and having the attitude and capacity to welcome and master

it. In making the business more competitive a greater effort should be made to provide every employee with maximum responsibility for creating a quality culture that tackles every deviation at source. Another issue is that employees should be more committed to working together, across functions and departments.

He believes he is employable as he has proven himself in work and in education and has a skills portfolio that covers many important jobs in industry today.

David O'Neill

Company:	Waterford Crystal
Job Title:	Shipping Team Leader
Marital Status:	Married
Age:	37
Years of Service:	Waterford Crystal 1987-2005

Starting Position	Current Position
General Operative	Shipping Team Leader

Most Significant Career Developments

- (1) Completed a Diploma in Counselling.
- (2) Completed a Certificate in Personnel Practice
- (3) Appointed to the SAP Project.
- (4) Appointed as Team Leader in the Shipping Department.
- (5) Completing a BA in Human Resource Management.

David joined the company as a general operative in 1987. He completed his Leaving Certificate and a one-year project with the Young Ireland Movement. His father was employed by the company at the time and helped him get the job. He is now married with one son and is 35 years of age.

He worked in the trays department for eight years and became tired of it as it presented little challenge for him. From 1991/1993 he completed a two-year diploma in counselling. He completed a Certificate in Personnel Practice in the Waterford Institute Of Technology in 1992 and a Certificate in Health & Safety from UCD in 1993. Again in 1993 he attended a basic computer course in FAS with great fear and trepidation. He went on from there to complete internal computer courses in 1994/1995. In 1995 he was appointed as a clerk in the Shipping Department having

made several attempts to progress on to staff. The company hosted the ECDL training & exams in the Learning Centre and he completed ECDL in 1998.

From 1987 to 1993 there was a continuous downsizing. Many employees began to return to education and develop alternative career options. Management encouraged employees to engage in education and to pursue employability status. Throughout the late 1990's David completed several modules in IPICS (Irish Production & Inventory Control Society) in Waterford Institute of Technology.

In 2001/2002 he was involved in the SAP Project and was responsible for part of the Sales & Distribution Training process. At that time he became a training instructor for the Distribution Centre staff and delivered training to seventeen of his colleagues. In 2003 he and was successful in applying for the Team Leader Position in Shipping. He was elected on to the staff representative committee, which he found very challenging and responsible. It was an opportunity to practise much of what he had learned in his studies. He is presently studying a Bachelor of Arts in Human Resource Management in the Waterford Institute of Technology.

David says 'I had to overcome several barriers such as the "fear of the unknown", "fear of failure and exposure of limitations to peers and bosses "' which resulted in me being unable to complete a number of courses I attended'. For a long time David lacked confidence but through perseverance grew to become very confident and has since then conquered his this deep-seated fear.

He was supported by a wonderful culture of learning that was developed in the company. All sections and levels engaged in education and training. The change process cut deep and it affected all jobs in the organisation. The encouragement from the training team, management, and colleagues was hugely motivational. The financial support was vital as employees on general operative wages were experiencing short time working and just couldn't afford the fees.

In hindsight he feels he should have applied himself better by attending college and have progressed to complete a third level degree. It would have made a major difference to his career. His career choice would be to become a Human Resources Professional. He is convinced now that it is never too late to develop. He returned to

education to improve his employment status. He was stuck in a job for eight years as a general operative and the only way out was through education. His manager encouraged him to go back to college. He felt better for it and on applying for promotion he was successful. His qualifications made all the difference to him both in confidence and in competency.

The qualifications have increased his self-esteem and confidence around taking on new challenges. His next objective is to progress further into a new function such as Human Resources and learn new skills. He is anxious to progress further within the company and if that does not happen he will seek opportunities elsewhere. The key generic skills required by industry today are, a good qualification, computer literacy and good people skills.

The company can gain a competitive advantage by encouraging and facilitating the workforce to improve their skills and knowledge. The company must at all time track their competitor base and surpass their performance in product price, quality, design and customer service.

Employability is having the necessary skills to perform in a number of positions and to become multi-skilled. The contribution of the employee is all-important. He feels he is employable as he has a range of valuable work experiences, qualifications, is ambitious and prepared to work hard to further his career.

David Cretzan

Company:	Waterford Crystal
Job Title:	Master Blower
Marital Status:	Married
Age:	37
Years of Service:	19

Starting Position	Current Position
Apprentice Blower	Master Blower

Most Significant Career Developments

- (1) Qualified as a Master Blower.
- (2) Represented the company as an Artisan in the US.
- (3) Achieved a distinction in the National Certificate in Engineering – Glass Technology
- (4) Completed National Certificate in Tourism
- (5) Completed a Diploma in Professional Studies, Managing Diversity.

David joined the company in 1985. His father was recruited from Slovenia to help in re-establishing the company in the late 1940s as a master blower. He sought to follow in his father's footsteps. Interest in glassmaking was very strong in the family and was regarded as a highly skilled and interesting job. He had completed his Leaving Certificate in Waterpark College and had opted for a degree in marketing & Design in the College of Marketing & Design in Parnell Square in Dublin. He completed one year on marketing techniques and found it all so isolating, draining and expensive. When he was offered the apprenticeship position he was glad to take it. He is 37 years of age and is married with 3 children. He qualified after 5 years and has progressed to become a master blower in the heavy blowing section where all the trophies and major presentation pieces are made.

He attended the Waterford Institute of Technology and completed a three-year certificate course in German graduating with a distinction. He then completed a four-year National Certificate in Engineering & Science – Glass Technology. He also completed ECDL. The development of the gallery / visitor centre prompted him to complete a National Certificate in Tourism and Customer Care and he achieved a distinction in it. In 1998/1989 he completed a Diploma in Professional Studies, Managing Diversity from UCC.

David says *'my interest in returning to education developed from wanting to progress in the job'*. He always had a deep interest in the blowing craft. He was particularly interested in developing his blowing skills and creating new and exciting concepts in glass. The barriers were in accommodating his family, work and study commitments. The supports were the company who covered the cost and provided encouragement in many forms. He was selected to represent the company as an artisan and travelled to the US on ten occasions.

In hindsight he should have completed a degree in third level college. His career choice would be to become a lawyer, as it is a challenging and satisfying profession at the cutting edge of social and economic development. He gained enormously from his return to education. His confidence, self-esteem has increased. He hopes to progress within the company and if not seek work elsewhere to satisfy his ambitions for a challenging and satisfying job. He has a great affinity with the craft as it is in the family for generations.

The most important generic skills for industry are a good education preferably third level, information technology, communication and problem solving. The company could improve its competitive edge by maximising the potential contribution of all its employees.

Being employable relates to employees becoming multi-skilled and adaptable. The employee contribution is the lifeblood of company performance. He believes he is employable having reached the top in the blowing craft, completing a number of difficult nationally certified courses and having a strong work ethic with the ambition to achieve new goals in work in the future

David Grant

Company: Waterford Crystal
Job Title: Artisan Programme Manager, UK and Ireland
Marital Status: Married
Age: 41
Years of Service: 25

Starting Position	Current Position
Apprentice Blower	Artisan Programme Manager UK and Ireland

Most Significant Career Developments

- (1) Qualified as a Master Blower.
- (2) Promoted to Front Line Manager.
- (3) Represented the company as an Artisan.
- (4) Promoted to Retail Operations Manager in Gallery
- (5) Transferred to position of Artisan Programme Manager UK and Ireland.

David joined the company in July 1979 as an apprentice blower and three days short of his 16th birthday. He had completed 5th year in secondary school. He is currently married with 3 children and is 41 years of age. As the eldest of 7 children he was from 14 years of age working part time in supermarkets and bars in order to earn money. He had no hesitation in applying for a position when the opportunity arose in Waterford Crystal Ltd. The company had at that time a great reputation for pay and benefits. It had a worldwide reputation for the high quality and craftsmanship, which was very much associated with the brand and its products.

In serving his apprenticeship he used to work during lunch hour making swans to improve his blowing techniques. He qualified at 21 years of age and after another year was appointed to head up a team of blowers making wine glasses with stems. When the company entered the Japanese market he was assigned to make the product for that particular market.

In 1986 he was appointed to supervise sixty blowers on production. He was one of the youngest blowers to have been given such responsibility. In 1987 following the announcement of the rationalisation he completed a self-analysis of his employability status. He was not satisfied with what his curriculum vitae given the uncertainty that

had developed. He was at that time married with one child and a mortgage to repay. He decided to return to education and completed a two year Irish Management Institute Course in Waterford Institute Of Technology on Supervisory Management which he found to be excellent. At that time over 1,000 employees exited the company and a huge level of uncertainty developed in the organisation for the first time in its recent history.

In 1988 he was invited to help in the development of technology in the blowing area in Butlerstown Plant. He always liked mechanics and found this new challenge to his liking. While in Butlerstown he participated in installing a piece rate system. At the same time he attended a one-year programme on industrial engineering. From 1990 onwards the company embarked on an aggressive training programme for managers. He participated in every in-house programme that was made available.

In 1996 he joined the Artisan Programme having being selected through interview. He was involved in an intensive training programme including retail selling techniques, media- radio and television interview techniques and calligraphy. He travelled to the US twice per year in Spring and at Christmas on promotional tours. In 1997 he returned to Kilbarry in Waterford as a Front Line Manager in the traditional production area, which included the tourist trail. He was closely involved with tourists, travel, retail and promotional work for many years. He developed a good knowledge of sales and marketing. In 2000 he was transferred to the Tank Furnace technology based area on shift work as a front line manager. In 2002 he was assigned to the cold end in the production process in wash, polishing and packing area. In 2003 he was appointed as operations manager of the Gallery. In 2005 he was appointed Artisan Programme Manager UK and Ireland.

David says '*the main barrier to progressing at work for me has been the lack of a good education especially a third level degree*'. There is a perception among executives that those without a third level education are less able. The other barrier has been the lack of opportunity in progressing in the job having completed courses.

The supports included all the in-house courses, which were helpful as introductory and confidence building measures prior to joining the national certificate/ diploma courses. The company through the change process provided many opportunities for self and group learning. The Training Team developed and promoted a supportive

learning culture all of which provided the right environment for continuous learning. His family were hugely supportive.

In hindsight he wished he had got the opportunity to attend third Level College. The chance to do so was never there. He had to find the other way, the road less travelled, which has been tough and difficult.

For a career choice a position as a sales & marketing manager is his preference. His motivation to return to education was realising how vulnerable he had become with his craft qualifications, which were declining in importance. They are in the main linked directly to the Waterford area.

His educational experiences have made him more confident. It has broadened his thinking and understanding of business and societal changes in the world.

The next step is to achieve a third level degree and to move on and upwards in the organisation. The key to encouraging employees to return to education is to provide funding. It is unreasonable to expect a person with family responsibilities to fund his or her own education while working in a demanding employment situation. In raising a family and taking time out to study the physical, emotional and financial strain increases substantially. An important support is the provision of a mentor.

The basic competencies required in industry today are, a good education qualification, team-working skills, and information technology skills and strong inter personal skills.

For the company to improve its competitiveness it needs the management team to become more imaginative and aggressive in marketing and in the development of new concepts. It needs to improve its the total package. The capacity of employees to improve the cost base, improve quality and customer service, to problem solve and make a difference in every field of the company's activity is enormous. The company should invest heavily in improving the skill and knowledge base of the company.

Employability is having the necessary skills and competencies for employers to will want them. The key question to be answered is will an employer benefit from

employing you? The higher the level of employee the more likely the employer is to gain.

He believes he is very employable because he is committed, competent in many areas of management, is dedicated and experienced in getting results.

Declan Fanning

Company:	Waterford Crystal
Job Title:	Manufacturing Quality Technician
Marital Status:	Married
Age:	39
Years of Service:	22

Starting Position	Current Position
General Operative	Manufacturing Quality Technician

Most Significant Career Developments

1. Qualified as a Cutter
2. Completed a National Certificate in Maintenance Technology
3. Promoted to Manufacturing Quality Co-ordinator.
4. Completed a Diploma in Employee Relations
5. Promoted to Manufacturing Quality Technician

Declan is aged 39 years and is married with one child. On leaving college after completing his Intermediate Certificate he worked part-time with his father, a Painting and Decorating Contractor. He joined the company in 1982 as an apprentice cutter and qualified in 1987. In August 1987 a major rationalisation was announced in which 1,000 jobs were shed in a voluntary severance package. Many of the early retirements and redundancies were craftsmen. The requirements of the business dictated a reduction in craft numbers

The restructuring led to the introduction of new technology, which changed many job specifications. He decided to update his skill base and he was extremely vulnerable in the face of an uncertain and ultra competitive business environment. He attended a number of computer courses in – house. He purchased a computer through the company’s computer purchase interest free loan scheme. He completed a FAS, CAD training programme.

From 1993 to 1998 he completed a National Certificate in Maintenance Technology. He was the only person who finished it from a starting number of 28. It was a three year course but had to be extended over a five years as the numbers were not available to run it straight through in three consecutive years. He fully appreciated the need for technology and its central role in achieving competitiveness in the future. As a glasscutter he was qualified for one industry and realistically one location. He was virtually unemployable if he lost his job at any time.

Following the completion of the Maintenance Technology Course he entered the final year of a three year Diploma in Quality Management being awarded exemptions for the first two years. He has yet to complete his final exam as he was sick at the time and could not attend.

In 1997 he redeployed from the cutting craft to the semi-skilled section. Declan says 'that being selected to participate in a 'train the trainer' course and qualifying as an in-company training instructor was the key first step for him in building a new career path within the company'.

The training instructor role gave him the freedom to move around company, meet a wide range of experts in different disciplines, learn about the wider business objectives, train fellow employees in new skills and generally develop a confidence and leadership quality which encouraged and supported him to move on and upwards in the organisation.

In 1999 he was appointed Manufacturing Quality Co-ordinator a position he still holds today and in which he is extremely happy. Over the past two years he has successfully completed a National College of Ireland Diploma in Employee Relations from the National College of Ireland. He chose this course to improve his people management skills and to get a good grasp of the operations of the overall business. His job consists to a large degree of working with people, influencing them, negotiating with them and understanding the total business. All the processes and quality standards pertaining to each stage of the development of the product has to be audited on a regular basis. He is responsible for managing quality throughout the process and has gained in expertise and confidence in working with production staff.

The barriers he has faced in returning to education in a part time capacity are organising study and class time and matching it to work and family commitments.

The supports he appreciates were his family and the company who provided the learning environment and funding, which encouraged him to go back to college and build up a new and flexible portfolio of skills and knowledge. In the company in the 1990s there were many employees whose jobs were at risk who were returning to education. There was a great air change and learning and taking responsibility for one's own development.

In hindsight he would have preferred to have completed his Leaving Certificate and continued to third level college to obtain a degree.' If I knew then what I know now'! Declan says '*I would have liked to have become a construction engineer, as I am very good technically and would love to work outdoors*'. The education he has received has made him more confident. He now has a better understanding of how the business works. He is in a position to discuss and make decisions on a wide range of quality issues across the business. He would like to progress further in the job. He likes the ambience, the product, the brand and his current job.

He recommends computer literacy, a high level of numeric skills, good communication skills, a willingness to learn and adapt to change as key generic competencies required to progress in industry today along with the Leaving Certificate and a primary degree if possible.

On competitiveness he recommends that managers get more involved with employees and encourage them to develop their skills and knowledge base. Employees need to want to take on additional responsibility as the current work place demands a shared approach to achieving the results.

Employability is having a set of qualifications and competencies that are needed by employers.

He believes he is employable as he is interested in many areas of work, has developed a number of qualifications, has redeployed on a number of occasions and is adaptable to change.

Deirdre Connolly

Company:	Waterford Crystal
Job Title:	Accounts Technician
Marital Status:	Married
Age:	37
Years of Service:	18
Starting Position	Current Position
General Operative	Accounts Technician, Finance

Most Significant Career Developments

- (1) Redeployed from factory to Finance Function as Accounts Clerk.
- (2) Completed Certificate in Accounting (Technician)
- (3) Became Computer Literate in Financial Packages
- (4) Promoted to Accounts Technician.

Deirdre joined the company in 1986 as a general operative in the Blowing Room. Her job was to take the glass from the blower's blowing iron and place it in buckets to be transported to the Lehr for the annealing, cooling process. She had completed her Leaving Certificate and had passed all subjects gaining a number of honours. She first of all went to work in a local hotel, as she wanted to become a chef. It was a five-year contract including on the job training. Her wages were low for a 70-hour working week. Her father was a blower in the company. In taking the general operative position in the company she earned four times for a 45-hour week what she was earning in the hotel. Deirdre is 37 years of age, has a partner and one child.

In 1987 she transferred to the washing and in 1988 she moved on to become an examiner in the acid polishing area. In 1995 she transferred to the Wedge Cutting as an examiner. She completed ECDL. She had completed Accountancy in the Leaving Certificate and with her business partner set up a business in 2001. Her role was to manage the books. She attended a bookkeeping course in the Waterford Institute of Technology to brush up on her financial management skills. She then completed an ACCA Accounting Technicians Course.

She intends qualifying as an accountant in the future. She applied for a trainee accountant position in the company but was unsuccessful. In 2003 she was approached to back fill a maternity vacancy in Finance in the cost accounting section. This was followed by another opportunity to cover for a maternity in the accounts payable section. She is currently there doing an excellent job.

In hindsight she should have stayed in college and pursued accountancy in third level. Getting involved in a business sparked her return to education. Her business partner did not have any financial experience but had the idea, skill and knowledge to get the business up and going.

The main barriers has been organising the time to study while working, manage a business and rear a child.

The main supports have been the company in funding her education and in providing her with opportunities to use her accounting skills. She intends staying in the company unless the external business needs her in a full time capacity.

Deirdre says that *'the benefits of education to me were the development of a greater level of confidence and competence'*. Her ability to re-deploy successfully into the Finance Function and improve her accounting skills was great. She has benefited financially in moving into Finance and is better able to support the development of her external business with her improved skills and experience.

Her next career objective is to qualify as an accountant.

The most important basic skills for employees in industry are – developing confidence through education qualifications, life skills such as getting on with all different types of people and information technology skills.

To improve competitiveness the company has to improve quality first time, reduce losses and maintain best practice approaches in every area of the business.

Employability means having a good education and a wide range of different industrial experiences where the knowledge is used in a practical way. She believes she is becoming more employable as she continues in education and applies the learning in work gaining much needed practical experience.

Eamon Lyons

Company:	David Flynn Ltd.
Job Title:	Safety Consultant
Marital Status:	Married
Age:	48
Years of Service:	33 with Waterford Crystal

Starting Position	Current Position
Apprentice Cutter	Safety Consultant

Most Significant Career Developments

- (1) Qualified as a Master Cutter.
- (2) Achieved a Certificate and Diploma in Health & Safety.
- (3) Worked as a Trainer in Health & Safety.
- (4) Recruited as a Health & Safety Consultant.

Eamon joined the company in April 1971 as an apprentice wedge cutter. He arrived in the company seeking a Summer job. On completing his entry test he was offered a permanent position. He was 15 years of age at the time and had completed his second year in the local Technical School. He is now 48 years of age and is married with 3 children.

He qualified as a wedge cutter in 1976 and graduated to become a master cutter. In 1991 following the strike he decided to return to college feeling very vulnerable, as he was single-skilled for one location only. He completed a Certificate in Health & Safety from UCD, a Diploma in Health & Safety from UCD, ECDL, Instructor in Manual Handling; Certificate as an Adult Tutor and IITD Train the Trainer Certificate. He was elected as a union safety representative and served in this capacity from 1995 to 2001 and as a Safety Trainer from 2001 to 2004. As a safety trainer he qualified to train in Manual Handling, Chemicals Management, Lock Out –Tag Out, Air Freight Security, Gantry Crane and Fall a Rest.

In early 2004 he was headhunted by a Safety Consultancy Firm and accepted it taking a voluntary redundancy package provided by the company. He is currently working as a safety consultant with David Flynn Ltd a leading local construction company.

There were no barriers to overcome in returning to education. The company supported, encouraged and funded all expenses. The training department and health & safety helped to identify work experience opportunities for him. Eamon says *'that at every stage in my development, opportunities were presented to me to improve my qualifications and competence'*.

The main supports were his family and the company. The company created a wonderful learning environment in which everyone with any interest in personal development was encouraged to participate in education and training programmes. The training & communications department, managers and colleagues all supported in a variety of ways involvement in education. The internal support was overwhelming. In hindsight he should have completed his secondary education and a third level degree.

His career choice would be a Construction Engineer as he has always been interested in building.

The motivation to return to education came from the training department whose members consistently encouraged, offered and prodded him at various stages in his development. The ongoing rationalisation programme from 1987 to 1993 created vulnerability around the future of the crafts. It made him determined to develop new skills and move on to a new career.

Education has made a life changing difference to him and his career. Prior to it he was an extremely quiet and introverted person. Education has increased his confidence in speaking, spelling, debating and writing. He feels he is a good example to his children and his morale has improved due to what he has achieved.

His next ambition is to establish himself as a reputable consultant and he might consider starting his own consultancy business in time.

To help employees return to education they need direction and access to information on careers, course options, progression routes, examples of success and improvements in lifestyle, job opportunities, assessment and other help that is relevant.

Many employees in industry are cut off from the information and help they need especially those on shift-work. They need every bit of encouragement. Education and training providers must go to the work place and identify what is required and then offer it in nationally accredited courses. Lecturers and trainers need inductions in industry and appreciate the context and conditions in which the knowledge and skills are applied. Many employees feel they have lost their chance having left school early prior to Leaving Certificate. They believe that there is no way back for them and accept their fate. Leadership in education, training and industry is required if the low skilled and redundant highly skilled craftsmen with low educational qualification in diminishing crafts are to be re-skilled and re-educated.

The most important basic skills and competencies required in industry today are IT skills, people skills, self- discipline, communications and personal appearance. Employability is having the qualifications necessary to be able to do the job well and having a range of work experiences and achievements.

He believes he is employable having acquired a wide range of skills, competencies, and work experiences and in being willing and eager to continue learning and changing.

Alan Stone**Company:** Microsoft Ireland**Job Title:** IT Director**Marital Status:** Married**Age:** 36**Years of Service:****Starting Position**

Apprentice Blower, 1986

Current Position

IT Director of Microsoft Ireland

Most Significant Career Developments

1. Qualified as a Blower.
2. Awarded a Degree in Marketing
3. Joined Industrial Engineering.
4. Completed a Bachelor of Business Studies Degree
5. Married an extremely supportive woman.
6. Led the New Product Development Project "Phoenix".
7. Recruited by Microsoft as
8. Appointed IT Director of Microsoft Ireland.

Alan joined the company in April 1986 as an apprentice blower having completed his Leaving Certificate in St Paul's College. Following his Leaving Certificate he joined a secretarial course in the college as a first step towards becoming a journalist. He applied to the College of Journalism in Rathmines and was awarded a place but he could not afford to take it up. His father worked in the company as general operative. Many of his friends worked there so when the position was advertised he successfully applied for it. Unemployment was high in Waterford at the time so he was glad to get a good job. He is 36 years of age and is married with two children.

He qualified as a blower in 1991. During the rationalisation period of 1987 onwards Alan was concerned as to the long-term future of the craft and his own prospects. He decided in 1989 to back to college and after four years he completed a marketing degree in the Waterford Institute of Technology.

On completion he went directly to executive management requesting a transfer to staff and to Sales & Marketing. There was no vacancy but at the time the company were restructuring the Industrial Engineering Department. He was offered a trainee industrial engineer position and accepted. He then went back to college and completed a Diploma in Industrial Engineering. He was granted exemptions due to his

marketing degree. He had to complete just two years of study instead of three. He followed on with a further two years of study to achieve a Bachelor of Business Studies Degree. He was nominated student of the year during the diploma and achieve a 2:1 honours degree.

He was appointed plant industrial engineer during the degree programme. He continued to practice as an industrial engineer until he was selected in 1997 to head up a project on new product development. He had as an industrial engineer written a report on the new product development process. The report was radical and creative but not well received initially. Some parts of it were critical of current operations and were a bit too close to the bone. He says he was criticised roundly for being over the top and admits that it was a lesson well learned on how to influence change without losing supporters through over the top criticism. He learned that there was little point in making outstanding suggestions if you were unable to persuade the decision makers to support them.

In leading the re-engineering of the new product development process he was given a cross-functional, supply chain team and a significant budget to manage. This was to become the most demanding and satisfying period of employment with Waterford. He took over a scattered set of operations and developed a new Product Data Management System that represented the best process flow. For the first time new product development became an ordered process with a most efficient and effective process flow established. The management of this project brought him into contact with all sections of the company and with many suppliers and customers. On completion of the project he was headhunted and appointed as IT Manager for Microsoft Ireland in Dublin in 1999. Since then he has been appointed IT Director managing a team of 20 people. Microsoft has 1,800 employees in Dublin and 55,000 worldwide.

The main barriers were funding as he started before the Part-time Education Scheme was introduced in 1990. Initially cultural barriers existed as the crafts were the most revered qualifications. 'The craftsmen were the producers and management functions were overheads'. It wasn't until 1990 that part time education for employees became such an important issue throughout the company. Only a small number participated in

the 1970s and 1980s. The craftsman was king and the magic and remuneration levels associated with the crafts blinded many employees from developing academically. Also there was the perception that once a craftsman joined as an apprentice at a young age with little formal schooling there was no way back to education and an alternative career for him. Alan says that *'a prevailing view in industry and education circles which served to stunt the progress of employees in education was that education achieved part-time as an adult was somewhat inferior to a full-time education.* This view was openly shared by ex graduate senior managers in industry and by academics in third level. It was more apparent in recruitment situations. It contradicted the efforts made by the more liberal and practical senior managers and academics who were very supportive and open in encouraging employees back to education and went to extreme lengths to provide the most supportive learning environment. This 'class' issue cropped up time and time again in subtle and pernicious forms. The experience in Waterford left many traumatised and disappointed employee students in its wake having being put in their place by the 'system'.

Alan was single when he completed his marketing degree and had no problem with organising his time. The main supports were the company in funding his later education involvement and the tremendous support for people returning to education in the 1990s. Also the new management were willing to give employees achieving qualifications an opportunity to use them. Finally the group learning was a great support. A number of employees from the industrial engineering team attended night classes on the diploma and degree courses. They formed a study group outside of the classes, which proved hugely beneficial. The group resolved many problems on maths and other new subjects. There was great group discussion and the friendships and camaraderie remains strong among the group to this day. His family were also very encouraging and helpful. In hindsight he should have stayed in college and achieved a third level qualification. It would have been easier to progress on entering the workforce. On completing his third level education the hard way he believes he has become a more rounded person. All his learning has been more meaningful and applicable. Many of the college graduates enter the workplace very much one dimensional and take time to adapt and build up their people and social skills in industry.

For a career choice he is open ended about it. He is certain that he wants to experience many work situations and responsibilities and by 55 years of age he would like to lecture in a university. Meanwhile he is highly motivated in his work and will follow whatever route opens up for him. If he is not satisfied he will change and move on to something challenging and rewarding. What motivated him to return to education was his job becoming very vulnerable as the blowing department was being restructured. He needed a parachute and his return to education gave him that. It has transformed his life and career. He is a much more competent and rounded person now. He can see many perspectives instead of just one. He has gained many experiences and is more confident in his ability. He has completely lost any inferiority complex he might have had on leaving college and on coming from a working class background.

His next objective is to improve in the job and watch out for new and exciting developments. The changes he would like to see happen to attract employees to education are, the government promoting and defining the value of education for employees. They need to know better the deal in having to invest time and effort and should be fully informed on the possibilities. The cost benefit should be illustrated and education should be made more accessible for shift workers. This would mean that educational institutions would need to be more creative and flexible in their delivery options. The employees at lower skill levels have huge potential, are most in need of educational opportunity and are most unlikely to get it in the current situation.

The basic skills required for industry are a good education, interpersonal skills, mental agility and to be able to think outside the box. The education system places all students into straight jackets and one size has to fit all. Many situations and problems in the workplace do not conform to the models of analysis and education, which students experience in school. Classes on creativity and innovation are needed in primary and secondary schools. Crosswords and puzzles on a variety of subjects would add interest to the curriculum and enable students to see things from a number of different perspectives. Employability is having a base level of education, being able to adapt to change and being flexible with strong personal skills. He believes that he is eminently employable, has acquired several qualifications, a wide range of work experiences and has an outstanding record of achievement.

Ann Nolan-Walsh

Company:	Waterford Crystal
Job Title:	Customer Service Administrator
Marital Status:	Married
Age:	41
Years of Service:	22

Starting Position	Current Position
General Operative	Customer Service Administrator

Most Significant Career Developments

- (1) Represented Ireland in Athletics
- (2) Completed ECDL
- (3) Recruited as an Information Technology Champion.
- (4) Selected for EU Employment- NOW Programme.
- (5) Appointed as Credit Controller.
- (6) Re-deployed as a Customer Service Administrator

Ann joined the company in 1982 as a general operative in the Finishing Department. She is 41 years of age and is married and has two children. She had completed her Group Certificate in the local Technical School and had left school to become a hairdresser. The pay and conditions were poor at the time. When the opportunity arose to join the company she jumped at it. It was the pay and benefits package that was available that attracted her to the company.

Having worked as a general operative for seven she was in 1979 appointed a training instructor. She was trained and became a trainer of all examiners of the product. These operatives were mainly female. They had responsibility for examining the product at the different stages in the process to eliminate poor quality product. The objective was that only top quality product reached the final stage of packing and distribution.

Ann enjoyed training, which was carried out on a part time basis, as it was required. In the mid- late 1990s she completed ECDL. She was appointed an IT Champion acting as tutor, coach and advisor mentor to the shop floor employees who were learning computer skills for the first time. They urgently needed to become computer literate to perform in their new upgraded roles. In 2000 she became a SAP trainer and provided expert assistance to many management and staff employees. Ann

was made available to take employees on a one to one basis. They had to improve their skills and their understanding of the integrated nature and operating principles of SAP. She provided an invaluable service for many who needed regular support until they became confident and proficient in the operations of SAP.

In 2001 she was seconded to Logistics for three months as a purchasing officer. This contract was extended to two years. In 2003 she moved to Human Resources for six months filling in for absenteeism, in the main maternity leave covering for changes taking place in the overall restructuring process. In 2004 she was redeployed to Finance as a Credit Controller. Finally in 2005 she was deployed to customer service, which she likes. She would like to settle there, as she is 22 years in the company. Her versatility, adaptability and willingness to co-operate have made her employable. In her case it has denied her to date the opportunity to settle down and establish a recognised career.

Over the years she was involved in many training and development programmes, Her first major development experience was involvement in the EU Employment NOW (New Opportunities for Women) Project which was managed by Training & Communications. It involved 30 women who were subjected to a very comprehensive development programme in order to help them to progress their careers. She found this project very beneficial to her as it gave her a great insight into the business.

She also completed a communication programme in the Waterford Institute of Technology, a foundation in maths course in WIT, certificate in training & development, typing skills and a certificate in IPICS. In the 1980s she took on the responsibility of shop steward for her section. She was very progressive and successful in representing her members in the different forums at a time when there were many challenges to be handled. She was an outstanding athlete in her youth. She represented Ireland in an international competition between the home countries in Crystal Palace, London at the age of 13 years. To this day she retains much of her competitive spirit. She has been very committed to making improvements to her skills and knowledge portfolio over the years and helping others to do the same.

Anne says 'that the main barrier to progressing her career and personal development was leaving school at a young age without any qualifications'. She appreciates how

detrimental this has been in progressing her career. She fully realises now that she has the ability to do much better and perform in a much more challenging job role.

The supports were the learning environment created in the company and the many opportunities available for all employees to improve their skills. The funding of the part time education scheme enabled employees engage in education courses. All job related courses are fully covered and non-job related are covered to a maximum of €300 per year. The computer purchase, interest free loan scheme was a big benefit and the in-house computer training in the early 1990s was tremendous.

In hindsight she should have completed her Leaving Certificate. She would love to have attained a third level qualification in information technology. Her preferred choice would to have been a teacher. Her motivation for returning to education was to move to a more interesting position. She found work in the factory monotonous and boring. Her confidence has improved as her competence built on her newly acquired skills proved to her how much more she could do. She feels much better about herself and looks forward to moving on in her career.

Change is exciting and brings with it many challenges. It has been good and she welcomes it and the many opportunities that it has brought with it.

She likes the ambience, people, product and brand and the opportunities to change and improve and hopes to continue on improving her career.

The most important skill sets in industry today are – information technology, typing, communications, awareness of business, a good qualification with a minimum Leaving Certificate standard of education, good interpersonal skills and an appreciation of and commitment to customer needs. Improving competitiveness means developing a plan, providing direction and bringing everyone along with it. Employability is being able to do your job well, to be multi-skilled and to be fully trained and reliable with a good attitude. The contribution of the employee is a major factor in competitiveness and employees need to be fully motivated at all times.

She believes that she is employable. She has shown herself to be flexible, adaptable, a quick learner, good with people, welcomes change and challenge and has a wide range of work experiences, which are relevant and critical to future progress.

Anne Walsh

Company:	Waterford Crystal
Job Title:	Office Services Administrator
Marital Status:	Married
Age:	40
Years of Service:	18

Starting Position	Current Position
General Operative	Office Services Administrator

Most Significant Career Developments

- (1) Transferred from Heavy to the Light Finishing Section.
- (2) Involved with Training Department Personnel
- (3) Participated in the 'NOW' (New Opportunities for Women) Project.
- (4) Appointed as Switchboard Operator
- (5) Promoted to Office Services Administrator.

Anne joined the company in March 1986 as a general operative in the Finishing Department having completed the Leaving Certificate. She had an interest in psychiatric nursing but St Otteran's; the local psychiatric hospital ended the employment of student nurses that year. She gave some consideration to qualifying in England but changed her mind and instead worked in a new shoe shop for a short period. She successfully applied to work as an au pair in the US and remained there for two years. On her return she went back to work in the shoe shop for one year before successfully applying for a position in Waterford Crystal. Anne is 40 years of age and is married with two children.

She first worked in the heavy product area and then changed to light products such as stem glasses and tumblers. The difference was great in that everyone in the Lights section were involved in part time education. She joined in and completed computer courses in the early 1990s along with a typing course and she loved it. Her confidence was boosted and she applied and was appointed as a switchboard operator. She was

sent to Cable & Wireless in Dublin to train as a receptionist / telephonist for three days which she enjoyed.

Anne says that '*the NOW- New Opportunities for Women Project were a brilliant experience for her*'. She also completed ECDL and when the office administrative position came up she applied and was successful. She loves dealing with people and the Services Office is always very busy in servicing the needs of the company. It manages the post, copying and other facilities.

The main barriers were, giving up too easy on the nursing option and the subsequent lack of motivation and ambition to complete personal development courses. The main barrier was within her and having started through involvement in internal courses she was delighted with her experience. The main supports were her colleagues in the Light Finishing department who were really keen on developing their skills and the training team who encouraged her to get involved and gave her advice and direction.

In hindsight she should have completed different subjects in her Leaving Certificate, the sciences instead of business. Her career choice would be to become nurse or now to become a human resources manager. The difference in improving her skills base is to have gained an increase in confidence. She has established a new belief in herself and can be trained to do any job she is interested in. She likes working in Waterford and would hope to continue to progress within the company.

The most important skills needed for industry today are information technology skills, work experience and a good knowledge and qualification on the area of work chosen. For the company to improve its competitive position it needs to invest in marketing and increased sales will cure a lot of our problems.

To be employable is to be flexible, willing to adapt and learn. She believes she is employable. Her education and training has made a big difference to her as a person. She is now much more confident and can converse and mix with every level of management.

Brendan Maher

Company:	Waterford Crystal
Job Title:	Charge hand Electrician
Marital Status:	Married
Age:	43
Years of Service:	26

Starting Position	Current Position
Apprentice Electrician	Charge-hand Electrician

Most Significant Career Developments

- (1) Qualified as an Electrician.
- (2) Completed a cross-skilling programme presented by FAS.
- (3) Acted as a training instructor on the Tank Furnace in training electricians and technicians on the new technology.
- (4) Completed a Certificate, Diploma and Degree in Maintenance Technology.

Brendan joined the company as an apprentice electrician in 1979 having achieved an honours Leaving Certificate and completed three weeks in the Regional College in a Certificate in Computer Technology. His uncle worked in the company and he responded to an advertisement in the paper for an apprentice electrician. He regarded it as a good opportunity as the conditions and benefits were the best in the locality and he had an interest in electrics.

He is married with 4 children and is aged 43 years. While serving his apprenticeship he completed a City & Guilds course in electrics, hydraulics and pneumatics all of which were work related. Having completed his apprenticeship he was made redundant for a period two years during which he was re-employed on short contracts. He attended paid FAS courses in Cork Institute of Technology in Industrial Electronics and Industrial Instrumentation.

He was re-employed in 1986 in a full time capacity. In the mid 1990s he completed a three year National Certificate in Maintenance Technology with distinction. He then proceeded to complete a Diploma in Manufacturing Technology with distinction and finally achieved a 2:1 honours degree in Computer Aided Manufacturing in 2003.

His main motivation for returning to education was to keep abreast of the changes taking place in engineering and technology in the industry. He also completed ECDL

and a host of in-company training programmes. The main barriers were organising the time to attend college while managing his family responsibilities and working in a pressured work situation. The main supports were the company in funding his return to education and providing the time and support to make it all possible.

Brendan says *'that in hindsight I should have completed a third level education course while full time in college.'* His choice of career would be to have become an architect as he has a great interest in art and drawing. He would be attracted to the practical end of the qualification. His motivation for returning was to improve his position and to help him adapt to change. Change was continuous, was impacting on all areas of his work and could only increase further in the future.

The difference it has made to him was giving him a greater level of confidence. He developed the competence to complete more complex and interesting tasks. His next project is to build a house on a site he has purchased in Crooke near Passage East.

The issues to be addressed in helping employees return to education are the provision of funding. He would have not completed the degree without the funding. He could not have sustained his family along with the time out from family responsibilities with no guarantee of success or reward at the end of it. In engineering the issue of maths is a problem for many employees. He regarded maths as his best subject. Other participants on the course gave up because of difficulty with maths and being too long out of education.

He would aim to stay in the company and progress with his new qualifications, as he wants to stay in the locality. The most important basic skills for employees in industry today are, a good education, computer skills and good interpersonal skills.

For the company to become more competitive it needs to settle on a direction on the best way forward and communicate it to employees. They then need to stick with it until it delivers the results. It will have to be flexible to adapt to changing circumstances but the central strategy should be agreed and communicated to the workforce.

Employability means having a good basic education and the wide skill set to handle a number of jobs and to be flexible and adaptable to changing circumstances. He considers himself employable because of his experience, his education and his achievements. He considers himself very flexible and adaptable.

Claire Banks	
Company:	Waterford Crystal
Job Title:	Customer Care Co-ordinator
Marital Status:	Married
Age:	38
Years of Service:	17
Starting Position	Current Position
General Operative	Customer Care Co-ordinator
Most Significant Career Developments	
Achieved a Certificate in Quality Assurance.	
Appointed to the Gallery as Retail Sales Assistant	
Received excellent feedback from Customers in the form of letters and presents.	
Promoted to Customer Care Co-ordinator	

Claire began her working career in Tower Rewinds in an administrative capacity having completed her Leaving Certificate at 16 years of age. Tower Rewinds went into liquidation in the first year of her employment with them. Claire worked with the liquidator for 6 months and went for many interviews without success. Her father worked in Waterford as a carpenter and also some other relations worked in the company. Her mother did not want her to work in a factor. She joined the company in 1987 as a general operative aware of the excellent working conditions on offer. She is 38 years of age, is married with two children.

She worked in many general positions, in Marking, Packing, Finishing, Quality Control and Washing. She became bored at her work and joined a French class in the Waterford Institute of Technology. She then completed a City & Guilds Certificate in Quality Assurance. She applied and was successful in getting a Sales Assistant position in the Gallery in 1991. She completed an Introduction to Computers Course and then moved from Sales Assistant in Gallery to Order Book Management in Customer Care. The Customer Care Department expanded and re-located into the

factory. It developed a very focused consumer oriented approach. She placed in charge of dealing with queries and complaints from consumers on orders.

To improve her competency she completed a Project Management Course, ECDL and Advanced Excel, Certificate in Customer Service and many other internal courses. In 1996 she took maternity leave. When she returned in 1997 she was appointed into her current position of Customer Care Co-ordinator. The role of customer care has changed radically over the years in line with the many changes in industry in that same period.

There were no barriers to her returning to education as she was single at the time and her training and education was fully supported and funded. The main supports were her family and the company who encouraged all employees to return to college and acquire new qualifications.

In hindsight she firmly believes she should have gone to third level college. Her parents had tried to persuade her to go to college but she wanted to work and earn money. She did stay on in secondary school for an additional year.

In work she loves dealing with customer and at home she loves crafts and dressmaking. *Claire says 'I was a top class debater in school and my preferred career choice would to have become a barrister'*. She worked with the company's barrister on quality and customer service issues. She liked dealing with the legal end of the business. She would like to fulfil her ambitions and education and training are the mechanisms that can help her do that. Better qualifications can lead to greater responsibility and satisfaction at work and higher remuneration.

The main difference education has made is becoming more confident and capable. She enjoys her leadership role and would like to progress further. She knows that she needs to improve her qualifications but it is not convenient at present. She would like to experience much more in work over the next few decades and knows that to achieve this she will have to continue learning.

The key skills and capabilities required by employees joining industry are to acquire the highest possible qualification, business degree or degree in area of interest, a good grasp of the English language, good communications skills, IT skills and a good attitude that facilitates adaptability and flexibility.

The company can improve its competitiveness by improving employee capability, managing its costs better and regenerating the sales and marketing team and strategy in the US. Employability is being multi-skilled, open to change, flexible and a good attitude. She believes that she is employable as she is open to change, is adaptable and wants to improve all the time.

Margaret Power	
Company:	Waterford Crystal
Job Title:	Front Line Manager
Marital Status:	Married
Age:	43
Years of Service:	25
Starting Position	Current Position
General Operative	Front Line Manager
Most Significant Career Developments	
<ol style="list-style-type: none"> 1. Appointed Quality Control Analyst 2. Promoted to Charge-hand position 3. Completed ECDL and SAP training 4. Appointed to Front Line Manager. 5. Covered for General Manager of Packing and Despatch. 	

Margaret joined the company- Dungarvan Plant, in April 1979 as a general operative having completed her Intermediate Certificate. She is married with three children and is 43 years of age. She worked as an Examiner for eight years before graduating to the position of Quality Control Analyst in Manufacturing Quality Department.

In working with production management she participated in a special team effectiveness programme for two years, which was a tremendous learning experience. She learned about the overall manufacturing process, the key performance indicators and manufacturing objectives. She was trained in objective setting, preparing budgets, setting targets, appreciating customer requirements, customer service standards and all aspects of quality, health & safety and environment. She was inducted into the

continuous process improvement programme, which formed the basis for achieving high performance across the business.

In 1993 she was promoted to the position of Charge-hand in the Packing Area and in 2000 she was promoted to Front Line Manager. She completed ECDL and has since then improved her information technology skills. She is now a very competent in SAP and MS Office. Her progress throughout her working career in Waterford was made possible by building a competency base through several key work experiences coupled with several key in-company training programmes. She did not attend college but was fortunate that management recognised her ability to organise and lead a shop floor team.

Margaret says that *'the main barrier to my progress in work has been the lack of qualifications'*. She feels this is a serious hindrance to further promotion and progress in what has become a high technology based manufacturing operation. She regrets not attending a number of in- company training courses that were made available. As the manufacturing operation becomes more complex the greater the need for education and a set of relevant qualifications.

The supports involved her immediate manager who showed great confidence in her ability to move to a managerial position. He trusted her to get things done and gave her the scope and opportunity to prove her worth.

In hindsight she regretted not completing her Leaving Certificate and progressing to complete a third level degree. Living in a rural area and a long distance from work and college curtails her capacity to engage in part time education. The logistics of working and raising a family and returning to education was too great a challenge to overcome. Her workplace and college are located in opposite directions. She is acutely conscious that if made redundant in her current position she would have great difficulty getting a similar job elsewhere. She believes she is not very employable in the current external business environment, as her lack of academic qualifications limits her chances.

Her career choice would be a Pharmacist / Beautician. She encourages her children to work hard in school and college. She is adamant that a good education is the key to a

very fulfilling life and very challenging and rewarding employment. She feels proud of what she has achieved to date and is acutely aware of how the acquisition of additional qualifications could have opened many other doors for her in the workplace. Her main career interest is in quality and production .She is confident and competent in both of these areas and has a wealth of experience and success in them.

The basic skills required by employees are a good education, information technology and plenty of good work experiences. The work experiences should include summer work during college years as every experience is valuable and helps develop confidence and capability.

For the company to achieve a greater level of competitiveness the best and surest way is to up-skill the entire workforce. Employees can make a significant difference in so many areas of competitiveness, cost, quality, customer service, new product development, introduction of new technology and process improvement.

Employability is being multi- skilled and able to competently carry out the tasks required in a variety of work disciplines.

She has attained a level of employability, as she can perform a range of tasks. Her capacity to pick up a similar job externally is curtailed by her qualifications, as most positions of a similar nature require a third level degree.

Michael Cooney

Company:	Waterford Crystal
Job Title:	Tooling Technician
Marital Status:	Single
Age:	34
Years of Service:	16

Starting Position	Current Position
Lehr Sorter	Tooling Technician

Most Significant Career Developments

1. Trained as a Trainer.
2. Selected as an IT Champion.
3. Completing a National Certificate in Computing – Computer Applications.
4. Appointed a SAP Trainer
5. Promoted to Tooling Technician.

Michael is 34 years of age and single. He joined the company as a general operative, Lehr sorter in June 1988 in the Dungarvan Plant. He completed his Leaving Certificate and participated in a National Certificate in Commercial Computing in the Waterford Institute of Technology for one year. He found that it did not suit him at all and couldn't relate the learning to real life situations.

