

REPORT TO
ENTERPRISE IRELAND
POLICY AND
PLANNING ON
DEVELOPING WOMEN
IN ENTERPRISE

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EXECUTIVE SUMMARY

Enterprise Ireland wished to explore how best it could act to assist with the particular challenges of women in enterprise in Ireland. This research examined, contemporary thinking, existing research, documented innovative approaches and best practices across Europe, the US, Canada, Australia and New Zealand and sought input from relevant representatives through focus group and interview. Sia Consulting was asked to undertake this important study to inform Enterprise Ireland of the current activity around the development and assistance of women in enterprise and to identify possible effective interventions, suitable to Enterprise Ireland's role, which would fit in an Irish context.

The objective of the study is to identify the key issues for women in enterprise in Ireland, examine suitable structures, resources and approaches to facilitating and supporting women's participation in the labour force and suggest initiatives which Enterprise Ireland can undertake. The study incorporates two elements. Desk research and primary research to compile Irish and international information about current and likely future issues for women in enterprise, positive action programmes for women in enterprise, within the parameters of the research, and existing women's networks. Primary research entailed a focus group and 7 depth interviews with Irish representatives of women's networks and support organisations and women working in key areas of interest e.g. Enterprise Ireland's client base and the technology industry.

The key areas assessed were women in management, women business owners and women in science and technology. Key issues identified for women in enterprise in Ireland were: Family responsibilities, Skill shortages, Training and education, Career path barriers, Social and cultural stereotypes, Exceeding expectations, Personal and professional style, Wage gap, Lack of gender disparate information, and Lack of structures to provide a unified effort to develop women in enterprise.

A number of recommendations are made for interventions or initiatives that Enterprise Ireland could offer to women in enterprise. These are centered on:

- Encouraging the use of family friendly and flexible working practices through awareness raising and promotion and awards.
- Tackling skill shortages through awareness raising, training and competitions
- Breaking down negative and restrictive stereotypes through training, promotion and awareness raising, leading by example, and co-operation with networks.
- Redressing the lack of gender disparate information through encouraging, and supporting primary research in key areas.
- Tackling the lack of a united effort through the establishment of national structures e.g. working women's unit and web-site.

A wide range of initiatives for women in business, from world wide sources, were compiled across seven key areas: Career development and entering management in a company, Starting a business, Entering new markets and exporting, Expanding a business, Managing a business, Family friendly policies, and Advancing women in science, engineering and technology. Suggestions were made regarding which initiatives were most applicable to Enterprise Ireland's position in seeking to advance women in enterprise across these areas.

1. INTRODUCTION

Much has been done world wide to redress the imbalance of power between women and men at many levels. These efforts have positively affected the traditional status of women in all areas of life both within and outside of the workplace.

Since the Second World War, as women have entered the work-force in increasing numbers, gender-role expectations have changed as a result of economic necessity. Women have become a factor in the success of business and industry in most Western nations and in many other parts of the world as well. In the UK, the USA and Canada, the increased number of women in the work force has promoted legislation regarding sexual discrimination and harassment which combines with other initiatives and activities to drive ongoing change.

The Beijing Declaration and Platform for Action reflected a new international commitment to the goals of equality, development and peace for women and was agreed in 1995 by the representatives of 189 countries attending the United Nations Fourth World Conference on Women. Much has been done in Ireland, since the Platform, to address the areas of concern for women and this report hopes to examine some new ways in which Ireland can assist women on this occasion, in the area of enterprise.

In Ireland we are far apart from the restrictive regimes under which women live in some countries. According to the Quarterly National Household Survey, Fourth Quarter 1999, the number of females participating in the labour force is increasing faster at 2.6% p.a. to 47.1% than the number of males at 1.3% to 71.1%. However, it is important not to take for granted this momentum which is enabling and developing women, on a daily basis to use their skills and abilities with confidence where ever they see fit, be it as business owners, as parents, as politicians, as contenders on the corporate ladder, as social workers, as sports personalities or in any other role.

This research was designed to explore how best Enterprise Ireland could work to address the issues affecting women in enterprise in Ireland. It examined contemporary theory, research, innovation and best practice across Europe, the US, Canada, Australia and New Zealand and involved consultation with key representatives through focus group and interview.

Sia Consulting, a member of the Sia Group, has conducted this research to provide a distillation of the current thinking and activity around the development and assistance of women in enterprise and to examine and recommend potentially effective interventions in line with Enterprise Ireland's role within in an Irish context.