In 1998 he was made permanent although he was totally fed up with working on shift. He came to the conclusion that if he wanted to progress to an interesting day job he needed return to education. He considered re applying to the CAO as a mature student and return to college full time. He wasn't sure if he would succeed and if he gave up the job he might regret it. He applied for a day job to enable him to return to college in part time capacity. He got a job in Finishing and had to take a significant reduction in wages as he lost out on the shift premium payment.

He first of all completed ECDL. He used the self taught CD ROM method staying back after work in the evenings. He completed the 7 modules through this method. He was selected as an Information Technology Champion .He was employed in a part time capacity (after official working hours) to train a cross section of shop-floor employees to help raise the level of computer literacy company- wide. He was trained as a trainer, tutor and coach, which helped, build his confidence and see a way forward in the future.

He then decided to join a Diploma in Information in Technology in the Waterford Institute of Technology and completed it in 1999/2000. He followed this up with a National Certificate in Computing and Computer Applications on three-year programme. He spent about six months implementing SAP in Dungarvan Plant and also became a relief worker for the Clerical Section, which meant that he covered for any clerk that was absent.

What made no sense to him when he entered the Information Technology course on leaving Secondary School was now making great sense to him as he could apply all he learned in the workplace and also help others to improve their skills and knowledge in information technology. In 2003 he applied for the Tooling Technician position and was successful. He had to become proficient in Auto –CAD and is in charge of all moulds and is the link between Design- Production and the Mould Maker.

The position is a very responsible one as it means that he must decide that the product can be made by consulting with quality, cutting shop as well as keeping track of all tooling repairs and modifications. Competence with CAD is an important requirement and he completed a Certificate last June having passed 12 exams with distinction securing 11 A's and 1 B.

The main barriers were a fear of failure and the general uncertainty in the workplace. The supports were the company and the culture of learning established which provided great encouragement to him. Everyone in the company was very positive and supportive.

In hindsight he should have pursued a third level degree as a full time student. He would have been in a much better position to progress on entering the workplace. As it happened he spent 10 years on shift work stagnating intellectually. He regrets these lost years albeit he was glad to have the job and the benefits associated with it.

For a career choice he would like to become an Information Technology Engineer. He is committed to completing his diploma and degree in due course. The motivation for

returning to education was the nagging feeling of not having fulfilled his full potential and that he could do much more.

The difference it has made is that he is much more confident and he is much better able to deal with all types of people on a range of subjects and issues. His training, tutoring experience has made a huge difference to him. He is able to stand up and deliver presentations, think on his feet in answering questions and it is great for his morale and confidence. The education has helped to broaden his mind and he is much more business literate as a result.

His next challenge is to obtain his diploma and degree. As Dungarvan is closing he is lucky that he has done so much to gain qualifications. He is considering returning to education full time as he is single or redeploying to Kilbarry and continuing his part time education there.

The most important skills for industry are information technology, adaptability, maintaining a focus on life long learning and to be continuously honing his skills. He says that the most effective way for the company to improve competitiveness is to innovate and engage in research and development on key business issues.

Employability is being able to respond quickly to employer needs and adapt to change by being multi skilled and qualified. He believes that he is eminently employable with very relevant skills and experiences and he is committed to continuously improving his skills portfolio.

Michael Evans

Company: Waterford Crystal
Job Title: Manager of External Services WIT.
Manager
Marital Status: Married
Age: 53
Years of Service: 37

Starting Position	Current Position
Apprentice Cutter	Manager of External Services WIT

Most Significant Career Developments

- (1) Qualified as a Master Cutter.
- (2) Recruited and trained as a Trainer
- (3) Represented the company as an Artisan
- (4) Appointed Sports & Leisure Centre Manager
- (5) Managed and Coached 'Waterford Crystal' to the All-Ireland Premier Basketball League Title in 2001.
- (6) Appointed Human Resources Facilities Manager.
- (7) Appointed as Manager of External Services in the Waterford Institute of Technology

Michael is 52 years of age and is married with two children. He joined the company in 1968 as an apprentice cutter just prior to completing his Intermediate Certificate. He wanted to get leave school as he considered it a tough place to be at the time. He wanted a job and a chance to earn some money. He qualified in 1973 and became a master cutter in 1980. (Master cutter status at the time was based on ability and the opportunity to lead and manage a group of five other cutters as a production team. It normally took ten years or more to graduate. In 1988 he was moved to the Special Department where all the high-end trophies and presentation pieces were produced.

He was selected as an Artisan and was trained in communications and media skills. He travelled to the UK and Canada on promotional trips and greatly enjoyed the experience. The artisan experience was a great learning opportunity and the dialogue with the customer was a revelation.

He joined the training department in 1990. He loved the experience of coaching fellow workers and helping them to develop and progress at work. He had been involved in many sports in particular basketball as a coach / manager for a long time.

He did could see how the same principles around motivation and teamwork would apply in work as in sport.

He has completed numerous in-house courses, including Finance for the Non-Financial Manager and first aid. From 1992 to 1994 he completed a Certificate in Supervisory Management – NEBS – a UK qualification delivered by Plassey Management in the University of Limerick. In 1993 he successfully applied for the position the position of Sports & Leisure Centre Manager became vacant and he successfully interviewed for it. He always had a liking for figures and maths was by far his best subject at school. He was totally self-taught on the computer, which he purchased through the Company's Computer Purchase Interest Free Loan Scheme. For the following few years he learned many new skills by doing. He was thrown in at the deep end and had to restructure the management of the centre. He was responsible for managing all aspects of the business, the finance, people, planning, developing new initiatives, promoting, improving performance and facilities, restructuring and training the staff to work as a new team and achieving the target of break even within a few years.

In 1999 he completed a total refurbishment of the entire centre including a new swimming pool to replace the old structure at a cost of €2.5m. In 2002 he was given responsibility for catering, security and cleaning contractors for the entire company. In 2003 he was appointed HR Facilities Manager with responsibility for the management of the Sports & Leisure Centre. In 2005 he was recruited by the Waterford Institute of Technology as a manager in External Services for which his background experience has made him eminently suitable

Michael says that ' by far the biggest barrier to success in returning to education for me was a major lack of confidence and belief in my ability to complete a nationally accredited course of study in a formal setting' Michael preferred learning by doing and he loved tackling new challenges at work using his vast experience as a trainer both at work and in sport. His lack of a good basic education was always an issue though in particular in dealing with formal issues in the company of highly educated personnel. In the early challenging years he gradually built up a newfound confidence and has successfully moved a number of times to different jobs. Time was also a

factor as he was heavily engaged in sport. Coming from a low education base was a handicap. It took him a long time to get going. But, for the personal development opportunities that were presented to him he might still be working as a master cutter, a job he enjoyed.

The supports were the company and in particular the training department that practised from a tremendously humane philosophy and ethos. This was that every person counted and that their potential had to be realised for the benefit of both the business and the individual. There was a great atmosphere in the company for learning and everyone seemed to be doing some course or was involved in some project.

The change-taking place in the company spurred him on to return to education and develop his skills. His choice of career would be to run his own business. In hindsight he has no regrets, as he liked his time as a cutter. Michael says that *'the difference education has made to him has been massive'*. He now can understand much more and appreciate the value of things better. He has no fear in dealing with all levels of management and a varied mix of people outside the company. He believes he is very employable and is confident in his capacity to remain in employment for as long as he wishes to do so.

He is anxious to perform well in his new role and hopes to continue to progress within the company. He would not be averse to trying something new outside the company if the circumstances dictated it. His recommendation on generic skills for employees is, willingness to work hard, adaptability, good attitude, and good with people, to listen, appreciate and communicate.

To be employable is to be ready, willing and able to learn and work. He believes a person with a good attitude can be trained to do a wide range of jobs. He feels that the contribution of the employee is taken for granted and is totally underestimated in most workplaces. If they are trained to understand the business they can be a powerful force for change and success.

As coach / manager he has coached Waterford Crystal to win the ESB National Super League in the 2001/2002 season. Waterford Crystal joined the league in 1997. He was awarded basketball coach of the year in 1999 and 2003. His involvement in basketball coaching has been a huge learning and developmental experience and has helped him enormously over the years at work. Michael says ‘ *that the experience of managing and coaching the basketball team was a huge learning experience and many of the qualities needed for this task are very relevant to industry and the workplace*’.

He believes he is very employable having excelled in his craft, sport, in managing a variety of projects and in the market place as an artisan. He has adapted continuously and is ready and willing to positively embrace change and make the best of it for both business and employees.

Kieran Tracey	
Company:	Waterford Crystal
Job Title:	Production Engineer
Marital Status:	Married
Age:	34
Years of Service:	18
Starting Position	Current Position
Apprentice Blower	Production Engineer
Most Significant Career Developments	
<ul style="list-style-type: none"> (1) Qualified as a Blower. (2) Completed a National Certificate in Manufacturing Technology. (3) Redeployed from Craft to Engineering. (4) Participating in the Expand Programme (5) Appointed to Technician. (6) Promoted to Production Engineer 	

Kieran joined the company in November 1986 as an apprentice blower. His father was an outstanding craftsman. Kieran regarded it as a good job, as the conditions and benefits were the best in the city at the time. It was a great step forward for him to get a job in Waterford Crystal. He had just completed his Intermediate Certificate in St Paul's College. Kieran is 34 years of age is married with 2 children.

He qualified as a blower in 1991 at a time of great change in the company. The company began to move towards technology. He had short service as a blower and knew that he had to develop an alternative skill set if he was to secure his future in the company.

He set out to complete a National Certificate in Manufacturing Technology. He redeployed to the Tank Furnace as a machine operative on shift work, which made it difficult for him to study and attend the classes. Kieran says *'I had to complete the certificate over five years taking breaks as required to facilitate my work and family responsibilities'*. He was promoted to the position of temporary technician and then made a permanent technician in 1998.

He was assigned to a number of process improvement projects in which he made a fine contribution. He graduated to being appointed as a production engineer without having the full academic qualification. He is currently completing his diploma in manufacturing technology and is committed to moving on to complete his degree. He is acutely conscious that he is the only non-qualified engineer in the team responsible for running the Tank Furnace, involving production, maintenance and tooling responsibilities. He has been hindered in his education path by the inability of the college to find a sufficient number of students to form a class. He has had to wait until a number of certificate courses concluded to form a sufficient number for the diploma course, which is now under way.

In the waiting period he completed one year of an industrial engineering course. He qualified as a training instructor and participated in the 'Expand' employee development programme. 'Expand' was an in-company training and development programme set up to fast track employees who had demonstrated commitment to furthering their careers and who would benefit from specialised development experiences. The programme included work experience for three months in the area nominated by the trainee.

The barriers are managing family and work responsibilities, making time for study and coping with shift work. The supports were the company in funding his education

and all the supports in place to back up those returning to education. His manager and colleagues acted as coaches and tutors especially during assignments.

In hindsight he should have returned to education much sooner. He would have achieved much more with a qualification in engineering at a time of change from craft to techno – craft, manufacturing processes.

His preferred career choice would be an engineer. His motivation to return to education was driven by a desire to keep up with the changes and developments taking place in the company.

He hopes to complete a degree in engineering and fully realise his potential. The degree will be the final piece in the jig saw, as he will have become a fully rounded employee in the engineering field.

There are a lot of interesting challenges to face in the company in the future and with his glass-making and engineering skills he is ideally placed to work at the heart of the transformation process. The most important skills and characteristics for employees in industry are to be highly motivated with plenty of drive, to be good at trouble shooting and problem solving, have a good standard of education and to have good interpersonal skills.

For the company to become more competitive it needs to invest more in advertising and marketing to revive the sale. The manufacturing is now relatively lean and competitive and an increase in sales will fill the factories and reduce overheads to a minimum.

Employability is having a good Leaving Certificate and third level degree, possess a good attitude that demonstrates a willingness to change and learn. He believes he is employable, as he has accumulated a wide mix of experiences, has a proven track record of achievement on the ground, and an impressive set of academic qualifications.

Linda Butler	
Company:	Waterford Crystal
Job Title:	Training Instructor
Marital Status:	Single
Age:	36
Years of Service:	17
Starting Position	Current Position
General Operative	Training Instructor
Most Significant Career Developments	
<ul style="list-style-type: none"> (1) Completed the Train the Trainers Course. (2) Completed the Diploma in Front Line Management (3) Participated in the EU 'NOW' (New Opportunities for Women) Project (4) Completed a Diploma in Front Line Management from National College of Ireland. (5) Co-ordinated a very important Process Development Project (producing colour glass products). 	

Linda joined the company in 1987 as a general operative in the Dungarvan Plant having completed her Leaving Certificate and a secretarial course in the Technical College in Youghal. It was just a job and she was glad to have it at the time. Linda is 36 years of age and is single. She worked in a number of jobs in the plant before being selected as a training instructor in 1997.

In 1996 to 1997 she participated in the EU Employment NOW Project (New Opportunities for Women), which was taken on by the company to support the development of women employees. The project involved identifying the barriers to progress for women in the industry. The project objectives included examining ways and means of removing the barriers identified. Linda says *'involvement in the NOW project for the 30 women involved was a seminal experience and it enabled all of them to progress to a new level of responsibility within the company'*.

Linda completed ECDL and a National College of Ireland Diploma in Front Line Management achieving a merit. She also completed an IITD Certificate in Training & Development and was qualified as a Training Instructor. Linda states that she seriously lacked confidence and was terrified at the thought of attending courses. She decided to counter this fear by taking up every course being made available internally.

Every course she completed gave her some element of confidence and the more she did the more her confidence improved until she was prepared to take on the second year Front Line Management Course.

A sample of the many training programmes she participated in included Manual Handling, Environmental Awareness, Barcode (printer) Document Control, Q-Sys Power Users, SAP master data, bills of materials and routing. Job search and interviewing skills, team building, product handling awareness and being selected to attend the Frankfurt Fair in Germany.

In parallel to this she was appointed as a temporary supervisor in the Packing areas. She was also selected to participate in several process and cost improvement projects. She admits that the NOW Project was the breakthrough for her. It was the first time that she became involved with a large number of employees from the different functions in the company on a development programme.

The main barriers were a lack of confidence and taking so long to begin improving skills.

Supports included, fellow instructors, her manager, the company funding and generally the encouragement she received from education and training.

In hindsight she always wanted to be a chef but was unsuccessful in applying to CERT. She completed a secretarial course at the time as an alternative. She decided to get involved in educating herself to get ahead and better herself at work. She is now a much more confident person and is delighted with what she has achieved.

She would like work on in the company as she likes the work, the people and the product. The most important and basic skills required in industry today are information technology and communications. To improve competitiveness the company needs to improve communications, involve employees more and develop their skills, as it is the employee capability and commitment that will make all the difference in every area of the business.

Employability is about being able to adapt, being willing to learn, possess the basic skills and be educated sufficiently to remain trainable throughout a full career. She believes that she is now eminently employable, is prepared to try anything and will listen to advice and learn to adapt.

Martin Brennan

Company:	Waterford Crystal
Job Title:	Senior Technician
Marital Status:	Married
Age:	41
Years of Service:	25

Starting Position	Current Position
Apprentice Blower	Senior Technician

Most Significant Career Developments

1. Qualified as a Blower
2. Attended the Adult Education Centre For Adult Literacy
3. Assessment discovered that he was suffering from Dyslexia
4. Completed the Training Instructors Course.
5. Trained Engineers and Machine Operatives on new Glass-Making Technology
6. Contracted to Lindner a Supplier Company from Germany, in Waterford, Stuart Crystal UK and in Spain.
7. Completing Diploma in Management and Employee Relations
8. Promoted to Senior Technician

Martin joined the company in 1980 as an apprentice blower. He was in his third year in Mount Sion Secondary School when he left it to work in a bar for one year. He then joined the company and qualified in 1985. He worked as a blower for thirteen years until 1993 when he was seconded to research and development to assist the development of blowing related technology. Martin had a gift for working with mechanical equipment. He had tinkered with engines and metalwork and was adept at welding and soldering. He could service his father's car from eleven years of age. He had little interest in academic learning as he couldn't read or write properly.

He attended an adult literacy course in the Adult Education Centre and discovered he suffered from dyslexia. Martin says ' that the company (training department and individual managers) were fantastic to him in that they supported him throughout the adult literacy programme and when diagnosed with dyslexia provided even more

support to help progress through a series of courses and work experiences that transformed his career'

He was professionally assessed and certified as suffering from dyslexia. In staying on with the literacy training he made great progress. He participated in many internal training programmes being very conscious of his difficulty but being determined to conquer his disability and gain new job related competencies. He completed a Report Writing Course, Team Effectiveness, Safe Pass, German Level 1, Overall Equipment Effectiveness training, Supervisory Management, ECDL, Project Management & Problem Solving, Train the Trainer and is currently completing a third level Diploma in Management and Employee Relations from the National College of Ireland.

He learned to live with his disability, receiving dedicated support from the company. In continuing to progress his confidence and competence improved enabling him to be selected for a wide range of research and development projects in Waterford and Stuart in the UK.

From 1993 to 1996 he worked in research and development in both Dungarvan and Butlerstown Plants. In 1996 he completed a Training Instructors Course. He trained the first batch of engineers and machine operators in blowing technologies for the new tank furnace in Kilbarry. He had been centrally involved in developing the technologies. He was on the Project team that built the tank furnace. He was contracted by Lindner a German company to help with the design and building of glass forming equipment for Waterford. They were so impressed with his technical engineering skills that with permission from Waterford Crystal, Lindner contracted him to work on a project in Spain for one month. Waterford Crystal management and training department viewed it as a month of intensive training for him in related technologies that would be beneficial to the company on his return.

He was appointed training instructor for the tank furnace to assist in up-skilling the operatives. He transferred to Stuart Crystal UK after Waterford had taken it over to help with the installation of new glass making technologies. He also brought with him the training programmes from Waterford and delivered them in Stuart Crystal.

When he returned he worked as a shift technician and moved between projects and shift-work.

In 2000 he went back to Stuarts for a five- month period to improve the effectiveness of equipment there. He then returned to Waterford to participate in a Process Improvement Project and was very successful. He currently works as a permanent Senior Technician on day work.

The main barriers to learning were the dyslexia, which was not discovered while at school and which held him back in returning to education. The main supports was the learning culture developed by the training department in Waterford Crystal in which every employee regardless of need was encouraged to engage in education, training and learning. He emphasizes that he was supported in every way.

In hindsight he should have stayed in secondary school and completed his Leaving Certificate and then progressed to third level but to have done this he would have needed special help and in particular an early diagnosis of his disability. His secondary schooling did not accommodate him and were not able to cope with different and unusual students. There was no facility to screen students with disabilities. The dyslexia was not discovered and he had to cope with an ongoing difficulty in reading and writing. Two of his kids have been certified as dyslexic and are being supported with special needs teachers.

His career choice is an engineer. The motivation for returning to education was that when his son was born he wanted to be able to help him and felt that he needed to improve his own qualifications. He was also embarrassed about his reading and writing skills in the workplace and both issues helped him to face up to his difficulties.

His return to education has made a tremendous difference and has given him increased confidence He hopes to continue to progress in a company on a continuous change path. Martin says that '*Waterford Crystal will be an exciting place for learners in the future*'.

The most important skills in industry are information technology, communications, people skills, problem solving and project management and being able to adapt and change. The company can become more competitive by creating a broad understanding company-wide on the business needs. Employees will focus better on their performance and keeping the product in Waterford if they know and understand the issues.

Employability is being educated, highly skilled and flexible. He believes he is employable. He is not afraid of any challenge and has built up a wide experience and skill base in the area of new technology and process improvement on which the future competitiveness of the company is based.

Martin Hearne

Company: Waterford Crystal 1968-1991
Job Title: Secondary Teacher.
Marital Status: Married
Age: 52

Starting Position	Current Position
Apprentice Cutter	Secondary Teacher.

Most Significant Career Developments

- (1) Qualified as a Master Cutter.
- (2) Acquired a Strong Work Ethic on Quality and Customer Service appropriate to the Brand.
- (3) Completed a Bachelor of Arts Degree in University College Cork.
- (4) Completed an MA in Economic History.
- (5) Departed the company and qualified as a Secondary School Teacher
- (6) Achieved a PhD in 2001 and lectures in the US and Ireland on Thomas Francis Meagher and other areas of historical and economic importance.

Martin joined the company in January 1968 as an apprentice Wedge Cutter having completed 5th year in Mount Sion Secondary School. Martin says '*I disliked school and when the company were recruiting apprentices at the time I immediately applied and was successful in gaining an apprenticeship*'. Many of his friends had taken up employment in the company.

Martin qualified as a wedge cutter in 1973 and then graduated to become a master cutter. He read widely and over a period of time developed an interest in returning to education to learn more especially in his areas of reading interests.

From 1976 to 1979 he completed seven honours subjects in his Leaving Certificate by attending night classes in the local Technical School, now the Central Technical Institute. He passed all subjects. In 1984 applied to participate in a Diploma In Social Studies from UCC which was delivered in the Central Technical Institute every two years. In 1984 sufficient numbers were not available so he decided to enrol in a BA degree evening course in University College Cork. The subjects included Economics, History, Psychology and Geography. He travelled to Cork four evenings each week for three years and for two nights each week for the final year. In the final year he worked closely with another student. Between them they attended all the classes and shared notes enabling them to complete their thesis while working in industry. In 1991 he completed an MA in Economic History and in 2001 he completed his PhD.

On receiving his results on the MA he was offered one month of work with the Presentation Convent in Waterford. The company were on short time working so when he took up their offer he decided to accept the voluntary redundancy package, which was on offer. Following the initial month he started in St Paul's Community College on the 8th of January 1991 in a part time capacity. He was appointed to a full-time post in 1998. He is currently employed as a teacher in St Paul's Community College.

He liked the cutting craft but began to lose interest at the time of rationalisation in 1987 and in the following years. The company were extremely supportive and provided him with a scholarship for the four years on the primary degree and the one-year on the MA degree. The company also provided him with time off to travel to Cork and attend college. He could leave the company at 3 p.m. every day and had some leeway on the following mornings in attending at work.

The barriers were travelling and the time needed to attend course and study. The supports included the company who provided the funding and the time off and general

encouragement. His family were very considerate and helpful. The college gave concessions on deadlines, assignments, mentors and special tutors when needed.

In hindsight he should have returned to college four years earlier. He never regretted working as a craftsman as he was well paid and it provided him with a good work ethic and a disciplined approach to study and class attendance on entering the academic world.

His career choice would be a College Lecturer / Writer. He has published up to 50 articles and four books. He completed a book on Thomas Francis Meagher and has lectured on him in the US as an invited guest lecturer. His motivation for returning to education was his interest in reading. If he had a choice of course at the time he would have completed a Bachelor of Commerce Degree but there was no such course available in the Waterford Institute of Technology at the time.

Education has made all the difference to him. He is more confident and knowledgeable. He is more aware of change and can appreciate many perspectives and is more open to a range of ideas.

His next development objective is to develop his lecturing programme in the US and he might live there for a period in the near future.

The basic skills needed in industry are a good education, communications, and information technology, inter personal skills and writing.

To accommodate employees returning to education a range of courses need to become more accessible, funding, flexible working and course delivery arrangements to be made available.

Employability is having the skills and knowledge to be flexible and to be able to adapt to change in the workplace. He believes he is employable because of the skills, work experiences and academic qualifications he has acquired.

John Murphy

Company:	Waterford Crystal
Job Title:	Front Line Manager
Marital Status:	Married
Age:	47
Years of Service:	32

Starting Position	Current Position
Apprentice Cutter	Front Line Manager

Most Significant Career Developments

- (1) Qualified as a Master Cutter.
- (2) Selected and Trained as a Trainer
- (3) Appointed Project Manager for a Leonardo da Vinci Project
- (4) Completed a Bachelor of Business Studies
- (5) Promoted to Front Line Manager.

John joined the company in 1972 as an apprentice cutter having completed his Intermediate Certificate in Tramore CBS. His mother died when he was seven years old. He went into the workplace to earn money and help his father who was responsible for rearing three children. He is 47 years of age and is married with three children.

He qualified in 1977 and followed on to qualify as a master cutter in later years. In 1991 he joined the training & communications department as a training instructor. He was responsible for training a wide cross section of employees in many different departments. In 1994 he was appointed a temporary supervisor. In 1997 he was appointed a front line manager in the Salzle Acid.

In 1996/1997 he was appointed a project manager for the EU Leonardo da Vinci MTEETP Project- Monitoring and Targeting of Energy and the Environment Training Project, which was a success. In the mid 1990s he completed a Diploma in Industrial Engineering over three years and followed on to complete a degree, Bachelor in Business Studies in two additional years.

He completed ECDL in 1998. He is also a qualified marriage counsellor and acted in this capacity from 1987 to 1998.

In hindsight he would have preferred to have stayed in college and have completed a third level degree, but circumstances did not allow for this at the time. John says that *'the main barrier to progress for me at work was a lack of confidence in my ability to succeed and the difficulty in managing my family, study and work responsibilities at the one time'*.

The supports were family, the company and the training & communications department. The emphasis was placed on learning and a comprehensive support structure was established. The encouragement for all employees to return to education and carve out new careers for themselves in the new technological age was tremendous.

His choice of career is a Marine Biologist. The difference education has made to him is substantial. He is more broadminded and ambitious to achieve in work and outside of work.

He would like to complete an MBA in the future and progress in work. He is considering his future all the time and if the right opportunity comes within or outside the company he would be interesting in taking it.

The most important basic skills are: openness to learning, being adaptable and flexible, having a good attitude and being information technology literate.

Employability is about employers wanting to employ you and recognising your education and life skills as first class and appropriate to their needs.

He believes he is very employable possessing a good set of qualifications, a wide range of work experiences and a record of solid achievements to his credit.

John Widger

Company: Waterford Crystal
Job Title: Strategic Projects Manager
Marital Status: Married
Age: 37
Years of Service: 18

Starting Position	Current Position
Apprentice Blower	Strategic Projects Manager

Most Significant Career Developments

- (1) Qualified as a Blower.
- (2) Completed a Diploma in Industrial Engineering.
- (3) Completed a Bachelor of Business Studies Degree
- (4) [Promoted to Industrial Engineering while studying for his Degree.
- (5) Involved in a number of important Business Process Re-engineering Projects.
- (6) Appointed Strategic Projects Manager.
- (7) Lectured in the Irish Management Institute Supervisory Management Course in the Waterford Institute of Technology.
- (8) Elected to Staff Representative Committee

John joined the company as an apprentice blower in July 1986 having completed his Leaving Certificate in Waterpark College at 19 years of age. He was unsure of what to do on finishing secondary school. His father worked in the company at the time and he knew of the conditions and benefits available which promised him a good lifestyle. He is 37 years of age and is married with two children.

He qualified as a blower in 1991. In 1993 he joined the Industrial Engineering Department having completed eighteen months in Waterford Institute of Technology in the Diploma in Industrial Engineering Course. He was transferred to Dungarvan Plant to continue his training. He was then moved to the Butlerstown Plant for four years during which he qualified as an Industrial Engineer. He returned to Kilbarry for a further two years having covered every process in the company in the three manufacturing plants. In 1997 he completed his Bachelor of Business Studies, which involved five years in total, three years on Diploma in Industrial Engineering and two further years finishing the degree course, all in a part time capacity. In 1999 he was appointed Strategic Projects Manager. He has also being involved in co-ordinating the Company's new strategic plan "Vision 500" and other projects on environment, cost monitoring and data management.

The main barriers to completing his education has been a fear of the unknown, lack of information and direction, making the time to attend class, study while accommodating work responsibilities. He was single and living at home in the early 1990s. He saw others who were married and had mortgages and gave up studying because they could not afford to continue. The main supports were the company who funded his education and encouraged his participation. John says ‘ *study group learning was particularly important to me. A number of us (employees) formed a study group and we learned a lot from each other and when needed got lots of help from managers in industrial engineering and from across the company*’. He was able to study and practice industrial engineering at the same time, which was a great learning experience for him.

In moving from craft to industrial engineering he suffered a 33% reduction in pay. He knew that if he could handle it for a few years the engineering position would pay off in the long run.

In hindsight he should have stayed on in college and have achieved a professional qualification. His preferred career choice would have been a barrister or lawyer.

He returned to education as he saw that the craft was diminishing and he wanted to do better in the company. The diploma was very hard and he found the degree course easier having cut his teeth in education on the diploma.

The difference it has made is to his confidence and how it opened up new opportunities for advancement within the company for him. He hopes to progress further in the company in the future. The main issues to be addressed in helping employees return to education are providing direction, a clear progression route, funding and time off for classes and study when needed.

The most important skills required in industry today are a good education, a good understanding of business, customer service compliant skills, information technology and a specialist skill in the area of interest and qualification. The company could improve its competitiveness by reducing the product range and producing the

remainder better and faster along with investing more heavily in supporting the brand as an upmarket brand.

He considers himself an employable person as he has built up a wide range of experiences and qualifications. He also has several recreational interests including breeding German Shepherd dogs and is involved in Rugby as an administrator and spectator.

Joyce Molloy

Company:	Waterford Crystal
Job Title:	Credit Control Administrator
Marital Status:	Married
Age:	39
Years of Service:	20

Starting Position	Current Position
General Operative	Credit Control Administrator

Most Significant Career Developments

- (1) Trained as a Training Instructor
- (2) Participated in 'NOW' Project
- (3) Participated in 'Sesame' Project
- (4) Completed JEB (Joint Examining Board) Teachers Diploma
- (5) Co-ordinated Bar Code Project.
- (6) Promoted to Clerical Position in Customer Service.
- (7) Promoted to Credit Control Administrator.

Joyce joined the company in 1984 as a general operative in the blowing room having worked in a number of jobs. She was employed in the Good Shepherd Convent making crafts for a number of months. She followed this with six months working in a factory sewing rucksacks followed by another six months in a Takeaway. She had left school during third year secondary prior to sitting her Intermediate Certificate. Her father and uncle worked in the company so she understood that the job was a good permanent position with good benefits and conditions. Joyce is 39 years of age and is married with one child.

Having worked in the Blowing Room until 1987 she transferred to the Packing under the restructuring programme and was trained to be proficient at all the jobs in the area.

In 1990/1991 she transferred again to a different Packing area with a different product range and learned how to complete all the tasks there. She was selected as a Training Instructor and trained as an instructor for the Packing Room. She completed ECDL, Health & Safety Course from the University of Limerick, and City & Guilds and Office Administration Skills Course in Waterford Institute of Technology.

She was appointed manufacturing representative on the Bar Code Project. The project objective was to implement a new bar code system in manufacturing. Joyce states '*this project provided a tremendous learning experience for her*'. She had to deal with a wide range of vendors and a wide cross section of people inside the company for the very first time. She attended many meetings with suppliers. She travelled to Germany to test the new bar code system with a main supplier. She also became the training instructor on the new system. She trained a group of trainers who were responsible for the training of other operatives and administrators.

In 2000 she transferred to the product-engineering department. She was responsible for the packaging and the tooling for moulds for new product development. She dealt with suppliers on orders and deliveries. She was involved with product samples for US market and the Rest of the World market. She dealt with US Sales Department on a regular basis. She also had to work on preparing capital approval forms for new product and equipment. She also drew up packaging instructions for outsourced vendors.

In 2001 she joined Customer Service and was responsible servicing the US marketing team dealing with purchasing and scheduling a number of brand extensions including china and heirloom products. She also processed outsourced product on to SAP and generated inter company, Ireland and US- invoices for outsourced product only.

In 2003 she moved to Finance and worked on accounts payable processing invoices for payment like current processing weekly payments and reconciling vendor statements.

The main barrier to progress was a real lack of confidence. She believed that the jobs were too advanced, that a much higher qualification was required that she couldn't achieve.

The supports included the training department who encouraged her all the way. She also said that the learning culture in the company was powerful influence. The provision of formal education opportunities coupled with practical and challenging experiences was an effective form of development. There was a universal willingness around helping each other to learn and develop. Group study was common and was the most supportive method of all. There was always someone in the group with the answer and the mix of experiences and backgrounds provided a well of support.

In hindsight she would have loved to have completed her Leaving Cert and have gone to third level education. But, it was never an option. She was one of a large family of nine children and had to get into the workplace early for economic reasons.

Her career choice would be to become a teacher.

Her motivation for returning to education was her appreciation of her ability to do better and seeing others who moved on from the shop floor on to staff.

The benefits accrued to her from the learning and work experiences were a complete reversal in her level of confidence from low to sky high. She is a totally changed person. She was always very quiet and is now much more assertive and vocal at meetings and in dealing with people both inside and outside the company. She is much more outgoing and is able to take control of situations which need direction and resolution. She had only started to drive a car in her thirties

She is very content in Finance as an accounts clerk and would hope to work in the company until she retires. The basic skills required in industry are information technology, financial (as the whole basis of operations revolve around costs and profits) and interpersonal skills.

For the company to become more competitive it needs to encourage employees to develop their skills and to be adaptable and flexible. Employability is an employee possessing good learning skills having common sense being reliable and adaptable.

She believes that she is very employable, as she has proven to herself and her employer how capable and reliable she is, how willing and interested she is in learning and how hard she works at doing a good job.

Judy Connors

Company:	Waterford Crystal
Job Title:	Cutting Department Administrator
Marital Status:	Married
Age:	42
Years of Service:	23

Starting Position	Current Position
Marking Operative	Cutting Department Administrator

Most Significant Career Developments

- (1) Participated in the 'NOW' (New Opportunities for Women) Project.
- (2) Participated in the Leonardo da Vinci 'Sesame' Project.
- (3) Completed the JEB (Joint Examining Board) Teachers Diploma
- (4) Selected and trained as an IT Champion
- (5) Promoted to Clerical Position.

Judy joined the company in 1981 as a marking operative in the Dungarvan Plant. She finished her secondary school career in the Mercy Convent Dungarvan just after completing her Intermediate Certificate. She was the second youngest of five children. Her family needed her to find work and earn money. Her first job was in a cake shop working long hours for little money. The reputation of Waterford Crystal was good in the town. The conditions, pay and benefits were far in excess of what she was earning at the time. She is 42 years of age and is single.

She worked in the marking area as both a hand marker and on the automatic marking machine for 12 years. The marker lined the glass piece in horizontal and vertical lines to guide the cutter in cutting the designs. She wanted to move on to a new position but was very good at her job. There was always a reason given to her as to why she should remain in her original position.

Judy says that 'it was not until I was selected to join the NOW (New Opportunities for Women) Project that I really understood the possibilities open to me and how

important it was to become multi-skilled and employable'. She found the NOW experience extremely beneficial and it helped her to learn about the total organisation. Completing the training, analysing the barriers and developing the solutions served to grow her confidence. Working and learning with twenty-nine other women focused on securing a more equitable future for women employees was a responsible and worthwhile task. She really enjoyed the experience and it opened up a whole new world for her to explore.

She completed a computer certificate course at night classes in the Presentation Convent. She quickly realised that computer skills were important and she kept all the notes from the class and used them at a later date as a tutor.

She was selected to participate in a Leonardo da Vinci Project "Sesame" in 1996/1997, which sponsored a foundation programme for access to third level education. Thirteen employees participated and all of them have since moved on in the company. She completed ECDL and quickly became an Information Technology Champion tutoring employees and their families in the Dungarvan Learning Centre. She followed this up by completing a JEB (Joint Examining Board –UK qualification) Teachers Diploma Course in the Waterford Institute of Technology. This was a one-year intense course, which she found difficult but rewarding. She was moved to become an examiner and for the past five years she has been working in the clerical section first as a relief clerk and then as made permanent in her current position.

She says there were no barriers as the company sponsored all her education and training. She is single and could organise the time for classes and study. She enjoyed all of it.

The support included the company who encouraged her in every way including the funding and when on shift work, facilitated changes in her work times to allow her attend classes.

In hindsight she should have completed second and third level education. She now knows that she has the ability and it would have made such a difference to her working life.

Her career choice would be to be a first class administrator. She thinks she is good at organising, planning, meeting deadlines, filing, arranging, completing tasks and she gets a right buzz from it.

She was motivated to learn by a feeling she had of not wanting to be left behind. She realised she had to acquire new qualifications and skills. The NOW Project was an eye opener as she learned so much about the entire organisation and the range of jobs available to qualified personnel. She says that you don't have to accept what you have if you are not satisfied with it.

Education has made a great difference to her. It has enabled her to progress and she is much more fulfilled and happy in her job.

The important issue in helping employee's return to education is to provide them with an awareness of what it entails and the value and benefit in making the effort.

The basis skills required by industry are communications, treating people with respect, getting on with people and information technology skills.

The company could improve its competitiveness by planning new product launches much better. She is convinced that if a routing committee comprising a mix of employees from the various departments were made responsible for the most efficient production process a huge improvement in productivity performance would be achieved.

Employability is about being flexible and adaptable, having the ability to take on the different tasks and responsibilities and having strong personal initiative.

She believes she is very employable having proving her adaptability on numerous occasions.

One great piece of feedback came from one of her ECDL students down town when he thanked her for all the help she had given to him to complete the course. He had found alternative and permanent employment with Glaxo –Smithline Beecham and he said he would never have got the position without ECDL.

Karl Casey

Company:	Waterford Crystal
Job Title:	Area Sales Manager
Marital Status:	Married
Age:	34
Years of Service:	18

Starting Position	Current Position
Apprentice Blower	Area Sales Manager

Most Significant Career Developments

- (1) Qualified as a Master Blower.
- (2) Redeployed to Customer Service.
- (3) Seconded to the SAP Project.
- (4) Appointed Commercial Analyst in the Strategic Intelligence Unit.
- (5) Appointed Area Sales Manager

Karl joined the company in April 1986 as an apprentice Blower. His father was already employed in the company. After he completed 5th year secondary in De La Salle College he took up the opportunity of a job in Waterford Crystal mainly for the money. He is 34 years of age and is married. He has a huge love of music and has been a member of several well-known bands in the city.

On entering employment he made special arrangements to complete his Leaving Certificate in music only and achieved an A honours grade. In 1987/1988 he completed a diploma in music in the Waterford Institute of Technology.

He qualified as a blower in 1991. As a result of the rationalisation and restructuring in the late 1980s /early 1990s he became the youngest ever master blower after just six years service in 1992. Many of the older and skilled blowers had opted for a voluntary severance package, early retirement of redundancy.

As a result of further rationalisation he redeployed to the customer service department in 1995. As one of the youngest blowers he was close to the bottom of the service list and was in a vulnerable position in the event of a compulsory redundancy programme. In 2000 he moved to the SAP Project to establish the new sales and distribution system and to train users on it.

In 2001 he was appointed to the Strategic Intelligence Unit as a Commercial Analyst. In 2005 he was promoted to area sales manager. He completed ECDL and many internal courses such as ECDL Trainer, Customer Services Skills, Train the Trainer Programme, SAP Processes in Sales and Distribution and Excellence in Selling Skills.

The main barriers to returning to education were finding the time as he plays with the band three nights per week and it is an abiding passion with him. Even though he achieved outstanding results in his Intermediate Certificate, 9 honours it was a long time since he attended a formal schooling situation. Carl says '*I lacked confidence in taking up new and challenging positions and mixing with people who had primary and masters degrees*'.

The supports were the company with funding and the encouragement he received from his managers and colleagues.

In hindsight he would have completed his Leaving Certificate and moved into third level to complete a music degree. His preferred career choice is to be a music teacher and performer, but as stated earlier the company's pay and benefits package was big draw for him at time.

What motivated him to develop was a necessity to develop alternative skills and to take a chance and move to a new position requiring new skills and knowledge. The blowing department was embarking on shift working which did not have suit his other interests and the band.

Education has helped round him intellectually and socially. He is much more confident in dealing with people and issues both inside and outside the company. For example he is more confident with his bank manager and solicitor and is better able to articulate his needs and position. His next ambition is to settle down in his new job representing the company as a sales representative.

The main issues to be addressed in facilitating employees return to education are funding and organising time off during the working day. Employees need support as they have to make sacrifices to organise themselves to attend classes and study sufficiently to pass the exams. The state should contribute as it stands to gain in

several ways, tax revenues, savings on social welfare, and availability of higher skilled employees. He is highly motivated in the company as he has moved a long way in a short time and has been treated very well in every way.

The most important basic skills are computer skills, a good education, and adaptability and strong inter personal skills.

The company could become more competitive by stabilizing labour costs in the craft sections and by managing all overheads in particular management expenses more vigorously. Employability can be achieved through acquiring a good third level education / qualification and a multi- skilled work profile. He believes that he has become employable through the many work experiences he has had and the many courses he has completed.

Brenda Flynn	
Company:	Waterford Crystal
Job Title:	Purchasing Officer
Marital Status:	Married
Age:	38
Years of Service:	19
Starting Position	Current Position
General Operative	Purchasing Officer
Most Significant Career Developments	
(1) Appointed a training instructor.	
(2) Promoted to Charge-hand	
(3) Recruited as an Information Technology Champion.	
(4) Participated in the Expand Programme	
(5) Appointed to Purchasing Officer	

Brenda is 38 years of age and is married with 2 children. She joined the company in 1985 as a general operative in the Blowing Department. Having completed her Intermediate Certificate she left school due to economic circumstances to work in hotels. Her mother worked in the canteen in the company. When the chance to join came she took it. Her father had been made redundant from the Paper Mills at that time. There were six children in the family to be supported.

She was recruited by the company on a six-month contract as a general operative in the Blowing Department. She was then employed in the Chandelier room in Butlerstown as a chandelier assembler for six years. During this time she was appointed a charge-hand. There were many operatives in the area that had longer service. She was hesitant in taking on the new responsibility. The employees encouraged her to take up the position. Having done so she received plenty of support from them and the management team.

She completed a computer course in the Waterford Institute of Technology. The chandelier room was transferred to Kilbarry in 1999. She moved with it and decided to complete ECDL. In 2001 she applied to participate in the “Expand” development programme. Expand was an internally designed fast track development programme for employees. Brenda says ‘ *Expand was aimed at employees who had demonstrated their capacity to move up two or three levels and who had the ambition and commitment to do so*’. It was a fifteen-month programme involving eight modules and three months work experience. The work experience was in a new area, where the employee had expressed an interest in moving to at some time in the future and in which their skills and talents were suited.

She nominated this programme as a key learning and development experience. It gave her a good overview of the operations of the business. It introduced her to a wide cross section of people. Shortly after the conclusion of the programme in 2002 she was given a three-month work experience in planning and logistics. The work experience was extended to two years and six months. She was then promoted to the position of Purchasing Officer during the 2003 rationalisation programme. She is very happy in her new role.

Expand provided her with an opportunity to develop her confidence and self-esteem. Her ability and potential was realised through it.

She has completed two modules of the Institute of Purchasing and Material Management Course. She has also been a training instructor and an IT Champion.

The barriers were lack of confidence and direction. She was not sure of what to do for a long time.

The supports were the company who funded her education, her plant manager, department manager, the Training Department and her father.

In hindsight she should have completed her Leaving Certificate and planned her career better.

Her preferred career choice would be to become a teacher. Her next work objective is to perform well in her new role and to complete the IIPMM (Irish Institute of Purchasing and Materials Management) exams.

Education has helped her enormously and she is much more confident, has a broader outlook on employment and the possibilities that are there for her children. Brenda says '*I am now much better at interviews and have far greater and higher self-esteem*'. She is convinced now that everyone has the ability to make much of his or her lives and it is the initial breakthrough such as Leaving Certificate or if in work the first course back that is successfully completed that is all-important.

Education has the capacity to provide so many more options for people. She would hope to progress further and every step adds to the ambition. She likes working in the company. She has already been offered jobs outside the company.

In hindsight she should have completed her Leaving Certificate and a third level degree. She appreciates that with education there are many more career choices available. The biggest barriers for employees returning to education are funding and direction and support all along the way. It is particularly important to have this in the early stages. The first course back in college is when confidence and self-esteem is low and when special supports are needed.

The key skills and competencies needs for employment are information technology; a good qualification, languages and people team skills. The company could improve its competitive position if it rationalised its product lines and concentrated on the core

product and produced it competitively. In her view employees take great pride in their jobs and continuously try to improve their performance. The contribution of the employee is paramount to achieving competitiveness.

Employability is having developed a broad set of skills that enables full participation and the capacity to do a great job. She believes she is employable. She has acquired a broad base of work experience, a set of qualification and a track record of achievement in a variety of roles.

Gerry Treacy	
Company:	Waterford Crystal
Job Title:	New Product Development Administrator
Marital Status:	Married
Age:	40
Years of Service:	25
Starting Position	Current Position
Apprentice Blower	Tank Technician
Most Significant Career Developments	
<ul style="list-style-type: none">(1) Qualified as a Blower(2) Redeployed to a Machine Operative Position.(3) Completed two years of a Certificate in Manufacturing Technology.(4) Seconded to Stuart Crystal in UK as a Technician / Trainer.(5) Trained and worked as a Training Instructor(6) Represented the Company as an Artisan(7) Experienced in Quality Control and Brand Extensions.(8) Appointed to Tank Technician Position.	

Gerry joined the company as an apprentice blower in October 1979 having completed his Junior Certificate in De La Salle College. His father was a master cutter and his sister and uncles also worked in the company. He responded to an advertisement seeking fifty blowing apprentices. He is 40 years of age and is married with three children.

He qualified as a wine blower in 1984 and in all spent 17 years working as a blower. In 1995 he was appointed to position of machine operator. He trained in the Waterford Institute of Technology on a full time course for two weeks. He joined the

Certificate in Manufacturing Technology for two years and was promoted to Technician and worked as a Training Instructor.

In 1998 he was selected as an artisan and has completed 10 trips to the US and UK hosting promotional events in different stores and locations.

As a Technician / Trainer he was seconded to Stuart Crystal in the UK from 1999 to 2001 and was an outstanding success in training all their technicians.

He completed ECDL and was seconded to Quality Assurance & Brand Extensions in 2003 for six months. He travelled to China, Eastern Europe and Portugal representing the company and he enjoyed the experience. He returned to the blowing department as a technician in late 2003. In 2004 he took up his current role in New Product Development.

The barriers were his low education base, lack of confidence and being such a long time away from formal learning. He also had to match his different responsibilities of work, family and study.

The supports were the company, in funding and encouraging employees to return to education. The opportunity to move to new jobs and gain new experiences was brilliant. This support and facility in being accommodated to try other things was great. It opened up so many alternative possibilities in the workplace for him.

In hindsight he should have completed his Leaving Certificate and a third level course. His favoured career choice would be a position in sales & marketing.

He was motivated to develop alternative skills as his job was under review during the rationalisation and the introduction of new technology. He had to move on with the changes. He was young and had a long career ahead requiring new skills and knowledge.

Gerry says that 'Education made a big difference to him. He acquired new experiences, new qualifications, gained greater confidence and a much wider

perspective on the company. His next ambition is to make a success of his current position’.

The issues to be addressed in facilitating employee’s return to education are to provide the right opportunities and to fund them while promoting and encouraging employees to participate.

He likes working in the company as it has provided him with so many opportunities both in work and education.

The basic skills and competencies required by employees in industry today are people skills, team working, information technology and a good education.

The company could improve its competitive position by completing its technology introduction programme and up-skilling employees to exploit its full potential.

Employability is having a good education and being multi-skilled enabling flexibility and adaptability.

He believes he is employable as he has the experience, is multi-skilled, has a good record of achievement and is a hard working employee.

Walter Cullen

Company: ATGWU Union
Job Title: District Secretary
Marital Status: Married
Age: 53
Years of Service: Waterford Crystal 1968-1987

Starting Position

Apprentice Cutter

Current Position

District Secretary of ATGWU in Waterford.

Most Significant Career Developments

- (1) Qualified as a Master Cutter
- (2) Worked in Industry for 19 years and gained a wealth of experience there.
- (3) Elected to serve as a Shop Steward.
- (4) Elected Senior Shop Steward.
- (5) Appointed Branch Secretary – full time position.

Walter joined the company in January 1968 at fifteen and a half years of age as an apprentice wedge cutter. Having completed his Group Certificate in the Central Technical Institute the company recruited him. He is 53 years of age and is married with 2 children.

As an apprentice he became interested in union affairs. The 1970s was a period of great expansion in the company and the ratio of apprentices to qualified cutters was 1:1. The piece rate system operating was structured in teams of six. The mix of qualifications on the team was a master cutter, first helper, qualified cutter and three apprentices. The responsibility of the master was to cut the most difficult parts of the design. He was responsible for organising the allocation of work to the appropriate personnel. He was responsible for planning the work schedule in such a way as to earn the most money for the group, produce the best quality and provide with the best training possible ensuring their qualification after 5 years. The mix of personalities, abilities, attitudes, energies and economic needs created at times a difficult and combustible team-working environment.

The apprentice population were at the centre of (1) clashes of personality (2) perceptions on inequity in work allocation (3) opportunity for development (4) reward

and recognition (5) pay differentials (6) reversing the way traffic in terms of input into the shaping of a fairer work structure. The authoritarian work structure demanded that apprentices responded to instructions and generally asked few questions. The union committee at the time was dominated by master cutters and qualified cutters. The apprentice had little voice and scope to air grievances and had a lot of work related issues to be sorted out.

He quickly became immersed in resolving the issues and represented the apprentice view with management. He with other like-minded apprentices sought to establish a more open and fair work structure and improve their working conditions and benefits.

In 1973 he qualified as a wedge cutter and progressed to become a master cutter in due course. He became a shop steward in 1975 and represented the membership on the Piece Rate Committee, Education Committee, and Waterford Council of Trade Unions. The union were heavily involved in a national tax campaign of the late 1970s and on the campaign against a Nuclear Plant at Carnsore Point in Co. Wexford. He attended shop steward development courses in Eastbourne and in Stoke- Rochford in the UK.

In 1986 he was elected chairman of the company based 11/64 Branch of the union for a 12 month period. He was appointed to the full time position of branch secretary in October 1987. He is currently branch secretary for the ATGWU for the Southeast, which includes Waterford Crystal, the hospitals, docks and the meat industry. There are 3,000 members to be serviced. He became involved out of interest in improving the working conditions of apprentices and he carries a strong belief in the equitable distribution of wealth.

Walter says *'that the main barrier to progress for him was the lack of a third level education'*. If he had it he believes he could have represented the membership better. The union representative has to cover a vast array of issues and business disciplines where as the organisation has many specialists to cover the different areas in the business.

The supports were the union, which has a strong commitment to education and to the development of shop stewards. The company also facilitated the development of shop

stewards and preferred to deal with a qualified representative as it usually led to the best solution for all sides. The other great support was the calibre of people that have worked with him and how committed and passionate they were about their beliefs.

In hindsight he would liked to have had a good third level education but circumstances at that time in the 1970s did not allow for such opportunity for many working class people.

His preferred career choice would be to be a qualified social worker or a barrister / solicitor a position he believes would fulfil his desire to lead change for the better for the less fortunate in society. The greatest disappointment has been employees after a lifetime of service losing their jobs and lacking the necessary skills to gain employment elsewhere.

His motivation for returning to education was to make progress within the trade union movement. He needed to participate in courses to improve his competency.

The difference it has made has been mainly in improving his confidence and his performance as a trade union representative. He has some more goals to achieve and looks forward to initiating further improvements in working conditions for his members.

The issues to be addressed in facilitating employees return to education are, access to the appropriate courses, funding, time off for classes, study and exams and direction on the best options available in progressing through the system. The key skills for industry today are, the best possible education, information technology, ability to communicate and express views clearly, ability to adapt to change and ongoing personal development commitment.

The company could improve competitiveness by placing more focus on sales & marketing, reducing dependence on the US market and dollar. Managing the implications of political upheaval and balancing overhead costs with overall labour costs are two difficult challenges for the company. It is essential that it continue to invest in training and development to take full advantage of changes in the market place and in technological development.

Employability relates to having the skills and qualifications needed by employers throughout a working life. He considers himself employable and has a huge bank of experience in industrial relations and in a wide range of business and social issues and disciplines.

Walter Walsh

Company:	Waterford Crystal
Job Title:	Heath & Safety Manager
Marital Status:	Married
Age:	53
Years of Service:	39

Starting Position	Current Position
Apprentice Cutter	Heath & Safety Manager.

Most Significant Career Developments

- (1) Qualified as a Master Cutter.
- (2) Managed the Artisan Programme.
- (3) Trained and worked as a Training Instructor.
- (4) Completed a Diploma in Training & Development
- (5) Appointed Manufacturing Training Manager for Kilbarry Plant
- (6) Appointed Health & Safety Manager in 2005.

Walter joined the company in 1965 as an apprentice Wedge Cutter at 15 years of age. He attended Mount Sion CBS and left IT after successfully completing his Intermediate Certificate. Taking up paid employment was an attractive proposition to him. His brother had joined the company as a wedge cutter about five years earlier and he knew that the benefits were substantial. He is 54 years of age and is married with three children. He qualified as a cutter in 1970 and graduated to master status in later years. He was very good with his hands and excelled at the cutting craft.

In 1991 he was appointed and trained as a training instructor having acted as a temporary supervisor for the period 1987 to 1990. On joining the training team at in 1990 he was instrumental in developing many outstanding training initiatives launched in the 1990s at a time of great change in the company.

Externally he was involved in the credit union as a director and as chairman of the loans committee. Walter contends 'that his credit union experience was invaluable to his development in dealing with people and in dealing with many difficult people

situations'. The ethos of the credit union helped him to develop his listening, influencing, negotiating and problem solving skills. Walter and his wife are active foster parents fostering in excess of 30 young children over a long number of years.

He was appointed to head up the co-ordination of the artisan programme and worked with representatives of the US marketing team. He is responsible with others for the outstanding success of this programme, which has been central to the overall success of the company in the past 12 years.

Co-ordinating the artisan programme involved; selecting, training, organising schedules, providing promotional video footage, equipment and tools and general event support for all international events in the US, Caribbean, Asia, UK, Europe and Ireland. The training programme for each artisan includes presentation skills, media techniques, calligraphy and inscribing.

He has completed a certificate in personnel practice, in supervisory management, a diploma in training & development and ECDL along with an extensive range of internal development courses. In hindsight he should have gone back to college in a part time capacity earlier and gained an information technology qualification in third level. There was no such opportunity available in the 1960s. His preferred career choice is to be a journalist specialising in foreign affairs.

His motivation for returning to education was to change career as he was too long in the one position and it was becoming obsolete with the advent of new technology.

The main obstacles were the lack of opportunity in the 1960s, 1970s and 1980s. Walter says ' I was too long away from formal education by the time the learning organisation was developed in the company and the part time education scheme became available to fund participation in courses'.

The main supports were (1) the company who funded and encouraged his participation in third level education (2) The training department led the way in developing the learning organisation in which employees at every level could take the next step in their development (3) the facility to be a member of a study group (4) the provision of a mentor if needed. These supports were a great source of comfort for

those who had long since departed the formal education system. It proved a very successful formula in Waterford.

Education has given him great confidence and an appreciation of his potential to learn and achieve in a formal education setting. It has helped him deal with all levels of management on an equal footing. It has bridged the gap between craft, technical and academic knowledge based issues and responsibilities.

Having completed his Diploma in Training and Development, he was appointed to the role of Manufacturing Training Manager in 1999. In this expanded role he was responsible for assuring quality training throughout all manufacturing processes, e.g. technical, quality systems, craft retention, health & safety etc. He was involved in a number of EU projects, which focused on the development of training initiatives for the glass industry. He was a member of FETAC's (Further Education and Training Awards Council) technical and consultative committees. Both committees were appointed by FETAC to develop their national quality assurance and programme validation guidelines and standards.

Probably his most important achievement in his role as training manager involved organising numerous safety training interventions required during the mammoth tank furnace demolition and rebuilding project in 2003. This eight-week project was completed with zero accidents. Waterford Crystal subsequently received a Safety Excellence Award from G.L.A.S.S. Charter.

In recognition for his performance as training manager, he was appointed as company Health & Safety Manager in 2004. He is currently undertaking a Diploma in Safety, Health & Welfare at Work with UCD. He is looking forward to his new role and intends making a success of it.

The most important basic skills for industry are, information technology, business literacy, communications, assertiveness, influencing, team working and gain confidence through achievement enabling the realisation of employee potential. To improve its competitive position the company has to make full use of the technology it has to hand and fully develop employee competency to achieve this. Employability

is being able to adapt to change, having a good education to maintain an effective trainability standard, have a positive attitude and be involved and effective where ever the opportunity occurs.

He believes he is employable because he has acquired a varied range of employment experiences, work related qualifications and has a proven track record of achievement in many different aspects of the business.

Willie Sharpe

Company:	Waterford Crystal
Job Title:	Product Engineering Manager
Marital Status:	Married
Age:	45
Years of Service:	30

Starting Position	Current Position
Apprentice Blower	Product Engineering Manager

Most Significant Career Developments

- (1) Qualified as a Master Blower.
- (2) Appointed to position of Front Line Manager.
- (3) Selected for Various, Interesting Responsibilities.
- (4) Appointed to head up the Outlet Store Project.
- (5) Promoted to Product Engineering Manager.

Willie joined the company in 1974 as an apprentice blower in response to an advertisement in the local papers. He knew from his friends that Waterford was a good company with well-paid jobs and great security. He had just completed his Intermediate Certificate at 16 years of age. He is currently 45 years old and is married with 3 children.

He joined during a major expansion period and having qualified in 1979 he progressed quickly to graduate as a master stemmer. He was stemming for seven years when he applied for a supervisors position in the early 1980s. These positions were traditionally given to senior craftsmen. He was chosen to cover for absenteeism for a supervisor who was out on sick leave on a regular basis. . In 1985 he was appointed a front line manager for the technology area in Butlerstown Plant. The position needed someone with technical ability. A young person was deemed to be

more suitable and trainable. He was charged with managing 48 blowers and 24 women employees.

During the 1987 rationalisation many employees departed the company. The whole area changed and the workforce was replaced requiring a comprehensive training programme. He completed courses in total quality management, supervisory management, and training instructor. Post rationalisation in 1987 he was given the additional responsibility for the Furnace Section. When the Tank Furnace was being built in Dungarvan in 1986 he co-ordinated the support required from the Butlerstown plant.

In the early 1990s he was responsible with quality assurance for implementing ISO 9000 in the Butlerstown Plant. He was responsible for a wide variety of management duties such as (1) negotiating with the union (2) leading the process improvement team (3) co-ordinating the production of new product directed to Butlerstown (4) identifying new processes (5) developing new competitive strategies.

He was appointed new product manufacturing co-ordinator and moved back into Kilbarry taking responsibility for all plants. The role grew all through the 1990s and he was given charge of the tooling budget for new product development. The annual budget was £1M in the early 1990s and is now €1.8M. He was responsible for the production of samples for trade shows and market launches up to 2000.

He was then assigned responsibility for packaging for all brands. He had to develop process specifications and a system for managing it He would have to have samples made up in-house, manage all the graphics for all brands and all new product introductions.

In 2003 he was charged with responsibility for managing product supply to 38 outlet stores in the US with a sales value of €55M. He led the development of products for these stores from concept stage to delivery. This part of the business reached €60/70M annually. He is responsible for concept, costing, routing, sampling, tooling and delivery. He completed Understanding Finance and Crystal Economics courses.

The barriers were the perception that too young on applying for jobs in the early years.

Willie says that 'the supports were the many opportunities that subsequently came on stream and were made available to very committed and able employees who had come up through the system'.

He was provided with many different work experiences and management were very supportive. A great learning and can do attitude existed that created an inclusive atmosphere in the 1990s. The workforce worked hard as a team and successfully turned around the fortunes of the company.

In hindsight he has been extremely lucky and has enjoyed a large number of job opportunities. He would have liked to have completed a third level degree course, as it is important to have it and the paper to prove it in applying for and working in demanding jobs.

His next challenge is move on in the business and gain further insights and experiences. His preferred career choice would be run his own business. His development both academically and in work experience has made him stronger, more competent and he through it he enjoys a good lifestyle.

The most important generic skills are computer literacy, good people skills and respect for people.

The company can improve its competitive position by developing a plan and building support for its implementation across the company giving the workforce sufficient time to deliver it. The company needs to empower its workforce and believe in them.

Employability can be summed up as a person who can do the job, has the qualifications to extend beyond it and the adaptability to reach across a range of jobs. He believes he is employable having the qualifications, the experience and a proven track record on adaptability and creativity.

Sean O'Donnell

Company:	Waterford Crystal
Job Title:	Sales & Marketing Representative
Marital Status:	Single
Age:	52
Years of Service:	34

Starting Position	Current Position
Apprentice Cutter	Sales & Marketing Representative

Most Significant Career Developments

- (1) Qualified as a Master Cutter
- (2) Represented the company as an Artisan.
- (3) Developed as a Stage Performer
- (4) Appointed to current position of Sales & Marketing Representative.

Sean joined the company, Dungarvan Plant in 1970 as an apprentice wedge cutter having completed his Leaving Certificate in Dungarvan CBS. The factory had just opened and there was a huge recruitment underway. The reputation of Waterford as an employer was outstanding and many young people were applying for jobs. There was no pressure on him to find work. He just wanted a job. He is 52 years of age and single.

He qualified after five years and progressed to become a master cutter after eight years of service. He is an outstanding singer. He was trained in the college of Music in Dublin under the tutelage of Veronica Dunne. He studied music part time and won many awards such as (a) Thomas Moore Cup and Light Opera Trophy (b) McManus Memorial Award at John Player Tops of The Town with Waterford Crystal (c) several awards at the Feis Maitiu in Cork (d) the John McCormack Medallion from the John McCormack Society (e) many other cabaret awards. He has performed in numerous musicals and shows throughout the country.

In 1994 he was selected as an ambassadorial artisan and received special training in media techniques, presentation skills and in calligraphy. His professionalism as an entertainer has helped him develop into an outstanding artisan. He travels to the US three times per year for four weeks per trip. He represents the Waterford Society in hosting invitation breakfasts and lunches to promote the product and brand. He answers questions on the latest developments in the company. He also represents

Waterford Crystal on QVC (Quality, Value and Convenience) TV channel appearing on six shows every year in US. This channel is dedicated to promoting the sale of products across a wide range of product categories. He appears on the same type of TV show in the UK twice per year. He is very busy on promotional events on St Patrick's Day in US and at Rose of Tralee Festival in late August.

He has completed ECDL, Keyboard Typing Skills and a Certificate in Training & Development.

In hindsight he has no regrets as his career progressed in a way that was most satisfying and challenging. He loves the interaction with the customer and representing the brand in so many countries.

His career choice would be a professional singer. His next aim is to continue to push for sales and as he has recently being moved into sales and marketing in the Waterford Gallery. He is highly motivated and views it as a new and interesting challenge every day. He can bring all his experience from the artisan experience to the gallery. He loves the buzz of the sale and the delight of the customer when they satisfied with the purchase and all the trimmings around it.

He does not see himself working with any other company in the future. Employability is related to having a good education including a third level degree and gaining a wide range of invaluable work experiences.

The company could improve its competitive position by spending more on advertising and to continue its strategy to associate the product with stars in entertainment and sport. He believes he is employable as he is a very responsible, motivated, experienced, ambitious and flexible employee. He is certain that employee capability will determine the future of the company.

Tom Cooke

Company: Waterford Crystal
Job Title: Designer
Marital Status: Married
Age: 51
Years of Service: 34

Starting Position

Apprentice Engraver

Current Position

Designer- Chairman of the Staff Representative Committee

Most Significant Career Developments

1. Qualified as a Master Engraver.
2. Completed ECDL, Mastered a Range of IT Packages, became IT Champion
3. Qualified as an Art Teacher
4. Appointed to Front Line Manager Position
5. Qualified as a Sculptor
6. Represented Company as an Artisan
7. Elected to the Staff Representative Committee
8. Promoted to position of Designer

Tom joined the company in October 1970 as an apprentice engraver. It offered him the opportunity to pursue a career in an art form, which was always his ambition in school. He had completed his Intermediate Certificate in De La Salle College. He is 51 years of age and has 4 children.

In serving his apprenticeship he attended the Central Technical Institute twice weekly for art classes, two half days plus one night each week for four years of the five year apprenticeship. He has obtained seven certificates in art. He has completed an art-teaching exam and is a qualified art teacher. He qualified as an engraver in 1975 and progressed to become a master engraver after serving another five years.

He was always open to new ideas, work methods, techniques and concepts. He embraced the many changes that have taken place over the past 20 years in his chosen craft. In 1987 he became manager of the engraving and sandblasting until 1994. During that period he led the development of the sandblasting process. Under the continuous restructuring programme he was appointed to the position of front line manager on shift in the Salzle Polishing Department. In 1996 he transferred back to sculpting and design under sales & marketing. He trained and qualified as a sculptor

and travelled to Japan to promote product for six-week periods for six years in succession, sometimes twice yearly.

In the late 1980s he recognised the capability of computers in aiding the design process and purchased a home PC under the company's Computer Purchase Interest Free Loan Scheme. He quickly became proficient on the computer and when the CAD system was established in the company.

In 1997 he was working at clay modelling when it was amalgamated with Design and the designing of new product such as one off pieces and trophies. He was appointed as a designer and completed a Certificate in City & Guilds in Auto CAD. He was appointed technical designer and responsible for product manual drawings, costing drawings and technical mould drawings for the mould makers. He became an information technology champion having completed his ECDL and trained a number of employees in computer skills.

The barriers include personnel time constraints in coping with a changing work environment, family responsibilities and study time. Tom explains *'Since the company developed the learning organisation in the early 1990s every help and encouragement was provided to employees who were interested in developing and learning'*.

The supports have been the company with funding and lots of other encouragement, which was represented in many forms.

In hindsight he would change nothing. He adapted to the changes and has prospered having progressed through many different career changes. His career choice would be to work in filmmaking, visual advertising or graphic design and to have pursued an arts degree. He recognised the potential of computers and introduced a very sophisticated computer system into the art design area. His motivation to return to education was prompted by a determination to progress in the company. The benefits included becoming more confident and gaining greater job satisfaction from using the new skills and knowledge gained. He has been elected as a member of the staff representative committee, which has the responsibility for dealing with all work related issues of concern to staff members.

He hopes to continue progressing his career within the company. The most important skills for industry today are information technology, communications, adaptability and openness to learning and education. The company could best improve its competitiveness by reducing its overheads. Employability is having the qualifications to add value to the company.

He believes he is very employable as he has a wide range of skills, work experiences and achievements to his credit and he likes dealing with change.

Tom Coppinger

Company:	Waterford Crystal
Job Title:	Head of Quality
Marital Status:	Married
Age:	58
Years of Service:	43

Starting Position	Current Position
Apprentice Cutter	Head of Quality

Most Significant Career Developments

1. Qualified as a Master Cutter
2. Involved in Negotiations as a Shop Steward.
3. Appointed to Head up Outsourcing Project
4. Promoted Quality Control Manager
5. Promoted Head of Quality

Tom is 58 years of age and married with two children. He began his working life at 16 years joining Hall's Grain Store as a clerk having finished second year in De La Salle College. He joined Waterford in 1961 as an apprentice cutter and became an assistant to the master cutter after just two years. The team system at that time included a master cutter, his first helper (assistant) and four apprentices. He became a master after eight years, which is unusual as it normally took ten years to achieve a rounded set of skills and the ability to lead a team of six craftsmen. The master cut the full range of designs, organised the work for the team, trained the apprentices and ensured top quality in producing sufficient product on a piece rate system to make satisfactory wages. The master's role was a difficult one to carry through successfully and he was an outstanding master.

Tom was elected as a shop steward. He had a particular interest in maths and in piece rates. He believes that the negotiations in settling piece rates were a great learning experience for him. The negotiations involved achieving a fair price on every design using the most efficient work methodology. The method developed became the established method in completing the design until some other craftsman developed a better way. Many cutters had individual methods and styles of cutting. Piece rating was central to the financials of the business, new product development, quality, customer service and profitability. There was very little scope in which to make a mistake. The craftsmen could be very unforgiving if the price agreed was found to be unfair to them.

In 1979 he successfully applied for the position of assistant Quality Control Manager. In 1983 a lightingware plant was opened in Butlerstown and he was given dual responsibility for quality control in both Butlerstown and Kilbarry plants. When his boss retired in 1987 he was appointed as Head of Quality for Kilbarry, Butlerstown and Dungarvan Plants.

In 1992 the company made a momentous decision to establish an outsourcing of product process for the first time in its history. It was named Project Unicorn. He relinquished the management of Quality Control which was reporting into manufacturing and which was responsible for inspecting the quality of the product throughout the manufacturing process. He was appointed manager of a new Quality Assurance Function with a responsibility for representing the customer in assessing the quality of the product and all related components such as packaging, brass fittings and clock faces etc.

With his union representative background he understood the sensitivities surrounding his new role in heading up the outsourcing project. Product referred to outsourcing outlets represented lost orders for the Waterford Plants and could lead to further job insecurity for employees. Taking the opposing view outsourced products producing higher margins could produce higher profits and help secure the future of Waterford Manufacturing through future capital investment in the plants. The cost base of the outsourcing companies was much lower than Waterford and as such, represented unfair competition to employees, as they would find it extremely difficult to compete.

A 14-week strike in 1990 had led to a hardening of attitudes. The union position was that mismanagement was responsible for the difficulties facing the company. Management blamed the unfavourable economic environment and a high manufacturing cost base as the root cause.

He agreed to take on the new Outsourcing Project Leader role on the basis that he could best manage all the issues, which would affect the future of Waterford Manufacturing. He had developed a unique appreciation of employee relations dynamics, the quality standards and the commercial imperatives that led to the development of alternative production options. Two teams of two people were appointed to travel to Eastern European countries and over a period of five weeks, 46 potential outsourcing factories were visited. A report including recommendations was presented to the board of the company for their decision.

Following the review of the report a director of logistics was appointed to take control of the outsourcing needs. He was appointed manager of Quality Assurance to ensure that the Waterford quality standard was strictly applied and adhered to by outsource suppliers. He spent four months in a supplier company in Germany working with them to raise their quality standards to comply with Waterford requirements. The first shipped outsourced product took place in September 1992.

One of his first tasks as quality assurance manager was to manage a major project in defining quality standards and recording them in written form. All craft industries were noted for their haphazard approach to recording of detail and much knowledge and information was retained in the heads of the craftsmen and artists. Tom says that *'Waterford became the first company in the crystal industry worldwide to produce written quality standards'*. The manufacturing function was in the main dominated by creative, craft, art approach to work, which paid little heed to systems and procedures. It was slow to adopt a structured and transparent approach to information management systems and to filing of information. Written standards for the Marquis brand were recorded in 1993. In the mid 1990s he headed up a project to install the ISO 9000 System beginning with the Butlerstown plant and then Kilbarry and Dungarvan plants.

On outsourcing, vendor companies didn't have the capacity to supply growing sales. He had to organise multi-sourcing of the one product from three factories at the same time. There were different processes in each factory and he had to ensure strict adherence to the one Waterford quality standard.

In 1997 the Millennium flutes were produced in seven different factories. The logistics associated with this new product initiative reached its highest point in the year 2000 when 1.4m sales were shipped to market, which was a record for any product in any one year.

ISO 9000 established disciplines and generated new ways of doing things. Originally the company used 5,000 clock movements. If defects were found all products were examined. Through the ISO quality system the company were positioned to charge suppliers for faults identified. The supplier had the opportunity to inspect the product and remove faulty products or send to an external source for rework. The bottom line was that there was no compromise on Waterford's standards. Since 1992 the philosophy was to contain the problem at source and only accept a quality product. A team of three roaming auditors from the company called on a regular basis to all outsource suppliers before the product was shipped to market. This process ensured that faulty product never got to the stores and Waterford honoured its commitment to the customer.

Following the writing up of the quality standards in 1992/1993 the company carried out focused group research in USA comprising eight groups of eight people. The groups were made up of competitor customers, Waterford's customers and sales people to validate them. The feedback confirmed that the standards with some slight adjustments. Similar research was carried out again in 2001 on a one to one basis with 350 customers on East Coast, West Coast and Mid US. Independent research recognised Waterford as the number one quality brand in the US in 2000 and 2003. Independent research in the UK identified Waterford as the foremost quality brand in the UK in 2003.

He began his working life in Waterford as an apprentice cutter and scaled the heights to senior management. He led some of the most innovative initiatives in the history of

the company during his tenure as Manufacturing Quality Manager and Quality Assurance Manager.

He firmly believes that a good education is essential for all employees in industry today but that the practical experience of doing the work and achieving stretching targets is where the learning is consolidated and the competent employee is developed. It is the combination of learning academic principles in an accredited format and applying them in many different and challenging situations to good effect that best produces the most adaptable and flexible employee

Tom Gleeson

Company:	Waterford Crystal
Job Title:	Plant Manager
Marital Status:	Married
Age:	56
Years of Service:	40

Starting Position	Current Position
Apprentice Cutter	Plant Manager

Most Significant Career Developments

- (1) Qualified as a Master Cutter.
- (2) Co-ordinated the introduction of diamond technology in the Wedge Cutting Department.
- (3) Established and Managed the Manufacturing Quality Function
- (4) Seconded as Manufacturing Manager of Stuart Crystal for a Three Year Period
- (5) Appointed Plant Manager in Kilbarry

Tom joined the company in January 1965 as an apprentice wedge cutter. He had a choice of serving an apprenticeship as an electrician or as a wedge cutter and was won over by the reputation of Waterford with a wonderful brand and craft tradition. He had just completed his Intermediate Certificate in De La Salle College. He is married with four children and is aged 56 years.

He qualified as a cutter in 1970 and as a master in 1973. The master had to prove his competence as an all round craftsman and be able to cut a wide range of designs. He also had to lead a team of 6 craftsmen normally involving two qualified craftsmen and

three apprentices. This was the most common arrangement until the system evolved to individual piece rate in the late 1980s when most craftsmen were qualified.

He was a very skilled cutter and was assigned to working on select pieces with the head designer Mirik Havel. President Jimmy Carter as a gift for his mother ordered one such piece. He served on the piece rate committee agreeing the prices in negotiations with management over a six-year period. This was a great learning process as the earning power of craftsmen was directly linked to the piece rate prices agreed. The better the price the higher the wages although the ultimate aim was to establish a fair price that was satisfactory to both union and management.

In the mid 1980s he was appointed trainer / advisor for the cutting section to assist in raising the all round skill levels and maintain reasonable wage levels for all craftsmen. The team system produced many anomalies with the different cutters having different skill levels and different earning aspirations. The advisors job was to ensure that the right teams were in place and that the teams earned in line with their potential and achieved agreed production targets. Maintaining a high level of quality was also a consideration as was the proper use of equipment and the health and safety of all craft personnel.

In 1985 he was appointed manager of one cutting shop in Kilbarry containing 152 cutters. In 1987 he was assigned to a project to introduce the diamond wheel technology. This major change in process technology meant that all up to 4,000 pieces had to be re-priced. The diamond process was much different than the stone wheel process in that it was much quicker, a better texture, was much smoother, demanded a higher skill level requiring greater accuracy all leading to a smoother finish with sharper and deeper cuts. He completed the introduction of diamond technology into the Wedge Cutting Section. He was then assigned to a major Rework Project, which over a 2/3-year period reduced rework from 29% to 19%. He established a reporting system, which itemised the cause of rework and introduced departmental procedures for its minimisation. This involved developing an awareness campaign highlighting daily and weekly results, producing a video on handling of glass and promoting best practice on notices throughout the factory.

Following the success of this project the company set up a new Manufacturing Quality Department, which would take responsibility for ensuring that the quality standards set by Quality Assurance were met. Manufacturing Quality worked closely with Training & Development in the observance of the standards building up the relevant skills and knowledge to ensure its success. In 1996 Tom was appointed manufacturing manager of Stuart Crystal for three years returning in 1999 to Kilbarry. Tom was appointed as plant manager in Kilbarry in 2001 and then overall plant manager to date.

Tom completed a range of in-house courses including ECDL, TQM, ISO, Statistical Process Control, Supervisory Management and a number of senior management courses.

Tom has been very involved as a soccer coach with his local club – Ferrybank. His involvement in soccer in a voluntary capacity has helped him develop as a manager and coach. Coaching and influencing skills are so important in the modern management environment.

He believes that the Task Group was the single biggest influencer of decision making in industrial relations in the company over the past 10 years. There is a need to improve business literacy levels company- wide. In communicating the business realities the workforce has responded positively and tremendous progress has been made.

Tom says ‘ the major barrier is a lack of a third level education as the further up the responsibility ladder you progress the greater the need for a higher education qualification’. The best supports have been the company and the inclusive learning environment that has been created.

His preferred career choice would to be a Manager/Coach of a Sports Organisation, Club OR Team. The benefits from education and training was an increase in confidence and a great sense of satisfaction in being able to influence the direction of the company at the highest level. The motivation to engage in education was to improve his competency level. He was lucky to have consistently moved from one responsibility to another and taking in many different areas of manufacturing in the

process. Most of his development was in doing and achieving in a range of different jobs. He would have loved to have a third level education to supplement his wide range of practical experience.

He is focused on doing a good job and improving manufacturing performance, which is a journey rather than a destination. The key issues to be addressed in accommodating employees in education are direction, funding and support. The most important skills for industry today are inter-personal, communications, information technology, adapting to change and business literacy.

For the company to improve its competitive position it need to rationalise its product range, concentrate on what it is good at, maximise the use of its current technology, continue to develop the workforce and pursue the management of cost issues across all functions.

Employability means having a good education, good attitude and a wide range of skills and qualifications.

He believes he is employable, as he has accumulated a vast range of industrial manufacturing experiences and has an outstanding track record of achievement in several different areas of management.

Tony Coady

Company:	Waterford Crystal
Job Title:	Production Manager
Marital Status:	Married
Age:	46
Years of Service:	30

Starting Position	Current Position
Apprentice Blower	Production Manager

Most Significant Career Developments

- (1) Qualified as a Master Blower.
- (2) Appointed as a Training Instructor.
- (3) Completed a Diploma in Management and Employee Relations.
- (4) Moved to Several Different Levels and Responsibilities in Management.
- (5) Deployed to improve Manufacturing Performance in Stuart Crystal in the UK.
- (6) Appointed Production Manager in 2004.

Tony joined the company in July 1974 as an apprentice blower having left school just after completing his Intermediate Certificate. He didn't like school and was glad to get the chance to work in a highly skilled craft making fine glass products. He is 46 years of age and is married with 2 children.

He qualified as a stem blower and quickly graduated to becoming a master. In 1984 he was appointed as an Advisor and was charged with improving quality and solving all blowing related problems relating to blowing skills or blowing equipment issues. He carried out this function for two years and returned to work as a blower in 1986. In 1992 he was appointed and trained as a training instructor to work with a management team grappling with a root and branch restructuring of the blowing department.

He was involved in preparing for the introduction of Quality Accreditation System, ISO 9000 and in planning the introduction of new technology. He completed a Supervisory Management Programme with Plassey in Limerick. In 1995 he was appointed to the position of Front Line Manager on the Tank Furnace. In 1999 he was seconded to Stuart Crystal as a manager to advise on shift patterns and production techniques. He spent 14 months there as Tank Manager. In 2001 he was appointed Tank Manager in Kilbarry. He completed a Certificate in ECDL and a Diploma in Management and Industrial Relations with the National College of Ireland. In 2002 he

was made responsible for both the traditional and technology forming processes. In 2004 he was appointed to his current position as Production Manager.

There were no barriers to his advancement as he always seemed to be the right man in the right place and having all the appropriate experiences and qualifications to do the jobs that he was appointed to do.

The supports were the company in funding his education and providing him with a variety of work-based challenges, which furthered his experience, and the development of his capabilities. The Training Team was very supportive as were his direct managers. The learning environment created to assist employees to develop and progress in the company was very positive. There was a very inclusive approach designed that enabled every employee take the next most relevant step in their development path. Involvement in learning whether it was in the classroom or on the job solving some problem or introducing some new piece of technology became contagious throughout the company. It was a time of great change and freshness and everyone were considering some form of formal learning and development. Job and employment security became a major issue and the acquisition of additional skills was deemed more appropriate to cope with the new technological age emerging.

Tony says that 'in hindsight he should have completed his Leaving Certificate and a third level degree course'.

As a career choice he would like to become a Leader/Manager in Human Resources. He was motivated to return to education with the advent of technology, as he knew that in the future he would require more knowledge around engineering and people management and development.

Education has provided him with a different and broader perspective on life and in work. He is much more confident and competent and is conscious of being a good example for his own children in his attitude to work and study.

His next ambition is to master his new post, which he has just taken up. The best way to help employees engage in education is to make them fully aware of the issues at

stake, to facilitate employees on shift with time off to attend class and study and to develop a more flexible delivery system.

He is committed to the new turnaround plan and expects that the company will quickly regain its strength and be successful again. The most important basic skills required in industry are, a good education preferably a third level degree or a trade, information technology and strong communications and interpersonal skills.

The company could improve its competitive position by introducing world-class techniques and standards such as LEAN manufacturing and develop a strong sales and marketing strategy to support the brand.

Employability is becoming very competent in a number of work related disciplines and being flexible and adaptable.

He believes that he is employable as he has developed a broad skill base and has had been fortunate to have gained substantial experience at the cutting edge of manufacturing, craft and technology based processes.

Michael Ryan

Company: Lapple Ireland Ltd. Carlow
Job Title: Health & Safety, Environmental & Maintenance Manager
Marital Status: Married
Age: 37
Years of Service: Waterford Crystal 1987 to 2003

Starting Position	Current Position
General Operative	Health & Safety & Environmental Maintenance Manager

Most Significant Career Developments

- (1) Completed his first Masters Degree in Education from Sheffield University.
- (2) Appointed Health & Safety Officer.
- (3) The outstanding support he received from Training Department / Company.
- (4) Lectured on Management Training Programmes for National College of Ireland.
- (5) Appointed as Health & Safety / Environmental Maintenance Manager in Lapple Ireland Ltd, Carlow.

Michael joined Waterford in November 1987 as a general operative. He had been unemployed for twelve months. Prior to this he had worked for six months in Allied Signal as a general operative. Waterford were advertising for temporary contracts for the Christmas period. He had completed his Leaving Certificate in Mount Sion having achieved a pass mark overall. He did not work hard in school and was glad to leave and join the workforce. Michael is 37 years of age and is married with 2 children.

Michael started off in the Distribution Centre and worked there for five 5 years as a general operative. He progressed to become a quality control inspector and worked at it for eighteen months. He transferred to a clerical position in Butlerstown Lightingware Plant for two years. He spent three years in Design and Marketing. In 2000 he was appointed to the position of Health & Safety Officer and remained there until 2003. In 2003 he was successful in applying applied for his current position in Lapple, Ireland Ltd.

Michael achieved the most outstanding and varied portfolio of qualifications in the company since the Training & Communications Department was re-established in

1990. The following is a list of qualifications gained by Michael who admits to having a photographic memory and can remember details of subjects in a remarkable way:

- Certificate in City & Guilds in Quality Control from the Waterford Institute of Technology in 1988.
- Certificate in Materials Management from Waterford Institute of Technology in 1989
- Certificate in Management of Quality Control from WIT in 1989.
- Certificate in Data Base Applications from WIT
- Certificate in Personnel Practice from WIT in 1990
- Certificate in Supervisory Management from NEBS in early 1990s.
- Diploma in Social Studies from the International Foundation of Adult Education in Holland for two years by distance learning.
- Diploma in Media Studies in St John's College, Waterford.
- Diploma in Advertising in WIT
- Diploma in Health & Safety from UCD delivered in WIT, two years
- Diploma in Personnel Management in National College of Ireland, three years.
- BA Degree from Portobello College Dublin, one year on to previous qualifications
- Masters in Education in Sheffield, two years
- Masters in Science and Health & Safety from UCD, two years
- Masters in Human Resources from De Montford in Leicester (two years).

He has been employed as a part-time lecturer with the National College of Ireland. He has over the years in difficult employment circumstances developed the most comprehensive set of academic achievements including three masters degrees in Human Resources, Health & Safety and Education which is a phenomenal record taking all the circumstances into account.

The company assisted him complete a number of education programmes. He decided to complete others, which he paid for from his own resources. He was single at the time and had developed a real hunger for knowledge. It was a great personal challenge for him and each succeeding programme successfully completed provided

him with additional drive to move on and gain new qualifications. His employment experience of starting off as a general operative and being previously unemployed instilled a fierce determination in him to develop a broad portfolio of skills and qualifications. He also enjoyed the social side and engaged with many employees who were struggling to enhance their careers.

Michael explains 'I was indebted to the company for providing me with so much support and opportunity and it made me very committed to like so many other employees to reciprocate by mentoring and coaching others to complete their educational objectives'. A great learning environment was developed in the company and all reasonable calls for help were answered along with many initiatives being taken by the training department as they saw the need for them.

The main barriers were financial and organising the time for work and study. He voluntarily extended his brief taking on the role as advisor, mentor and tutor with a number of study groups that were set up in-house to support the learning process.

The main supports were his family and the Training & Communications Department who were extremely supportive and facilitated his learning and teaching experiences in every way possible.

In hindsight he would not have changed a thing. He is convinced that learning is more meaningful when applied. Being in employment is an advantage for the learner as s/he can apply it immediately making it more relevant and productive. His career choice would be to become a solicitor and be able to help people to help themselves. A little help at the right time can go a long way for someone needing support.

Education has made a huge difference to him at a personal and employment level. Michael says ' I have grown in confidence. I am more open-minded, and have developed employability status and increased earning potential through engaging in part-time education over a number of years'. The basic issues to be addressed in helping employees return to education are direction, support and encouragement, funding and recognition following the acquisition of a qualification. It is important that the organisation responds to effort and success in gaining qualifications, as it is a

great boost to the employee student and a great incentive to those who have yet to return to education.

The most important basic skill requirements today are getting a good education, strong inter personal and conceptual skills, information technology and a strong desire to succeed coupled with a humility and willingness to listen and learn.

Employability is the degree to which a person can develop attractive qualifications portfolio required by employers. The portfolio should include the mix of education qualifications, work experience and record of achievement.

He believes he is highly employable because of his experience, qualifications, maturity and adaptability.

Ollie Crotty

Company:	Waterford Crystal
Job Title:	Cutting Technology Technician
Marital Status:	Married
Age:	44
Years of Service:	27

Starting Position	Current Position
Apprentice Cutter	Technician

Most Significant Career Developments

- (1) Qualified as a Master Cutter
- (2) Completed a Certificate in Glass Technology
- (3) Redeployed from Cutting Craft to Technician.
- (4) Completed a Degree in Manufacturing Technology

Ollie joined the company in September 1977 as an Apprentice Wedge Cutter in Dungarvan Plant. Ollie completed his Leaving Certificate in Kilmacthomas Community College and achieved an honours grade. Employment opportunities were scarce at the time and he could not acquire an apprenticeship as an electrician. He is 44 years of age and is married with two children.

He qualified as a cutter in 1983 and then moved into the master craftsmen's area in Dungarvan where all the special pieces – trophies and presentation pieces were produced. These were the most difficult and prestigious pieces and he was an extremely competent in producing them.

In the early 1990s following the rationalisation of the crafts to drive the competitiveness agenda it became increasingly obvious that technology was critical to the future viability the business. This would necessitate a new skill base. He joined the National Certificate in Science- Glass Technology and achieved outstanding results throughout the four years of this part-time course. The programme was a joint development between the company and the local Institute of Technology. He also completed a NEBS – National Examining Board Studies – Supervisory Management Course, a UK based qualification, presented by the University of Limerick.

In the mid 1990s he transferred to Kilbarry in Waterford City as a technician in the cutting technology area. He then proceeded to join the National Certificate in Manufacturing Technology Programme in Waterford Institute of Technology gaining exemptions from his Glass Technology Course. He proceeded to complete a Diploma in Manufacturing Technology Course over a two- year period gaining outstanding results.

He joined the Degree in Manufacturing Technology Course over two years part- time and achieved outstanding results once again. He spent 4 years on Glass Technology, one year with exemptions on the Certificate in Manufacturing Technology, two years on the Diploma and a final two years to gain the Degree. Ollie says that ***'I have spent in total, 9 years in part- time education while working in a very demanding job involving shift- work'***. He is one of three employees who were the first to qualify as fully-fledged engineers in 2002 having begun their working lives as craftsmen. This is an outstanding achievement. The more effective management of time, effort, family and work responsibilities tests the resolve and intellectual capacity of employees in part-time education as once committed there is never any other option open but to succeed. Ollie says ***'there is huge weight of expectation placed on the shoulders of employees in education. Their managers, peers and family members all hope and expect that the disruption, time and cost incurred will at least deliver success for the***

person involved and the company'. The entire process is too public for it to remain as a confidential and private matter.

The main barriers were organising the time and matching family responsibilities with work and study needs.

The main supports have been, his family. The company accommodated every reasonable request for support in covering course fees, materials, time off for classes and study showing great flexibility in switching shift team members as required. The Training Team provided a very supportive learning environment for those pursuing part- time education programmes.

In hindsight he wished that there had been a better career guidance service available when leaving college. His preferred career choice would be to become a Computer Engineer.

Education has given him a major boost in confidence. He has proven his ability to pursue a difficult academic programme over many years and achieve outstanding results. His success has encouraged his wife Kate to return to education and complete a Degree in Social Science in University College Cork.

He would like to graduate now into an engineering position to fully exploit the knowledge he has gained and is keeping his options open on remaining on in the company. The most important basic skills in industry are a good education, third level degree if possible, information technology, good literacy and numeric skills, a willingness and ability to learn and to be flexible and adaptable.

Employability is having marketable skills that are in strong demand in the workplace. He believes that he is now very marketable. He has a strong mix of practical experience married to good academic qualifications and a strong track record of achievement.

Pamela Power

Company:	Waterford Crystal
Job Title:	Sculptor
Marital Status:	Married
Age:	34
Years of Service:	17

Starting Position	Current Position
General Operative	Sculptor

Most Significant Career Developments

- (1) Experience of working in different jobs in Manufacturing.
- (2) Appointed as an Apprentice Sculptor.
- (3) Passed Exams in Drawing and Painting.
- (4) Produced and presented a sculpted piece of Ballybunion Castle to President Clinton
- (5) Qualified as a Sculptor in 2003.

Pamela joined the company in May 1987 as a general operative. Her father was employed in a management capacity and she took up her new job just prior to sitting the Leaving Certificate. Pamela is 34 years of age and is married with 2 children.

She worked in all the packing rooms, the Blowing room in Kilbarry and the Chandelier Room in Butlerstown. She then returned to work for 6 years in the Achthal Polishing Department, which included acid dipping, washing, examining, rework and packing.

Pamela always had a passion for art and design and in the early to mid 1990s she returned to education and completed a computer art design course, three life drawing courses in succession and two one year drawing and painting courses. She also completed a Microsoft Word course.

In the early '90s she applied for design positions on two separate occasions and for an engraving post without any success. She was ruled ineligible because of her contract status the jobs going to permanent employees. In 1998 she successfully applied for a position in sculpting from two positions advertised. She began her apprenticeship and qualified in 2003. Pamela is the only female sculptor and craft-based employee in the company.

Ten applicants applied for the two sculpting positions. As part of the interview process each one of them had to make a piece, a solid bear and submit a portfolio of drawings. Her submission was very impressive having spent so many years developing the portfolio.

The main barrier to progress was the demarcation line that existed between craft and general employees and between permanent and contract employees when applying across the line for a position.

The supports were the company who funded the courses and the sculpting team who were superb in helping her master her craft throughout her apprenticeship.