2. OBJECTIVES

The key objectives of the study are as follows:

1. Identification of the key issues for women in enterprise in Ireland today and for the next few years.
2. Examine innovative approaches and best practice in supporting women in enterprise and facilitating women's participation in the labour force.
3. Identify the Networks and other structures which support women and may act as a vehicle or facilitator for further initiatives.
4. Compile useful resources and contacts in progressing positive action initiatives forward in the Enterprise Sector in Ireland.
5. Suggest initiatives which Enterprise Ireland can undertake - or be a catalyst for – which will provide support to women in Enterprise in Ireland, based on a study of the current position in Ireland and best practice internationally.

3. METHODOLOGY

3.1 SCOPE

Due to the vast nature of the topic area, the scope of the research required clear definition. It was decided that the research would mainly be carried out within the following parameters of relevance:

- Women in Enterprise.
- Enterprise Ireland's client base, i.e. internationally traded organisations. (It was deemed likely that the research and new initiative development processes would throw up items of interest to other organisations e.g. CEBs and these would be noted for inclusion in the final report).
- Women in Management and Executive positions (Some areas relevant to women in administrative/support positions were also to be explored).
- Women's Initiatives (Some non gender specific initiatives could also be examined if they have had a significant impact on supporting women).

To accomplish the above objectives, the following phases of work were completed.

3.2 PHASE ONE – DESK RESEARCH

The desk research phase sought to compile Irish and international information about:

- Current and likely future issues for women in enterprise.
- Positive action programmes for women in enterprise within the parameters of the research.
- Existing women's networks.

The desk research used a wide range of sources including the following:

- Existing resources within Sia and Enterprise Ireland.
- Internet.
- Libraries (Business and Academic).
- Directories.
- Associations.

- Networks (Both formal and our own informal networks).
- International associates and networks.

3.3 PHASE TWO – PRIMARY RESEARCH

The second phase focused on qualitative research exploring:

- Best practice in terms of support initiatives for women in enterprise.
- The key success factors and inhibitors for structures or initiatives to assist Irish women in enterprise.
- Gaps in the areas of business assistance currently open to Irish women in enterprise.
- Prioritisation of the issues affecting Irish women in enterprise.
- The suitability of possible adjustments of existing initiatives or new approaches to better suit the Irish context.

The qualitative research entailed the following:

- 1 Focus group with Irish representatives of women's networks and support organisations and women working in key areas of interest e.g. technology industry.
- 7 Qualitative depth interviews with key figures involved in supporting women in Irish business and women working in key areas of interest e.g. Enterprise Ireland's client base.

4. DESK RESEARCH

Enterprise Ireland's clients are mainly locally controlled internationally traded and employ more than 10 people. The advancement of women in these businesses is the prime focus of this research.

In order to explore how an organisation such as Enterprise Ireland can work to assist, promote and respond to the particular challenges of women in enterprise in Ireland, it was first necessary to identify the current position of women in business and the particular issues which affect them. In order to contain the research within the parameters relevant to Enterprise Ireland's client base, the following areas for focus were chosen.

- Women in management
- Women business owners
- Women in science and technology

The following sections outline the current position of women and the issues that affect them across these three areas. The final section looks at how businesses are affected by the lack of women in the work force and also by the lack of women in leadership positions.

4.1 WOMEN IN MANAGEMENT

"Women in management" focuses on women, within organisations, who are seeking equal opportunities with men for recruitment, promotion training, recognition, etc... This section seeks to give a short overview of the issues women may experience within organisations, such as glass ceilings and walls, pay gaps and isolation.

4.1.1 Overview

The literature reports on a number of different issues, which affect the development of women in management.

At the individual level, many reasons for lack of development have been explored. The most common suggestion by senior managers is that women, who do not succeed as well as they might, may not have the right education or sufficient training or lack the necessary experience to be selected or promoted to certain management positions. This assertion, however, that an insufficient number of qualified women exist to fill the top jobs is rapidly becoming out of date. While gender differences still exist in professional study choices, women world-wide are demonstrating their intellectual and commercial ability.

They are even increasing their share in scientific and technological studies although their representation in engineering is low.

At the level of the organisation, structural and cultural factors can contribute to the obstacles for women wishing to develop in management. Promotion and recruitment systems may implicitly disadvantage women, for example, by awarding informal promotions without job advertising or by giving women a career start mainly in specialised management tracks that in most cases do not lead into higher management positions due to the narrowness of their focus. Closely related to these, is the lack of access to professional networks and personal contacts as sources for receiving advice and information about vacant positions and possible promotions. Furthermore, male values are frequently dominant in corporate culture, and the gender stereotypes and prejudices resulting from these can prevent women entering and/or developing in management positions. In recent years, however, HRM is moving organisations away from viewing employees as mere commodities like machines or equipment and towards the concept that people are a much more valuable resource. People are being recognised as the key source of competitive advantage in the current globalised world of work and good HRM approaches such as appraisal, performance management, and the importance of team working should enable individuals, whether male or female to be valued for their own particular abilities.