Pamela says ' In hindsight I should have completed my Leaving Certificate and then progressed to a third level course in Art and Design'. Her preferred career choice would be to become a Graphic Designer.

Her motivation for returning to education was that she knew she could master a design or craft-based job. She always wanted to move on and out of general operative work. Achieving a position as a designer was her first choice but she was delighted to become a sculptor and is extremely satisfied with her progress in the sculpting department.

Pamela says 'I am now much more confident and fulfilled having returned to education and having qualified as a sculptor'.

She has had the opportunity to produce special pieces for very important people. She was commissioned to make Ballybunion Castle for President Bill Clinton to mark his visit to Ballybunion in the late 1990s. She has also made a piece for Michael Flatley. She has made numerous special presentation pieces and is extremely proud of her work and the work of the department team.

Her next ambition is to continue to work in sculpting and become a master sculptor and maybe some time in the future becomes a designer.

The most important support for employees returning to education is funding, having access to a mentor to help and guide employees through the difficult times. Employees returning to education after a long absence and with low formal education standard need to consistently be made aware of the possibilities and the benefits to be accrued on successful completion of course, in particular the first one back.

She loves working with glass and the company where creativity and innovation is encouraged and appreciated. She hopes to continue working with the company until she retires. She appreciates the freedom offered to her to develop and express her creative instincts and competencies. She likes the buzz around creating new concepts and designs in glass and how close the sculpting team is to the end customer often in continuous dialogue on any one product. There are so many exciting opportunities for employees with an artistic talent available and ideas are never ruled in or out until proven. The most important basic skills for employees in industry are – acquiring a good education, computer skills and people skills.

The company could improve its competitiveness by investing in marketing the product and targeting young consumers to the brand. The future of the business depends on our ability to attract the next generation of consumers. The John Rocha contemporary design initiative showed what could be done.

Employability is about being multi-skilled, adaptable, educated and people friendly. Pamela believes she is employable. She is capable of fitting in and is very willing to adapt to any work situation. She has gained a wide range of work experience and any position in the art, craft, and design area would suit her. Given her recent experience she is confident she would make a success of it. She welcomes change, as it is likely to present her with new challenges and opportunities, which will serve to maintain her interest in the work.

Peter Roche

Company:	Waterford Crystal
Job Title:	Data Validation Manager
Marital Status:	Married
Age:	47
Years of Service:	32

Starting Position	Current Position
Apprentice Cutter	Data Validation Manager

Most Significant Career Developments

- (1) Qualified as a Master Cutter
- (2) Completed Diploma in Industrial Engineering
- (3) Appointed Pricing Analyst
- (4) Completed Degree in Marketing
- (5) Appointed Head of Data Management Department.

Peter is 47 years of age and is married with three children. He joined the company in March 1972 as an apprentice cutter having dropped out of school after completing his Intermediate Certificate in Waterpark College. He qualified as a cutter in 1977 and a master cutter in 1982 two qualifications of which he is very proud

Peter says that ‘ in 1990 during the Strike period as he watched a World Cup match on TV he was struck by the vulnerability of his employment contract’. If the company closed where would a highly qualified cutter find alternative employment? On returning to work in July 1990 he continued to vacillate leaving the taking of action as to his qualifications to a later time. It wasn’t until January 1991 that he decided to go down to the Central Technical Institute and enquire about completing a Leaving Certificate in Mathematics and English. He had chosen a Diploma in Industrial Engineering as his first choice qualification. He appreciated the need for maths for calculations and problem solving and English for reporting. He was invited to join the class on Mondays and Tuesdays, English from 7 to 8.30 pm and Maths from 8.30 to 10 pm with the reverse sequence of subjects on the Tuesdays. Having joined he was in time to register for the Leaving Certificate in which he completed on two pass papers on the following June.

He then joined the Diploma in Industrial Engineering class in September of 1991 in the local Institute. He completed it in three years. During the course, in February 1993 he was appointed a trainee Industrial Engineer. He stayed at it for six months but had to return to cutting, as he could not sustain the drop in wages (40%). His eldest son was about to enter third level college. It was the hardest decision he ever had to make. He wondered what was the point in studying so hard if he could not afford to take up the new position. The commitment to study was enormous. Following further consideration and reflection for a period he decided to finish the course. He hoped that it would at some future date provide him with a wider set of employment options.

After three years of intense study he completed the course in 1994. He had attended classes on Tuesdays and Thursdays and study sessions on Mondays, Wednesdays and at the week – end. Shortly after completing the course he applied and was appointed to a position as Pricing Analyst in the Sales & Marketing Function. He found this position to be interesting and challenging and it confirmed the value of education. ***Peter confirmed that he had achieved second place in Ireland in the Diploma in Industrial Engineering, which was an outstanding achievement.***

He then decided to complete a Marketing Degree in Waterford Institute of Technology through the Marketing Institute of Ireland. Through exemptions he was able to cover two years of the course in twelve months and due to work and family circumstances he went on to finish the degree by distance learning. The pricing analyst position was located in the Finance Function, which was very specialised, and he needed to move on to a more generalist role in which he could use his qualifications better and thus be in a better position to gain promotion as opportunities arose.

In 2000 he was seconded to the SAP project holding a dual role of Pricing Analyst and Data Validation on Bills of Materials. SAP, a computer based integrated business planning system and includes a wide range of modules covering all functions of business operations. He had to validate bills of materials and with some assistance for colleagues he cleared 3000 of them in three months. In December 2000 it was decided to centralise the approach to data management. The integrated nature of the SAP

system resulted in mistakes in data accuracy, which had a serious follow on effect, down line.

The Finance Function audited the data and recorded an error rate of 40%. Following the validation process and over a period of time the % in getting it right first time improved month on month and on a subsequent audits the error rate reduced to 2.5 %. Peter was appointed as Data Management Manager, Head of the Department on the 1st October 2004 with the task of establishing and maintaining an error free system.

The barriers to achieving qualifications were organising the time while balancing family, work and study during a difficult period at work and in the home. He had a very young family and the responsibilities that are associated with it are huge and need full time attention.

Peter says ‘ the main supports came from my family, the company and a well-organised study group, which was critical to sort out many difficult concepts’. Every possible help was afforded to employee/ students in special leave, exam leave, purchase of books, payment of fees and the provision of mentors and rooms and meals for study sessions.

In hindsight he regretted leaving school without completing his Leaving Certificate and his career choice would have been to qualify as a doctor. He always held a particular interest in medicine and in holding down a position in which he would be able to help people.

His motivation for returning to study was the desire to achieve employability status. The difference it made was a sense of achievement, pride and the security that being employable brings. The example he set for his children was also a consideration. He wanted them to stay at school, gain a worthwhile qualification as a full time student before moving into the workplace.

He currently teaches in the local Institute on industrial engineering in the evenings and is fully aware of what less fortunate participants are facing. He has students who have to pay their own fees. If they pass their exams they will be refunded or part refunded. He also has students who are working on shifts shift from 4 pm to midnight. They take time out to attend college from 7 to 10 pm and have to return to work on

until 4 am the following morning to make the time used in attending college. This represents a horrendous challenge for them. In other cases more draconian arrangements have to be made. The contrast with his own experience and the support he received from the company on time off and funding couldn't be more dramatic.

The basic skills required for industry are flexibility and inter-changeability, an open mind and a willingness to learn. For the company to become competitive it needs to employ leading edge technology and develop a multi-skilled workforce.

For him employability means developing an attractive and relevant skill portfolio. He believes he is employable having a good set of qualifications and a rich vein of work experience.

Philip O'Keeffe

Company:	Waterford Crystal
Job Title:	Health & Safety Officer
Marital Status:	Married
Age:	47
Years of Service:	31

Starting Position	Current Position
Apprentice Cutter	Health & Safety Officer

Most Significant Career Developments

- (1) Qualified as a Master Cutter
- (2) Joined the Civil Defence and graduated to Instructor in First Aid
- (3) Completed a Health & Safety Certificate- first third level certificate.
- (4) Represented the company as an Artisan in the US.
- (5) Appointed Health & Safety Officer.

Philip joined the company in July 1973 as an apprentice wedge cutter having completed his Group Certificate in the Central Technical Institute. He had relatives working in the company and liked the idea of working with crystal. Philip is 47 years of age and is married with two children.

Philip qualified after five years serving his apprenticeship. He graduated as a master cutter in due course. He was very conscious of not having a good education. He

returned to the Central Technical Institute to complete his Leaving Certificate in English, Irish and History in 1996 and 1997. He believed it was necessary to acquire a good education to progress in the company. His brothers and sisters all had progressed to third level and Philip was determined to redeem his educational deficit. He also completed an Art course in the Central Technical Institute.

He joined the Civil Defence – First Aid Section. He graduated to become a leader in first aid and was then trained as an instructor. He has served 30 years in the Civil Defence in the Fire Training Section and Rescue Section. He is an expert on rescue techniques. Philip says that *‘ my involvement with the civil defence was a most enlightening and developmental part of my life. It helped me to take on responsibility and develop leadership qualities that have helped throughout my working and family life’* .He completed a Supervisory Management Course in 1992/1993. In 1993/1994 he completed a Certificate in Health & Safety from University College Dublin and a Diploma in Professional Studies, Managing Diversity from University College Cork in 1998/1999. He will be entering the second year of the Diploma in Health & Safety in September 2005.

He represented the company as an artisan in the US and Ireland and was involved in about 20 promotional events. He has been trained in public speaking, and on how to handle interviews on Radio and TV. In the US he was involved in special promotional events in Las Vegas, Cheyenne and Wyoming. The US Retail Stores sponsored a number of Philip O’Keeffe Days. The training and subsequent pressure and experience of performing as an artisan helped him to develop his confidence and competence in public speaking.

Philip’s record in a leadership capacity in the Civil Defence and his experience as an artisan have been of tremendous development value to him. He was promoted to the position of Health & Safety Officer in December 2002.

The barriers were organising time in balancing work, family and study. The supports were family, his brothers and sisters who have third level qualifications. The company funded and encouraged him to return to education and to progress within the

organisation. In hindsight he should have remained college and completed his Leaving Certificate and a third level degree.

His next aim is to complete the Diploma in Health & Safety. His preferred career choice would to have become a doctor. He always had a great interest in medicine and people welfare.

What motivated him to return to education was an inner nagging feeling of having missed out on something important. His brothers and sisters had progressed to third level education. His mother always reminded him that he had the ability to do so well in college. In working in industry he became very aware of how graduate employees progressed and the responsibilities they were given. He became more anxious to return and try and improve his employability status.

The difference it has made to him has been in his self esteem and confidence and how it has helped him to progress in the job.

His next aim is to become a Safety Manager and he would hope to stay in the company until he retires, as he likes the work, the culture, the people and the pay and benefits. There is a great spirit in the company and an underlying concern for others, which is very gratifying.

The most important generic skills for industry are, reading and writing, computer, communications and being able to work well with people. Taking and giving feedback and criticism is a critical feature of working in a change environment.

The company can improve its competitiveness by returning to the basics and the core business. It needs to reduce the product range and become expert in what it does. It should seek to develop the skills of employees and have them take on more responsibility and get it right first time.

Employability is about having the skills to be able to work at a number of jobs both inside and outside the company. He believes he is highly employable. He has acquired a wide range of qualifications and work experiences. He is very willing to continue learning and developing.

Brendan Farrell

Company: Tellabs, Sandyford, Dublin
Job Title: Project Manager & Senior IT Support Specialist
Marital Status: Married
Age: 35
Years of Service: Waterford Crystal 1986-1998

Starting Position
Apprentice Blower

Current Position
Project Manager & Senior IT Support Specialist

Most Significant Career Developments

1. Qualified as a Blower
2. Achieved a Certificate and Diploma in Commercial Computing.
3. Approached Manufacturing Director re New Job Role.
4. Became Trainer and Sergeant in the Civil Defence.
5. Joined Tellabs as a Project Manager and Trainer.

Brendan joined the company in 1986 as an apprentice blower having completed his Leaving Certificate in St Paul's College. All his friends were going to third level but he did not know what to do and decided to work for a few years. He responded to an advertisement for apprentice blowers and he knew that the company provided good employment. He is 35 years of age and is married with one child.

He qualified as a blower in 1991 during a very difficult period in the company's history. He wanted to move on to a new position, as he was very vulnerable as a craftsman in a diminishing craft. He approached the manufacturing director and enquired about opportunities in information technology. The director of the time was seeking an IT support service for manufacturing which was embracing a wide range of information technology packages and solutions.

He had while at school worked part-time in a butcher's shop and helped with computerized administration for 5/6 years. He had his own Personal Computer and was always working on it. The director was interested and offered him a position as manufacturing IT Support in helping to introduce information technology into manufacturing both machine and information software packages.

Also he was completing a Certificate and Diploma in Commercial Computing in Waterford Institute of Technology. This huge interest and commitment to developing his competency in information technology is what convinced the director to take him on. He spent two years supporting Process Improvements. He was provided with a great experience on the total manufacturing process and a lot of other processes and systems company-wide.

In the mid 1990s he moved into the Information Technology Department and trained as a Programmer and Technical Analyst. He helped set up the Local Area Network. In 1998 he became an Information Technology Training Instructor and trained many shop floor people in the use of computers. Brendan was good with people and having come from the craft had an immediate affinity with them and the fears around computers and their need to conquer them.

He trained IT Champions who were located around the company in the different departments and whom the company regarded as the most appropriate people to build information technology literacy company-wide.

In December 1998 he was recruited by Tellabs in Shannon as an IT Trainer. He moved to Tellabs in Sandyford in Dublin in 2003.

There were no barriers for Brendan as most of his education was completed while single and he had all the time he needed after working hours to complete his studies. The company paid for his fees and accommodated him with time off. The learning organisation, the company offered plenty of encouragement by way of new work experiences which enabled him to apply the learning in the workplace.

The main supports were the company with fees, job transfers, help from work colleagues who had already completed the courses. There was a general air and support for learning prevailing in the company throughout the 1990s.

In hindsight he should have returned to education earlier in a part-time capacity. Brendan explains that 'I believe that there is a myth created around having to have experience before taking on new roles'. He firmly believes that if the opportunity to

take on a new role and responsibility arises it should be taken on immediately. The opportunity provides the experience and then having got it there is nothing in the way to hold back the person’.

His preferred career choice would be a Network Engineer or an Animal Trainer, which is his hobby interest.

He was motivated to return through personal ambition. He possessed a curious mind and always wanted to learn about new concepts and ideas. He was particularly interested in the computer. A major influence on him was his involvement in the Civil Defence. He has been a member of the FCA since 1986 and has risen to the rank of Sergeant. He has been a trainer in the FCA and responsible for training new recruits and now sergeants in leadership and instructional skills, weapon craft and map reading.

The difference education has made is that it has helped him realise his potential in information technology and in leadership capacities. It has given him a real sense of his capability. It has exposed him to a wider range of topics and provided him with many more options in employment. He has gained greater confidence and competence and has helped him to think critically. His next ambition is to work more with people in a voluntary capacity. He is a member of EMILY Foundation, which develops guide dogs for the blind and deaf. These are mainly German Shepherds and Labradors. He is passionate about the training of these guide dogs and the improved quality of life they provide for disabled persons.

The main issues to be addressed in helping employees return to education are providing them with champions and examples of successful students. Employees want to do better for themselves and their families and can be inspired by colleagues who have taken the lead in achieving results in education. For many seeing and knowing what others have done gives them the confidence and spark to go and do it for themselves.

The basic skills and competencies are – the ability to think analytically, information technology skills, people skills, and numerical ability and to be able to manage your education and employment paths setting clear goals and objectives.

Employability is having the skills required to do the job well and to maintain these skills in line with the changes taking place in work, high personal initiative, being multi-skilled and having the ability to learn. Brendan believes he is employable having built up a wide portfolio of skills and knowledge, being flexible and adaptable, possessing an enquiring mind and welcoming change as an exciting challenge and a new experience.

Joe Kelly

Company:	Waterford Crystal
Job Title:	Industrial Engineer/ Project Manager
Marital Status:	Married +3 children.
Age:	47
Years of Service:	31

Starting Position	Current Position
Apprentice Cutter	Industrial Engineer/ Project Manager

Most Significant Career Developments

- (1) Qualified as a Master Cutter
- (2) Completed a Diploma in Industrial Engineering.
- (3) Appointed as an Industrial Engineer.
- (4) Achieved a Bachelor in Business Studies Degree.
- (5) Managed the CODE (Creating Options for Disabled Employees) Project.
- (6) Appointed Manager of Waterford Local Economic Development Company in a part-time capacity.

He joined the company on the 17th September 1973 as an apprentice cutter. His reason for joining was to acquire a qualification and enjoy the pay and benefits on offer. Employment prospects were much better than anywhere else in the city at the time. Joe is married with three children.

He spent 19.5 years as a cutter he was appointed as a trainee industrial engineer in 1992. During his craft career he spent 18 months working in the sister cutting craft of rheintour cutting and become dual skilled. He also acted as Education Officer in the ATGWU Wedge Cutting Section from 1983 to 1986. His responsibility was to promote education among the shop stewards and to assess and facilitate stewards opting for training programmes in Ireland and England with travel, accommodation and subsistence allowances.

In the mid 1990s he became an artisan and completed seven promotional tours to the US. This was a big step forward for him. He was trained in media techniques for both print and communications media. He completed a public speaking course and joined Toastmasters to improve his presentations skills. Part of the promotional event was to engage in interviews on television and on radio.

Joe states '*I spent 11 consecutive years in college beginning in 1988 with a one-year Leaving Certificate Maths course in the VEC*'. In 1999 he signed up for the Diploma in Industrial Engineering for three years. A Certificate in Quality Science and two further years, in which he completed his Bachelor in Business Studies Degree through part time study, followed this.

In 1998-2000 he acted as Project Manager for the EU Horizon Project – Creating Options for Disabled Employees (CODE).

He helped to develop and then participated in a Diploma in Professional Studies – Managing Diversity from University College Cork the first of its kind in the country from 1998 to 1999.

In 2001 he completed a Tutor Training Course in WIT and in 2002 and became a lecturer in Employee Relations on the Industrial Engineering Diploma Course. In 2003 he was appointed as project manager of a new community development company Waterford LEDC – Local Economic Development Company that was set up by Ballybeg Community Development Project and Waterford Crystal to assist in regenerating the local community, which bounded the factory premises in Kilbarry. In 2004 he added the management of the Department of Enterprise, Trade & Employment sponsored In-company Training Measure Project in which the company was the lead promoter. This project is due to conclude in December 2005. He has also been elected on the Staff Representative Committee, which represents all management, staff members in the company (management and non-hourly paid employees). In 2004 in the local government elections he was successful in being elected as a Waterford City councillor for the first time.

His motivation for returning to education was his vulnerability in employment, as he had no formal academic qualifications when he entered as an apprentice cutter in

1973. The rationalisation in 1987 and his manager, the Head of Industrial Engineering, were instrumental in him returning to education to secure his employment. He found the Diploma in Industrial Engineering very difficult. The special study group that was set up in the company for employee/students was very helpful in dealing with many difficult concepts and maths was critical. It was three days per week with study on Saturdays and Sundays. He had to change his lifestyle and reorganise his family time.

His experience in managing project CODE gave him many new insights into government, the agencies, trans-national interaction, managing budgets, dealing with disability and the expectations of families. He developed his interpersonal skills and had to deal with many different issues and people.

The barriers were his initial lack of education and the huge effort it took to get through the first qualification, managing the time properly, matching work, study, family in a way that catered for all needs.

The supports were the company with funding, new job opportunities through promoting from within, his family and very importantly the special study group, which was a great help to him and kept him going at the most difficult periods.

In hindsight he would much have preferred to complete secondary education and a third level degree programme as a full-time student. He believes it would have been a wonderful experience to be a full time student in university.

His career choice would be to have been a solicitor / lawyer and the challenge and reward that would provide.

His return to education made a huge difference to him socially and economically. It opened many doors of opportunity for him. It would have been impossible for him to move out of the craft and into management without having gained the new education qualifications. He developed into a much more competent and confident person. He has become Chairman of the Waterford Area Partnership Board a position he could

not have held without the confidence and expertise his educational experience has given him.

He hopes to work on in the company until retirement. He has built up many different work experiences to his credit, which makes him extremely employable and flexible both within and outside the company.

The issues to be addressed in assisting employees with many responsibilities to return to education are the payment of fees, provision of assessment and direction, flexible and relevant programmes and time off or rearranged if working on shift.

The key skills and competencies required in industry today are, a good education, information technology, people skills, team-working skills, business literacy and a good attitude to working and learning.

The company could improve its competitive position by developing its employees to a higher level. Educated and adaptable staff is unique to each organisation and they play such a central role in company performance. Every job- holder is an expert and should be involved in many of the changes especially those pertaining to their positions.

Employability is having the relevant skills and competencies required by employers and he believes he is eminently employable having the experience and qualifications to perform in many different work situations.

Pat Keane

Company:	Waterford Crystal
Job Title:	Area Sales Manager
Marital Status:	Married
Age:	40
Years of Service:	24

Starting Position	Current Position
Apprentice Cutter	Area Sales Manager

Most Significant Career Developments

1. Qualified as a Master Cutter.
2. Appointed as one of the first Cutting technology Technicians.
3. Participated in the 'Expand' programme including three-months work experience in Sales & Marketing in the UK.
4. Appointed Sales Representative for Munster.

Pat joined the company in the Dungarvan Plant in July 1980 as an apprentice wedge cutter having completed his Group Certificate in Dungarvan Technical School. He was very good in school achieving 7 honours in the group Certificate. His father died when he was 6 years of age and for economic reasons he was encouraged to seek employment. Many of his friends were working in the Dungarvan Plant at the time. He is aged 40 and is married with two children.

He qualified in 1985 as a wedge cutter and subsequently graduated to become a master cutter. In 1987 at the time of the first major rationalisation he redeployed to become a technician and completed a mix of engineering training programmes. Engineers had previously carried all of the work in this area out. A new technician position was created to take over responsibility for this area of technology management and maintenance and free up the engineers to concentrate on development and improvement work.

He was one of the first batches of technicians to be appointed and trained internally. He completed his ECDL and became proficient in engineering technology. It was a major step up for him and as he came to terms with the new position his confidence soared. From 1997 to 1999 he worked in the Kilbarry Plant. In 1999 he qualified as a training instructor and returned to Dungarvan to train machine operators and technicians on the new cutting technology based processes.

In 2001 he was chosen to participate in the “Expand” employee development programme. Pat says ‘ Expand was another seminal development experience for me. A strong bond developed between the team of 16 members involved in the programme, which has carried through to date which has helped him build a network of contacts throughout the organisation’. The programme contained a three-month work experience in a new preferred area of work for participants. He opted to spend three months in the UK with the Sales & Marketing team having expressed through the assessment element of “Expand” a preference for a Sales & Marketing experience.

He was given two weeks induction and enjoyed the experience. He loves working with people and has a passion for the product and the brand. This approach proved successful and he was appointed to the Waterford Sales & Marketing team on his return from the UK. He was appointed Munster Area Sales Representative.

He completed a Supervisory Management Course and an Interior Design Course to help him on the merchandising element of his new job. He always had an interest in Art and Design.

The main barrier to progress was a debilitating lack of confidence. His move to technician, addressed this deficit and it enabled him progress to where he is today.

The main supports were his family and the company who gave encouragement, support, and provided the most enlightening and inclusive learning environment. As part of this provision he received mentoring support from a senior manager.

In hindsight he would have loved to have completed his Leaving Certificate and achieved a third level degree course. He finds this lack of a third level qualification a serious handicap as all of his colleagues have it and he will need it to progress further in the very specialised Sales & Marketing Function.

His career choice would be to become a teacher.

The motivation for returning to education and developing his skills was to become more employable. As one of the youngest craftsman he appreciated how vulnerable

his craft position was in 1987 during the first major rationalisation. He quickly opted to move on to become a technician to secure his future in the company.

The main difference the development has meant to him was in his confidence and self esteem. Every position he moved to in the company and every training course he completed help his confidence levels to grow.

The issues that need to be addressed in helping employees return to education are the funding of part time education courses, the awareness of all the options available, the provision of an entry level, foundation course to enable people ease back into education. His next objective is to complete a degree in marketing, as he needs it to move on in his chosen profession. He would hope to stay in the company but that is entirely dependent on how he progresses with his career path.

The key basic skills required for industry are having a good attitude, having a strong competence in area of work interest, a good education and openness to change and continuous learning.

For the company to become more competitive all employees need to be more aware of the customers and competitors and have the skill sets to compete in the international business arena.

Employability is about having a pool of skills that employers need at any moment in time. He believes he is employable having craft, engineering technology and sales & marketing competencies and work experiences. He has a high level of confidence in dealing with change and is confident he can adapt to it at any time.

Pat Mahon

Company: Sun Life Financial Ltd.
Job Title: Information Delivery Programme Manager
Marital Status: Married
Age: 41
Years of Service: Waterford Crystal 1979-1998

Starting Position **Current Position**
Apprentice Blower Information Delivery Programme Manager.

Most Significant Career Developments

- (1) Qualified as a Blower.
- (2) Realised the need for education to secure an employable future.
- (3) Achieved a National Certificate in Information Technology.
- (4) Appointed to participate in a 6 months project- first time to move out of Blowing.
- (5) Departed Waterford Crystal and 20 years of friendships and Job Security.
- (6) Current job role where he is responsible for 24 people across 3 continents, managing \$10M projects.

Pat joined Waterford Crystal in June 1979 as an apprentice blower. His father was employed in the company as a blower and then as a manager. He finished 5th year in Mount Sion CBS when his father helped him to secure a position in the company. He liked school but was in a hurry to join the world of work and earn money. He is 41 years of age and is married with one child.

He qualified in the heavy blowing area and worked there for 12 years. In 1991 he was offered a position on 6 months project comparing pricing structures across all markets. He was at the time engaged in completing a Certificate in Commercial Computing, which he finished in 3 years. He then progressed to complete a diploma over the next two years. Finally he completed a Bachelor in Business Studies degree, completing seven years of continuous study.

On completion of the project he was offered a position as Computer Programmer. He moved on to become Programmer Analyst with the majority of the work concentrated on programming and then on to Analyst Programmer with the main work involving the analysis of information. He was finally promoted to the position of Business Systems Analyst.

In 1998 he departed the company to join Medite in Clonmel where he spent two years as Information Technology Operations Manager. He followed this experience with a six months spell with Cantrell & Cochrane as Senior Business Analyst. He finally moved to Sun Life Financial Ltd and has been employed there for the past four years.

The barriers in returning to education were organising the time and the rigidity of the education system. Pat says ‘ the education system is currently not structured to deal with issues that would help facilitate employee students with low formal education, a long time out of the system successfully complete a third level course’. The adaptability, flexibility and empathy are not there to meet the employee student half way. Many employees are experiencing a second bad experience from the education system in their lives’. The drop out rate is very high’.

The supports included the company who funded the courses, gave him time off to attend classes, study and complete exams when needed and his family who encouraged him all the way.

In hindsight he should have continued in school and progressed to complete a 3rd level degree. His parents were very supportive and would have preferred if he had chosen to do so. His career choice would be to become a Mechanical Engineer. His motivation for returning to education was that he was regretting for a long time leaving school after 5th year. The company were strongly urging employees to return to education and prepare for the knowledge and technology based workplace. They were also being urged to take personal responsibility for their own development and were investing heavily in developing a learning organisation to support them.

The difference it has made has transformed his life. It has made it possible for him to change careers several times over the past decade. His next objective is to complete researched based masters in science programme.

The basic generic skills, characteristics required in industry today are, the ability and willingness to learn, self motivation, information technology skills, strong literacy and numeric skills, and strong people skills including communications and team-working.

For the company to become more competitive it needs to invest in developing a flexible and adaptable workforce.

Employability relates to employees having the relevant skills both social and technical at any time.

He believes he is employable and has developed a broad range of technical skills in his chosen field, is well educated, has a wide range of different work experiences and is a good communicator.

He manages a team of fifteen people in Waterford, five in US and four people in China. He travels extensively to US, Canada and China in the course of his work.

Pat O'Connor

Company:	Waterford Crystal
Job Title:	Planning Manager
Marital Status:	Married
Age:	40
Years of Service:	23

Starting Position	Current Position
Apprentice Cutter	Planning Manager

Most Significant Career Developments

1. Qualified as a Master Cutter
2. Acted as Commissioner of the Catholic Scouts of Ireland (CSI)
3. Completed Diploma in Industrial Engineering
4. Appointed Front Line Manager of a Production Department
5. Appointed Team Leader of Outsourced Planning on the SAP project
6. Promoted Planning Manager for all Waterford brands and Extended Lines

Pat joined the company in 1981 as an apprentice cutter. His uncle organised this option for him. Family circumstances and being the eldest of eight children directed him towards gainful employment. He worked in Fanning's Cash & Carry for three years having completed the Intermediate Certificate in De La Salle College. He is 40 years of age and is married with four children

Having qualified as a cutter in 1986 he graduated to Master status in 1991. Following the rationalisation in 1987, Strike in 1990 and short time working in 1991 and 1992 it became obvious to him that he needed to develop an alternative skills portfolio. He

decided to attend the local Institute of Technology and he enrolled in a Diploma in Industrial Engineering Course. During the course, in July 1993 he applied for the position of Plant Scheduler and was successful. In February 1998 he was appointed Front Line Manager of a production department – Wash, Polishing and Packing for one year. He then moved on to become a shift –based Front Line Manager in the Polishing Department. In 2002 he was seconded to the Planning Team in the Logistics Function to cover for absence and he is still there today.

In May 2003 he became Team Leader of Outsourced Planning on the SAP project. In June 2004 he became Planning Manager for all Waterford brands. These included the extended lines such as china, linen, writing instruments and all outsourced product and collateral required to support the product lines.

He has always had a deep interest in orienteering and he has become National Chairman of Irish Orienteering Association. He has also being National Commissioner of Scouts and is a former board member of Catholic Scouting Ireland (CSI). Pat says *'my involvement with the scouting movement has provided outstanding developmental opportunities for me which has helped in work'*.

The barriers to his educational development were organising time, family commitments, recreational interests and shift working. Pat says *'Trying to combine so much activity was a real difficulty for me and some hard choices had to be made in favour of furthering my studies'*. The supports were his family and the company who provided him with the opportunity to pursue courses he wanted to at any time.

He completed his ECDL and has passed two exams in the Irish Production and Inventory Control Society professional course. It is the most relevant course for logistics people and it is a programme he intends to complete.

In hindsight he would have loved to complete a third level degree course as a full time student. His career choice would be to become a lawyer or politician and serve in public life. His motivation was the uncertainty and vulnerability surrounding the future of his craft position. Engaging in part-time education provided him with a broader perspective on work and life. He has become more aware of the wider issues

and has an open mind on them. He is capable of thinking more globally and in seeing the bigger picture and he believes that it is vital for a supply chain manager to understand and appreciate the complete product cycle. His next move in personal development is to assess all the options open to him and to meanwhile become expert in his current position.

Pat says ‘ I am a firm believer that a broader curriculum is required to accommodate the many and varied needs of employees on returning to education. All the intelligences should be treated with equal importance and receive the proper attention and development supports in the education system’. There is currently too much emphasis on academic attainment. In many cases the child or adult with wonderful motor skills is treated as second class. This is a pity as so much talent and potential is lost to society. The economy, company and individual are losing out. The capability of the employee is under utilised and s/he remains unfulfilled at work.

He intends working in the company until he retires as he is making steady progress and has developed a strong portfolio of skills most of which will be very relevant to the company in the future. The skills and aptitudes most needed by employees are adaptability, openness to change, communications skills and a good qualification either technical or academic. To improve competitiveness the company should reduce its product lines and concentrate on the core product range, supporting it with appropriate advertising and back up customer service support.

Employability means being adaptable, dependable and competent, being able to use initiative and taking ownership and responsibility for work issues. He believes firmly that he is employable. This is based on his qualifications, work experiences, his willingness to change, his openness to learn and his ability to add value in many work place situations.

Alan Roynayne

Company:	Waterford Crystal
Job Title:	National Accounts Co-ordinator - Sales & Marketing
Marital Status:	Single
Age:	29
Years of Service:	11
Starting Position	Current Position
General Operative	National Accounts Co-ordinator - Sales & Marketing

Most Significant Career Developments

- (1) Participated in the "Expand" Programme.
- (2) Moved to Customer Service in Waterford.
- (3) Acted as National Accounts Manager for six months.
- (4) Appointed National Accounts Co-ordinator

Alan joined the company as a general operative in Dungarvan Plant in August 1994. He had completed his Leaving Certificate in St Augustine's Dungarvan and had gained a place on a Business Degree Course in University College Cork. He applied for a deferral opting to take up the job in the Dungarvan Plant to make some money. He also valued his freedom and was anxious to leave the college environment and experience life in the world of work. He planned to return to college after a few years. Alan is 29 years of age and single.

He worked as an administrator in the Dungarvan Distribution Centre, the store that held supplies and materials. He was appointed as a charge-hand in the stores. In 2000 he was selected for the Expand Programme, which was aimed at fast tracking employees with capability and ambition to their level of competence in the organisation. Alan says '*The Expand programme was an outstanding success. I benefited enormously from being exposed to all parts of the business. The interaction and learning within the "Expand" team of sixteen employees was excellent*'. He quickly gained in confidence and was successful in applying for a job in the Customer Service Department in Waterford. His job was to manage the key accounts in the UK and deal with the order book. He was appointed as national accounts administrator, which was a more sales, orientated job. The role included bringing in sales and ensuring that all the relevant collateral was in place to fulfil the order.

When his manager opted for maternity leave he was appointed in her place for a six-month period. He was thrown in at the deep end and had to learn quickly which tested his resolve and adaptability. He was responsible for the six largest accounts in Ireland, Brown Thomas, Aer Rianta, Blarney Woollen Mills, Kilkenny Shop, Arnotts and House of Ireland representing 40% of the total Irish Market. He had to deal with the manager and buyer in each store on merchandising, artisan events and the supply of product. While he found it very challenging it proved a great learning experience for him.

He completed a one- year Marketing Certificate in the Waterford Institute of Technology and is aiming to return to the college for the second year of the course next September. He completed his ECDL and SAP modules.

The barriers included organising the time and fitting study and class times into work and recreation. He was very involved in his local GAA Club.

The supports included the company in funding his education and in providing him with many learning opportunities in-house. He was selected for a variety of work experiences all of which helped develop his competency levels. His manager and supervisors encouraged him to keep at it. He is looking forward to returning to education next September.

In hindsight he should have gone to UCC and completed a business degree. Given a career choice he would like to become a Sales & Marketing Manager. He was motivated to return to education through getting bored with his current employment position. He wanted to move on and achieve a more challenging job and a higher remuneration package. The move to Waterford was a big step but it has made a great difference to him. He has become more confident and assertive as his range of work experiences increases. His next objective is to complete the second year of the marketing degree and continue on to achieve a professional qualification.

The issues to be addressed in facilitating employees return to education are, providing, time off for classes and exams, offering support from manager and peers in covering the workload and of course funding. He hopes to stay in the company until

he retires as he has done very well to date and is on track to improve his career. He is confident that it will provide him with many opportunities to learn and progress within the organisation.

The most important skills for employees are self-confidence, a good formal qualification, computer skills and people and communication skills. The company can become more competitive by supporting the brand through increased advertising spends. Improved sales are a critical issue at this time. Employability is having the skills necessary to be able to move from one job to another as and when required.

He believes he is employable because of his work experience, his developing competence and his attitude of wanting to move ahead in the company.

Brendan Kelleher

Company:	Waterford Crystal
Job Title:	Laboratory Technician
Marital Status:	Married
Age:	49
Years of Service:	25

Starting Position	Current Position
General Operative	Laboratory Technician

Most Significant Career Developments

- (1) Qualified as a Lab Technician in a Pharmaceutical Company.
- (2) Completed a Certificate in Engineering – Glass Technology.
- (3) Appointed as a Lab Technician in Waterford Crystal.
- (4) Qualified as an Environmental Management Auditor.

Brendan joined the company in 1980 as a general operative having been made redundant from a local pharmaceutical firm. He had worked for five years as a laboratory technician and one year as an insurance clerk. He had completed his Leaving Certificate and a 3 year NCEA Certificate Course in Applied Chemistry. Brendan is 49 years of age and is married with 3 children.

He worked in a number of jobs in the company as a general operative and then moved into the Semi-Skilled Section from 1981 to 1986. He was appointed as a Stocks Clerk

and worked in that position from 1986 to 1990. He was then appointed as a Laboratory Technician and has been working at it from 1990 to date.

Four year National Certificate in Engineering – Glass Technology in Waterford Institute Of Technology. This course was the outcome of a joint project between the company and the college to develop a national certificate in glass technology the first of its kind in the country. It was a major effort to develop the new skills necessary to transition from the old manual craft only to the new techno-craft. This can best be summed by the stated objective of marrying the best of the craft to the sensible use of technology in an effort to become competitive.

While in the company he has qualified in a number of important areas relating to his position such as, an Environmental Management Systems Auditor, Health & Safety, Measurement Test Methods in Radiological Safety, ECDL, Adult Tutoring, Problem Solving & Project Management, Team Effectiveness, SAP, Q-SYS and a wide range of laboratory based skills.

Brendan said ‘ The barriers I faced in returning to education included my age, the length of time I had been away from education and a serious lack of confidence which held me back for so long despite the best of intentions and long held interest in gaining new qualifications’ The redundancy experience was difficult as it took him some time to recover from it. He had to start all over again in general work and progress up the levels to in a new craft-based manufacturing environment to regain his original position as a Laboratory Technician. The supports included the company in providing funding and a very special learning environment in which every employee was encouraged to return to education and develop new career paths.

In hindsight he should have remained in education and completed a third level degree. His preferred career choice would be to become a teacher. He was motivated to return to education in order to progress within the company and improve his self-esteem, pay and conditions and as a plus achieve some additional fulfilment from work. The difference education has made has been a massive improvement in confidence and an improved performance in the job. His next step is to continue learning and be on the alert for new job opportunities in the company.

The issues to be addressed for employees wanting to return to education are, funding, time off for classes and study and support from his manager in transferring the new knowledge and learning into the job. He hopes to remain in the company until he retires as he has too much service to consider a move. He is very ready and able to move on within the company if the opportunity arises. The important skills required in industry today are a high level of personal confidence, communication teamwork, computer skills and a good standard of education.

The company can become more competitive by restructuring further, reducing costs and investing in the brand. Employability is about having a wide set of qualifications and experiences. He is fully convinced he is employable as he has a wide experience, good track record in work, good qualifications and is flexible and adaptable.

Brian Hayes

Company:	Waterford Crystal
Job Title:	World Sports Administrator
Marital Status:	Married
Age:	36
Years of Service:	20

Starting Position	Current Position
General Operative	World Sports Administrator

Most Significant Career Developments

1. Qualified as a Blower.
2. Selected and trained as an IT Champion.
3. Appointed to the SAP Implementation Project.
4. Promoted to Data Management Department
5. Redeployed to Strategic Intelligence Unit as Administrator
6. Redeployed to Sales & Marketing as an Administrator.
7. Promoted to World Sports Department.

Brian joined the company as a general operative on work experience in June 1985 having completed his Intermediate Certificate in De La Salle College. After a few months he was offered an apprenticeship in the Blowing Department. His father was a blower and Brian was delighted to get his chance to become a skilled craftsman and earn high wages. In 1990 he qualified as a wine blower.

In the mid 1990s he completed his ECDL and was selected to become an Information Technology Champion to train blowers and machine operatives. In 2000 he was appointed to the SAP Implementation Team for two years. He then moved on to run

the SAP Help Desk for 12 months before it was handed back to the Information Technology Department.

He was promoted to the Data Management Team for one year and then moved to the Strategic Intelligence Unit as an administrator. His computer skills were developing all the time. These new skills have provided him with many opportunities as he moved across the organisation. He was then appointed to National Accounts Administrator in Sales & Marketing supporting the manager. He worked at this for another year and in February of this year he was appointed to World Sports Department Administrator to cover for maternity leave. World Sports is a very exciting area providing access to key customers worldwide. He has to deal with many different customers embracing different cultures, continents, time zones, languages and currencies.

Brian emphasizes that ‘ the broad experience I gained since moving from my original blowing position occurred through developing my computer and administrative skills and I am so glad that I took up the training when it became available’. He is looking forward to acquiring more experience in the company and is delighted that he has been able to use his skills to good effect in the company. Improving his adaptability and flexibility will open up a greater the number of opportunities for him. He is determined to maximise his employability going forward.

The barriers have been the deep personal struggle in adapting to completely new work environments and the many changes and challenges he has faced. While it was a difficult experience he has enjoyed every minute of it. There is a vast difference in working as a craftsman in the blowing and working as an administrator across several departments. He has held his ground and has adapted quickly due to his skills in information technology. He likes working with different people and it has helped him settle down in a variety of positions in a short few years.

The supports have been the Training Team who trained and encouraged him to develop as a training instructor and to train employees in new skills. In preparing and delivering training programmes to his peers he increased his confidence, his presentation and information technology skill levels. He is convinced that working as

trainer has made a huge difference to him as he had to work hard to reach a sufficient standard to be able to return to the blowing department and help his former colleagues acquire new information technology skills. There was no better testing ground for developing communications, presentation, empathetic, feedback and leadership skills

In hindsight he regrets not completing his Leaving Certificate as he now realises what a degree qualification could provide for him in the workplace. There are so many opportunities but most of them require a good education foundation. His career choice would be to become a motor car designer and work as a researcher and developer of cars and motorbikes.

His motivation to develop a broader range of skills developed from his vulnerability as a blower at a time of great change and reduction of craft numbers. This strong sense of insecurity prompted him to change direction and develop new skills in other work disciplines. The difference it has made is that he feels better and his confidence and self-esteem has grown. He is now much more socially competent as he has to deal with people at all levels and on a variety of issues. The experience has helped him mix and deal with a wide variety of people from within and outside the company. He was engaged with external consultants on the SAP project and with the customers while in sales & marketing and with members of the different teams he has joined.

His next ambition is to return to college and to complete a course in Sales & Marketing. He identifies the following issues as enabling employee's return to education, funding, direction and support and confidence building. He remembers being very scared and worried leaving the security of the blowing department and moving into a new area in which new social and technical skills were required. Having trained as an IT Champion he had to coax and convince fellow blowers to attend ECDL classes in the Learning Centre which was strategically located in the heart of the manufacturing plant. He understood their fears and was pleased to be able to act as a tutor and mentor to so many of his fellow blowers and take much of the fear and mystery away for them. As an IT Champion he helped them make the move. They knew he was aware of their difficulties and they responded in great numbers conscious that they could express their fears and that they would be taken on board.

He tried hard to make their learning experience in information technology as rewarding as possible for them.

He would hope to stay in the company. He has been given the opportunity to move on several times in the past few years and develop a wide range of business knowledge and skills. The most important basic skills required for industry are, a good qualification, computer skills, people and communication skills and health & safety.

The company needs to invest more in advertising and in supporting the brand as it has already made huge progress on cost reduction. An increase in demand would make a big difference now that the cost base has been reduced to its current level.

Employability is about having a good attitude, adapting to change, having a wide mix of skills and being diligent and punctual. He believes he is employable as he is now multi-skilled, confident in his ability to adapt, can learn new skills quickly, has had numerous work experiences and is good with people.

Danny Merriman

Company:	Waterford Crystal Ltd.
Job Title:	Process Developer
Marital Status:	Married
Age:	51
Years of Service:	35

Starting Position	Current Position
Apprentice Cutter	Process Developer

Most Significant Career Developments

- (1) Qualified as a Rheintour Master Cutter
- (2) Marriage changed Life Style and Attitude to Work.
- (3) Moved to Process Improvement.
- (4) Appointed as Process Developer in Process Engineering.

Danny joined the company in February 1970 as an apprentice Rheintour (Flat) Cutter. He had completed his Group Certificate. He qualified in 1975 and progressed to become a master cutter in 1980. He represented his section as a union shop steward, a safety steward, a branch representative and a member of the piece rate committee. All these positions of responsibility on the union were great learning experiences. He had

to prepare well, understand the issues fully and then think on his feet once the negotiations began and in reporting back to section meetings at which he was cross examined by the members on minute details of the negotiations and subsequent proposals for agreement.

In 1993 he was appointed as a diamond wheel technician being responsible for sourcing and developing the best and most suitable cutting wheels. He had to ensure that the quality standard required was achieved and maintained. He retained full responsibility for the programme for 4 years developing new and different technologies, material specifications and work methods. In 1997 he joined the Process Improvement Team. His brief was to examine all Rheintour Cutting processes with a view to improving them. The introduction of new technologies was the key factor in making these improvements. Research and development initiatives were undertaken with European companies. These companies specialised in designing new glass cutting processes, leading edge equipment and utilising fully the potential of diamond technology.

In 2000 he was appointed Process Developer responsible for re-engineering the total Rheintour process in collaboration with German Technology Research and Development Companies 'Winter' and 'Efgan', 'Cleveland' and 'Proglass'. Significant cost savings and quality improvements were made.

He completed many in-house training programmes including Health & Safety, Industrial Engineering, Total Quality Management, Just In Time, Team Leader Programme, Train the Trainer, ECDL, Technical Engineering, Wheel Balancing, Project Management, Problem Solving and SAP. He improved his understanding and competence of glass related technologies and became expert in his area of work.

There were no barriers in developing his competence. All development opportunities that were needed by him were made available as required. The supports include the company's willingness to open up opportunities for him on a continuous basis. Danny says *'I was at all times encouraged to build up my skill base and every encouragement was provided to help me do so'*. The company and the Waterford –

Wedgwood Group responded to every request by him for training and work experiences.

In hindsight he has no regrets on his career to date. He always wanted to work with his hands. He was very happy at work with his craft and is delighted to have progressed to be in a position to shape future processes through technological innovations.

His preferred career choice would be to become a researcher in manufacturing/engineering processes. He was motivated to develop new skills through his appreciation of how the craft was changing and how technology was required to support it to establish a competitive manufacturing process. He achieved master status as a cutter, had served as a shop steward for a number of years and was well informed on future developments. He had developed a high level of business literacy through his work, learning and the regular communications sessions held within the company. He always wanted to move with the changes and if possible influence and shape them.

The difference his multi development experiences has made is to make him much more confident about his own ability to negotiate and work with a wide variety of people both inside and outside the company, His self esteem has risen and he has a much deeper appreciation of the big picture.

His next goal is to progress his engineering skills and be in a position to manage the next wave of technology to be introduced into the company. The issues to be addressed in helping employees return to education are communicating future changes and providing them with tailored programmes to meet their needs, in particular information technology programmes. He would like to work on in the company until he retires. He is currently fully involved at the edge of the technological revolution-taking place. His career is centred on glass manufacturing and Waterford Crystal.

The basic skills for employees in industry are communications, the ability to accept change and the willingness to learn along with a good basic level of education ensuring the trainability status of the employee. The company can become more

competitive if it examines all areas in which costs are high. It needs to explore all the available technological solutions and enhancements and learn from past mistakes.

Employability is being able to carry out the tasks that are required by the employer and become multi-skilled and flexible. He believes he is employable as he has a good understanding of what is required and is capable of moving with the changes that will improve the competitive position of the company. If needs be he could take up a position in another industry in process improvement.

George White

Company:	Waterford Crystal Ltd.
Job Title:	Customer Service Representative
Marital Status:	Married
Age:	41
Years of Service:	26

Starting Position	Current Position
Apprentice Blower	Customer Service Representative

Most Significant Career Developments

1. Qualified as a Master Blower
2. Recruited as an IT Champion.
3. Redeployed to Machine Operative Position.
4. Trained as Training Instructor
5. Promoted as Customer Service Representative.

George joined the company in 1979 as an apprentice blower having completed his Intermediate Certificate in Mount Sion CBS. He qualified in 1984 as a stem blower and became a master blower in 1989. He attained many skills as a traditional blower, tank furnace based blower, which mixes the traditional approach with technology. He was appointed to the post of machine operative in 1995 with the advent of technology. He was recruited as an IT Champion to train blowers and machine operatives on shift having completed his ECDL tutor / trainer programme. He also completed a City & Guilds IT Programme and became the co-ordinator for the tank furnace training instructor team. In this role he took up the position of technical training manual developer and VIP Tour Guide. In 2004 he was appointed to a position in Customer Service in charge of the Irish Desk dealing with all customer queries. He had to acquire SAP and Telephone Skills and has since move to Global Invoicing. While

attending college in a part time capacity he achieved a Certificate in Engineering – Glass Technology, the JEB Teacher in Information Technology and the Train the Trainer Programme.

George says ‘ *The barriers to education were working on shift, a lack of confidence and grappling with new subjects like Physics and Maths*’. The supports were the company funding his education, the encouragement he received from management and the use of the company’s education and training resources. In hindsight he would not have changed anything as he has done well. He is happy with his progress and the many different experiences and developments he has received.

His career choice would be to become a Teacher, as he loves the training and the interaction with employee learners. His motivation to return to education was developed by the overall economic climate and the precarious position and dilution of craft numbers within the company. Education has made him more confident, a better communicator and more assertive. His next step is to continue to improve his performance in Customer Service and to teach part time in the local Institute of Technology. He is content to remain with the company until he retires.

The basic skills required by employees are – being able to communicate properly, having a good qualification and being a good team player.

The company could become more competitive by investing in the brand and broadening its appeal in particular with the younger generation. Employability is being willing to learn, participate in problem solving, be a good team player and have a good qualification. George believes he is employable – being ultra flexible, approachable, has a good set of qualifications and is determined to succeed.

John Murphy

Company: Design & Display Ltd
Job Title: General Manager of Design & Display Ltd
Marital Status: Married
Age: 36
Years of Service: 16 with Waterford Crystal

Starting Position	Current Position
General Operative	General Manager of Design & Display Ltd

Most Significant Career Developments

- (1) Moved from General Operative to Administrative Post.
- (2) Appointed IT Champion.
- (3) Completed a National Certificate in Computer Applications and Office Management.
- (4) Promoted to Customer Service and dealt with a multitude of customers worldwide – Russia, South Africa, US and the Caribbean.
- (5) Promoted to National Accounts Manager in Customer Service.
- (6) Head hunted as General Manager of a Small Successful Business.

John joined Waterford Crystal in 1987 as general operative in Blowing Dept in Butlerstown. He is married with one child and is 36 years of age.

He completed his Intermediate Certificate in De La Salle College and served two years as an apprentice plumber. The wages were poor and work was scarce in the building industry at the time. His father was employed in the company and he helped him get a 'better' position with Waterford Crystal, the leading industry in the region.

He worked as general operative until 1995. He then went back to college in 1992 and for three consecutive years he attended computer skills classes. He completed a City & Guilds Certificate and various computer applications. In 1995 he was successful in being appointed into an administrative position as clerk in Butlerstown Lightingware Factory. From 1995 to 1998 he successfully completed a National Certificate in Computer Applications and Office Management in the local Institute of Technology. He followed this up with a one-year correspondence course a Diploma in Information Technology from the Open University. The Butlerstown Lightingware Plant closed in 1995. He was promoted to Customer Services in Kilbarry and managed the

Caribbean and other global markets. He completed one-year of a three year Business Studies Course.

He also completed ECDL and was selected as an Information Technology Champion. He then completed ECDL tester and teacher course and became the Customer Services Information technology champion teaching approximately sixty employees on ECDL. John *says* ' ***It was my willingness to get involved in training in new skills that helped me most to progress within the company and to be in a position to take up a managerial position outside of it when the opportunity arose*** '

In 2001 he was promoted as Analyst for the Customer Service Department. He was appointed a member of the team that led the change over to SAP in his department. At the end of 2001 he was given the position of National Accounts Manager. In September 2003 he was offered a job as Sales Representative for Morris Plumbing & Heating. In January 2004 he was head hunted for the position of General Manager in Design & Display Ltd. It is a small business designing and manufacturing signs for business premises and employs 17 people.

The main barriers to education while at work, were managing time, work and family. The main supports were – company funding and access to a very supportive learning environment including state of the art education and training facilities and resources.

In hindsight – he should have completed his Leaving Certificate and a third level degree course.

His career choice would be to run a business. He has a business idea he hopes to develop at some time in the future. Meanwhile he is learning the role and responsibilities of the business manager.

He was motivated to return to education on realising how vulnerable he was in the workplace. He knew that the company would be seeking more qualified employees in the future. The restructuring had de-stabilised many work areas. Many employees were returning to education hoping to carve out new careers for themselves in the new workplace.

Education made a big difference in growing his confidence and he became more outgoing and professional in his work. He was always conscious of his growing employability and of being able to move on when the right opportunity arose.

His next objective is to make a success of his current position and he hopes that in the near future he can realise his ambition of opening his own business. The main issues in facilitating employees return to education are funding – the opportunity to be a member of a study group and the need to promote the benefits country –wide through people who have already done it.

The most important skills required in industry today are communications, computer and people skills

Employability is about having the necessary skills employers need. It is critical to become multi-skilled and to be able to adapt to an ever-changing business environment.

He believes he is now employable even to the point of owning and managing his own business. He has a wide experience in working in a number of industries and the portfolio of skills he possesses has enabled him to be adaptable and flexible.

Linda Sheridan	
Company:	Waterford Crystal Ltd.
Job Title:	Manufacturing Quality & Product Engineering Administrator
Marital Status:	Married
Age:	37
Years of Service:	20
Starting Position	Current Position
General Operative	Manufacturing Quality & Product Engineering Administrator
Most Significant Career Developments	
<ul style="list-style-type: none"> (1) Trained as a Training Instructor. (2) Participated in the “Sesame” EU Project. (3) Set up a quality system for Packing Room. (4) Trained and co-ordinated a training programme for Examiners. (5) Managed 70 people in the Packing Room as Temporary Front Line Manager. (6) Promoted to Manufacturing Quality & Product Engineering Administrator. 	

Linda joined the company as a general operative in November 1985. Having completed her Intermediate Certificate she worked in a café for one year. Linda says ‘*I didn’t like school and could not wait to get into the workplace and earn some money*’. Linda is married with two children and is 37 years of age.

In 1994 she moved from the blowing room to the Packing. She was trained as an Examiner and was appointed in charge of overall quality in the area. In 1999 she was trained as a Training Instructor. She trained 20 Examiners and supervised their work maintaining their skills and competencies as new products continuously came on stream. She acted as temporary front Line Manager for packing area. She successfully applied for her current position in 2004 and is busy developing her competence there.

She completed ECDL; Train the Trainers and Front Line Management Course from the National College of Ireland. She was selected to participate in the Sesame Project, which was a Foundation Course for Access to third level under a EU Leonardo da Vinci Programme. This was a great learning experience for her and it acted as an alternative Leaving Certificate.

The main barriers to education were a major lack of confidence as she did not do well at school and disliked it intensely. Organising the time to complete her courses was also difficult. The supports were Company funding, given time off to attend classes and the group study, which was great for confidence building and was very motivational.

In hindsight as she did not have much interest in school she has few regrets. She is now highly motivated to learn. Her learning to date in the company has meant much more to her as she can apply it and gain from it. Her preferred career choice would be to become a manager, team leader in industry. She was motivated to return to education because she wanted to do better and was encouraged by many of her friends including training team members that she had the ability to do much better. She started tentatively with a little ambition and in experiencing success was highly motivated to keep moving onwards and upwards.

Her involvement in education courses has made her more confident, multi-skilled, has provided her with a different and broader outlook on life and work. She has developed within her the drive to move on in the job and feel good about herself. Her next objective is to return to study once she has got on top of her current position. She needs to develop her already good computer skills more, brush up on a number of personal skills and seek to move on again in the job. She now feels that she has more potential yet untapped.

The issues to be addressed in making education available to employees are, funding, encouragement to counter a lack of confidence and the provision of a welcoming learning environment especially for those who have departed school early.

She has no great wish to stay forever in the company and would move on when ready. She points out that it will be some time yet as she has more challenges to overcome in Waterford.

The most important skills for employees in industry are, to be able to connect with people, listen, help, communicate and give feedback. A good qualification, a

willingness to learn and a good attitude will take any employee a long way in today's work environment.

The company can improve its competitiveness by improving the handling of the product and communicating more between departments. Employability means being multi-skilled, computer literate and having a good qualification.

She believes she is employable being multi-skilled having a good attitude and being willing to change and learn on an ongoing basis.

Ollie Hearne	
Company:	Waterford Crystal Ltd.
Job Title:	Machine Operator / Tooling Operative
Marital Status:	Single
Age:	29 years
Years of Service:	9 years
Starting Position	Current Position
General Operative	Machine Operator / Tooling Operative
Most Significant Career Developments	
<ul style="list-style-type: none">(1) Obtained FETAC Level 2 Certificate in Engineering, Glass Manufacturing.(2) Completed an Engineering Degree in Manufacturing Technology.(3) Redeployed to Machine Operative Position(4) Promoted as a Tooling Operative.	

Ollie joined the company in 1997 having completed his Leaving Certificate and one year on a Production Engineering Course in Waterford Institute of Technology. He is 29 years of age and is single. He joined the company as a general operative. His father, uncle, brother and sister worked in the company and he wanted to make money and enjoy himself.

Having started out as a general operative in the Distribution Centre he moved to the Tank Furnace as a Machine Operative in 2001 and then to become a Tooling Operative in 2004.

He returned to college and completed four years part time to achieve a Degree in Manufacturing Technology. He had already completed his certificate prior to entering the workplace. On joining the workforce he waited one year to become eligible for

full funding from the company as the criteria included the completion of 12 months service.

The barriers involved the logistics of attending work and classes while on shift work. He attended classes on Tuesday, Thursday evenings and every second Saturday morning. Ollie says '*The most difficult challenge for me to overcome was to finish work at 8 am on Saturday morning, then attend classes at 9 am until 1 pm and be ready for work again at 12 mid-night*'. This sequence of work and classes occurred a number of times throughout the year.

The main supports were the company, It funded the four years in college, provided the time off for classes, exams and study, offered the use of the Learning Centre for study, facilitated study groups who supported each other with class notes and shared responsibility for problem solving. The company provided the facilities and materials to complete assignments and projects. The learning culture in the company favoured participation in education and all participants were helped out in every way possible.

In hindsight he would not have changed anything, as he wanted to get into work to make money and having done so he was able to return to college and had it funded by the company with massive back up facilities added to make the learning experience enjoyable and more productive.

His career choice would be to qualify as an engineer. He hopes to move on in the company with this qualification.

He was motivated to return to education by a desire to complete his degree. His success has made him a better-qualified person and he is now seeking the necessary experience to complete his training.

His next objective is to achieve an engineering post and he is currently moving in that direction as a tooling operative.

The main issues to be addressed in helping employees return to education are providing time off and funding. Building confidence and incentive in the value of education can be done through promoting those who have completed their education and he is hopeful that he has started out on this road and every step is beneficial and critical to his chosen career path.

He plans to stay in the company provided he can access opportunities that will enable him become an engineer. The important basic skills for employees are communication, listening, analytical skills, self-belief, teamwork, people skills and planning.

The company can improve competitiveness by reducing waste and improving employee skills.

Employability requires the development of a broad skill base to include job related specialist skills and a good education.

He considers himself employable as he has a good qualification, wide experience, and a good knowledge of process and is very adaptable.

Seamie Rochford

Company: Waterford Crystal Ltd.
Job Title: Social & Sports & Office Services
Manager
Marital Status: Married
Age: 45
Years of Service: 19

Starting Position	Current Position
General Operative	Social & Sports Centre & Office Services Manager.

Most Significant Career Developments

- (1) Moved from a small company to Join Waterford Crystal.
- (2) Promoted from General Operative to Office Administration
- (3) Completed Certificates in Supervisory Management, Health & Safety and ECDL.
- (4) Appointed Office Services Manager.
- (5) Achieved a High Performance in the Job.
- (6) Appointed manager of the Company's Social & Sports Centre / Office Services Mgr

Seamie joined the company in June 1986 as a general operative having worked with both a construction company and light engineering company for ten years as a Stores and Purchasing Clerk. Prior to this he had completed his Junior Certificate in Slieverue Vocational School. He is 45 years of age and is married with 3 children.

He worked as a general operative from 1986 to 1989. He was appointed to Office Services as an Administrator. In 2000 he was appointed Office Services Manager. In 2005 he was given additional responsibilities and appointed as manager of the company's sports and leisure complex.

In the early 1990s he completed a two year National Education Supervisory Board Programme, a UK accredited programme for Supervisors. He completed a Certificate in Health & Safety from University College Dublin and the ECDL.

The barriers to education for employees include on his part a fear of the unknown, a deep lack of confidence in his own potential and ability. He had been a long time away from education and never considered himself academically smart. He was excellent with technical equipment and had very good organisational skills.

The supports included company funding but more important for him was the support of management and the training team who believed in him and encouraged him to go for it. Involvement in-group study was critical for him. He believes that team members working together pulled each other through the courses. He also received mentoring assistance from a manager, which was great.

In hindsight he wished that he had been encouraged to return to school and that the real value of education had been explained more fully to him. His career choice would be to own and manage a small business. His motivation to return to education came from the insistence of a senior manager who spotted his potential and continually and doggedly encouraged him to return to education and gain some appropriate qualifications. It has made a major difference to him. He has a better understanding of issues, is more confident and business literate.

His next objective is to develop within the company and broaden his skill and knowledge base. The issues to be addressed in facilitating employee's return to education are accommodating family needs while studying and attending classes. The provision of funding and access to professional advice and support is essential.

He hopes to remain in the company until he retires all going well. Seamie says 'The most important skills for employees are computer literacy, a good qualification, good people skills which are now more important than ever in the technology / knowledge age'.

The company can become more competitive if it invests in educating its employees and develops an appreciation of systems and the effects of their actions and decisions on systems.

Employability involves being highly qualified, flexible and interchangeable and being willing to adapt to situations and people.

He admits to being semi-employable as he believes he has a limited set of skills and qualifications that are growing rapidly by the week now that he has been trusted with such a wide set of responsibilities.

He also concedes that he has a wealth of experience in many areas of administration in industry and services and is very committed with a strong work ethic.

Sean Sweeney	
Company:	Waterford Crystal Ltd.
Job Title:	Sourcing Manager for Marquis, China and Waterford Products
Marital Status:	Single
Age:	40
Years of Service:	25
Starting Position	Current Position
Apprentice Blower	Sourcing Manager for Marquis, China and Waterford Products
Most Significant Career Developments	
<ul style="list-style-type: none">(1) Qualified as a Master Blower.(2) Appointed as a Blowing Advisor.(3) Completed a Degree in Marketing.(4) Redeployed to Customer Service and filled a number of positions.(5) Appointed Direct Markets Accounts Manager(6) Promoted Sourcing Manager in Logistics in 2004.	

Sean joined the company in August 1980 as an apprentice blower having completed fifth year secondary education in Mount Sion CBS. He lived beside the company and viewed it as a good job with excellent conditions. Sean is 40 years old and single.

He qualified in 1985 and was promoted as advisor to Stemming Section and also as a Deputy Supervisor as a cover in the event of absence.

In 1995 he joined Customer Service having applied for a number of staff positions across the company. He quickly made his mark in Customer Service and graduated to managing Wedgwood UK, Australia and Singapore. He moved on to Customer Service Co-ordinator for the retail business and then to Direct Markets Accounts Manager, which serviced all the big retail conglomerates outside of the US such as

Ireland, UK, Europe, West Indies and the Gallery in Visitor Centre. He took up his current position in November 2004.

In 1996 he completed a Marketing Institute of Ireland four years Graduate-ship Programme. He completed ECDL and progressed to become an IT Champion servicing his own work area. He is currently involved in completing an APICS course (American Production & Inventory Control Society), which is a key qualification in progressing through the Logistics Function over the next few years.

Sean says that 'The barriers I faced in returning to education included a difficulty in returning to the classroom after such a long absence, a lack of confidence having failed to complete the Leaving Certificate and the huge commitment required to complete a four-year programme in the Waterford Institute of Technology'.

The supports included the company funding his education and providing time off for study and exams. Also the company's training team were in the process of developing an inclusive learning organisation in which every employee was made feel part of a company-wide involvement in education and training. There was a brilliant attitude to learning and education in the company and every manager and fellow worker was helpful and supportive.

In hindsight he says he should have completed his Leaving Certificate and a Third Level Degree. In the 1980s there was little direction available on educational direction and employment prospects as high unemployment prevailed. His career choice would be to become a Logistics Manager as he has a great interest in the work and the variety of challenges involved.

He was motivated to return to education because he was convinced he could do better. His job was under threat through the new competitiveness strategy adopted by the company.

Returning to education has made a big difference to him. It has helped his confidence, broadened his horizons in and out of work, developed a more disciplined approach to problem solving and has helped him become more focused in his thinking. He improved his work ethic as studying, working and trying to involve him in sporting

interests provided him with a pressured situation to which he responded successfully. He found he could do much more when challenged.

His next objective is to settle in his current position and perform well. The most important issues to be addressed for employees returning to education are building up their confidence, motivating them and demonstrating with examples what is possible for them to achieve.

He has made great progress, likes working in logistics and is aiming to stay in the company until he retires all going well. The basic skills required from employees in industry are, common sense, a good attitude, get on well with people and a good basic education.

The company could improve its competitive position by re-investing in the brand through advertising and brand awareness strategies. A lot of cost cutting has already been done.

Employability is about being flexible, multi-skilled and having a good attitude to change and learning.

He believes he is employable, has a good work ethic, wide experience, and very good information technology skills and is highly qualified.

Eugene O'Shea

Company:	Waterford Crystal Ltd.
Job Title:	Designer
Marital Status:	Married
Age:	46
Years of Service:	31

Starting Position	Current Position
Apprentice Cutter	Designer

Most Significant Career Developments

- (1) Qualified as a Cutter/ Stopperer.
- (2) Appointed to position of Sculptor.
- (3) Appointed to the position of Designer.
- (4) Completed an Engineering/ Technical Drawing Course.
- (5) Completed European Computer Driving Licence – ECDL.
- (6) Progressed into New Product as Commercial Designer for Manufacturing.

Eugene joined the company in January 1974 as an apprentice cutter/stopperer having completed his Group Certificate in the local Technical School in Waterford. He is married with three children and is aged 46. He was always interested in craftwork and two members of his family were already employed in the company in the craft sections. It was a natural progression for him to seek and gain employment in the company, which was the leading employer in the city at that time.

He qualified in 1979 and was promoted to the position of Sculptor in 1989 at which he produced some outstanding concepts in glass. He was appointed a designer in 1994 designing one off pieces for sculpting. He is now the new product –commercial designer in manufacturing. The commercial prepares the brief, produces the sample for costing and consultation with market before producing a batch of them. The designer / sculptor produces the concepts and makes it himself and in small numbers – singles or doubles in the main.

He completed his ECDL, Art Life Drawing for three years in the Central Technical Institute and City & Guilds in Technical Engineering in the Waterford Institute of Technology for two years. He completed many internal programmes on Team

Development, ISO Auditing, Change Management, Problem Solving, Creativity and Innovation, Art Appreciation and a variety of information technology courses.

The main barriers were accommodating study, attendance at classes, work and family responsibilities. Eugene says ' I enjoyed the struggle and the learning as it was in the main applied learning and everything I learned advanced my career and competency levels'. The main supports were the company in funding and encouraging participation, his family and the positive experience around learning created in the company. In the 1990s it was cool to be in college and everyone committed to the successful transformation of the company's operations were attending some training or education programme either within or outside the company.

In hindsight he should have completed his Leaving Certificate and a Third Level Degree Course. The opportunity was not there for him to take up at the time, in particular the Third Level Degree.

His preferred career choice would be to qualify as Carpenter/ Wood Joiner and become a Sub Contractor. He is very skilled at woodwork and would love to own a small business.

Education has made a big difference in growing his self-confidence and having overcome his fears and achieved his first certificate he experienced a great feeling of self worth, which made all succeeding courses much easier to complete.

His next development objective is to improve as a designer, which is a very challenging position. The future success of the company is dependent on winning greater market share by introducing new concepts and products on to the market. He is operating at the heart of this process and loves the creative challenge and is highly motivated when a product is received well in the market place.

The issues to be addressed in motivating employees to engage in education are, providing plenty of encouragement by outlining the benefits and the success stories, making the content of courses employee friendly using practical examples to explain academic principles, provide clear education progression routes for all employee categories and winning the full support of the employer, which can make all the difference.

He hopes to remain in the company until retirement. He has a long service record and his specialist skills are specific to Waterford.

The most important basic skills required by industry are: communications, teamwork, a good attitude, a willingness to adapt to change and learn, a good basic education and a desire to continually improve.

The company can be more competitive by restructuring, matching capacity to demand and investing more in the brand. Employability means being able to perform a function required by an employer at any time, having a good education and being able to progress beyond immediate position.

He believes he is employable as he is highly qualified, can produce added value products and has a wide experience and range of skills albeit in a specialist area.

Stephanie Byrne

Company:	Waterford Crystal Ltd.
Job Title:	Customer Services Direct Markets Manager
Marital Status:	Single
Age:	31
Years of Service:	11
Starting Position	Current Position
Packing Operative	Customer Services Direct Markets Manager

Most Significant Career Developments

1. Participate in the EU Employment "NOW" Programme.
2. Won the student of the year award on the Accelerated Technician Programme
3. Won first place for women students on the Diploma in Manufacturing Technology.
4. Appointed to position as Industrial Engineer
5. Appointed to Customer Services as Direct Markets Manager.

Stephanie joined the company in 1994 as a Packing Operative in the Dungarvan Plant having being made redundant by Kromberg & Schubert. Her father was Manager of Quality Control in Dungarvan. She is 31 years of age, is single and completed her Leaving Certificate before entering the workplace in 1991.

She moved to different areas in the plant, working on shift work in the Polishing Department throughout 1995. She then returned to work in the Packing Department from 1996 to 1999. She was selected to participate in a EU Leonardo da Vinci Programme “WICCA” which sponsored six women on the Accelerated Technician Programme. Four of the women were company employees and two were recruited from the community. Stephanie says ‘ *at the time, the EU WICCA Project was a major innovation. I was so glad to be selected to participate. The learning and the results I achieved gave me a tremendous lift and set me off on a new career path which has been a great experience for me*’.

It was not thought possible or preferable that women would take up positions in engineering. Stephanie was extremely successful and achieved first place in the country for females participating in the Certificate Programme.

In 2001 she joined the Diploma Programme on a full time basis and the company facilitated her with work at weekends to enable her cover her subsistence expenses. She also came first in Ireland on the Diploma Course. In September 2001 she joined the degree course but over Christmas she was taken ill and had to take leave of absence from the course and from work until June 2002 when she returned to work in the Packing Department. She was assigned to a project on polishing capacity in Dungarvan and then moved into Customer Services in Waterford in June 2003. In 2004 she was appointed into Industrial Engineering. In December 2004 she was appointed into her current role as Customer Services Manager.

She completed her JEB Teachers Diploma and lectured in the college for one year. She was also involved in the Crystal NOW Programmes, which she says, was an excellent break for her. It highlighted the position of women and their lack of role models in the company. The aim of the NOW Programme was to remove barriers and establish new opportunities for women starting with the participant group.

The barriers were mainly psychological. The “WICCA” Project funded full-time participation in the Accelerated Technician Programme. The company participants found their involvement very pressured believing that they were operating in the full glare of the company’s management team. They also found that adjusting to full time

education from the workplace was a difficult transition. She had not studied Maths and Science in the Leaving Certificate and found them difficult on joining the Engineering Course.

The supports were the company in funding all her education, involvement in the EU Leonardo da Vinci Project and the Employment NOW Project, being involved in a closely-knit support study group and being helped by all the managers, maintenance staff and training team.

In hindsight she would not change anything as she admits to having little interest when in school and she achieved a very average Leaving Certificate. She did not know what she wanted to do and her career evolved rather than planned.

Her motivation to return to education was driven by a fear of redundancy having been made redundant in her first post in Kromberg & Schubert. This feeling of vulnerability returned to her in Waterford during the restructuring and she was determined to develop an employable portfolio.

Education has made a difference in growing her self-belief. It has developed her capacity to take charge of her career. She looks at things differently now and can appreciate and understand much more. She is now much better at problem solving. Her next work objective is to make a success of her current role.

The issues relating to employees returning to education are funding, the provision of direction on best career path to follow and the provision of encouragement at all stages along the way. The availability of assessments and the widespread promotion of the benefits of education to employees are essential.

She is aiming to stay in the company as she is doing well and is looking forward to a long and fruitful career.

The basic skills and characteristics required by employees are self-belief, a good qualification and communications. The company can become more competitive by involving and tapping into the skills and competencies of the workforce. To be employable an employee needs to be motivated, qualified, multi-skilled and be a good learner.

She believes she is now very employable as she has a wide range of work experiences, a good set of qualifications, is very adaptable and flexible and is determined to continue to build her portfolio of skills that has the capacity to support in employment in the company or outside depending on what the future holds for her.

Pierce Kennedy	
Company:	Waterford Crystal's Sports & Leisure Centre
Job Title:	Gym Instructor
Marital Status:	Single
Age:	22
Years of Service:	2
Starting Position	Current Position
Gym Instructor	Gym Instructor
Most Significant Career Developments	
<ul style="list-style-type: none"> (1) Completed NCEF Certificate Level 1&2 (2) Completed ECDL (3) Secured a position as Gym Instructor (4) Achieved success in Training Teams and Athletes. (5) Gained a wide range of Paid and Voluntary Work Experiences. 	

Pierce is currently working as a gym instructor in the Waterford Crystal Social & Sports Club. He is 22 years of age. He completed the Leaving Certificate Applied in St Paul's College in 1999 with 89 credits from total of 100. He had no plans for a career. He had been advised to take the Applied Exam as he was rated as unsuited to the academic Leaving Certificate. Prior to joining Waterford Crystal he was employed by a company in the Industrial Estate as a general operative. He worked on shift and was getting bored and dissatisfied with his position.

Being heavily involved and interested in sport he decided to examine his options in the fitness and leisure industry. He was involved in soccer, golf, hurling and football, pitch & putt and the martial arts since a very young age. He won numerous awards in all the sports in which he has competed.

Pierce says ' the qualifications I have gained to date in the fitness industry has cost me €5000 which I had to borrow from the Credit Union and which I am now currently repaying'. This is a very difficult issue for him to overcome, as his wages are low and the cost of the courses including travel, equipment and clothing are expensive. He hopes to improve his earning power with additional part time assignments in the fitness area. He has a keen interest in the fitness area. He has completed many programmes over the past few years but feels that the lack of the academic Leaving Certificate will hold him back in his career. He was always in the top three of his class of 25 students in the Leaving Certificate Applied. He won the top student of the class in his final year in college.

When in college he was assessed and recommended as unsuitable to complete the mainstream Leaving Certificate an outcome he bitterly regrets. He admits to messing around in his early years in secondary college and it worked against him. He was labelled a special needs student. He applied to do the Recreational Management Degree Course in the Institute of Technology and his application was rejected.

He has represented Waterford in the Schools Championship in Pitch & Putt. He has won Waterford, Munster, and Waterford Crystal Open Championships in the Singles Competitions.

In hindsight he should have completed his Leaving Certificate. At the time he did not see himself entering a third level college. He was advised to take the Applied Leaving Certificate option, which is now of little use to him in accessing third level education an objective he would like to accomplish.

His career choice is to become a Coach/Tutor /Personal Trainer in the Fitness Industry.

He was motivated to return to education by his Kick Boxing Coach who believed in him and who continually praised and complimented him. Many people whom he helped and trained advised him to return to college and develop his skills. He had a natural competence in the fitness area as he loved everything about it and worked hard at it.

Education has made a huge difference to him. He is more confident, assertive and his self – esteem continues to grow on completion of each successful programme. The feedback from participants is first-class and it inspires him to work hard in gaining qualifications and in preparing and delivering the programmes.

His next ambition is to progress within the industry. He admits that it is difficult to do so without really worthwhile qualifications. The wages are low and the hours are long in the lower end jobs

He has secured qualifications in:

- ECDL, all modules completed
- Coaches and Physical Trainer Course in Waterford Institute of Technology.
- Personal Trainers Course – AAAI & ISMA
- ACE Personal Trainer Course,
- FAI Coaching Course Foundation and Level 1 and Level 2.
- National Certificate in Exercise & Fitness
- Diploma in Hypnotherapy & Psychotherapy
- National Council for Education and Fitness Level 1& 2.
- SAQ – Speed, Agility and Quickness
- Occupational First Aid
- Basketball & Hurling Coaching Course
- ACE Personal Training Course – Distinction
- NCEF Level2 Advanced Resistance Training Specialist Course.
- Sports and Recreation Vocational Skills Certificate FETAC.

He is currently in a voluntary capacity physical trainer to the Waterford Athletics Club, FAI Soccer Coach for their Summer Camps and Trainee Instructor for the Waterford Martial Arts & Street Awareness Centre.

Employability is about being a good learner, hard worker, flexible, a team player, trustworthy and multi – skilled.

He believes he is employable in the fitness industry, which is growing with Fitness Clubs, Hotels, Sports Clubs, and City and County Council recreational facilities being developed in every town and city in the country. He believes he is extremely capable, is multi- skilled, is assertive and positive.

Jackie Quinn

Company:	Waterford Crystal
Job Title:	Purchasing Officer
Marital Status:	Married
Age:	44
Years of Service:	22

Starting Position	Current Position
Quality Control Operative	Purchasing Officer

Most Significant Career Developments

- (1) Moved from shop floor operative into Manufacturing Quality.
- (2) Participated in the EU Employment "NOW" Programme
- (3) Completed ECDL.
- (4) Completed a Certificate in Tourism & Customer Care
- (5) Completing her APICS (American Purchasing & Inventory Control Society) Modules and Exams.
- (6) Appointed Purchasing Officer.

Jackie joined the company in 1982 as a Quality Control General Operative examining blank pieces. On completing her Leaving Certificate in the Mercy Convent in 1977 she worked in a hotel for six months in Waterford. She then moved to London and worked in various hotels, pubs and shops until 1982. She is 45 years of age and is married with two children.

She was assigned to shift working and didn't like it. She was involved in the delivery of product through the factory. She applied for a position in Manufacturing Quality and was successful. She worked in this department for one year on shift work and helped manage the repatriation of product from Stuart Crystal Ltd following its closure. In 2003 she was successful in applying for a temporary position in Purchasing for six months. She has been appointed a full-time buyer.

Jackie says that *'in 1997 I participated in the 'NOW' (New Opportunities for Women) Project which was a great experience for me'*. She was introduced for the first time to the broad sweep of the manufacturing processes and other function activities and responsibilities. She completed ECDL. In 1998 she completed a Certificate in Tourism and Customer Care in the Waterford Institute of Technology. In 2002 she completed the five modules of APICS (American of Purchasing and Inventory Control Society)

The barriers faced in completing her education programmes while working and rearing a family were juggling several competing responsibilities at the same time, the pressure of coping with new concepts in a class room environment having been away from formal education for some time.

The supports included the company who funded, facilitated and encouraged participation in part-time education.

In hindsight she has no regrets on her education record. She believes that people develop at different stages in their lives as the need arises and as opportunities arise. She was not content in secondary school and could not wait to leave for the world of work.

Her career choice would be to become a competent Purchasing Manager. She is very happy in her current role in Purchasing. At some future time she would like to try out other work disciplines.

She was motivated to return to education out of interest in progressing within the company and exploring the other job options available in the workplace. She enjoyed working across the company and learning about the overall business.

She is not sure about wanting to stay on in the company until she retires as it depends on her evolving life situation.

The issues to be addressed in encouraging employees to return to education are – funding as it extremely expensive for any employee with family commitments to cover the growing expense of part-time education. There is also a need to provide

direction and support for the employees in their preferred career paths. Most of them know what they want but have no idea how to do it.

The most important basic skills needed for industry today are – organisational skills, time management, ability to get on with people and a good basic education, which prepares people for all eventualities.

The company could become more competitive by developing a more open and inclusive organisation in which all functions work more closely together in solving the problems and in learning from the solutions. There is a need to promote organisational learning and formalise and record the huge level of tacit knowledge available to the company. Departments are currently too defensive and much potential learning from each other is stifled and lost.

Employability is being able to do whatever work has to be done to a high standard and taking full responsibility for the result. It is about having a wide range of skills and competencies.

She is sure she is employable having gained several valuable work experiences and qualifications and is willing to adapt and change as required.

Vivienne Evans

Company: Waterford Crystal Ltd.
Job Title: Accounts Clerk
Marital Status: Married
Age: 40
Years of Service: 8

Starting Position	Current Position
General Operative	Accounts Clerk

Most Significant Career Developments

1. Completed ECDL.
2. Joined Training Team and gained experience of dealing with people across the company.
3. Qualified as a Trainer and trained employees in basic computer skills.
4. Completed a Financial Accounting Course
5. Appointed to position of Accounts Clerk

Vivienne joined the company in 1997 as a general operative in the finishing department in Butlerstown Lightingware. She is married with two children and is 40 years of age. She completed her Leaving Certificate in 1982 in the Presentation Convent and subsequently a Secretarial Course in the Central Technical Institute.

On entering the workforce she worked part-time at Dunnes Stores and Quinnsnorth and in a full time capacity at Kromberg & Schubert for 11 years. She acquired a multi-skilled portfolio and became very adaptable and flexible. She was made redundant and in 1997 and within a few months had been re-employed in Waterford Crystal. She worked in Butlerstown Lightingware Plant for 2 years until it was closed after which she transferred to the main manufacturing plant in Kilbarry. She was assigned to shift-work in the post polishing area. During her time off she completed ECDL a qualification that brought her secretarial skills up to date.

In seeking a day job she applied for a number of administrative positions and successful in on being appointed to the Training & Communications Department in 2002. Vivienne says '*I always had an interest in accounting and decided to complete a certificate in financial accounting in the local Institute of Technology*'. She was also trained as a trainer and was provided with the opportunity to train employees in computer basics. The challenge in training others in information

technology was a great learning and developmental experience and helped to build up her confidence levels. She completed an Assertiveness Course to help her perform better as a trainer and take on new responsibilities which in the main involved dealing with people and managing their expectations. The company over the past two years introduced a new Core Time & Attendance System. She was selected to represent the Training Team on the Project Team in a part-time capacity. She became expert on Excel, People-Soft HR, SAP, Core and other IT software packages.

In April training involved co-ordinating and managing company education and training schemes and she had to deal with a wide variety of issues, departments and levels of management and union along with a many external institutions and suppliers.

The main barrier in returning to her education was a distinct lack of confidence. The main supports were encouragement from the training team, manufacturing managers and funding. Completing ECDL helped bring her secretarial skills up to date and recover her confidence sufficiently to successfully operate in the training co-ordinator role a position that exposed her to every function in the company and many different situations in which she had to use her own initiative and common sense.

In hindsight she would have liked to complete a third level degree. Her preferred career choice is accountancy. She was motivated to return to education to move away from shift-work and achieve a day- time position, which would make her family responsibilities more manageable. Her next objective is to settle in as an accounts clerk in Finance and make a success of it. She will then review her qualifications and is likely to return to college in the future.

The key issues facing employees in returning to college are – awareness of the opportunities and the difference qualifications can make to a career. There is a great need to encourage employees in particular at the early stages on returning to education (first course back after a long absence). The funding of part-time education is essential as it is so expensive and is rising every year. It is very difficult for a general operative, low skilled worker, on shift-work and on a relatively low income to organise a return to part- time education. Only the very dedicated who can get

employer support will do it. Many shift- based employees have failed because the difficulties were too great to overcome.

She has developed an appreciation of the many obstacles faced by this category of female employee.

She is aware of the many barriers facing them and the distance they have to travel to better their position in the workplace. She was one of the few who made the breakthrough and has maintained contact with her previous working friends many of whom also wanted to move on but did not get the same chance. She enjoyed helping employees return to education and where possible re-organised the supports making it more possible for them to achieve their objectives.

She hopes to stay with the company for the remainder of her career. She has been given a number of opportunities to advance her career and can make further progress in the future. The most important skills for employees in industry today are Computer Skills, A Good Education, Maths, and People Skills.

The Company could become more competitive if they managed overheads better and improved employee skills and competencies. Vivienne defines employability as being multi-skilled, adaptable, open to change and always ready and willing to learn. She rates herself employable having acquired a wide range of skills, proven her adaptability, is very flexible and enjoys change and the challenge it bring with it.

Willie Meaney

Company: Meadow Court Homes
Job Title: Block-layer
Marital Status: Married
Age: 36
Years of Service: 16 years with Waterford Crystal

Starting Position	Current Position
Apprentice Wedge Cutter	Block-layer

Most Significant Career Developments

- (1) Qualified as a Wedge Cutter.
- (2) Joined Construction Company as an Apprentice Block-layer.
- (3) Completed Theoretical Phases of Apprenticeship in Waterford Institute of Technology.
- (4) Entered third year having passed all exams and managed family financial restructuring.

Willie joined the company in April 1986 as an apprentice wedge cutter. He is 36 years of age and is married with two children. He completed two years in secondary school and was involved in a pre employment course in the Central Technical Institute prior to joining the company as an apprentice wedge cutter. He was always interested in working with his hands and head. He liked the challenge of working in the company as a craftsman. His uncle was employed as a master cutter and he facilitated his employment there.

He qualified as a cutter in 1990. He completed an Introduction to Computers Course and a range of statutory courses in Health & Safety and the Environment. In the 1990s the numbers of craftsmen were being reduced on an annual basis. He felt increasingly vulnerable, being one of the craftsmen with least service and most likely to lose his job in any redeployment or redundancy situation if a sufficient number of volunteers were not applying to move out of the craft.

Willie says ‘ in 2002, I approached the Training Department with a request to support me in applying to FAS for an adult apprenticeship. He was well received by the training department and FAS. Between them they were able to make satisfactory arrangements which protected his family financially and enabled him to work as an apprentice again’. Part of the solution was to take the voluntary redundancy package

on offer. He had identified a local construction company who were willing to sponsor his apprenticeship.

In contemplating this major change in career he had to consider the financial implications for his family. He used the redundancy money to reduce his mortgage and to make up the shortfall in wages for the first two years of his new apprenticeship.

From third year on his wages were able to provide his family with a very good standard of living. He was able complement his day-job with additional contract jobs after official working hours especially in the Summer months. The construction industry was experiencing a boom and there were many opportunities available to supplement his income. He came through the transition through the cooperation of FAS and his employer. He was able to get through the most difficult part, returning to college for the theory and living on a low income supplemented with redundancy money and additional work at weekends and in the evening time. In 2006 he qualified as a blocklayer.

FAS were very helpful ensuring that the education phase in the Institute of Technology was organised for Winter thus allowing him to make best use of the prime building weather in Spring, Summer and Autumn.

The main barriers were grappling with the financial and educational implications in leaving relatively secure employment in a strong company. He had some difficulty in re-organising the family budget and his family were very supportive at the time. The theoretical phase of the apprenticeship was a barrier as he had left school at a young age without completing his Junior Certificate and he wondered would he be able to cope.

The supports were his family; the company's training department, FAS and the voluntary redundancy package, which helped him, cope financially. FAS were very helpful in arranging the most practical and accommodating apprenticeship work timetable.

He found the theory difficult enough at first but has settled in and his most recent theory phase was extremely interesting. It included building theory, health & safety rules and regulations, technical drawing and building miniature walls, fireplaces, chimneys and other technically challenging constructions.

In hindsight even if he had the opportunity he would not have completed his Leaving Certificate. He always wanted to qualify as craftsman. He was content being employed as a wedge cutter although his first preference would be block-laying. He should have completed his Junior Certificate as it would have given him a better grounding on subjects like maths and technical drawing which he now needs to assist him qualify as a block-layer.

His preferred career choice was to qualify as a block-layer and he is delighted that he has achieved it and made the change. He was motivated to move on and out of the company when his cutting craft position came under threat from the need for the company to introduce technology and become more competitive. He did not want to re-deploy to another position within the company. His move to his new apprenticeship role has made a big difference to him. He is much more content and settled now and is working at his preferred trade. Having qualified as a block-layer he believes he is much better off financially and better off in terms of job satisfaction. He can look forward to a more secure and rewarding future in the workplace. He may decide in the future to set up his own sub-contracting business.

Willie notes that mature employees opting for adult apprenticeships need advice on how best to handle the significant drop in pay. ***‘I needed advice on how best to cover the mortgage and adjust to a new lifestyle for the first few critical years in the new apprentice position’.***

The fundamental skills and qualifications required by employees are – a good education foundation, pass Leaving Certificate if wishing to pursue a trade, career advice and assessment at an early age and to have an interest in the career chosen.

Employability is having the skills and competencies required by employers at any time. He believes he is eminently employable – having gained a number of work

experiences, proved his adaptability, is about to qualify in a second craft and is very willing to change and learn.

Michael Vereker	
Company:	Waterford Crystal Ltd.
Job Title:	Industrial Engineer
Marital Status:	Married
Age:	49
Years of Service:	33
Starting Position	Current Position
Apprentice Cutter	Industrial Engineer
Most Significant Career Developments	
1. Qualified as a Master Cutter	
2. Completed a Diploma in Industrial Engineering.	
3. Represented the Company as an Artisan in the US	
4. Re-deployed as a Trainee Industrial Engineer.	
5. Qualified as an Industrial Engineer	

Michael joined the company in April 1972 as an apprentice cutter. He was a member of a large family and at 15 years of age was required to join the workforce. He had completed his Intermediate Certificate in Waterpark College. Michael is 49 years of age and is married with two children.

He qualified as a cutter in 1997 and as a master cutter in 1982. In early 1990s he completed a City & Guilds course in Gardening. His father excelled as farmer and horticulturalist and passed on this passion for plants and trees to Michael.

Michael says ‘ I was a left-handed writer and found it very difficult in primary school. My teacher insisted I should write with my right hand, a task I could never master. I lost confidence in my ability to progress in school through this experience’.

Michael always believed deep down that he could do better for himself. He was an extremely skilled as a glasscutter. This positive experience helped him to review his capabilities elsewhere and try to move on to another career. His position as a craftsman was coming under increasing pressure due to technology and the company’s need to become more competitive. In 1997 he decided to return to college and complete a diploma in industrial engineering over three years. He was aware of

how a number of his fellow workers were performing in college. Although unsure of his capacity to successfully complete the course he decided to do it. He found it to be a most enlightening experience. He passed his exams. Michael says *'the support I received from the company and my participation in a study group formed with a number of employees were for me the most meaningful supports and the critical enabling factors'*.

In 2004 he was appointed as a trainee industrial engineer. He is currently transferring the learning from college and is making great progress in his new position. He is keenly interested in the engineering concepts and applications. He qualified as an industrial engineer in 2006.

The barriers included caring for his mentally handicapped son who lived at home for most of the time. He had developed a lack of confidence as a result of his primary school experience. Employed as a craftsman in a well-paid job blinded him for a long time from considering developing a wider set of skills. Organising the time to combine family responsibilities with work and study was a difficult task which had to be overcome.

The supports included the company's funding of his education, the study group, and in particular the mentoring and encouragement he received from so many people in the learning organisation that had been created. It was so fulfilling being back in college with so many others learning and gaining new qualifications for future use.

In hindsight his left – handed writing experience left an indelible mark on his confidence level and held him back for a long time from considering any kind of academic based learning. He should have returned to night school much earlier. He was the oldest member of the class in the college. A combination of well paid employment and personal unawareness of his potential to master a third level academic based course blocked him from realising the alternative career opportunities available to him.