In society, the traditional unequal distribution of family obligations between men and women continues to create difficulty for women who combine a management career and having children. The impact of these factors on the workplace is likely to vary according to a number of factors, for example, workplace role, financial resources, family friendly work practices etc...

The position for women working their way towards senior management in business is certainly improving. However, women still have a long way to go to achieve equality.

Women in Management

The US Women's Bureau 1997, reported that women comprised 44% of the total number employed in executive, administrative and managerial occupations in 1996 and that this figure had increased from 39% in 1988. The majority of women in management positions are in medicine and health (75%), personnel, training, labour relations specialists and underwriters – all one group (over 60%).

The level to which women rise in organisations is lower than that of men. Although women were almost half of the executive, administrative and managerial occupations in 1996, they accounted for less than 3-5% of top executive positions.

Wage Gap

In the US in 1999, women overall were earning 76.5% of men's median weekly earnings. In essentially all occupations for which information is available, women's median weekly earnings are less than men's. In part this is due to women's concentration in lower-paying occupations, however, women typically earn less than men even within the same occupation.

This is attributed to many factors including education, experience, hours worked and discrimination. In Ireland in 1997 women were earning 84.5% of average male earnings. This had increased from 80% in 1987. (ESRI 2000)

Women in Leadership

According to a Catalyst 1998 report on the Fortune 500, only 11.2% of corporate officers in Fortune 500 companies are women. Women also fill only 62% of the total line positions (those with revenue-generating or profit-and-loss responsibility) held by corporate officers. In a 1996 Catalyst report, female executives cited three key factors holding women back from advancement to corporate leadership:

- Male stereotyping and preconceptions of women
 - Exclusion from informal networks of communications
 - Lack of significant general management/line experience
- CEOs on the other hand see only two key factors:
- Lack of general management/line experience
 - Women have not been in the pipeline long enough

There is little information available on the progress of women managers in small businesses. The US is the strongest gatherer of data from businesses. The lack of comparable data on women in management in Ireland is an area that should be developed more strongly in future.

Much research has been conducted to identify the issues and barriers that negatively affect women's advancement in management. For the purpose of this report the most commonly accepted ones have been collated.

4.1.2 Issues specific to women in management

The following issues are particularly important for women seeking to build careers within organisations. Many of these are also particularly relevant for women building careers in SET

sectors. However, these will be further explored in 4.3 Women in Science Engineering and Technology.

The key issues, which affect women in management, are:

- The glass ceiling
- Exceeding expectations
- Career path barriers (Glass walls)
- Wage gap
- Social Attitudes and personal biases
- Personal and professional style
- Family responsibilities
- Old boy networks

The Glass Ceiling

The term “Glass Ceiling” was first used in 1986 in a Wall Street Journal special report on the corporate woman. It described a corporate world in which women's access to top management positions was blocked by cultural factors such as corporate tradition and prejudice. Over the last 15 years the glass ceiling has come to represent an invisible barrier that prevents women and minorities from rising above a certain level in organisations.

Exceeding Expectations

Women recently placed in management positions traditionally filled by men are often seen as a test case for the introduction of more women in the future (Davidson and Cooper 92). Women, however, continually report the need to work harder than their male counterparts to prove themselves and prove their credibility as managers, particularly when they are the “token women”. Ragins et al (1998) stated that 99% of the female executives in the study reported “consistently exceeding performance expectations” as critical or fairly important. These women stated that they feel the need to prove their ability repeatedly, and over-perform, in order to counter negative assumptions.

Additionally, as women move into higher positions, they become more highly visible and public. This creates a perception of a greater pressure to perform even harder since their actions will be more highly scrutinised (Klenke 96).

Career path Barriers (Glass walls)

Although specialisation in management functions can lead to middle management, senior management demands broader

experience. This is an issue for women as frequently their promotion and career advancement takes place within specialities rather than through moves into general management. "Female-associated" management specialities also often hold relatively little influence in the organisation.

The filtering of women into these non-core business areas results in a perceived under-supply of female candidates for powerful positions in male dominated specialities. Women in these side roles are also not in a position to network with key top management and this perceived lack of power and powerful contacts is a serious impediment to access to powerful positions, particularly in systems and cultures whereby "power begets power". Women need to move at an early state into areas such as product development or corporate finance that can allow an upward movement to key executive positions in the traditionally pyramidal structure characteristic of large organisations.

Wage gap

Women manager's earnings are still below those of male managers. IBEC reported in 1997 that Irish women were earning 84.5% of average male earnings. And in executive, administrative and managerial occupations in the US in 1996, females employed full-time, on average, earned only 67% as much as male counterparts. (US Women's Bureau 97).