His career choice would be to set up his own Horticulture / Forestry Business. He was motivated to return to education to develop an alternative career due to the changes taking place in the company involving the reduction in craft numbers. His

educational experience broadened his mind on how the business is run. It developed within him a higher level of confidence in his own ability to master change and an alternative career path. He was better able to express his opinions and found that his opinions were valid and respected.

His next objective is to qualify as an industrial engineer and make a real success of it. The most important issues in helping employees return to education are: provide encouragement and support to them on an individual basis. Having captured the interest of the employee it is essential that funding be provided. The benefits of gaining new qualifications should be promoted countrywide. Employers should be encouraged to provide in-company training for employees and develop a learning environment for them. Most employees want to do the best they can at work and if given the opportunity and support they will realise their own potential. Completing ECDL was for many employees a huge step forward and their first step back to training. It became the catalyst for many to return to education.

He hopes to retire from the company, as he is excited about the potential of his new qualification and position and has a lot to do to become an expert in it. The basic skills in industry today are adaptability, a good education, and a willingness to change and learn.

The company could become more competitive if they invested more in education and training and promoted the product range through new advertising strategies.

Employability is about having life skills a good education and a willingness and ability to change and adapt as required. He believes he is employable as he has a wide experience in a number of positions, has proven to himself his capacity to study and achieve good results and he has many interests and is willing to change and adapt to new situations.

The key factor for him was that he got the support he needed in the company when he was at his most vulnerable and needed direction and encouragement

Noel O'Keeffe

Company:	Waterford Crystal Ltd.
Job Title:	Technician
Marital Status:	Married
Age:	39
Years of Service:	23

Starting Position	Current Position
Apprentice Cutter	Technician

Most Significant Career Developments

- (1) Qualified as a Wedge Cutter
- (2) Moved from Wedge Cutting to Blowing.
- (3) Redeployed from Blowing to the Tank Furnace.
- (4) Participated in the Certificate in Manufacturing Technology Programme
- (5) Seconded to Stuart Crystal Ltd for one year as Advisor and Trainer.
- (6) Promoted to position of Technician

Noel joined the company in May 1982 as an Apprentice Wedge Cutter having completed his Intermediate Certificate in Mount Sion CBS. His father was employed in the company. Noel wanted a craft position in the company, which he regarded as being well paid with great prospects. Noel has 3 children and is 39 years of age.

He qualified in 1987 at the time of a major rationalisation and being very low on the seniority list he knew that his position was precarious. He opted to move to the blowing room and began again to learn a new craft. He completed four years in blowing. In 1995 he moved again to become a machine operator on the introduction of a new tank furnace in Kilbarry.

Having completed three years in this position and two and a half years on the engineering technician course in the Waterford Institute of Technology he was appointed as a technician in 1998. He excelled in his new position and was seconded to Stuart Crystal in 2001 to assist in the training of technicians. He had to provide technical and manufacturing support to the plant, which was owned by Waterford – Wedgwood.

In 2002 he returned to Waterford as a technician and was made responsible for scheduling product, developing new tooling for new product and continuously

seeking to improve processes, which were technology and tooling related. He is also involved in researching and developing equipment for the manufacturing of product. He has qualified as a trainer for shift technicians and machine operators providing a 24 hour, 7 day call up service for the tank furnace operation.

The barriers included organising time for family, work and study commitments. The supports included funding, encouragement from training department and all the engineering staff in the company.

Noel says that 'In hindsight I should have completed my Leaving Certificate as I now see it as essential to returning to education and in progressing my academic and technical qualifications'.

His career choice would be to become a Production Engineer. His motivation to return to education was prompted by the changes taking place in the company and his need to secure lifetime employment.

Education has developed greater confidence in him to realise his potential. He has met so many interesting people through his new job and he has learned a lot from them. His next objective is to return to college and complete his technician course and then continue on to qualify as an engineer. He is confident that he can achieve this and his practical experience will be a great help to him.

The key issues in helping employees return to education are funding, providing time off from work and making the right support available in work and in study. He is making satisfactory progress in his career to date and looks forward to one becoming an engineer having built methodically on his craft skills of cutting and blowing and technical experiences with Waterford and Stuart.

The most important skills in industry today are – a good attitude to work, being adaptable and flexible, having good qualifications, computer skills, people skills, and to want to be a good team player.

The company could become more competitive by developing the next generation of technology, rationalising the product range and developing a new contemporary

product range. Employability is having the skills and attitude to adapt to change on a continuous basis. He believes he is employable as he has had many work experiences, a good qualification, has proven he is adaptable and flexible and welcomes positive change.

John O'Leary	
Company:	Waterford Crystal Ltd.
Job Title:	Offices Services Assistant
Marital Status:	Married
Age:	51
Years of Service:	24
Starting Position	Current Position
Security person	Offices Services Assistant
Most Significant Career Developments	
1. Served as Shop Steward.	
2. Completed a Certificate in Health & Safety.	
3. Operated as a Trainer in the Company.	
4. Transferred to the Offices Services Position	
5. Completed a University College Cork, Diploma in Social Studies Course-May 2006.	
6. Elected as Development Officer for GAA in Waterford	
7. Completed a Diploma in Social Studies from University College Cork.	

John joined the company in January 1981 having completed 10 years as a machinist with Irish Leathers Portlaw. At the time they were on the verge of closing which they eventually did. He completed his Group Certificate and joined the workforce doing a number of jobs before joining Irish Leathers. John is 51 years of age and is married with two children. John began his career at Waterford as a security person. After two years he was deployed into the Semi- Skilled Section where he worked at a number of jobs – rework, finishing and polishing from 1983 to 2002. He then transferred to Offices Services maintaining an office support service to the whole organisation.

He served as a shop steward from 1984 to 1993 and was Health & Safety Representative from 1998 to 2002.

He learned typing in the early 1990s and completed part of ECDL. He completed a Certificate in Health & Safety in Waterford Institute of Technology and a 'Train the

Trainer' Course with Irish Institute of Training & Development. He is currently engaged in a Diploma in Social Studies with University College Cork.

He has a great interest and involvement in the GAA and was elected to a number of responsible positions. He was County Youth Officer from 1992 to 2000 and County Development Officer from 2000 to date. He is currently serving on the Munster GAA Development Committee, 2001 to date. He has been an officer in his local club for a long number of years. He works in a voluntary capacity as a Local Radio Presenter for GAA Affairs presenting a weekly report from 1992 to date. It takes two hours to prepare each week for a seven-minute presentation and it has been a great developmental experience for him. John says '**my deep involvement with the GAA in a wide variety of roles has been a huge development experience for me**'.

The main barriers to returning to education have been: his involvement in voluntary work in the community, mainly the GAA. It has taken a great effort for him to reduce this involvement and attend the Diploma course.

The supports have been his family and the encouragement from the training department who continuously advised him of his potential to move on to a better position in the company if he gained the appropriate set of qualifications.

In hindsight he would have completed his Leaving Certificate and his preferred career choice would be to become a Journalist. He was motivated to return to education by a work colleague who persuaded him that he could do much better in both his work and the GAA if he gained a third level qualification.

The difference education has made to him has been seminal – he has gained a broader perspective on so many issues, has greater confidence in his ability to discuss and debate, takes greater interest in the opinions of others and can appreciate the many different and often opposing viewpoints. He can now see how important education is in progressing in the workplace and in the community and how higher goals can be achieved.

His next goal is to progress in the workplace as currently a restructuring is taking place and he is expecting many new opportunities to come on stream. Similarly he would like to progress within the GAA and is hoping that the right opportunity for him to do so will arise.

The issues that require attention if employees in general are to be helped to return to education are

There is a need to demonstrate more clearly the benefits to employees from qualifications and continuous learning.

There is a need for funding, as he would not have been able to participate if he had to pay for it

New entrants badly need the support of a mentor or support group to be nursed through the many difficulties facing them especially in the first course back after a long absence from school.

Access to an assessment and career advice that would help employees choose the right course, which would most likely lead them to success.

He is looking forward to progressing within the company and is hopeful his participation in education will facilitate progress in the next few years.

The most important skills for employees in industry today are the capacity to be flexible and interchangeable, IT skills, teamwork, communications, a good education and business literacy to understand the context in which change is taking place.

The company could become more competitive if it selected the right people to fill vacant positions, provided them with the proper motivation and invested more heavily in advertising and promoting the product and brand.

Employability is about a willingness to learn, having a qualification, being flexible and able and willing to adapt to change. John says '*I am employable, flexible and willing to change and have gained a wide set of experiences from filling responsible positions both within and outside the company*'.

Sean Maher

Company: Waterford Crystal Ltd.
Job Title: Rheintour Cutter
Marital Status: Married
Age: 53
Years of Service: 34

Starting Position	Current Position
Apprentice Rheintour Cutter	Master Rheintour Cutter

Most significant career developments:

- (1) Qualified as a Master Rheintour Cutter.
- (2) Developed Typing, Shorthand Skills and IT Skills.
- (3) Travelled extensively.
- (4) Completed a Diploma in Social Studies-Managing Diversity from UCC
- (5) Completing a Higher Certificate in Legal Studies Course.
- (6) Served as Director of the 4th largest Credit Union Branch in the country.

Sean joined the company in February 1971 as an Apprentice Rheintour Cutter having spent two years as an apprentice carpenter with William Fewer Construction. He had completed 4 years in Mount Sion Secondary School and was anxious to join the workforce as he felt he wasn't making progress. Mount Sion was an all-Irish school and although extremely interested in Irish history and culture he did not warm to its learning regime.

On joining the company he was apprenticed to John Clarke one of the old masters and he received a very thorough training. He qualified in 1976 and in 1987 he was appointed as a master to manage his own team.

In 1999 he was appointed Archive Cutter, which is his current position. He was elected Branch Representative (senior shop steward) for the Rheintour section from 1979 to 1986.

He returned to education in 1990 and completed a three-year Diploma in Social Science including one-year foundation from UCC in the local Central Technical Institute. He followed up with a Certificate in Personnel Practice in Waterford Institute of Technology. From 1998 to 1999 he completed a Diploma in Professional Practice – Managing Diversity from UCC. This course was sponsored under the EU, Employment Horizon Programme – CODE (Creating Options for Disabled

Employees) sponsored by the company. He always had an interest in gardening and in the mid 1990s he completed an Environmental Programme on the proper management of nature and natural habitats with Teagasc.

In-house he completed the ECDL Certificate and a Calligraphy course that was organised as part of the company's artisan training programme. Artisan craftsmen travel to the markets to promote the product and inscribe messages and names on products personalising them as gifts for customers. He represented the company as an artisan in the Canadian market. He also completed short courses in Irish and English. He completed a one-year Art course in the Central Technical Institute as he has a great interest and talent for sketching. He is very interested in local history, journalism and sketching which engages his attention on a regular basis.

Currently he has completed ten modules of a twelve module Higher Certificate in Legal Studies in the Waterford Institute of Technology and is enjoying it immensely.

The main barriers to returning to education were time and the ability to get back into a learning mode and manage a new set of information. The supports were, his family and the company who gave great support and encouragement over the years.

Sean says that 'In hindsight I would not have attended an all Irish Secondary School as I found it very difficult at the time to study a range of subjects through the medium of the Irish language'.

Sean is very interested in the Irish language and has attended evening classes for several years improving his spoken Irish. There was no family pressure on him to leave school at the time only that he was not doing well and he decided to move on to learn a trade. This experience and interest led him to finally being employed by Waterford Crystal as an apprentice craftsman.

His preferred career choice is to own and manage his own business. The motivation to return to education came from a feeling and belief that he could do much better in his career. He began to become over dependent on the company and the world was changing especially in the 1990s at a rapid rate.

The ability to learn was essential and the Diploma in Social Science was his first introduction back to formal education, which remains a milestone for him in development terms.

His educational experience was seminal and made him a better person, more patient and tolerant, more secure and confident, more open to change and it has helped build up his self-esteem which was contrary to what he experienced in secondary school.

His next objective is to build on his legal studies and continue with Labour Law and Constitutional Law. His interests are many and he has travelled extensively to Cuba, China, South Africa, Jordan, Israel, France, Germany, US, Canada, Dubai and Jamaica.

The most important support for employees returning to education is providing them with encouragement and an understanding that education is the basis for the development of their careers. There should be greater emphasis on career guidance at an early age. The provision of assessments would help individuals understand their potential and the options open to them. Too many are branded failures at too early an age and it leaves a permanent mark on their confidence. Employees now need access to education and new qualifications throughout their working life.

He would like to re-deploy to an interesting job for the remainder of his time with the company but is satisfied with his progress in college and work to date.

The basic skills required by employees are a good education, good technical and people skills. Everything else can be learned as required.

The company to become more competitive needs to promote a new awareness of the product in the market place provide best value by producing it at the right price to attract customers and realise sufficient profit to cover the needs of the business.

Employability means employees becoming flexible, knowledgeable and adaptable to change.

He believes he is employable having gained a wide range of experiences, qualifications and has proven his capacity to change and learn.

Lisa Ryan

Company: Waterford Crystal Ltd.

Job Title: IT Desk Top Support

Marital Status: Single

Age: 25

Years of Service: 6

Starting Position

Clerk

Current Position

IT Desk Top Support

Most significant developments:

1. Completed a secretarial course, which included work experience in Waterford Crystal.
2. Joined the company as an administrative clerk in Distribution Centre
3. Completed a Certificate in Computing and Information Technology
4. Completed Diploma and Degree in Information Technology
5. Promoted to the IT Department in 2006 to Desk Top Support.

Lisa joined company in May 1999 as clerk in the Distribution Centre. She had just completed a Secretarial Course in the Presentation Convent having completed the Leaving Certificate Applied. During her secretarial course she was accommodated with work experience in the company in Customer Service and liked the work and the people. She is 25 years of age and is single.

She learned and discharged a number of different duties including responsibility for inventory, despatch orders, despatch couriers and creating orders.

Since she joined the company she has completed a Certificate in ECDL in-house and returned to education to complete a Certificate, Diploma and a Degree in Computing & Information Technology over 5 years finishing in June 2005.

She enjoys working with computers and while finding it difficult to return to education and fit work, study and play into a busy schedule she is delighted to have completed so much in such a short time frame. In particular as the company is currently undergoing restructuring she feels she is eminently qualified to hold down a number of jobs and is now more secure in her employment prospects

The main barriers she faced in returning to education were making time for classes, study, work and recreation.

The main supports were the company, the encouragement, resources, advice and support that were made available. Lisa says ‘ I appreciated been part of a supportive class and study group that was willing to share information and solve difficult concepts’. Over 60 students started out on the certificate and five years later just over 20 students finished the degree in June 2005. She is convinced that the supportive environment in which she was involved made a huge difference to her completing the course. Every employee returning to education needs help to overcome the mental, physical and monetary barriers that are holding him/her back.

In hindsight, she would not have changed anything. She is happy with everything she has done. She believes it was vital for her to gain work experience with computers and be able to immediately transfer the learning to her job while studying at college.

Her preferred career choice is to work in the Information Technology Department as a Systems Analyst. Lisa was motivated to return to college to better her and to qualify in some form of computer applications.

Her educational experience has developed a greater level of confidence in her ability to achieve new goals, higher skills with computers and a new set of qualifications which has placed her in a better position to move on and up within the company. Her next objective is to gain some work experience in the Information Technology Department.

The issues to be addressed for employees returning to education are getting over the psychological barrier of returning to learning and studying. A mentor, coach and study group can be an enormous help particularly if returning to college after a long absence. All the difficult crisis moments can be sorted out with help and support. Funding is an issue for those who would have to pay as the cost of part – time education is spiralling upwards all the time.

Lisa would like to stay in the company now that she has been promoted into the information technology department. She is confident that she can develop a very challenging career path that will motivate and reward her.

The basic skills required in industry today are a good education, IT skills, varied work experiences and good inter- personal skills. The company could improve its competitive position if it invested more in advertising.

Employability is about employees being flexible and adaptable and having a good education from which to operate.

She believes she is employable being eminently qualified, has had several valuable work experiences and is prepared to adapt to change.

Jessica Ryan

Company:	Waterford Crystal Ltd.
Job Title:	Accounts Payable Administrator
Marital Status:	Married
Age:	27
Years of Service:	8

Starting Position	Current Position
General operative	Accounts Payable Administrator

The most significant developments in her career to date have been:

1. Completed the Access to Third Level Course under the Company's EU Leonardo Da Vinci "Sesame" Project.
2. Completed ECDL.
3. Experience and motivation gained from working shift-work for 5 years
4. Promoted to Accounts Payable in Finance Function
5. Experienced a massive learning curve in moving from shop floor to office environment.

Jessica joined the company in May 1997 as a general operative in the Packing Room having completed 5th year in the Ursuline Convent. She is 27 years of age, is married with one child. Upon leaving school without completing the Leaving Certificate, the job options were few. She worked in shops and in a supermarket. Her father, two uncles and an aunt worked in the company and she was glad to get the job having lost interest in school. She had not settled on a career path.

She worked as a general operative for one – year and was then trained as an Examiner. In 1998 she was assigned to work on a 5-shift roster for three years. Working a 3-shift roster for two years followed this. This lifestyle was taking its toll and in finding a partner and giving birth to a child she began to think that she should be aspiring to something better in the workplace.

During this period she was selected to join the Leonardo da Vinci “Sesame” Project. This was a EU Project to enable employees without Leaving Certificate enter third level college. Thirteen employees, eight men and five women completed the programme in the Waterford Institute of Technology. She had to complete it while working the five-shift roster and it was a tough challenge. Jessica says’ *I found the Sesame Project as the most enlightening experience of my working life. It changed my outlook on work and on a career for the better. It confirmed to me that I had the capability to achieve a degree if given the opportunity*’.

She completed a Certificate in ECDL in-house and with both qualifications sought to improve her working conditions and prospects. She was a contract employee from 1997 to May 2004 and was ineligible to apply for promotion to a staff position. On being made permanent she applied for her current role in Finance and was successful. She had to undergo an interview and three aptitude tests, which she passed with flying colours. She was delighted with her performance and her success in moving to a day job in a comfortable but challenging work environment. She puts her success down to completing the two certificate courses and in settling down to married life. Her new found and recognised potential opened up her mind to new possibilities for her in the workplace. She was witness to what others were doing and thinking and that so many of her peers had returned to education and had moved on to better things. The role models were many, varied and inspiring.

The accountancy and finance element of the “Sesame” Project was of great interest to her. On moving to Finance she took at least six months to settle, as the change was dramatic. The work concepts, skills and disciplines required were new and exciting but difficult on first experience. The work environment, work culture and general differences between working shift on the shop floor and days in the Finance Function

was all new and it took her time to acclimatise and settle down but it was better by the day and she is now delighted with her new job.

The main barriers in returning to education were shift-work, buying a house and settling down with her partner. Involvement in the “Sesame” Project was the key development opportunity for her and it showed her a new future and how she had the potential to achieve much more in the workplace. It also introduced her to college and gave her an overview of the working of the company and the many different jobs available there.

The supports were her family and the company who provided funding and encouragement. A vitally important support was the class, group support on the Sesame Project. A wonderful bond existed on the team who responded superbly to the new spotlight on them and the opportunity being provided for them.

In hindsight she should have completed her Leaving Certificate and attended third Level College but her mind and aspirations were elsewhere at the time. Her career choice is to become a Secondary Teacher and she is interested in pursuing this goal in the future. Her motivation to return to education was a belief that she could do much better and she wanted more than continuous shift working for her new family.

Education has increased her confidence, self- esteem and appreciation of the greater potential to be realised by her in the future. Her next step is to settle down in her current position and master all tasks. She will keep all her options open and organise herself to continue with her development in the future.

The issues that need to be addressed for employees returning to education are an awareness campaign on what is available, the support, options, examples of success, funding and the provision of incentives that will activate personal drives in pursuit of suitable educational objectives. She would be anxious in the future to realise her potential and become a teacher at some time in the future.

The basic skills needed by employees are a good education, good interpersonal, communications and computer skills. For the company to become more competitive it needs to invest more in advertising and be more creative and innovative in marketing the product. It needs to communicate and motivate its employees to ensure they

achieve high performance. In turn they will feel valued and respected and the gain for the company and the individual will be worth the investment.

Employability is an important concept and it means employees becoming adaptable, having a good education, being willing and able to learn and developing a wide range of experiences. She believes she is employable having developed a number of experiences and qualifications. She has proved her capacity to adapt to change and is very willing and able to learn and engage in continuous life long learning. A new world of opportunity has opened up for her.

Andre Thompson

Company:	Waterford Crystal Ltd.
Job Title:	Solicitor
Marital Status:	Single
Age:	30
Years of Service:	8

Starting Position	Current Position
Retail assistant	Solicitor

The most significant developments in his career to date has been:

1. Joined a company that had a huge interest in learning and education.
2. Appointed as Legal Assistant.
3. Gained enormous support from Company Solicitor
4. Supported by company with funding and encouragement develop.
5. Qualified as a solicitor in 2006.

Andre joined the company in April 1997 as a temporary retail assistant in the Gallery in a Summer job. He completed his Leaving Certificate in Newtown School in Waterford, which he followed up with a one year Post Leaving Certificate Art & Design Course in the Central Technical Institute. He worked in the family business (Pub and Undertaking) for two years before spending some time in Cork with friends and finally coming back to the Waterford to join the company in the Summer of 1997.

As a contract worker he was deployed to the Employee Gift Shop for two months after the Summer and then to deliver post in the company for three months. He then switched to the factory as a clerk in the cutting department. When the Butlerstown Lightingware Plant closed, a displaced full time employee was redeployed into his

clerical position. He was redeployed to the Tank Furnace as a general operative for three months and then back into the post job for four months.

During that time in late 1998 he decided to apply to the CAO to return to college to study Law. At the same time the position of Assistant to the Company Solicitor was advertised in-house. He successfully applied for it and was afforded permanent status by the company. He had over the previous few years applied for many positions without success. As a contract employee he was disadvantaged in competing with full-time employees when applying for full-time positions. He was offered a few full-time college places to study law but declined in favour of remaining with the Legal Assistant's job and studying part-time to become a solicitor.

At the time a new solicitor was employed in the company and she offered him her full support in achieving his career goals. Andre *says' without the support of the company's solicitor it would have been extremely difficult for me to have completed my study and exams. It was critical for me that I had such a mentor and the company were brilliant in how they accommodated me over the years'*. With her support he began a two year National Certificate in Business Studies course in Waterford Institute of Technology, which he passed with distinction. He then proceeded to complete the Law Society of Ireland Entrance Exams. These involved eight exams over a two-year period for which he studied in the evenings and at weekends. He completed his final exam in October 2003.

In the following September 2004 he began the Law Society's full-time Professional Practice Course which required taking Leave of Absence from the company from September 2004 to April 2005. Andre is now a trainee solicitor in the company. The company's solicitor is acting as his "master" from whom he receives his training. He has returned to the company to complete the two years of his apprenticeship, which includes his final exams, and the completion of his training contract.

The main barrier to returning to education was organising the time to combine work, study and recreation.

The main support was the company in providing funding and encouragement. The learning environment developed within the company was excellent. It made it easier

for him to return to college as so many other employees were engaged in education. There was a great learning atmosphere and it seemed that everyone was willing to help each other out on study and work problems and issues.

In hindsight he wanted to gain a wide variety of work experiences in order to decide on a future career.

His preferred career choice is to become a solicitor. He was motivated to return to college to achieve something substantial.

His adult educational experience has made a huge difference to his self – esteem and confidence.

His next career objective is to qualify as a solicitor and practice at it for some time. The main issues for employees returning to education are funding, direction and support, access to all the information and a mentor to take them through the first course back as it is a difficult challenge and there are many crisis points to be navigated.

He would hope to work in the company for the foreseeable future. The basic skills required of employees in industry are a good education, IT skills, good inter-personal skills and the ability to study and learn.

The company could improve its competitive position if it spent more on advertising and marketing the product.

Employability is having a wide range of skills and the ability to adapt effectively in the workplace.

He believes he is employable having a wide range of work experiences; a good set of qualifications and has adapted to change on numerous occasions.

Liam Moore

Company:	Honeywell Plc
Job Title:	Health, Safety & Environment Leader
Marital Status:	Married
Age:	43
Years of Service:	25

Starting Position	Current Position
Rheintour (flat) Cutter	Health, Safety & Environment Leader

The most significant developments in his career to date have been:

- Qualified as a Wedge Cutter.
- Completed two Diplomas in both Psychology and Health & Safety
- Worked as Assistant to a Health & Safety Consultant during a Short Time Period.
- Acted as Safety Representative for Dungarvan Plant from 1995 to 2003.
- Appointed Health, Safety & Environment Leader with Honeywell Plc

Liam joined the company as a Rheintour (flat) Cutter in 1978 having completed his Junior Certificate in Dungarvan CBS. His entry into employment was motivated by family and financial reasons. He is currently 43 years of age and is married with three children.

In 1980 he transferred from Rheintour (flat) to Wedge cutting and qualified 5 years later in 1985. In 1988 he was elected as a union representative and in 1995 he became a safety representative and served in this capacity until 2003. While in Waterford he completed the following courses:

- 1992, Diploma in Psychology from Kilroy College through distance learning.
- 1994, Certificate in Computer Applications in Dungarvan Technical College.
- 1995, First Aid Training Certificate with Occupational First Aid Training, Clonmel.
- 1996, Certificate in Safety Consultation with IBEC in Dublin.
- 1997, Certificate in Health & Safety from UCD in the Waterford Institute of Technology.
- 1997, Certificate in Respiratory Protection from NISO in Waterford.
- 1999, Diploma in Health & Safety from UCD in the Waterford Institute of Technology.

- 1999, Awarded membership of the Institute of Occupational Safety & Health (IOSH)
- 2000, Certificate in Manual Handling Instructor with IBEC in Waterford.
- 2001, Certificate in Teaching Skills for Adult Tutors in the Waterford Institute of Technology.
- 2002, Visual Display Unit Assessor Course with IBEC in Waterford.

Liam has also lectured on health & safety issues throughout Ireland for the National Irish Safety Organisation (NISO) and for the Amalgamated Transport & General Workers Union (ATGWU). He is currently teaching transition year students in three schools, on health, safety & environmental issues.

In 2003 he joined Honeywell as Health, Safety & Environment Leader and is very happy in his current position. He is using all his knowledge, qualifications and experience gained over the years.

In 2003 he was awarded membership of the International Institute of Risk & Safety Management. (IIRSM). In 2004 he achieved a Diploma in Environmental Management from the British Safety Council in London and became an Associate Member of the International Environment Management & Assessment. Liam says '*I was always determined to improve my career and the company was superb in their support for my many efforts to educate myself and move into different positions that gave me the experience to gain the necessary qualifications*'.

The main barriers to returning to education were time, family commitment and travel to the college in Waterford. The supports were the company for time off, payment of fees and exams and the encouragement he received all along the way from management and colleagues.

In hindsight he should have completed his Leaving Certificate. Third level qualifications would be much more achievable with a Leaving Certificate. He always wanted to be a Garda when he was young.

His preferred career choice is to become a Health, Safety & Environment Manager. He says that it is a very challenging and rewarding career and is passionate about

achieving a high level of competence in this area. His motivation for returning to education was a deeply held view that he missed out on something important, education and the importance of a good education in the workplace.

Education has made a great difference to him providing greater opportunity, a higher level of confidence, competence and the general capacity to effect improvement and change in the workplace.

His next goal is to settle down and make a success of his current position.

The main issues to be addressed to enable the employees return to education are to cover fees, provide time off for class and study and give plenty of encouragement, promoting and extolling the benefits and providing work experience in the subject areas being studied.

The most important skills required in industry today are a good education, the appropriate technical skills for the job and communications skills. He says that the soft skills are critical and are in fact the hardest to acquire and implement.

Employability is having the necessary skills and qualifications to work at a number of jobs and having the aptitude to change and adapt continuously. He believes he is eminently employable possessing a range of qualifications and experience.

Colm Reville

Company:	Hitol Ltd Waterford
Job Title:	Project/Design Engineer
Marital Status:	Married
Age:	39
Years of Service:	4 years with Waterford Crystal

Starting Position	Current Position
	Project/Design Engineer

The most significant developments in his career to date have been:

1. Giving up his job to return to college full-time to complete Certificate in Manufacturing Technology (Accelerated Technician Programme).
2. Mentored by an extraordinary Technical Person in Waterford Crystal.
3. Completed Technical Project in Waterford Crystal
4. Completed a Degree in Manufacturing Technology
5. Promoted to his first engineering position in Hitol Ltd

Colm is 39 years of age and has two children. He repeated his Leaving Certificate in De La Salle College. He joined the workforce, working eight years in Retail and Tourism including one year in Germany.

At 32 years of age he gave up his job and returned to full time education to complete a National Certificate in Manufacturing Technology under the Accelerated Technician Programme. This programme was specifically tailored to meeting a national shortage of technicians at that time -1997.

He was married and earning low wages at the time. To save money he began servicing and repairing his car and carrying out general maintenance work especially in electrical and mechanical areas. He developed a great interest in all engineering and mechanical issues and equipment. He was particularly keen on all DIY work. He read all the trade magazines and books on maintenance.

On returning to full-time education on the Accelerated Technician Programme he was very fortunate that Waterford Crystal agreed to provide him with six months work experience in a technology-based environment. He completed a computer-based project on the commissioning and development of a heavy finishing machine. He was lucky in that the new piece of equipment arrived one week before he joined the company for his work experience term. An extremely competent and innovative technical person whom he gives great credit to for his commitment and willingness to share his vast body of knowledge and experience mentored him. This was the most important development in his career to date and it set him up to complete the certificate, diploma and degree courses.

On completion of project he returned to Waterford Institute of Technology to complete the course and graduate. On graduating he returned to the company to give a presentation on his project, which was very relevant to technology development. He was immediately offered a contract for 6 months as a development technician in the process improvement department. The contract was subsequently renewed for three consecutive six-month periods. During the third contract he was offered a full time

position as a development engineer with one of the company's suppliers, Kennedy Abrasives.

Kennedy Abrasives are located in Clonee, Co. Meath and he stayed with them for two years before he returned to Waterford to work for Nypro as a Process Technician. He remained with Nypro until they decided to transfer their operations to Galway closing their plant in Waterford. He then moved to Hitol to his current role as Project /Design Engineer.

While on contract employment with Waterford Crystal he returned to college to complete the diploma in a part-time capacity the company sponsoring him on the course. During his employment with Kennedy's and Nypro he completed the Bachelor of Technology in Computer Aided Manufacturing.

He had to pay for the final years of his degree course and the Certificate Course having resigned from his job to concentrate on it. Colm says '*I came second in Ireland in the Certificate Programme and achieving 100% in numerous exams throughout certificate, diploma and degree courses*'. . The reason he achieved such high marks was that failure wasn't an option for him. Having given up his job he had to apply himself to the task in hand

The main barriers were financial. He was unemployed and had to provide for his family in extreme financial circumstances. His original position was not well paid and was part reason for leaving it and returning to education to get a better job. He wasn't entitled to social welfare as he was in college. Marital and family pressures were also barriers as he dedicated so much of his time to college and study. The time left for family activities was limited. He felt under no pressure on the actual course, as he was full of confidence in his ability to complete it.

The main supports were the financial assistance he received from Waterford Crystal and Kennedy Abrasives. He was provided with materials, course fees, leave of absence for exams and study, the wholehearted support of Learning Centre, its staff and facilities, the full support of management and was provided with open access to a

whole range of specialist personnel within the company. He also received a number of college grants. He had the full support of his family who were behind his decision to return to education to achieve a better standard of living.

Colm says that ‘ in hindsight I should have returned to college much earlier although the certificate course did not exist in that eighteen-month full time form at prior to the special government backed initiative to sort out the shortage of technicians’.

His career choice would be to become an Engineer. He is thrilled and proud to have made it.

He was motivated to return to education by the need to improve his financial circumstances and the opportunity to learn and qualify in engineering a subject he had a real passion for and which fulfilled a need for job satisfaction and a higher remuneration level.

Education has improved his confidence in his ability. He is more logical and competent at work. He is much more employable and he has been employed ever since he entered college in 1997 and gained the six month work experience with the company completing a technology based project as part of his course. He is more articulate and technical qualified person and is very interested in continuous learning. He much prefers reading textbooks rather than fiction.

The next stage in his career is to continue to move forward and improve his financial circumstances.

The issues to be addressed for employees in education is the need to be made aware of the value of education in the workplace, be provided with time off to attend classes, study and complete exams along with receiving the necessary financial support

The most important basic skills required by employees are computer, communications, common sense, logical thinking, flexibility and a good attitude. A good formal education allied to a good work ethic would be a major advantage.

For companies to become more competitive they need to –have a highly educated and adaptable workforce and an excellent communications network with dedicated people.

Employability is for employees to be, well-educated, hard working, good communicators, flexible and holding a good primary degree.

He believes he is eminently employable as he has wide experience in different work settings, his proven his ability to adapt to change, has achieved decent qualifications and is anxious to pursue his interest in continuous learning.

Appendix C: History of Waterford Crystal

The Early Years 1783 – 1851

The city of Waterford has long been an important seaport in Ireland. It is one of the oldest cities in our island country. It was thriving as Portlairge (Port of Laraic) when the Vikings set up stations on Ireland's east coast for their longboat fleets. They called it Vedrafjordr, weather fjord, which in time became Waterford, a triangular walled city on the river Suir. Reginald's Tower, one of the three towers built at each point of the triangle, dates from 1003 and is still standing today.

Glass was made in Ireland in the sixteenth and seventeenth centuries, but it was not until the eighteenth century that, as an industry, it became important. An influx of émigrés from England arrived driven there partly by economic pressures in 1777, 1781, and 1787 as England levied excise taxes causing many of their glasshouses to close. The glass workers renowned for their nomadic spirit and in keeping with the adventurous spirit of the times, led to them establishing glass houses in Dublin, Cork, Belfast, Newry and Waterford - the latter to become world famous.

The archives state the first ever glass-making house operated in Ballinageeragh in County Waterford, which is about 10 miles from the city. On November the 1st 1783, the first glass factory was opened in the city by William Penrose and began to craft "as fine a quality as any in Europe...in the most elegant style. When tapped, it sang sweetly. When touched, it felt warm and soft yet it possessed strength and durability and, most wonderful of all, the crystal shone with a romantic, silvery brilliance". The patience, skill and artistry of the craftsmen had forged a triumph whose reputation was to endure through the following four centuries and which is very much to the fore today as a leading international brand name.

In 1825, George IV King of England, persuaded Parliament to levy a new excise tax for glassmakers in all parts of the realm. A new duty of £12 10s 0d was placed on every thousand pounds of metal. This marked the beginning of the end for free trade among Ireland's glassmakers and a preview of heavier taxation yet to come. Many of Ireland's glassmakers now found it impossible to continue in production.

Waterford Flint Glass battled on for another quarter of a century producing the same excellent crystal through which they had built a world famous reputation. Business carried on, but prosperity began to fade.

George Gatchell, the owner of the company at the time, began to despair about the future and in 1850 he noted that it was losing money. The business continued to be deprived of sufficient capital investment and finally collapsed in 1851 when heavy excise duties were imposed on crystal exported from Ireland. It was in that same year that George Gatchell sent a most magnificent Waterford entry to the Great Exhibition held in London in 1851 at the Crystal Palace. The entry won several gold medals.

Soon after the London exhibition closed in October 1851, all of the machinery and contents of the Waterford Flint Glass Works went under the auctioneer's hammer. George Gatchell moved to England and never returned. Between 1835 and 1896 all production of flint glass (lead crystal) in Ireland had ceased.

During its brief 68 years, 'Waterford Crystal' enjoyed an unequalled reputation that transcended the intervening centuries. The high quality, and purity of colour, combined with the design of new shapes and decorative motifs, left a legacy that has ensured the lasting renown of the 18th century craftsmen. It also made it imperative that anyone seeking to revive the craft in Waterford would, at least, have to match the qualities made famous by their illustrious ancestors.

It was to be 100 years later that the crafts of glass making in Waterford would be revived.

Forty Years of Growth 1947–1987.

In the 1900's the glass business in Ireland grew slowly, although at first it was limited to bottles, containers and everyday glasses. In 1932, together with a group of Belgians, Joseph McGrath and his co-directors took over the management of the virtually defunct Irish Glass Bottle Company.

As with Joseph McGrath and Joseph Griffin, 'Waterford' had been a magic name to Bernard Fitzpatrick, a Dublin jeweller and silversmith. He was a regular visitor to

European glass factories prior to the war. One of these, near Prague, belonged to Charles Bacik.

After the Second World War, and faced with the communist take-over of his native Czechoslovakia, Charles Bacik came to Ireland to help set up a crystal factory. Helping to persuade him in this decision was Bernard Fitzpatrick.

In 1947, while Europe was still in ruins after the Second World War, a small factory was set up in Ball truckle, a suburb of Waterford, one and one half miles from the site of the original Penrose glasshouse on the western edge of the city.

Some progress was made and, in 1950, Bacik, Fitzpatrick, McGrath, Griffin and a number of other prominent businessmen injected further necessary capital. Joseph McGrath became Chairman and Joseph Griffin became Managing Director of the reorganised company. Around that time Noel Griffin, son of Joseph, arrived in Waterford to manage the accounts. A move to a larger site in Johnstown nearer to the city centre became necessary due to increased growth. Newer and better furnaces were built in 1951. Almost precisely 100 years after its 19th century closure - the new factory produced its first crystal. Waterford Crystal

Ballytruckle Factory



began its amazing second coming, which, ultimately, was to take the company to the summit of the world's crystal industry. In future decades it progressed to create an international brand name synonymous with distinctive design, quality and craft.

For the Irish to recreate a crystal industry in their own country meant starting from scratch.

It had been so long since Waterford and the other old flint glass operations had shut down that the new owners faced a formidable task in recruiting skilled artisans. And so they turned to the long-time European tradition of glassmaking to find the skilled craftsmen they needed to produce crystal and also teach their skills to the Irish work force.

There was a considerable displacement of craftsmen from Czechoslovakia after the Second World War. The Italian glass industry was also in a depressed condition, with many men out of work.

This was the ideal situation for the rebuilding of Waterford. In 1950, Charles Bacik and Noel Griffin, travelled to Europe. They recruited approximately 30 blowers and cutters from Italy, Germany and Czechoslovakia who came to Waterford to produce crystal and train young Irish apprentices. Though they stayed in the industry for many years, some of them returned to the continent having completed their task. Others stayed and their children live in Waterford today.

Miroslav Havel, a blower from Czechoslovakia, for his first task carried out a studious inspection of the old pattern books from the defunct Waterford Flint Glass Works of the previous century, which were stored in the National Museum in Dublin. This study greatly influenced the first patterns, or suites, produced at the Johnstown factory. Through the years, Havel has been the chief designer. He could blow, cut, sculpt, paint and engrave as well as design. Many current craftsmen learned their trade from the master. Many of them have equalled if not surpassed the best that Miroslav Havel produced through the refined development of their creativity and skills. The apprentices learned well and many of the most prestigious presentation pieces and sports trophies in world sport are currently produced in Waterford.



The traditional, deeply incised cutting patterns made famous in the 18th century by Waterford's artisans, became the design basis for the growing product range of the new company.



Noel Griffin

Con Dooley and Noel Griffin undertook the first expedition to the United States in 1952. They spent three weeks there until they recruited an agent and then went to Canada. At the end of the trip the value of their orders taken was about \$500, which was at that time very substantial.

On their return Waterford Crystal began selling on the home market to the top Dublin stores such as Switzers, Brown Thomas, Arnotts, Weirs and Clerys amongst others.

It was in 1955 that Waterford Crystal made its first profits. At the time, word of mouth was the best form of advertising by visitors to Ireland. In 1958, it was decided to no longer conduct business through the New York agent and to go it alone. They then began to sell directly from the factory to the stores.

In 1959 the company's management turned to their top customer at the time, John Miller of Altman's in New York, and asked him to head up a new company, Waterford Glass Inc. This company was to become an American operated distributor dealing directly with the American retailers. Miller understood the need to advertise and so hired Harry Pesin, advertising professional in New York, to create an innovative advertising campaign. To this day the campaign is still considered a landmark in the high-end luxury gift market.

During the 1960's and 1970's demand for Waterford Crystal expanded dramatically. Demand began to exceed supply. Consequently, the glass works grew in size and

stature to become the best-known name in hand crafted crystal. The brand was by now firmly established. **“Americans flocked to Ireland with guns to our heads. We never had enough crystal for them.”** (Con Dooley, then Sales Director).

The Johnstown located factory was no longer large enough to cope and so in 1970, a new factory was opened in Kilbarry. It was built in stages. Before the final stage of completion the company bought land in Dungarvan and built a factory there which was opened in 1972 and involved the same processes as used in Kilbarry. It was in July, 1973 that Waterford Crystal completed the Kilbarry plant of 425,000 sq feet, almost 10 acres. It was the largest crystal-manufacturing unit of its type in the world.

After the oil crisis of the winter of 1973 - 1974, Waterford built a third plant at Butlerstown on the edge of the city to manufacture lightingware, chandeliers, lamps, wall lights, candle holders and other products used for lighting purposes. The new manufacturing plant was called Waterford Lightingware Ltd and it employed 300 people. The demand for the product remained huge all through the 1970s and 1980s. The company, which was floated on the stock exchange as a public limited company in 1966, opened a subsidiary in Brussels in 1974. Waterford Aynsley U.K. Ltd. took over the marketing and distribution in Britain.

In the 1980s computer technology improved the accuracy of the raw materials mix, known in the crystal industry as the "batch". Pure raw materials are consistently blended for much greater accuracy than was possible a century or two ago. The latest furnace design, one that uses natural gas instead of oil was introduced in November 1986, and saved the company £2 million on their annual oil import bill. In addition, the research and development portion of the company identified major cost and quality improvements that could be realised through the use of diamond wheel cutting. Diamond wheels were introduced into production in 1987. These have assisted Waterford craftsmen to create even more exciting and intricate patterns.

The brilliance and sparkle of today's Waterford Crystal is emphasised through these designs and is further enhanced by the light refractive properties made possible by the unique formula used in blending the raw materials. It is in this vital area of activity that Waterford has been able to improve on its 18th century forerunner.

In the traditional end the blowers use almost the same techniques and equipment to gather, blow and form the blank crystal shapes. Furnace temperatures are, of course, precise and the melting time for the raw materials has come down from 60 hours in the 18th century to 36 hours today. The same age old promotion slogan is as true today in 2006 as it was in the 18th century 'often copied, never equalled'

The new technology has revolutionised design possibility and the quality of the molten crystal. There is far greater scope to develop new designs and concepts using new technology and tools.

The challenge in 2006 is to marry the best of the crafts with the innovative use of technology using new skills and techniques and creating the possibility for new designs, high quality and improved customer responsiveness.

The Techno - Craft Age 1987- 2006.

Information Technology

During the 1990s the Internet was developed as a world-wide information technology based communications system. It also acted as a world library, a source of information on every conceivable topic. It connected every person and organisation to the one data- base enabling a one world communications system. The internet became a powerful business tool as a telecommunications networks. It grew very quickly and helped in the development of international business and the emergence of a global economy. This development assisted in the marketing and purchase of product with on-line shopping and increased the speed of responding to the needs of customers, consumers, and suppliers.

The company developed a Local Area Network (LAN) and later a Wide Area Network (WAN), which revolutionised communication methods throughout the organisation and within the constituent parts of the Waterford –Wedgwood group.

The use of e-mail, voice mail, fax, web publishing, video conferencing, voice conferencing, calendaring, scheduling, document sharing and electronic messaging systems quickly became the norm throughout the business.

In June 2001 the company introduced an ERP system called SAP. This replaced an older system called BPCS, which was in operation since the late 1980s. SAP is the leading enterprise information and management software package worldwide. This System made it possible for the company to track and manage sales, production, accounting, and materials across the organisation. All of this happens in real-time, so figures and balances are always up to date. At an instant a SAP user can check the current status of orders, customer accounts and other business requirements. In parallel with SAP, a shop floor control system 'Wonderware' is used to track the production of stemware from the hot end to blank store. Access Databases were also developed in-house to measure OEE 'Overall Equipment Effectiveness'.

An Information Technology Department was established of 21 people covering hardware and software requirements and the ongoing maintenance of a wide range of systems. A company wide campaign to train employees in the basics and then in specialist packages in information technology was hugely successfully in the late 1990s with 1,400 employees getting involved. Design, production, administration, financial, logistics, marketing, human resources and quality were heavily supported with information technology software packages and every member of management staff and a high proportion of shop floor staff were daily engaged in computerisation which was a complete contrast to the 1980s when a few specialists managing one payroll system was involved.

Engineering Technology

Tank Furnace

In 1995, when the first Kilbarry Tank Furnace was built, it was constructed with a design life of eight years. This calculation was based on the amount of raw material passing through the furnace every day, 365 days per year, for the following eight

years. Behind that simple calculation lays a mathematical understanding of how molten crystal, with a melting point of 1,300C interacts with the ceramics that make up the internal workings of the furnace.

In 2003 the original tank furnace was demolished and rebuilt at a cost of €10.5m. The life expectancy of the new tank is ten years; it operates between 24 and 26 tons of glass per day, (the original operated at 18 tons).

Tank Furnace Overview.

The tank has three stem lines, employing ten operators with two per machine. They work a five-shift rota producing 30,000 pieces good to store per week.

Superior tank furnace melt quality achieves a 2% rejection rate at 1st stage examination versus a 20% rejection rate from the traditional multi-pot method.

Finishing Technology

After the glass is formed it proceeds to the finishing area, where laser technology is used to remove the cap from the glass after the blowing process.

Cutting Technology

Multiple workstation pneumatic grinding technology and single workstation with a six axis diamond abrasive tools are used in the cutting the crystal.

Auto Polishing Technology (Salzle)

Acid polishing process utilising hydrofluoric and sulphuric acid and patented additives assure minimum acid consumption, low waste, emission processes, and high process capability and stable production.

New Product Streams

As a result of the introduction of technology into the Waterford plants, there was a significant reduction in the cost of production. Technology enabled Waterford to improve quality and enhance their product range by creating new design concepts.

As well as the classic crystal products several new product streams were developed:

Mrquis by Waterford

Stuart Crystal

The Millennium Range

The Evolution Range (colour crystal)

The Contemporary Range

John Rocha

Jasper Conran



Waterford Crystal dominates World Markets

Waterford Crystal stands today on a 40-acre site on the outskirts of the city made famous by its glittering product. It is over 20 times the size of the original Penrose Glasshouse. Today, 2006, Waterford is the premier brand name in fine crystal among collectors worldwide. While the global crystal market is a mature market (having contracted in recent years) Waterford has held its market share. Plans are in place to once again invest heavily in supporting the brand and securing its premier position as number one over the next decade and beyond. From its very humble beginnings Waterford Crystal has emerged as the most prestigious, best selling and most beautiful crystal in the world.

Visitor Centre.

The Waterford Crystal Visitor Centre is the fourth largest tourist attraction in Ireland. The number of visitors has grown significantly over the last 15 years when 100,000 visitors were welcomed through the doors. Since 2000, over 300,000 visitors have arrived to tour the plant and visit the gallery.

The Waterford Crystal Visitors Centre Tour and Gallery provide people with an opportunity to witness the production of the product, from the molten crystal through to the finished piece.

Waterford's Strengths

Waterford's brand pre-eminence in the luxury tabletop market is unrivalled. The following are a range of achievements that has secured premier status in the luxury gift market worldwide. Sales in excess of £300m guarantee its position as the world leader in premium crystal. The brand commands 50% of the US premium crystal market and has distribution companies in North America, Japan, Australia, Hong Kong and Singapore.

Waterford Crystal is the market leader for premium crystal in the US, Ireland, UK, Canada, Australia and the Caribbean. The brand is also emerging as a significant player in the Japanese and other Asian markets.

Waterford is part of the Waterford- Wedgwood Plc Group including Waterford – Ireland, Wedgwood, Royal Doulton and Stuart Crystal in the UK, Rosenthal & Hutschenreuther in Germany and Spring & W-C Designs in Switzerland.

The business has grown strongly throughout the 1990s doubling in size since 1991. In December 1999 Waterford was chosen to produce the millennium ball, which was dropped in Times Square to mark the Millennium and watched by one billion people world wide. Since 1999 Waterford signed a contract to produce new year's eve balls in crystal lighted up and depicting themes of hope, courage, peace, prosperity, love, happiness and diversity using one such theme each year.

In December 2002 Waterford was voted number one quality brand in the US. In 2001 a major international disaster occurred which had a hugely negative effect on business in its major market the US. September 11 was followed by an outbreak of Sars disease and then the Iraq war began which preceded a fall in dollar value, which has impacted negatively on the viability of the Waterford business.

Steps have been taken to restructure the business and adapt to the new international business environment. Currently in 2006 radical restructuring is an ongoing experience for employees and it is expected that the company will return to profit in 2007. There are robust sales and marketing plans in place and the competitive base of manufacturing has improved significantly.

While currently experiencing difficulties the future is bright as the brand is strong and the marketing opportunities are there to excite a new generation of customers with new more contemporary lines and ranges of products.

Appendix D: Glossary of Terms

Term	Definition
Assessment Centre	Norm referenced method of assessing the composite skill profile of an individual as measured against the average of a peer group or norm
Adult Training	A special mature approach to trainees. Those with entrenched skills acquired through long experience and whose inclination to accept retraining or attitude change calls for specialised training skills
Aptitude	Natural ability to acquire and utilise types of knowledge and /or skill. Tests to determine such ability are called aptitude tests
Assessment	General term for the processes of ascertaining whether training is efficient or effective in achieving prescribed objectives. It covers both validation and evaluation.
Annealing	Method of strengthening the crystal by uniform reheating.
Artisan	Craftsmen who have been specially trained to promote the product in retail stores around the world. The artisan is assigned to a network of stores for promotional events. He will meet the customers and explain the making of the product, the story behind the name of the item, suite and range. He will also appear on local and national television and radio shows for interviews and promotional work.
ATGWU	Amalgamated Transport and General Workers Union.
Auto-Press Machine	Press System producing clocks, plates, and picture frames.
Batch	Mixing of raw materials, There are three basic ingredients ultra-white silica sand, potassium carbonate (potash), and lead oxide.

CAD	Computer Aided Drawing –software package to facilitate the development of plans and sketches for buildings, products and designs on computer.
CNC	Computer Numerical Control – machine controlled by computer programme.
Competence	The ability to perform a particular activity to a prescribed standard. The activity may involve the development of a variety of skills.
Cullet	Crushed crystal from breaks added to batch during the melting stage.
Distribution	Area where customer orders are prepared and shipped.
EDRA	Employee Development Recruitment Agency is a proposed network of one stop shops in the regions for the purpose of encouraging employees to return to education and training to improve their qualifications.
EDO	Employee Development Officer whose job is to liase between the stakeholder groups on the ground to smooth the way for employees returning to education.
Engraving	Etching of designs, logos, portraits or writing on the surface of crystal.
Education	Means the acquisition of a broad base of knowledge (leaving certificate/ third level qualification) and the development of reasoning and analytical skills. The emphasis is on <u>understanding</u> .
Educationally	Those who are employed without having completed a

Disadvantaged	second level education. They are in the process of being trained in new technology, knowledge based concepts, systems and processes as old processes and skills become obsolete.
EGFSN	Expert Group on Future Skills Needs –Forfas, Dublin. A government sponsored task group to advise the Minister for Enterprise, Trade & Employment on the future skills needs of the economy.
EU	European Union
Finishing	The process of removing surplus glass (the blowing cap) to prepare the crystal for cutting the design.
Front Line Manager	A supervisor on the front line who manages a team of production workers in the plants i.e. craft and non-craft.
Gatherer	Craftsman collects molten glass on the end of a blowing iron in preparation for blowing, pressing or drawing.
Glass Blower	A qualified craftsman who blows glass on a blowing iron (mouth blower) or semi-automatic machine (machine blown).
Heavy Blowing	Forming shapes of large products, i.e. trophies & vases.
LAN	Local Area Network, a number of computers linked within a building or a group of buildings.
Learner Centred Method	A learning/teaching system in which the learner is encouraged to make, within his/her capability limits, his/her own decisions about the methods and pace at which he/she learns.
Lehr	Continuously run belted ovens that gradually reduce the temperature of the glass form in its hot state down to room temperature in a controlled manner. It has the effect of

eliminating any stresses or strain in the glass items that may cause them to break while being worked on or used in normal circumstances.

Machine Operator	A worker responsible for an automatic or semi-automatic glass-forming machine.
NEDC	'National Employee Development Council' a proposed national co-ordinating body dedicated to the retraining and re-education of employees and realising the maximum use of the available resources.
New Economy	The emergence of a high value economy using knowledge and technology innovatively to produce goods and services and compete with the most advanced countries in the global economy.
OECD	Organisation for Economic & Co-operation and Development.
Packing	The final product is stamped, examined and packed accompanied with a leaflet containing instructions/marketing. The complete package meets the company's strict quality standards.
Rheintour Cutting	Also known as 'flat' cutting, typically flute shaped cuts shaping stems of glasses, necks of decanters and sometimes a complete design.
Salzle	Acid polishing process utilising hydrofluoric and sulphuric with patented additives.
Sandblasting	Method for producing large volumes of decorated crystal,

carrying designs, logos and inscriptions.

Sculpting	Creating custom made trophies and presentation pieces shaped from blocks of solid glass.
SKU	Single Keeping Unit – describes a single glass item – one goblet or one lid on biscuit barrel or one major trophy.
Tank Furnace	Technology for melting raw materials and forming the blank crystal product.
Training	Learning and development of specific task related skills and competencies for circumscribed roles. The emphasis is on <u>doing</u> .
UNESCO	United Nations Education, Scientific and Cultural Organisation
WAN	Wide Area Network, a number of computers linked over a wider geographical area.
Wedge Cutting	The process of cutting patterns on crystal. The cutting wheel has a wedge shape profile and cuts deep into the crystal creating a special shine when polished.
Wine Blowing	Forming stemware shapes i.e. goblets, clarets, champagnes, flutes, white wines, iced teas etc.
WEC	World Economic Council.
WTO	World Trade Organisation.

Appendix E- Raw Data from Research Phase 1.

Q.1 – Define competitiveness

- To be able to compete on a global basis on all the key areas of producer, customer relationships.
- Compete on, price, cost, design, product range, quality, customer service, reliability of supply and workforce capability.
- Ireland exports over 80% of products, ‘ to be able to sell profitably on the open market’.
- Branded products are likely to move to lowest cost production area provided all other key performance indicators can be met. Waterford has to compete on price, quality and cost to retain and develop new business.

Q.2 What was the main changes in Irish manufacturing over the past five years.

- Increased cost base including, wages, utilities and materials.
- Rationalisation of many traditional production bases.
- Increased speed of technological change
- Increased move away from low skill manual to high skill technology
- High focus on cost control
- Increased exposure to international competition with the removal of trade barriers and the opening up of new markets.
- Exiting of manufacturing production units to low cost countries including Eastern Europe and Far East, China and Korea.
- Inward investment has slowed down and is concentrated in a few key sectors, pharmaceutical, electronics, information technology and financial services.

Q3. What were the main changes in Waterford Crystal Ltd over the past five years?

- Change in product type, style and design to more contemporary/ fashionable products. Decreasing price points and increasing competitive pressures.
- Drop in demand for products due to external influences and internal inflexibilities re customer service.
- Too much change coming at once. Valuable old knowledge has been lost as the company builds the new knowledge sets required. A vast amount of experience and tacit knowledge has been lost in the process.
- Over dependence on the development of new product to regenerate sales.
- Investments in manufacturing processes are not always aligned to front line sales and marketing strategies.
- Craft replaced with technology and automation.
- Increased demand for short runs of product placing great strain on the flexibility of the operations and skill base of the workforce.
- Major increase in the use of IT software packages and machine technologies.

Q4. What is the key challenges facing Irish manufacturing over the next ten years.

- Achieve sustainable competitiveness.
- Improve the skill and knowledge base of the workforce
- Develop smarter technologies and processing techniques
- Leverage government influence as a key stakeholder in tackling the main cost issues. Leverage assistance for manufacturing to enable it to develop and compete by moderating wage costs, reducing insurance costs, improving infrastructure, providing for employee education and training and increasing investment in research and development.
- Develop maximum flexibility in working arrangements and increase capital investment in people, plant and equipment in order to remain at the leading edge of global industrial development and performance.
- Achieve world-class standards and performance
- Anticipate changes in global business environment and prepare in time to make the necessary changes to adapt.

Q 5. Describe the most successful Irish manufacturing model of the future

- It will be cost effective and efficient, totally customer focused, capable of customisation and is highly flexible, adaptable and responsive to market demand.
- Lean manufacturing will be the preferred model and will include an integrated production system capable of delivering the required level of quality, cost and customer service.
- High technology and high skill based manufacturing with the capacity to create unique competitive advantages will dominate the competitiveness agenda.
- A focus on high value added product content through the employment of high technologies and significant investment in research and development programmes will be developed.
- High technology with low labour content with a high dependency on outsourcing product parts, products and expertise.
- Highly sophisticated processes with highly skilled employees producing high value products at medium to low volume levels.
- Agile manufacturing optimising the capability of people, technology and process to service a broad mix of customer profiles.
- Lean systems engaging the full capabilities of the employee cohort.
- Making branded product range with technical processes at a competitive price.
- High capital investment in high technology backed up with a highly skilled workforce.

Q6. What new strategies can be developed by Waterford Manufacturing to improve performance?

- Fully exploit the new technical manufacturing base installed over the past ten years

- Develop smarter logistical techniques to drive cost base down and provide quicker response to market needs.
- Develop new marketing initiatives to increase demand and sales. Fill the factories in line with new established processes and achieve a competitive cost base.
- Engage fully the commitment of the workforce and provide a psychological contract including security of employment in exchange for high personal initiative and commitment.
- Restructure manufacturing to become a lean, agile operation.
- Develop a high level of business literacy to enable the workforce understand fully the competitive imperatives and what is required of them in dealing with the competitive challenges in the future.
- Rationalise product range and maximise sales, customer service, quality and cost of production.
- Become a low cost, high value supplier to the group.
- Communicate more strongly the changes required to enable successful implementation. Develop an integrated manufacturing operation including a fully integrated supply chain supporting the marketing **strategy**.
- Continue to develop leading edge technologies and reduce costs.
- Invest in research and development in new products, technologies, processes and systems.
- Introduce leading edge management tools such as Lean, Total Productive Maintenance, Overall Equipment Effectiveness, Kan Ban- Single Minute Exchange of Dyes (SMED), Statistical Process Control (SPC), and Just – in-Time (JIT). Develop the skill and competency levels of all employees operating the supply chain.
- Increase education base of the workforce enabling it to adapt to change and to engage in continuous learning and development.

Q 7. What is the essential base qualifications required by management in Waterford over the next 5/10 years?

- Interpersonal, process and systems skills

- World-class production, costing, scheduling, finance and people management skills.
- Strategic management and business literacy to understand the drivers of change, its impact and consequences.
- Develop competence in information technology both software and hardware.
- Technical job skills, engineering competence, supply chain and leadership skills.
- Build good team working and team leadership skills.
- Promote participation in science, engineering and financial third level degrees
- Develop commercial astuteness involving third level education with deep shop floor experience of production, product, systems and people.
- Over fifty per cent of daily job is dealing with people. There is a need to build a special competency in managing and leading people in the future.

Q8. What is the essential base qualifications required by employees in Waterford?

- Information technology literacy
- Flexibility and adaptability
- Ability to learn
- Team working and problem solving skills
- Functional excellence and technical skills
- Understanding of world class manufacturing techniques, processes and systems.
- Good second / third level education as a basis for adapting to change and continuing life long learning
- Good knowledge of health & safety
- Business literate and a willingness to change and adapt to change.
- Understanding of industrial engineering standards and systems
- Customer focused and knowledgeable on customer and markets.

Q 9. What are the differences between the old (pre 1990) and new competencies / qualifications.

- Continuous change demands continuous learning. Product and information lifecycles are shorter and skills need to be continually updated.
- Greater need for emphasis on technical competence including system and process knowledge.
- Need for increased team-based working, learning and problem solving.
- Sweat and graft has been replaced with brain- power and learning.
- Emphasis on legislative standards, employment, health & safety, environment, business ethics, product standards and traceability.
- Broader skill base requiring a higher education level with a Leaving Certificate as the basic minimum requirement.
- A huge emphasis has been placed on cost and competitiveness.
- There is a much greater demand for third level qualifications.
- The emphasis is now on process rather than job skills, flexibility and interchangeability.
- There is a greater emphasis on general business awareness and the drivers of change
- New business, work, management concepts with new knowledge being are being developed all the time.
- The delegation of accountability and responsibility is continually underway.
- Social and team skills are more important than ever.
- There is a realisation that the only constant is change and it is driving the need for continuous up-skilling.
- There is a growing trend towards a more entrepreneurial approach emerging at all levels which is promoting innovation, creativity and problem solving at all levels within the organisation.

Q 10. What are the main opportunities for learning in Waterford today?

- Part-time education and internal and external training programmes.
- Job rotation, job enlargement, new job specifications, increased accountabilities and responsibilities.
- Project and team involvement and problem solving
- Introduction of new technologies, systems, processes, work methods.
- Benchmarking and site visits
- Redeployment, promotion and temporary secondments to alternative positions within the group.
- Research and development projects
- Process improvements and the introduction of new technologies
- Adapting to change in all its forms.

Q11. What are Waterford's main competitive advantages?

- Brand
- People capability and embedded knowledge
- Technology utilisation and management as leaders with a vision
- Relationship with market and retailers along with trade relations
- New product development capacity.
- Size- economies of scale on glass production.

Q 12. How would you define innovation in a manufacturing context?

- Doing what has not already been done before
- Initiating clever improvements into the product and process.
- Improving costs with new ideas and techniques
- Mastering change with new clever adaptations
- Achieving year on year cost improvements
- Providing an unconventional response to competition and change

- Working smarter in developing new more cost effective processes and products
- Inventing new technologies and advance to produce better more cost effective products.

Q 13. How important is innovation in achieving success in Waterford Manufacturing

- Critical in making a successful changeover from craft to techno-craft operation
- Crucial given the scale of change the company is experiencing and the increasing competition it faces.
- Essential to secure the future
- Innovation in all areas of the business is our main means of achieving competitiveness and gaining sustainable competitive advantage.
- Essential to achieving competitiveness is the ability of employees to innovate
- Extremely important in seeking to operate at the cutting edge of industrial development in the global economy.

Q 14. How can manufacturing industry develop technical systems that are most open to human manipulation?

- Involve all the key people from concept to delivery of product and at every stage of developing and commissioning of new technologies and systems. The system should be capable of manipulation by the employee and not force the employee to adapt to it.
- Ensure operators are fully trained in the full workings of the equipment and that they can intervene and make improvements and adaptations that produce improved results.
- Include relevant employees in research and development projects. Engage those who will be using the system in its development. Team involvement and general operative competence around a new system is essential for maximising performance from it.

- Facilitate the involvement of the maximum number of employees at the earliest possible stage in system, process and in product development. Involve, motivate, improve and adapt the machine to the user, which will lead to the development of a virtuous improvement cycle.
- Encourage involvement in problem solving and improvement projects with the system. Enable the operators to get to know the system well.
- Establish an ongoing consultative process between team members and developers of new technology.
- Develop a socio-technical culture with employees developed sufficiently to improve and control the technology.
- Encourage benchmarking against best in industry as a means of continually improving the system.
- Promote continuous learning and education around the system.

Q 15. Describe the optimum integration of functions that would best support superior performance in Waterford Manufacturing.

- Develop matrix type organisation with the concept of business centres dominating.
- New product development to be linked directly to engineering manufacturing and marketing through a cross- functional team.
- Develop a team based performance appraisal system that rewards the team rather than the individual for performance using open and transparent objectives i.e. customer service metric, cost efficiencies or level of inventory or new product development and sales. In rewarding the team it is likely to develop more collaboration within the team and with other teams throughout the industry.
- Organise a project team based organisation integrating all relevant functional expertise into a team- based structure.
- Marketing and logistics to act as the arbiter of demand and supply with manufacturing concentrating on production.
- Develop a high awareness of process management and of supply chain internal customer service requirements. Function representatives from order to cash

should be formed into teams to unlock and remove impediments to performance.

- Develop a strong cohesive executive team around one vision for the business.
- Integrate US, marketing and Ireland manufacturing teams into one business.
- Integrate marketing, design and manufacturing into one integrated management team over seeing the required co-operation and synergy.

Q 16. What are the key distinguishing features of a successful manufacturing operation in Waterford in the future?

- Adaptable, flexible and efficient producing to order.
- A product range made at optimum cost and quality
- Outstanding leadership with educated workforce responsive to change
- Highly flexible, low cost, low inventory, high level of customer service driven by a trained and developed workforce.
- Employees who are business literate and who fully understand the role of manufacturing and who are continuously adapting, changing and maximising the potential of manufacturing within the business.
- Employee relations partnership with minimum outsourcing an established world-class manufacturing, technology and process management.
- Lean manufacturing concept supported by a rationalisation of functions and with an intensive focus on costs generating the maximum profit on an annual basis.
- Lean operation with low inventory supported by highly skilled, trained and motivated employees.
- Customer responsive with competitive cost, high profit margins employing a wide range of skills with an ability to adapt and change.

Q 17. What will be the key improvements to management practice that best supports the new Waterford manufacturing model.

- Close the gap between production and customers with a constant focus on non-value added activities both inside and outside of manufacturing. Eliminate low margin items and install a new comprehensive communications system.
- Invest in a new technology system and upgrade the skills of the workforce under one agreed and supported vision for the company.
- Develop a fully informed workforce who have maximum involvement in decision-making.
- Develop leadership at every level using the capability and commitment of employees to gain competitive advantage.
- Establish a balanced scorecard of key performance indicators as driving the business agenda with all functions supporting one set of business objectives.
- Develop a well-led, informed, inclusive and motivated workforce.
- Develop a more professional approach to management
- Develop a better-informed workforce that understands that it is customer demand that drives production.

Q 18. What are the key changes in employee roles and responsibilities that best support the achievement of Waterford manufacturing objectives?

- The development of an understanding of the business and how each employee and team contributes to the achievement of the business objectives. It is essential that every employee understand how their inputs impact on the supply chain and within systems based organisation.
- Implementation of a team based self- managing team culture.
- Establishment of a continuous lifelong learning culture.
- Development of a more process, cross- functional based culture supported by continuous learning by employees.
- Taking on a broader set of responsibilities and accountabilities with employees developing a more responsive approach to issues, problems and opportunities in the business environment.

- Re-defining the employee role as a stakeholder. Leaving the past role of provider of a service behind and replacing it with a committed, actively involved added value resource.
- Developing better trained and educated, more empowered employee that is capable of driving a lean manufacturing enterprise.
- Increasing the flexibility and responsibility of employees through a more comprehensive knowledge of new role and company performance goals. Providing maximum opportunities for job satisfaction within a team -based operation.
- Developing highly business literate, and informed employees on key company and department performance indicators with the capability to intervene in a proactive way as the need and opportunity arises.

Appendix F: Raw Data from Research Phase 2

Summary of survey responses:

Q 1. Name 3 initiatives that would improve the competitive position of the company?

Managers (N=15).

- Develop new markets and lessen dependence on US market and dollar revenues.
- Exploit fully the current management systems for planning, production and delivery.
- Review existing work practices and introduce new and better technologies.
- Provide education and training for all employees in particular non-craft to achieve greater workforce flexibility.
- Reduce 'single keeping units' (SKUs) to increase efficiency and cost effectiveness. Rationalise the product range.
- Improve customer service
- Improve quality and reduce breaks/losses
- Concentrate on Crystal Division and divest part of Group
- Achieve Vision 500.
- Concentrate on core product – what we are good at.
- Identify and eliminate non cost effective work methods through the employment of industrial engineering standards.
- Establish one integrated company between US and Waterford. Eliminate much inefficiency and establish a common purpose and focus.
- Establish a clear focus on cost.
- Simplify packaging
- Make to order.
- Review and restructure management layers X2
- Deal with excess craft workers
- Introduce lean manufacturing

- Increased productivity, reduce cost and develop a marketing strategy to increase sales.
- Improve gross margin. Review quality as perceived by the customer and rationalise the product range.

Shop Floor Employees (N=10):

- Maximise potential of hot end technology. Introduce new technology X3
- Increase direct to consumer sales. Develop Internet sales.
- Outsource non competitive product
- Focus on cost reductions
- Introduce lean manufacturing
- Up-skill the workforce.
- Introduce new cutting technologies
- Rebuild morale and motivation of workforce
- Reduce price of crystal
- Develop high end products to enhance the brand
- Involve outside designers to develop new ideas – colleges – employees
- Increase international market outlets
- Rationalise range of product
- Introduce lean manufacturing
- Improve forecasting
- Improve quality and reduce waste
- Train and educate managers and employees
- Set up project team with employees from all areas of the company, Study the global market place for new opportunities and set up employee workshops for reporting back and for brainstorming sessions for new ideas around competitiveness.
- Lower the cost base, Develop new markets and train and educate the workforce.

Q 2. What are your four key work objectives for 2003?

Managers (N=15)

- Vision 500 planning, environmental compliance, cost cutting initiatives, barcode compliance.
- Ensure smooth day to day running of customer service department. Ensure service levels are in line with planned business levels. Ensure that the customer is represented within the business. Deliver new processes to departments that will improve the level of service and achieve better results.
- Manage occupational disability more effectively. Manage self- insurance within set limits. Reduce accidents rates. Ensure compliance with statutory legislation.
- Reduce scrap and repair. Achieve quality targets and facilitate the smooth introduction of new products.
- No clear objectives
- Manage re-engineering projects. Develop staff by educating people to facilitate change.
- Cost, service, supply and quality.
- Master planning schedule. Create safe working environment. Ensure effective running of tourist trail. Integrate employee goals with company goals.
- Trust in my ability and take chances in airing my opinions at meetings and on teams. Achieve an expanded role definition. Expand my range of contacts and be able to respond to employee needs. Implement a number of employee welfare initiatives.
- Deliver weekly master production schedule. Establish cost effective performance on product through British Standard Institute systems. Reduce losses on quality targeting 1.5% on throughput.
- Achieve maximum overall equipment effectiveness (OEE) and value of production (VOP) – Complete manufacturing restructuring in area. Reduce cost and improve health and safety.

- Achieve the master production schedule. Maintain a high quality standard. Inform the team and keep learning about my own capabilities and weaknesses.
- Manage all training interventions in Dungarvan Plant. Develop advanced trainer programme. Play an active role in extended business process re-engineering. Support manufacturing in Dungarvan e.g. SAP, IT etc
- Build teamwork. Accommodate change process. Reduce cost while increasing production and maintaining quality standards. Where possible engage in personal development.
- Co-ordinate production engineering group to improve overall equipment effectiveness. Make product transfers to technology. Develop finishing technology. Track and record product production performance and develop tooling.

Shop Floor Employees (N=10).

- Gain promotion – achieve work satisfaction- improve qualifications.
- Support business projects – manage data processes. Train users in systems and procedures
- Retain job position. Identify new job opportunities that may become available. Create an awareness of the potential that exists in-company to fill vacancies.
- Retain job following restructuring. Failing that secure a suitable day job that would make best use of my abilities.
- Core time and attendance, identify and train users on the system and develop user manuals. Develop an overall equipment effectiveness database. Engage in continuous improvement and support programmes. Develop quality assurance database to include vendors and facilitate corrective actions. Develop and maintain IT systems for manufacturing.
- Complete college exams. Gain promotion and get more involved in decision-making. Achieve higher remuneration.
- Develop company intranet. Provide a problem solving capacity for all IT systems and packages. Provide trainers for SAP and continue with my

education a BSc in Computing & Software Development and Web Developer Diploma.

- Learn more about the business. Set up guidelines to support each procedure. Participate in at least two work related training courses and plan a to do list for each day covering what was not done the previous day.

Q 3. What skills and knowledge are required by you to carry out your duties?

Managers (N=15).

- Improve IT skills. Gain a better understanding of business processes. Develop a strategic view of human resource development and learn how to do new tasks and gain new competencies
- Improve people skills such as delegation, problem solving, planning, SAP while keeping up to date on bills of materials, glass products and collateral.
- Improve people management skills such as negotiating skills, engineering technical skills and IT skills.
- Develop complete knowledge of product, equipment and people. Have to be able to get the best from the team
- Develop high level of interpersonal skills, intuitive and reasoning skills, employment legislation and in-house policies and procedures
- Interpersonal skills- knowledge of technology systems – SAP, CORE.
- High level of knowledge of crafts of cutting and marking
- Develop and promote “cop on”. Business degrees are excellent but many qualified people have great difficulty relating to people.
- Develop broad managerial competencies including financial acumen, people management, communication, and presentation and change management.
- Develop basic manual work skills for my area.
- Develop leadership, negotiation skills, manufacturing knowledge, people management and system management.
- Acquire knowledge of specific hazards and risks associated with the industry. Achieve a professional qualification in health and safety and an up to date on all current health and safety legislation both EU and Irish.

- Gain an understanding of company's overall business objectives including an appreciation of the customer base and new requirements, a thorough understanding of SAP and an ability to represent the customer in the company.
- Gain logical project experience. Develop perseverance and an ability to sell ideas to people.
- Develop communication and interactive skills, IT literacy, budgeting and cost monitoring skills and production target setting.
- Gain new engineering qualification to support industrial and production requirements. Develop managerial skills, computer literacy, glass making experience and knowledge.

Shop Floor Employees (N=10)

- Computer Literate – SAP – understanding of supply chain, team player, patience, become a good communicator and develop good planning skills.
- IT skills, business literacy and process skills.
- None
- Good communication skills
- Improve experience of salvaging archive pieces.
- Improve glass blowing skills, new concepts, designs and shapes.
- Knowledge of data management structures, good communication and organisation skills
- Know the product, quality control and get to know the people that are being trained.
- Improve computer skills, team working skills. Need to develop empathy and patience to gain co-operation from other departments. Be prepared to ask for help from others as new work is allocated.
- IT skills, communications skills, problem solving and influencing people.

Q 4. What new skills and knowledge you will require over the next 5 years?

Managers (N=15)

- People management and a strategic perspective
- Greater in-depth understanding of our customers. Ability to embrace new technologies that support the achievement of business objectives.
- Update on legislation, continued professional development, insurance law changes.
- Lean manufacturing, six sigma, kaizen and continuous improvement, best practices, cost of quality and benchmarking.
- Future is too unpredictable to predict them.
- Improve current competencies.
- An awareness of how the world is changing.
- Change management skills.
- Embrace technology and utilise wisdom gained through life experience.
- Broaden skills and knowledge of all areas of production including product, processes and systems.
- IT and leadership skills
- Deal with stress, work in teams, improve training skills, people/ counselling skills, working with new technology / systems and engage in further education.
- Better understanding of organisation strategy at a high level, greater IT capability, ability to distil large quantities of data, ability to understand and deploy business tools to best advantage.
- Increased education about process. Further education and training in industrial relations and problem solving. Improve upwards communications and management skills and improve team-working skills.
- Industrial engineering skills. Keep up to date with management techniques, engineering programmes, and computer software and gain a greater knowledge of the business.

Shop Floor Employees (N=10).

- Management skills, knowledge of product, training on new product.
- People and financial management.
- Develop engineering knowledge to work on automated production.
- None
- Artisan skills to explain to visitors the skills of the craft
- IT skills, business literacy and process skills.
- Negotiation skills and problem solving.
- Advanced IT skills, advanced problem solving, people skills and teamwork.
- New computer skills, new management skills and better general work skills.

Q 5. What changes will be taking place in the company / department over the next 5 years?

Managers (N=15)

- Improved productivity with same or less resources, greater individual responsibility required, stronger emphasis on results from human resources interventions.
- Increased shift-work to work new technology and systems. A shorter lead-time for products and the restructuring of plant layout to a more compact operation is in the pipeline.
- New technology and new products.
- New technology in acid, packing and cutting.
- Increased emphasis on internal promotion and development, greater accountability is expected. The repatriation of outsourced products to fill the home factories.
- A complete downsizing programme and re-organisation of company with the introduction of new technologies.
- Whole world will continue to change and will impact on the company. We will need to be more cost effective and withstand the threat from Eastern Europe and China.

- Less people with higher skills and a broader knowledge base. We will face higher external competition.
- Reduction of craft, an increase in technology and an expansion of markets
- More redeployment and redundancy, more emphasis on work measurement using such performance measurement concepts such as overall equipment effectiveness, key performance indicators and value chain analysis.
- Greater focus on health & safety including greater concern for the environment to achieve a possible top tier Seveso Site status. There will be higher penalties for non- compliance.
- Greater interdepartmental flexibility to achieve higher productivity through improved work practices.
- Greater company flexibility to become more customer orientated. Become smaller and more process driven.
- Introduction of new technology, a reduction in the workforce and the diversification in product range.
- Continuing trend towards technology to reduce costs. Designs are constantly changing and engineering resources must be made available to maximise technology.

Shop Floor Employees (N=10).

- Dungarvan will close, fewer craftsmen, more machines, more restructuring.
- Increased technology, new systems, integration of functions.
- Department closing down as craft is diminished, will become a tourist attraction.
- None
- None
- Traditional methods of glassmaking replaced with automated equipment and systems.
- More restructuring for a changing market place
- More technology.
- More redundancies to downsize the workforce. Redeployment of craftsmen, to move ahead with new technology.

- Introduction of new technology, new product streams, lean manufacturing and a more flexible and adaptable workforce.

Q6. What innovations are likely to occur in your area and in the company over the next 5 years?

Managers (N=15):

- Product customisation, short runs and increased in high value products.
- Technology development and people skill development
- More consultation and involvement, sharing of responsibility and more proactive employees
- Introduction of LEAN manufacturing.
- Development of new processes and systems, change management initiatives.
- Greater automation of process with greater flexibility
- IT connecting with rest of world.
- Introduction of diamond cutting in the rheintour craft.
- Technological improvements in manufacturing processes, flexible working practices, improved work, life balance.
- Less handling of product to reduce losses, costs and manning levels.
- Lean manufacturing and new product development.
- Improved work systems, processes and improved equipment in cutting and blowing.
- LEAN manufacturing, greater use of CNC technology for product in the finishing area, increased use of systems for decision- making and capacity planning.
- New technology in drum and acid polishing and the elimination of pre-acid repair.
- We must design product that suit our production capability, keep abreast of developing technology to get the best return from our investments. Introduce work procedures such as Lean Manufacturing and Total Preventative Maintenance.

Shop Floor Employees (N=10)

- Less packaging and quality checks, right first time on quality.
- Greater use of internet and more automated clerical processes
- Further use of technology and performance systems for payment of wages.
- None.
- None.
- Current work will be eliminated
- Intranet, new product catalogue, standard operating procedures, manuals and employee benefits.
- Extranet facilitating the linking in with suppliers and customers
- New systems and databases.
- Continue to develop and maintain the intranet, develop an online product catalogue, continue to develop an e-commerce initiative and introduce Lean Manufacturing.
- Improve management information system efficiencies, new product on to the system, and link new product development with process improvement and data management to achieve greater cohesion.

Q 7. How important will employee capability be to the overall performance of the company over the next 5 years?

Managers (N=15)

- Vital – increased individual responsibility will require multi-task employees to move with production demands with the ability to read data in various forms. Change and adapt from skill to knowledge base.
- Essential – the people will manage the change, produce the products and manage the processes and systems.
- Crucial – company will need to maintain the experienced people at the head of the development process and they will bring all others with them.
- Employees with a range of new skills, which are technology based, will be needed.

- Critical – Increased technology will heighten dependence on people with greater knowledge and ability to be flexible, adaptable and interventionist.
- Extremely important- will have to master the new skills required to manage the new technology and win the maximum product for home-sourcing.
- More important – independent and rounded people required.
- Will continue to be crucial.
- New technology and systems will require upgrading of skills and knowledge of employees.
- Critical – to become competitive employees will have to embrace all the concepts of competitive manufacturing process, process flow, costing ,cost of quality. When everyone understands cost drivers and the changes required to improve efficiency it will be easier to promote, install and maintain continuous improvement programmes.
- Critical – competent workforce will ensure safe workplace, work methods and systems.
- Crucial – will face many new challenges. The ability of the employees to respond to these issues will decide the future success of the company.
- Hugely important- We need to be more customer responsive with shorter lead times and a reduced workforce. Management style needs to become more employee- centred and proactive to replace the current reactive one.
- Critically important – technology and changing markets will demand a wider knowledge base.
- Extremely important – employees will need to be very capable, motivated and trained in their job for the company to deliver future objectives.

Shop Floor Employees (N=10).

- Very Important – we are only as good as our weakest link.
- Critical – The company will become more dependent on the employee's capacity to achieve more from the new technology which will be coming on stream.

- The employees will have to become more adaptable and move on to new departments and jobs. A higher level of trust and teamwork is what is required to succeed.
- None
- None
- Very Important – company will require total inter- departmental flexibility, which will require informed and qualified employees to achieve it.
- Very Important – The employees are the company’s most valuable assets.
- Very Important – Employees will need to be more flexible in the future.
- It will be a huge part of the company’s success, employees will need to learn more skills and knowledge as we become more technically advanced. Their skills will guide the company through the next era of change.
- Very important – as the company becomes more knowledge based employees will have a big input in using and managing the new technologies.

Q 8. (A) Does the company invest enough money in employee development?

Managers (N=15):

Yes –8 and No - 5 with one undecided

Shop Floor Employees (N=10).

Yes – 3 and No - 4 with one undecided.

Q 8. (B) Are there any areas in need of special attention looking ahead to the next 5 years?

Managers (N=15)

- Employee must be helped to take responsibility for his or her own development. Many learning opportunities available to them throughout each

day. Management should facilitate this and build a trusting relationship with employees through it.

- Need help of employee assessments to identify needs accurately.
- On the ground training needs to increase.
- Teamwork and technology.
- Engineering / Technical / Information Technology
- Information on direction of business and training needs identification to follow.
- More effort and focus on using the new skills developed.
- Health & Safety and Environment
- Business Awareness
- Career Development Plans
- Financial Literacy, Customer Service, Change Management.
- Change Management and Leadership Development
- Health & Safety
- Change Management
- Business Literacy, Broad Management Skills Portfolio.
- Development of employability status for all employees.

Shop Floor Employees (N=10).

- Technical / Environmental Awareness / Management Development.
- Technology, Flexibility Training
- Plenty of Opportunities Currently available in the company
- Change Management
- Technology, Electronics, Engineering.
- Job Skills, General Upskilling, Computer Skills.
- Training for Early Retirement
- Adaptation to Change / Flexibility
- Technology, Systems, Cross- functional Teamwork.
- Okay Currently.

Q 9 (a) Will Irish Industry compete effectively in the future?

Managers (N=15)

Yes-8 and No-6 with one undecided.

Shop Floor Employees (N=10)

Yes-7 and No -2-no with one undecided.

Q 9 (b) what are the key issues to be addressed in facilitating competitiveness?

Managers (N=15)

- Management of national economy Management, tax structures, wage agreements, benchmarking, manufacturing best practice.
- Cost of labour, cost of materials, production efficiencies, cost of consumables, legislative costs/ health & safety & environment, insurance costs.
- Scrap and waste, better quality, product, cost. Improved customer service, development of workforce potential.
- People costs, standard of living.
- Costs too high v China
- Greed, prices too high
- Labour costs / overheads too high.
- Labour costs
- Customer responsiveness
- High cost base and the uncertainty of employment contracts leading to a live for today attitude with consequent effects on productivity and quality.
- Labour costs and improved technology.
- Improve skills base/ worker competencies and reduce costs.
- Costs, full utilisation of technology, employee empowerment and flexibility, customer service, new product development.
- Move up value chain to high technology and high specification of jobs industry and educate the workforce.
- Irish workforce has to worker smarter to become more cost efficient.

Shop Floor Employees (N=10).

- Business literacy, health & safety and employee flexibility.
- Cost issues, profit margins and manpower costs.
- Quality and employee development.
- Increased innovation, cost efficiency, increased technology.
- High cost base
- Increase technology
- Rationalisation, increase technology and shift work.
- Increased research and development, new technology and new product development.
- Labour costs, operating costs and insurance costs.
- Develop educated workforce and aim at competing at the top end of the manufacturing product range.

Q 10 Outline a person specification for a general operative position over the next 5 years?

Managers (N=15)

- Personal initiative, understands the purpose of job, continually grow and develop, continuous improvement.
- Health & safety, information technology, teamwork, communication, quality.
- Multi-skilling, flexibility, interchangeability.
- Information technology, willingness to work on contract, shifts, learns quickly and works in teams.
- Broad based team skills, information technology, and business skills.
- Skilled, flexible and mobile.
- Flexibility, health & safety, teamwork.
- Technology on processes and systems, multi-skilling.
- Technology in all forms.
- Information technology, health & safety, teamwork.

- Multi-skilling,
- Computer literacy, process knowledge.
- Computer literacy, information analysis, teamwork, customer focus, process knowledge, continuous learning.
- Eager to learn, willing, wants to be involved, can work on own initiative if necessary.

Shop Floor Employees (N=10).

- Computer literacy, adaptability, increased responsibility.
- Information technology skills, health & safety, business literacy, teamwork.
- Leaving certificate standard of education, flexibility and adaptability, team working, computer literacy.
- Computer literacy, health & safety, empowerment of individual
- Personal Initiative, Computer Skills, Objective Setting.
- Information Technology, Business Awareness.
- Teamwork, Computer Skills.
- Computer Skills, Teamwork, Business Literacy, Health& Safety, Flexibility.

Q11 Outline job specification for front line manager – 5 years?

Managers (N=15)

- Systems perspective of management, collation and analysis of data, make decisions on information distilled and internal customer focus re supply chain, understanding of process and business, commitment to develop employees.
- Competent on SAP, improved management skills, understanding of cost base and health & safety legislation.
- Better informed on business needs, good communication skills, and good people skills/ leadership skills.
- Industrial relations skills, leadership skills, health & safety, information technology.

- Strong leadership skills, functional skills – jobs and processes in own area, computer skills, knowledge of BSI systems, health & safety.
- High level of IT skills, leadership and motivational skills, good business savvy.
- IT literate, communications skills, customer focused, quality standards, environmental issues, health & safety
- Respected and knowledgeable.
- People management, IT skills, and business literacy.
- Good communication skills, mentoring and leadership skills, leader of team, good business knowledge, health & safety.
- Business literacy, financial awareness, quality conscious, people management, fluent in HR procedures, health & safety.
- Supervisory management qualification, qualification in health & safety, IT literacy, leadership.
- Good formal education, good knowledge of overall business, team leadership, project management, capable of moving up the organisation.
- Good knowledge of process, knowledge of team capabilities, competent in job related skills, performance driven / leadership and focused on improvement all the time.

Shop Floor Employees (N=10)

- Leadership skills, facilitator skills, problem solving and planning skills
- Strong people skills, information technology skills,
- Know your people
- Change management skills, people management skills, computer literacy, and general business awareness.
- Good communications skills, leadership and motivational skills, computer literacy, third level education, develop employees, target setting and achievement.
- People management skills, systems skills, communication skills, good decision making skills

- Leadership skills, IT skills, business literacy, process understanding, adaptability.
- Leadership/ strong willed, patient, common sense and cross-functional appreciation.

Q12 In what way can you contribute more to your department?

Managers (N=15)

- More freedom to work on my own initiative, want higher responsibility.
- Need better structure to enable the development of people and better production planning
- Increase overall awareness of health & safety issues throughout the company.
- Good leadership and better management
- Agitate for a better management and pay structure to facilitate increased contribution in a variety of areas
- Need better co-ordination in the management structure to facilitate improved performance.
- Improved IT Skills
- Need more assistance from Human Resources.
- Greater involvement in decision- making process.
- Greater involvement in planning and aim for greater efficiency.
- Acquire improved Information Technology and technical competence.
- Improve planning – get better at saying no to people and avoid unnecessary pressure every target date, Communicate better with workers.
- Greater focus on a smaller number of priority issues.
- Managers need training on managing people to enable a better team performance.

Shop Floor Employees (N=10)

- Identify training needs, innovative improvement projects and collaborate more with other employees in problem solving.
- Engage in education and training to improve skills and impact.
- Improve awareness of business developments and needs
- Engage in more on the job training and new work experiences.
- Maximise and use current skill base,
- Improve product knowledge.
- Build relationships across functions. Develop a better understanding of the business.

Q 13 What changes would you like to see in the workplace that would improve performance?

Managers (N=15)

- Improve data management and data integrity, FLM development and redesign of FLM job descriptions, Review of current work practices and targets, develop individual training plans in line with business objectives needs. Current systems individual and anti teamwork.
- Ensure that bonus systems are linked to overall performance of department, develop better understanding of cost base/cost per process and educate the workforce on this, Take our workforce with us.
- Place all general operatives on one grade, need buffer stock at cut and blank levels and a buffer stock of collateral to facilitate quick deliveries.
- Legislative update and better teamwork.
- Marry design to manufacturing – friendly designs- Integrate manufacturing with logistics.
- Develop better communications, more ergonomically sound workbenches, and better scheduling procedure.
- Work smarter and use systems better.

- Better career development opportunities for employees at all levels
- Eliminate piece rate system and install quality bonus system, Improve quality and internal customer relationships, Have more brainstorming and less blame storming.
- Change culture to responsibility and pride in performance from a its not my problem.
- Reduce accidents, Improve work environment; Take Health & Safety seriously –up to highest level within the company.
- Establish new mindset on change and on the what, why, how and when of the change- develop flexibility on the ground and leadership at the top.
- Achieve less politics, more cross-functional co-operation; concentrate on current position and not on shaping up for next promotion.
- New technology to keep us ahead, Educate employees to higher level- will feel more valued, more ergonomically effective re lay outs.

Shop Floor Employees (N=10).

- Remove the pay freeze, improve communications and develop improved transparency.
- Improve cross-functional teamwork, Up-skill the workforce.
- Provide additional responsibility for employees, trust them and engage them more in the decision making process, improve morale.
- Improve incentives and rewards.
- Increase technology. Increase incentives.
- Increase accountability and improve performance systems.
- Establish objectives for employees as part of their employment contracts.
- Give employees more responsibility and the opportunity for greater job satisfaction.
- Better cross functional co-operation – process knowledge and supply chain knowledge
- Complete restructuring. Increase involvement and responsibilities.

Q 14 Rate the following from 1-10 on their importance to the future success of Waterford Crystal?

Managers rated the named competitiveness factors in the following order of importance:

1. Cost reduction initiatives;
2. Education of workforce;
3. Education of management
4. Communications;
5. Training of workforce;
6. Training of management;
7. Leadership at executive level;
8. Introduction of new technology;
9. New product development;
10. Development of learning organisation;
11. Leadership at every level;
12. Cross-functional development;

Shop Floor Employees rated the following competitiveness factors in the following order of importance:

- 1 Education of Workforce
- 2 Training of Workforce
- 3 Training of Management
- 4 Leadership at every Level
- 5 Communications
- 6 Cross Functional Development
- 7 Development of Learning Organisation
- 8 Leadership at Executive Level
- 9 Introduction of New Technology
- 10 Education of Management
- 11 Cost Reduction Initiatives
- 12 New Product Development

Q 15. If you were the CEO what would you do to improve performance in Waterford Crystal?

Managers (N=15)

- Promote the Company's Business plan "Vision 500" and ensure that everyone understands and is involved in its implementation.
- Review and invest in brand, improve gross margin, operate factories to full potential and create link between design and engineering to maximise the return from the technology available to us.
- Improve communications from top to bottom, explain the bad and good news and walk the floor and listen to the employee's views and appreciate their feelings.
- Increase technology; invest in advertising and in new management systems – LEAN.
- Produce a definite plan, fill factories, develop honest and open communications, reward the committed and motivate the workforce by meeting with them and seeking to understand them.
- Foster a sense of ownership among the workers for the roles they are filling.
- Set up company wide communications platform, set achievable goals, recognise initiative and insist on fairness and equality of opportunity.
- Focus on cost, drive competitiveness and invest in marketing.
- Put the right management team in place and develop the most appropriate structure to enable them perform. Decide on the best business model and use it.
- Insist on following through on all the initiatives that have been started in the organisation.
- Get tuned into to what is happening throughout the company – all the functions. Select a small and dependable team and give them measurable and clear objectives to deliver on.

- Communicate more with line managers and carry out personal audits also takes care of H&S and the environment.
- Many variables outside your control – but concentrate on cost control, new product development, customer service providing clear leadership.
- Concentrate on the 20% of the initiatives that represent 80% of the sales and develop greater cross-functional integration.
- Develop a strategy of communication to all levels of management from senior to FLMs, Information can be a powerful tool as equally being in the dark can be a de-motivator and push for investment in brand and sales strategies.

Shop Floor Employees (N=10)

- Promote direct to consumer sales, engage in cost reductions and continue with outsourcing.
- Implement restructuring, focus on core crystal business, reduce costs, and invest in marketing.
- Communicate business plan to all employees with the seven main project leaders present to explain objectives and progress.
- Source additional finance from Group Board to restructure company and strategically lower the cost base.
- Maximise the potential contribution of every employee in the company, which would result in a massive improvement in performance.
- Focus on customer needs and increase advertising spend to enhance the brand.
- Communicate more to the workforce and be more aware of what employees are doing and thinking.
- Improve morale of workforce through education and training and examine the services we require from outside with a view to taking them inside.
- Develop new markets, complete restructuring programme and develop a short -term plan to take us through the current difficulties facing the company.

Q16 What do you understand by the term employability?

Managers (N=15)

- Ability to retain employment in the open job market.
- How skilled and competent one is in the eyes of the business world.
- The competence to retain a job for life
- Suitability for employment – potential for the future
- Suitability for different types of work
- A persons ability to meet the needs of a changing working environment
- Level of mobility one has in employment terms.
- Capacity to be flexible and possess a diverse range of skills in an ever-changing work environment.
- The skills, training and motivation to contribute to the achievement of the business objectives.
- Ability to do any job within their wider remit at any given time.
- Possessing the skills required by the business at any time.
- Fitting the right person to the one right job –not the job to the person.
- Be suitable to work in a large number of positions.
- Having the skills and knowledge to work both inside and outside the organisation.
- Being armed with the knowledge to perform many tasks and being able to make a difference in building the competitiveness of the organisation.

Shop Floor Employees (N=10)

- Being flexible and being able to adapt to the changing needs of employers.
- Having the skills and knowledge to be able to work along side others successfully.
- A person that could turn their hand to anything in any type of organisation.
- Suitability of person to take up employment
- Range of skills, knowledge and experience a person has achieved which make them more employable.

- Level of education and skills attained relating to employment opportunities.
- Fitness for work.
- Qualified to do the work available and level of adaptability and openness to change.
- Having the skills required by the company at any time.
- How capable you appear to an employer – how easy you would find it to gain employment in the open market.

Q.17 (a) How important is employability to employees?

Managers (N=15).

- Vital in times of accelerated change.
- Important to progress career
- Extremely important- for employees to satisfy the needs of the organisation
- Very important- to cope with the ever changing workplace
- Vital – Change is very rapid in the 21st century
- Critical- satisfies a basic need to be able to engage in continuous development
- Very important for job security and empowerment
- 10 out of 10- World of work is changing faster than ever before with no guarantees of employment.
- Very – important for company to remain competitive.
- Very important- make employees more valuable to the company
- Important
- Critical- increases the potential for continuing employment
- Very –gives an added sense of security and well-being.
- Extremely – Employees need to be able to stand on their own two feet should the need and opportunity arise.
- To many it is not that important – as they only come in to do the job and draw their wages.

Shop Floor Employees (N=10)

- Critical – employees have to develop skills to keep up with change.
- Important - Being able to continue in work
- Very important – to be able to find a new job in redeployment situation or in unemployment situation.
- Very Important – in an age of constant change flexibility in movement is critical.
- Very- makes employees more flexible as markets change
- Very important – employees would be able to apply for any job.
- Huge – everyone needs to be trained and skilled for morale
- Critical and essential – for job security.
- Very – the more employable you are the easier to change companies – you have a choice.

Q. 17 (b) How important is employability to the company?

Managers (N=15)

- Very Important – for flexibility and customer responsiveness has a major role to play in employee loyalty.
- Important for succession planning.
- Extremely important – company will be more productive and the workforce happy.
- Critical – to cope with the ever changing workplace
- Absolutely vital – employees must have the skills to make the best possible contribution.
- Critical – to help the organisation respond to a myriad of new and diverse challenges to remain in business.
- Vital- a more flexible workforce is needed to respond to a wide range of business needs.
- 8 out of 10 – Companies must be attractive workers
- Very important – for the organisation to remain competitive.

- Very Important – employees as assets prepared to update skills when required.
- Important – to maintain /improve performance
- Critical – employees can progress within the company – promotion from within.
- Very – a wide range of skill sets are useful to a company.
- Very high – companies compete on a global level and need all the competitive advantages they can muster.
- Employability means everything- having employees who are multi-skilled and interchangeable is a very effective weapon.

Shop Floor Employees (N=10)

- Very Important- the capacity of employees to adapt the better.
- Critical- essential to have a flexible, competent, well educated and trained workforce.
- Huge – highly skilled workforce is a huge benefit to a company.
- Very important, ready-made applicants for new jobs and responsibilities.
- Very Important – Need employees capable of doing the job, which is changing all the time.
- Very Important – In an age of constant change flexible employees are a critical asset.
- Very Important – the ability to change and develop new skills is what companies at this time and in the future require.
- Important – many work experiences and skills are critical
- Critical – employees must develop skills to keep up with change.

Q18. Do you consider that you are capable of taking up a position above your current position –If yes – what position / area?

Managers (N=15)

- Yes – from quality projects to human resources.

- Yes – customer service to customer service manager and other areas if required.
- Yes – from company safety manager to corporate safety manager.
- Yes – from manufacturing quality manager – to plant manager
- Yes - from temporary supervisor to project manager / process improvement manager.
- Yes – from business process re-engineering manager to financial controller.
- Yes – who hasn't self- belief?
- Yes – from front line manager to production control manager.
- Yes – from human resource officer to human resource manager
- Yes –from front line manager to plant superintendent
- Yes – from plant superintendent to plant manager.
- Yes – from front line manager to manager of world sports department.
- No – As a process improvement engineer recently promoted I am learning the business and need more time before progressing further.
- Yes – from training officer to training manager /operations manager.
- Yes -from front line manager to training /human resources manager.

Shop Floor Employees (N=10)

- Yes – from training instructor to IT support engineer
- Yes –from wedge cutter to front line manager
- Yes – from wedge cutter to full time training instructor
- Yes – from surplus rheintour cutter to a number of positions in non- craft area as I have completed a number of courses and could do a number of different jobs.
- Yes – from blower to front line manager as I have several qualifications
- Yes- most definitely – from IT programmer to manager of data management systems.
- Yes- from training instructor to front line manager – completing a diploma in front line management currently.

- Yes – Have recently being promoted but know that I can move on further given a successful period in current position.
- Yes – from training instructor to Internet / web programmer.
- Yes – from customer service to a managerial position in logistics.

Q.19 What is your attitude to continuous change?

Managers (N=15)

- Great – Opportunities for new experiences and learning makes working life more challenging and interesting.
- Positive – we need to be prepared to keep one step ahead as change is inevitable.
- In favour – Change is a good thing and is needed to keep in touch with our customers but it is essential that everyone is kept fully informed of the changes.
- Good – I encourage change to secure competitiveness – but not for change sake.
- In favour- We must have continuous change to serve our customers and stay ahead of our competitors – “Opportunity in life only lasts the life of the opportunity”
- Okay – Continuous change is difficult to cope with –As human beings we need change in order to grow but we also need a sense of homeostasis so that we can assimilate our new experience.
- In favour – I realise that change is an integral part of the modern manufacturing organisation and the lifeblood to cost efficiency and competitiveness.
- Okay – We have to get faster and faster.
- In favour – Change is inevitable and you must not only embrace it, you must make it happen.
- In favour – The world doesn’t stop changing; neither will markets or customer .We must keep pace if we expect to survive.

- Essential – We must change constantly to keep up with our competitors and satisfy our customers. We must also change our management style to accommodate the new work organisation.
- Don't have a problem with it – but employees must be prepared for it.
- It is here to stay – but need to be clear that the change brings the benefits associated with it.
- Very important – We have to become more flexible and responsive or we will lose market share.
- The only constant is change – this is true- if we believe that things will remain the same we are lost. To give us the edge in business we have to develop new products, educate the workforce and work more cleverly.

Shop Floor Employees (N=10).

- Essential – can't sit still – markets are changing all the time.
- I like change – good for employees, provides new job opportunities and we have to do it any way to compete in the market place.
- Healthy – for all of us to change and not get stuck in the one position all our lives.
- Important
- Positive – Leads to progress and improvement – making products and services better, faster, cheaper.
- Cautious – can be used as a tool by management to frighten employees to do things the company wants and not all management decisions are right for either company or employee.
- I am a convert – as it can continue to provide jobs in a new context
- A must – if we do not adapt to continuous change there will be no hope for Irish Industry- In an ever changing world the only way to compete is to evolve and change and this can only be done through education and training.
- I welcome continuous change, as it is positive for the company.

Q. 20. How can the company prepare for the change coming in the next 5/10 years?

Managers (N=15)

- Carry out extensive market research – rationalise the business further – focus on a smaller range of product and become better at it – develop our people.
- Plan better – communicate the change – explain it and the alternative if we do not take it on board.
- Up-skill the workforce and communicate the change
- Develop the workforce to facilitate the change – outsource to compete and reduce costs.
- Place more emphasis on change management and develop the workforce skill base
- Educate and train employees – move people around the organisation and provide development plans for people
- Erect barriers – focus on core competence and invest in marketing.
- Educate the workforce –communicate properly and research the market place.
- Avoid change for change sake – consult widely and communicate positively the rationale for the change.
- Develop first class leadership at the top – develop a well balanced and trained workforce and we must have a plan
- Know the market place better and up-skill the workforce to meet the new challenges.
- Train the workforce, maintain our position at the front end of technology development, communicate the good and bad news to the workforce and promote people from within.
- Monitor closely market trends, keep abreast of latest technologies, with latest manufacturing and management techniques, continuously train the workforce and educate them on the financial running of the business.
- Educate workforce in change management – train all management and develop strong communications systems and ensure transparency of strategies and plans for the future.

- Invest in becoming more competitive, educate the workforce, invest in the brand and continually monitor costs / expenditure.

Shop Floor Employees (N=10).

- Up-skill the workforce
- Educate, Train and develop cross-functional co-operation.
- Education, training and communications.
- Identify requirements for the company and communicate and gear up for the future.
- Training, education and change management.
- New technology and a trained workforce.
- Train the employees.
- Gain the trust of the workforce with open and honest communications and involve them more in the change process.
- Employ the right people in the right places.

Appendix G: Raw Data from Research Phase 4.

Q5 Supplementary Information - The following is information on course type, duration, study time and who covers the fees?

Shorthand for course names

- **Dip IE** Diploma in Industrial Engineering
- **Cert Mkt** National Certificate in Marketing
- **Cert, Bus St** National Certificate in Business Studies
- **Sup Mgt** National Certificate in Supervisory Management
- **Cert Leg St** National Certificate in Legal Studies
- **Dip Per Mgt** National Diploma In Personnel Management
- **Cert QA** National Certificate in Quality Assurance
- **Dip JEB** Diploma in Joint Examining Board (IT Teachers)
- **F Cert Coun** Foundation Certificate in Counselling
- **Cert Comp App** National Certificate in Computer Applications
- **C Comp Prog** National Certificate in Computer Programming
- **ACCA Tech** Accounting Technician
- **Dip IIPMM** Dip in Irish Institute of Production and Materials Mgt
- **BSc Comp** Bachelor of Science in Computing.

	Course	Duration	Classes	Study time	Funding.
1-	Dip IE	3yrs	2N / 6hrs	6hrs	Employer
2-	Dip IE	3yrs	2N /6hrs	4hrs	Self
3-	Dip IE	3yrs	2N /6hrs	4hrs	Employer
4-	Dip IE	3yrs	2N/6 hrs	6hrs	Employer
5-	Dip IE	3yrs	2N/6hrs	6hrs	Employer
6-	Dip IE	3yrs	2N/6hrs	6hrs	Self
7-	Dip IE	3yrs	2N/6hrs	6hrs	Employer
8-	Dip IE	3yrs	2N/6hrs	4hrs	Employer
9-	Dip IE	3yrs	2N /6hrs	6hrs	Self

10-	Dip IE	3yrs	2N/6hrs	6hrs	Employer
11-	Cert Mkt	1yr	2N/6hrs	3hrs	Self
12-	Cert Mkt	1yr	2N/ 6hrs	4hrs	Self
13-	Cert Mkt	1yr	2N/ 6hrs	4hrs	Self
14-	Cert, Bus St	2yrs	2N/ 6hrs	6hrs	Employer
15-	Cert, Bus St	2yrs	2N/6hrs	4hrs	Self
16-	Cert, Bus St	2yrs	2N/6hrs	4hrs	Self
17-	Cert, Bus St	2yrs	2N/6hrs	3hrs	Employer
18-	Cert, Bus St	2yrs	N/6hrs	4hrs	Self
19-	Cert, Bus St	2yrs	2N/6hrs	9hrs	Employer
20-	Cert, Bus St	2yrs	2N/6hrs	6hrs	Employer
21-	Cert, Bus St	2yrs	2N/6hrs	6hrs	Self
22-	Cert, Bus St	2yrs	2N/6hrs	6hrs	Self
23-	Cert, Bus St	2yrs	2N/6hrs	8hrs	Self
24-	Cert, Bus St	2yrs	2N/6hrs	6hrs	Self
25-	Cert, Bus St	2yrs	2N/6hrs	9hrs	50/50
26-	Sup Mgt	2yrs	2N/7hrs	2hrs	Self
27-	Sup Mgt	2yrs	2N/7hrs	4hrs	Self
28-	Sup Mgt	2yrs	2N/7hrs	6hrs	Employer
29-	Sup Mgt	2yrs	2N/7hrs	2hrs	Self
30-	Cert, Leg St	3yrs	2N/ 6hrs	4hrs	50/50
31-	Dip, Per Mgt	3yrs	2N /6hrs	6hrs	Employer
32-	Cert in QA	1yr	1N/3 hrs	6hrs	Employer
33-	Cert in QA	1yr	1N/3hrs	2hrs	Self
34-	Cert in QA	1yr	1N/3hrs	5hrs	Employer
35-	Cert in QA	1yr	1N/3hrs	4hrs	Self
36-	Cert in QA	1yr	1N/ 3hrs	3hrs	Self
37-	Cert in QA	1yr	1N/3hrs	6hrs	Self
38-	Cert in QA	1yr	1N/3hrs	4hrs	Employer
39-	Dip JEB	1yr	1N/ 3hrs	3hrs	Self
40-	Dip JEB	1yr	1N/3hrs	10hrs	Self
41-	Dip JEB	1yr	1N/3hrs	6hrs	Employer
42-	Dip JEB	1yr	1N/3hrs	2hrs	Self
43-	Dip JEB	1yr	1N/3hrs	6hrs	Self

44-	Dip JEB	1yr	1N/3hrs	6hrs	Self
45-	Dip JEB	1yr	1N/3hrs	4hrs	Self
46-	Dip JEB	1yr	1N/3hrs	4hrs	Self
47-	Dip JEB	1yr	1N/3yrs	10hrs	Employer
48-	Dip JEB	1yr	1N/3hrs	4hrs	Employer
49-	F Cert Coun	1yr	2N/ 9hrs	5hrs	Self
50-	F Cert Coun	1yr	2N/ 9hrs(Sat)	6hrs	Self
51-	F Cert Coun	1yr	2N/ 9hrs(Sat)	11hrs	Self
52-	C Comp App	3yr	2N/6hrs	6hrs	Self
53-	C Comp App	3yr	2N/6hrs	6hrs	Employer
54-	C Comp App	3yr	2N/6hrs	6hrs	Self
55-	C Comp App	3yr	2N/6hrs	3hrs	Employer
56-	C Comp App	3yr	2N/6hrs	6hrs	Employer
57-	C Comp App	3yr	2N/6hrs	3hrs	Employer
58-	C Comp App	3yr	2N/6hrs	6hrs	Employer
59-	C Comp App	3yr	2N/6hrs	6hrs	50/50
60-	C Comp App	3yr	2N/6hrs	6hrs	50/50
61-	C Comp Prog	1yr	1N/3hrs	10hrs	50/50
62-	ACCA Tech	3yr	2N/6hrs	4hrs	50/50
63-	ACCA Tech	3yr	2N/6hrs	6hrs	Self
64-	ACCA Tech	3yr	2N/6hrs	2hrs	Employer
65-	ACCA Tech	3yr	2N/6hrs	6hrs	Employer
66-	Dip IIPMM	3yr	2N/6hrs	4hrs	Self
67-	Dip IIPMM	3yr	2N/ 6hrs	2hrs	Employer
68-	Dip IIPMM	3yr	2N/ 6hrs	6hrs	Employer
69-	Dip IIPMM	3yr	2N/6hrs	4hrs	Employer
70-	Dip IIPMM	3yr	2N/ 6hrs	4hrs	Employer
71-	Dip IIPMM	3yr	2N/6hrs	15hrs	Self
72-	Dip IIPMM	3yr	2N/6hrs	5hrs	Employer
73-	Dip IIPMM	3yr	2N/6hrs	2hrs	Employer
74-	Dip IIPMM	3yr	2N/6hrs	8hrs	Employer
75-	Dip IIPMM	3yr	2N/6hrs	3hrs	Employer
76-	Dip IIPMM	3yr	2N/6hrs	4hrs	Employer
77-	BSc in Comp	2yr	3N/9hrs	4hrs	Self

78-	BSc in Comp	2yr	3N/9hrs	5hrs	Employer
79-	BSc in Comp	2yr	3N/9hrs	6hrs	50/50
80-	BSc in Comp	2yr	3N/9hrs	6hrs	Employer

Appendix H: National College of Ireland Certificate and Diploma.

(Submitted for FETAC Level 3 and Level 6 accreditation in 2006.)

Certificate in Employment Skills

Modules: (core and electives)

- Personal Development & Learning Skills
- Information Technology
- Teambuilding
- Equality & Diversity Management
- Mathematics for Business
- Health & Safety
- Communication Skills
- Quality & Service Management

Diploma in Business Skills.

Modules: (core and electives)

- Learning & Development
- Human Resource Processes
- Quality & Service Management
- Economics
- Leadership & Team Motivation
- Health & Safety
- Management Information Systems
- Quantitative Methods for Business
- Communication Skills
- Finance
- Social Studies

Appendix I: Ireland's Current Global Rating.

Over the past decade Ireland has made tremendous progress on competitiveness and is now firmly ranked by a number of reputable sources in the very top league of the advanced industrial economies of the world. It is in this competitive context that the development of the workforce and in particular the educationally disadvantaged is to be considered. There are many benefits from investing in eliminating the educational deficit. There are many consequences from ignoring it. The case for doing it is unbeatable. The information in Appendix 1 was taken from the following national and international sources.

- **IDA Annual Report (2004 pp.14-15) Dublin : Forfas.**
- **Global Competitiveness Report 2005/2006 (2005 pp 332-333).**

(1) From IDA Annual Report (2004 pp14-15) Dublin, Forfas.

Most globalised country in the world for three consecutive years: From 62 countries, accounting for 96% of the world's GDP and 85% of the world's population Ireland was ranked 1st for three consecutive years.

Source: AT Kearney/ Foreign Policy Magazine Globalisation Index, 2004.

First in Foreign Direct Investment Flows as a % of GDP: This indicator of 60 countries surveyed measures inward flows of foreign direct investment in US\$ as a percentage of US dollars.

Source : IMD. World Competitiveness Year Book, 2004.

First in Portfolio Investment (assets US\$ billions): The ranking demonstrates, of 60 countries surveyed, the size of the financial assets held by overseas companies in Ireland and the success of its global financial services industry.

Source: IMD World Competitiveness Year Book, 2004.

First for Quality of Life: Out of 111 countries surveyed, Ireland was the most attractive place to live and work in the world according to the EIU. Ireland ranked first because it successfully combined the most desirable element of the new –material

well being, low unemployment rates and political liberties- with the preservation of certain life satisfaction- enhancing elements of the old- such as stable family and community life.

Source: The Economist Intelligence Unit. Worldwide Quality of Life Index 2005.

First for Corporate Tax Rate on Profit: Of 60 countries surveyed, this indicator highlights Ireland's very attractive corporate tax rate in a global context and the likely high after tax-rate of return on investments. This is the calculation of maximum tax rate calculated on profit before tax.

Source: IMD, World Competitiveness Year Book, 2004.

Highest output of Science and Engineering Graduates: This data compares the position of Ireland within Europe and its member states and with the main competitor location in Science and Technology, Japan and the US

Source: EU Directorate General for Research: Third European Report on Science and Technology Indicators 2003; per 1000 population aged 20-34.

Second in Higher Education Achievement. Of 60 countries surveyed; this shows the percentage of the population in the 25-34-age group that have attained at least a third level education.

Source: IMD, World Competitiveness Year Book, 2004.

First in Creativity: Of 30 countries surveyed, Ireland was ranked number one for its new 'creative class' whose values and lifestyles will drive the 21st Century knowledge economy, its technologies and social structures.

Source: The Rise of the Creative Class, Richard Florida published by Basic Books, 2004.

Ranked in the Top 15 R& D Collaborations between Business and Academia:

This is an indicator of one of the key characteristics of a modern, innovation –driven economy i.e. the formation of Research and Development (R&D) collaborations and networks between industry and academia. The output of shared knowledge and

technology linked to business commercialisation capability is a highly desirable economic driver. Ireland was ranked 11th out of 102 countries surveyed.

Source: IMD, World Competitiveness Year Book, 2004.

Third in Flexibility and Adaptability: Out of 60 countries surveyed, this indicator refers to the ease and effectiveness with which people in the economy embrace change and respond to challenges.

Source: IMD World Competitiveness Year Book, 2004.

(2) From The Global Competitiveness Report 2005-2006 – Policies Underpinning Rising Prosperity. New York: Palgrave- Macmillan. (2005 p 332-333)

**Growth Competitiveness Index 26 in 2005 -----30 in 2004.
(Ranked from 117 Countries).**

Macroeconomic index rank	7
<i>Components:</i>	
Stability	7
Government Waste	28
Government Credit Rating	14
Public Institution index rank:	13
<i>Components:</i>	
Contracts & Law	11
Corruption	18
Technology index rank:	
<i>Components:</i>	
Technology	31
Innovation	22
ICT.	24

Business Competitiveness Index Rank: 19 (Ranked from 110 Countries)

Sophistication of company operations and strategy	16
Quality of national business environment	20

Notable Competitiveness Advantages

Growth Competitiveness Index – (ranked from 117 countries).

Macroeconomic Environment:

Access to credit	4
Recession expectations	5
Country credit rating 2004	14
Government surplus/deficit, 2004	18

Public Institutions:

Judicial Independence	5
Favouritism in decisions of government officials	10
Property rights	10
Irregular payments in tax collection	12
Irregular payments in exports and imports	16
Irregular payments in public utilities	23

Technology:

Firm-level technology absorption	10
Laws relating to ICT	13
Cellular telephones 2003	16
Personal computers, 2003	18
University /industry research collaboration	20
Technological readiness	20
Telephone lines 2003	20
Government prioritisation of ICT	20
Company spending on research and development	21
Utility patents, 2004	22
Internet hosts, 2003	23

Extent of regional sales (exports to neighbouring states)	2
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Notable Competitive Disadvantages

Growth Competitiveness Index – (from 117 Countries).

Macroeconomic Environment

Real effective exchange rate, 2004	106
Interest rate spread, 2004	35
National savings rate, 2004	35
Inflation, 2004	32
Wastefulness of government spending	28
Government debt, 2004	27

Public Institutions

Organized crime	30
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Technology

Quality of ISP sector	55
Internet access in schools	37
Internet users, 2003	31
Gross tertiary enrolment	29
Government success in ICT promotion	29

Notable Competitive Advantages.

Business competitiveness Index – (ranked from 110 countries)

Sophistication of Company Operations and Strategy:

Extent of regional sales	2
Number of administrative procedures required to start up a business	6
Willingness to delegate authority	11
Extent of incentive compensation	11

Production process sophistication 20

Quality of the National Business Environment:

Foreign ownership restrictions 2

Quality of Educational system 3

Quality of public schools 3

Quality of science and maths education 16

Other Indicators - (ranked from 117 countries):

Impact of rules on FDI 2

Soundness of banks 2

Strength of auditing and accounting standards 3

Venture capital availability 4

Ease of access to loans 6

Business costs of corruption 9

Efficacy of corporate boards 9

Tax burden 10

Extent and effect of taxation 10

Protection of minority shareholder's interests 10

Importance of corporate social responsibility 10

Effectiveness of law-making bodies 11

Ease of hiring foreign labour 17

Notable Competitive Disadvantages.

Business Competitive Index – (ranked from 110 countries).

Sophistication of Company Operations and Strategy :

Capacity for innovation 22

Company spending on research and development 20

Production process innovation 19

Quality of the National Business Environment

Centralization of economic policy- making 84

Railroad infrastructure development 55

Telephone/fax infrastructure quality	50
Other Indicators (ranked out of 117 countries)	
Flexibility of wage determination	110
Hiring and firing practices	79
Availability of mobile or cellular telephones	67
Pay and productivity	44
Intensity of local competition	43
Business costs of crime and violence	34
Government procurement of advanced technology products	34
Prioritisation of energy efficiency	32
Local availability of process machinery	32
Pervasiveness of money laundering through banks	31
Effects of privatisation on competition and the environment	27
Prevalence of corporate environmental reporting	27
Local supplier quantity	26

Appendix J: Waterford Crystal & Waterford Institute of Technology Partnership Programmes 1990-2006

In 1991 an agreement was made between the college and company to collaborate on education, training and research projects to aid business competitiveness and employee development. Since then personnel from Waterford Crystal and Waterford Institute of Technology have worked closely on joint projects aimed at supporting the transformational change process in the company. The objective included the full utilisation of the many specialists technical and knowledge based resources in the college. The collaboration was an essential part of the building of a learning organisation, which would encourage employees to develop a portfolio of skills and knowledge to improve business competitiveness and employability status.

New approaches and methodologies were explored providing invaluable learning experiences for a wide category of employees. The new skills and knowledge sets facilitated employees who work at the leading edge of industrial change. The innovation in curriculum development provided valuable experience for the staff of the Institute keeping them directly in touch with industrial change and the market place. Engagement in leading edge change kept them abreast of developments in a fast changing business environment enriching curricula and teaching experiences for full time and part time lecturers and students.

The change from craft to techno-craft to knowledge-based jobs in the company triggered new interest in learning among all sections of the workforce. Employee capability and commitment had long been recognised within the company as the most enduring basis on which to build sustainable competitive advantage. Employees played a central role in maintaining the integrity and reputation of the brand and the competitive base of the company. The concept of employability was promoted company-wide.

A special onus was placed on employees to take responsibility for their personal development. The Institute of Technology is the main third level educational support for employees. It offers a wide range of educational interventions in both standard and customised forms. It was vital for the business, employees and college that a

partnership approach was established that jointly promoted innovation and learning company-wide.

The Institute provided access to a wide range of learning opportunities from national certificate to postgraduate degrees. The company provided funding and a very supportive learning environment. There were other areas of co-operation, which completed a broad agenda of co-operation and partnership. The following are examples of the initiatives completed and in progress:

1. Continuing Education and Training.

1.1 Part-time Courses in the Waterford Institute of Technology.

On average 120 employees participate every year in part-time education mainly in the college. Most of them plan to acquire a 3rd level professional qualification certificate, diploma or degree. Over 1000 employees have attended courses in the college since 1990 and the proximity and width and depth of the curricula on offer has been a tremendous aid to employees and the company in achieving the turnaround of the skill and knowledge base of the company.

On average 50% of participants are usually staff and 50% hourly-paid employees. The breakdown in the entire workforce on shop floor employees to management staff is 20% - 80% making it a much higher percentage of management staff attending part-time education courses, as is the trend nationally.

The range of courses attended includes MBA, primary degree, diploma, and certificate and foundation courses.

Fourteen nominated job related courses are fully funded by the company and all others are funded to a maximum of £250/ €325 per year.

Note:

The increase in shift work impacted on employee attendance in continuing education. There were a growing number of queries regarding the availability of distance learning programmes. Efforts were made to provide open learning and e-learning

alternatives and to make more flexible arrangements with the college on delivery methods.

1.2 Technician training programme.

The accelerated technician programme was a Government sponsored Industry /Education Initiative designed to meet the skills needs of the economy. It commenced in 1998 as a partnership approach between government, education and industry in recruiting, educating and training of technicians in manufacturing technology.

This company sponsored one craftsman for the first full-time programme in 1998-1999. The company also sponsored a full time student providing six months paid technical work experience and then employed him for one year until he gained employment with a supplier company.

In the following years, twelve employees completed the programme on a part-time basis with seven of them progressing to become fully qualified engineers with three of them graduating in 2006.

1.3 Customised Courses.

A number of customised courses were developed by the Institute to meet the needs of Waterford Crystal and were delivered flexibly to suit the schedules of the participants.

- **National Certificate and Diploma in Engineering -- Glass Technology.**
- It was the first ever nationally accredited glass technology course developed in the country and it ran for four years. It was an extremely difficult course for the participants who were mainly craftsmen. The level of dedication and commitment was outstanding.

- **Machine Operative Course.** It was a two- week full –time course to introduce surplus craftsmen to engineering technology.
- **Plastic Welding Course.** The course was developed to develop skills in this specialist area and to broaden the skill base of engineering based employees.
- **Foundation in Technology Course.** This course was developed for employees as an introduction to technology in response to a need to help employees become skilled in the engineering and technology through collaboration between the Institute and the company.
- **Maintenance Technology & Glass Production Course-**offered on a modular basis.
- **Introduction to Maths Course-** Following a review of a number of engineering courses it was decided to run a special support course in maths. Difficulties with maths caused many employees to walk away from engineering courses even though it was only one of the many subjects to be completed.

1.4 Language Classes.

German and French language classes were developed and launched in co-operation with tutors from the Institute in 1996. It ran successfully for three years. Employees have continued ever since in learning languages, which is a growing requirement as they work in the global economy. In 2002 new flexible courses were organised. Language training is ongoing among managers and staff particularly in the logistics, customer service and research and development areas.

1.5 Operational Best Practice Programme.

An operational best practice programme was organised in co-operation with the Institute to improve the skills and competence of front line managers who had in earlier years were promoted from craft and general operative jobs. Twelve modules of one- day duration per module were included in the programme. College lecturers and company staff delivered them in-house. Two other related short courses were also developed and delivered

- **Business Analysis** – The course was developed and delivered on a number of occasions to fulfil a specific need.
- **Management Accounting** – The course was piloted with 14 managers in 1997 and was an outstanding success.

1.6 Crystal Economics.

A three- day course on financial management was developed between Training, Finance and the Institute. It was piloted in September 2001 in the college for middle and senior managers in Manufacturing, Logistics, Sales & Marketing, Quality, Human Resources and Corporate Affairs. The aim was to develop business managers who would be financially and business literate and who would be able to manage cost / profit centres within the overall business.

1.7 Instructional Techniques for Adult Learners Course.

Lecturers presented the course in house from the institute to 8 employees who were chosen to act as mentors to employees returning to education in particular women.

1.8 An interactive multimedia-training programme for Waterford Crystal on Logistics Management.

Two lecturers from the institute developed a training and awareness programme on the logistics function on CD ROM in co-operation with the head of logistics. The CD ROM was launched in September 2001. It was well received and is an excellent portrayal of all the key activities and responsibilities of logistics and the supply chain in the company.

1.9 UCD Certificate in Safety, Health and Welfare at Work.

This programme is beamed by satellite link to centres around the country including WIT. The company has supported 17 of its frontline managers to undertake this course in 1998, 14 in 1999, 12 in 2000, 8 employees exams in 2001 and on average four employees every year since then. This heavy involvement in health and safety education is a strategic initiative to improve the awareness and competence among managers in this key area of responsibility. The company is very committed to adopting a proactive approach to health and safety on moral, employee relations and business grounds. The company is self- insured and establishing best practice in the management on health and safety in the company is a priority.

1.10 Expand Programme.

The Expand programme was an effort by the company to identify employees with the potential to take on new responsibilities and to fast track their development. The programme included a mix of personal and business development modules building a new set of competencies that enabled them to progress to more responsible jobs in the company.

Two qualified staff in the education and career assessment carried out personal assessments providing direction on career path development for all participants. They helped design the programme and evaluated it on completion against the objectives set. The programme was completed in April 2002. All the participants have made progress since then in their careers.

2. EU Projects

2.1 Sesame Project Leonardo 1998-2000.

This project involved the development of a customised foundation course for access to third level education for employees in the company. It was aimed at employees who had not achieved a Leaving Certificate standard of education and who wanted to gain third level qualifications. Even though the company was the lead promoter a lecturer from the institute which had to make the greatest contribution to its development was appointed to act as co-ordinator. There were thirteen participants, four from Dungarvan and nine from Waterford (five women and eight men). All the participants passed and graduated in 2000. The programme was rated as a major breakthrough for educationally disadvantaged employees. The course was singled out for special mention at the graduating ceremony by the director of the college, the chairman of the college board of management and the visiting head of the NCEA. This access course was deemed to be the final piece in the progression route from second to third level.

2.2 WICCA Project- Leonardo 1999-2001.

The project involved the inclusion of 4 women employees and two women from the community in a full-time certificate in manufacturing technology. All 6 women successfully completed the course with Stephanie Byrne achieving first place for women participants in Ireland and 3rd place overall. Stephanie has since completed the diploma course full-time on one year's leave of absence and is now planning to complete the engineering degree course full-time. All the other participants are now working in technical areas. The community based women gained employment as technicians in industry in the locality. Ger Grant who was sponsored by the company on a full time basis to complete the certificate acted as a mentor for the women. This programme was a major breakthrough in women in employment in Waterford Crystal and it has opened up new area of potential, which is an expanding area of opportunity in the future. The programme proved that women could make it in an area that had

been avoided by them in previous years. Technicians are subject to a higher remuneration package than women operative

2.3 EU Integra Project - Employment Initiative 1998/1999.

The EU Integra project was funded by the European Social Fund. The project was managed by WIT with Waterford Crystal involved as a partner. The aim of the project was to promote lifelong learning opportunities for adults through the provision of information, guidance and counselling services.

The project involved:

- Networking with voluntary, statutory, and community organisations
- The provision of training, support, and information
- The establishment of a core library on education & training courses available
- The development of a computerised database containing information on social welfare entitlements and grants available
- The service provides a holistic client centred approach to career, education, and personal guidance.

2.4 Leonardo - Monitoring of Energy and Environment Project.

This project involved the development of a new computer based monitoring and control of energy and the environment system. John Vance, lecturer in electronics from the Institute, developed a training manual for the new system and delivered a programme in co-operation with Jim Croke and John Murphy under the Leonardo 1996-1997 programme. This project supported the establishment of a new state of the art on line monitoring system, which provided on time information for users and managers. It also had the capacity to regulate usage per need and time of day in the various areas in the company. It also monitored oil, gas, water and electricity.

2.5 Leonardo - Training of Trainers in Glass Manufacturing.

Both the Institute and the company were partners in a glass train the trainers project funded under the Leonardo da Vinci programme. The project involved the identification of trainer needs within the glass industry; the design of a modular training programme for trainers, the delivery of training of trainers in the Netherlands, Ireland, Sweden and Portugal and the evaluation of the training programme.

2.6 Horizon – NOW –New Opportunities for Women.

The company supported by WIT ran a very successful NOW project in 1995/1997. The project involved the identification and elimination of barriers to progress to mainstream employment for women employees. It also included a development programme for 30 women from all sections of the organisation. The participants on this programme have all progressed in the company mainly due to their involvement in the programme. NOW was responsible for motivating them to engage in formal education and training initiatives.

WIT delivered a training programme for 10 mentors who were available to support women in education in the future. Since then women have become more aware and involved in education and in seeking better positions for themselves.

2.7 Adapt-Voltaire Project.

Waterford Institute of Technology supported the company on this project. The company's trans-national partners the University of Wales - Newport, Cologne Technical University, KdG Antwerp (3rd level college of technology) and ESCPI-CNAM Paris (university) have developed links with WIT on a range of trans-national education projects since then. Voltaire involved the development of information technology and engineering technology programmes that served to establish a wide level of technical expertise required by the company in order to deal with the introduction of new technology.

3. Research and Postgraduate Studies

3.1 Operational Programme for Industry.

Throughout the 1996-2000 period the government provided £4m for the Institute of Technology Sector to enable them to train students to master's level through industry related research projects. Following successful joint applications by WIT and Waterford Crystal two scholarships were awarded totalling £27,558 which enabled two students to undertake a masters by research thesis on the following two company related issues. Also the company to carry out research on tank furnace related issue sponsored another student.

Student/s	Project Title.
Tomas O Dwyer	An evaluation of the impact of the Adapt/Voltaire programme on the workforce
Pierce Sheridan Maeve O'Grady	The development and assessment of an Accreditation of Prior Experiential Learning action plan for Waterford Crystal
John O'Dwyer	Research project over 2 years 1999-2000 into the application of artificial intelligence analysis of our furnace control and shop floor data collection

3.2 Other Post Graduate Master Students sponsored by the company.

Logistics.

A lecturer from WIT carried out a postgraduate masters study on forecasting for the logistics function. The study period was from July 1998 to December 1999 and was sponsored by the company. On conclusion of the project the company employed the lecturer in a full time capacity as a sales forecaster.

Marketing.

The head of the department of accountancy & business studies in the college in conjunction with the head of marketing in the company selected a postgraduate student to undertake a study which examined the development of electronic relationships between Waterford Crystal and its retail channels in Ireland. The company sponsored the student for 21 months.

3.3 Chair of Marketing.

In 2000 the company decided to sponsor a chair of marketing in the college to the value of £100,000. This was a huge boost to the college and raised the profile of marketing programmes in the college. It enabled the college to employ special expertise and to upgrade their marketing degree course.

3.4 Research Projects.

(a) A project involving the use of WIT's Scanning Electron Microscope for a study of the elemental analysis of lead glass imperfections and the interaction of lead glass with refractory brick commenced in 1998. The main researcher was David Power under the supervision of WIT lecturers Dr Gabriel Gallagher and Dr Sheila Donegan. Enterprise Ireland provided funding of £12,000 and Waterford Crystal supported the project to the value of £4,000.

(b) Dr Sheila Donegan has carried out research work with the scanning electron microscope for surface analysis of glass. This equipment examined the cutting and polishing finish of glass. It was aimed at optimising the cutting wheels and the acid and mechanical polishing processes including repair work. Sheila also worked on a computer imaging idea (based on explaining the reason Waterford Crystal bends light to cause rainbow effect and the sparkle of crystal) for the tourist trail.

(c) **Lead Leaching Project** -- Dr Sheila Donegan completed a research study in this area.

3.5 On-line Monitoring of Waste Water.

This involves 2- year project for the company in collaboration with the chemistry department in WIT. A grant was secured from Forbairt to complete the research. The project involved research into the development of online monitoring systems for wastewater. Limerick Institute of Technology were also involved.

3.6 Advanced Manufacturing Training Unit.

The Institute in co-operation with Allied Signal, Bausch & Lomb, Waterford Crystal and SMC a supplier of technical training equipment developed a state of the art Advanced Manufacturing Training Unit on the Industrial Estate. An Tanaiste Mary Harney T.D opened the new training centre in July 2001 at the launch of a Skillnets project.

The centre accommodates a modular manufacturing training system, which was used for training courses for employees and students. Designed as a replica production unit it added to the range of technical training facilities available in the college. Products can be assembled, transported and tested using this leading edge technology, which includes PLCs, pneumatics, hydraulics, robotics, sensors, actuators, and industrial PCs.

The most modern technology and equipment used in Advanced Manufacturing Technology are represented in this training unit. The equipment supplier SMC committed to update the equipment on a continuous basis.

3.7 Research Forum

Arising from a WIT / Waterford Chamber of commerce survey, WIT set up a research forum in co-operation with local industry including Waterford Crystal. The partnership forum addressed research needs in industry in the South East. The development increased the synergy between education and industry to create new knowledge. The project helped secure competitiveness for the many companies and businesses in the southeast and raised the profile of the college in research.

3.7 Skillnets Project – SETTS –South –East Technology Training Scheme 2000-2001.

Fourteen companies including Waterford Crystal collaborated with Waterford Institute of Technology to run a Skillnets programme. Common technology related training needs were identified and programmes were agreed and delivered to trainees from the different companies.

4. Industrial Placement for Undergraduate Students

4.1 Two third year electronic students completed 6 months of industrial placement with Waterford Crystal from January to June 1999. One worked in Process Improvement on a SCADA (Supervisory Control & Data Acquisition) specification for the Tank Furnace control system and the other worked on the Year 2000 (Y2K) project.

In addition as part of the BSc Degree Programme in Applied Computing approximately 2/3 students have undertaken their industrial placement with Waterford Crystal on an annual basis.

4.2 CALMAST Programme – (Centre for the Advancement of Learning of Maths, Science and Technology). The company and college in 2005 set up a joint committee to manage the programme. Its aim is to foster and promote interest in engineering/science/ technology/ design among first year secondary students in local secondary schools. First year secondary students are invited to submit engineering/science/design- based projects. Prizes are awarded to winner and part of the project in 2005 was a work experience term in the company working on a design as part of the International Young Glass Designer Programme.

5. Social, Sporting, Cultural and Other Links.

5.1 Library Access.

The college provided Training and Communications with a master card for library access. Any employee wishing to borrow a book/magazine from the college library could apply to T&D to use their card. The college has opened a state of the art library and information technology facility at a cost of £6m, which is a major support to all students attending the college.

5.2 College GAA Club Sponsorship.

Since the early 1990s the company has on an annual basis contributed sponsorship towards the cost of running WIT's GAA Clubs. The club has an outstanding record in the colleges Fitzgibbon Cup competition winning it on seven occasions (the latest in 2006). In 1999 the camogie club won the Ashbourne Cup (3rd level colleges camogie championship) for the first time in its 82-year history. The senior hurlers won the Fitzgibbon Cup on seven occasions (the latest in 2006), which is an outstanding achievement. These sporting achievements have promoted a very positive image for the college countrywide.

5.3 Social & Sports Centre.

The college rented the company's grounds including 25 acres of playing pitches at the Social & Sports Centre, which is, located a few hundred metres away. The college teams including hurling, football, camogie, soccer, rugby and athletics have used the grounds to great benefit over the past ten years. The refurbishment of the centre including the renovation of the swimming pool provided a high quality recreational opportunity for all students who wished to avail of them. To fund the recent restructurings in the company the lands were sold to a developer. The college are currently in the process of developing their new grounds at Carriganore for the 2006/2007 academic year.

5.4 Waterford Crystal Basketball Team.

The Crystal basketball premier league team used the college indoor sports hall for all the home national league games. The Crystal basketball team won the All-Ireland Premier league in 2001. In 2005 due it withdrew from all competition due the restructuring as part of the cost improvements programme.

5.5 Interview / Evaluation Panels.

Senior staff members carry out the interviews for the interviews for the Company's scholarship scheme. Two senior human resources managers have served as members of the college interview panel. During the international review of WIT in 1999 commissioned by the minister for education the education, training and communications manager represented WIT / Industry links at the review meetings. Jim O'Neill was appointed as a member of the college chamber of commerce/ industry strategic committee in 1998/99, which carried out a strategic review of college industry links.

5.6 Part-time Lecturers.

In the late 1990s, the college employed twenty-two employees from the company as part time lecturers across a range of subjects. Many of these part-time lecturers acted as mentors, tutors and coaches to study groups and individual employees within the company in completing accredited courses.

5.7 Chairman of Board of Governors.

In February 2003 Mr Redmond O'Donoghue, Chief Executive Officer of Waterford-Wedgwood was appointed as Chairman of the Governing Body of the college for a three- year term. In February 2006, he was re-appointed for a second term of five years.

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- The training team included Walter Walsh, Tony Tracey, Dennis O'Connor, John O'Riordan, Vivienne Evans, Pascal Roche, Mary Byrne, Marie Lenihan, Miriam Moloney, Annmarie Buckley, Michael Kenny, the training instructors and information technology champions. They operated at a time of transformational change in the company. They led by example in developing their own qualifications. They adapted brilliantly to many diverse and challenging roles including trainer, leader, coach, tutor, facilitator, advisor, motivator, problem-solver, trouble-shooter and change agent as different situations called for different interventions and approaches throughout the period 1990-2006.
- To employees across all functions in the company, in particular, the educationally disadvantaged who displayed great character in overcoming many barriers (in particular personal fear and lack of confidence) in adverse, pressurized circumstances while achieving outstanding results.
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