4.1.3 Issues important for all women in business

The following issues are pertinent, not just for women managers but may affect any woman seeking success in a business environment e.g. women business owners seeking new customers.

Social Attitudes and Cultural Biases

Corporations with significantly more men than women, or vice versa, in influential positions, tend to have a culture (or "how things are done around here" here - Deal and Kennedy 1982) which favours the dominant gender. These are frequently referred to as "gendered organisations" (Klenke 96).

One frequent aspect of a male gendered culture is the perception of men as natural leaders and women as natural followers. (Klenke 96). According to a survey by Deloitte & Touche (2000), most Americans appear open to the idea of a woman president. However, when asked to compare women

and men on important leadership issues, a man president is viewed as being more effective than a woman president on key characteristics and issues of importance to Americans. In a similar way in business such perceptions can be reflected in a subjective application of recruitment and promotion procedures.

The male leadership perception is also strengthened by a lack of strong female role models. This is an important issue for women's development throughout child and adulthood. In an environment where the number of women in key executive positions is minimal, it is difficult to develop a mental model of women as leaders which could negatively impact on girls perception of themselves (and consequently their development) in leadership roles (Davidson & Cooper 92).

Personal and Professional Style

Ragins et al. 1998 report that 96% of the female executives they surveyed felt they had to develop a professional style with which male managers would be comfortable.

Traditionally many organisations embrace a "male-oriented" management style where direct and aggressive behaviour is the norm. This is so firmly established in business culture that it is frequently accepted as the only way to lead.

Aggressiveness, objective thinking, dominance, competition and decisiveness are characteristics often found in leadership research studies as preferred by both men and women as desirable (Klenke 96).

The issue for women is that their traditional expected "female-oriented" behaviour norms are so at variance with this management style, that, when they embrace it they are frequently labelled as "bossy, and pushy" (Davidson and Cooper 92). The female behaviour style is also so strongly associated with non-leadership roles, that women report adopting a "feminine" managerial style runs them the risk of being viewed as ineffective (Ragins et al 98).

There is a need to address the preconceived stereotypes of women as followers by developing women as leaders not just at a business level but throughout childhood, in schools and in society as well.

Family Responsibilities

"Conventional male-dominated organisational culture dictates that people who pursue managerial careers subordinate all other life roles to their work" (Maier 97). The way work is designed by businesses traditionally relies on hierarchy, task orientation and freedom from domesticity. It is fortunate then for men that women generally have a disproportionate responsibility for domestic work, including care of the young, old and ill.

According to Opportunity NOW 2000, 83% of women believe that commitment to family responsibilities hinders women's advancement in the workplace. However, some women with children still want to work. In the UK the proportion of women returning to work within a year after childbirth has increased from 45% in 1988, to 67% in 1996 (Women's Unit 2000). In Ireland the 1996 Census showed that the largest growth by occupation since 1991 was among personal service and childcare workers with an increase of 36,000.

The difficulties caused for women in business with families are, however, considerable. Part-time managers are rare. Reconciling long hours with running a home and caring for children is exhausting. Engaging in after-hour's opportunities to socialise with the decision-makers can be impossible. The result of this may be that, women more than men forgo marriage and children for the sake of their careers. In 1996 US women managers were more likely to be single (never married) than male managers. They were also nearly twice as likely as their male counterparts to be divorced (US Dept Labour 97).

The long-term implications of a severely reduced future workforce are all too apparent as even today's organisations struggle to recruit and maintain the employees they require.

Old Boy Networks

In most organisations that are male led, the "old boy network" still exists, and is very important for career advancement. Studies show that women have been largely excluded from these networks (Klenke 96). Women, therefore, often have to create alternatives to substitute for what informal networks accomplish.

Although this may be encouraging more women to take up traditional business networking sports such as golf, many women also network by joining female business networks. However, these networks require that a reasonable number of women have already reached top positions in the organisation in question and are willing to offer support to women working their way up the corporate ladder behind them.

4.2 WOMEN BUSINESSOWNERS

"Women business owners" face the same issues as men in striving to grow and strengthen their organisations. Women business owners are, however, subject to the same cultural and social biases as those working their way up in organisations. Support for these women helps not only to tackle these issues, but also to work towards increasing the number of women in leadership positions in business. This section looks at how women business owners are increasing and developing globally

as an encouragement for boosting the development of more women business owners here in Ireland, especially those in sectors relevant to Enterprise Ireland's client base.

4.2.1 Overview

Women business owners have brought many assets to the global market. Female entrepreneurs have demonstrated the ability to build and maintain long-term relationships and networks, to communicate effectively, to organise efficiently, to be fiscally conservative, to be aware of the needs of their environment and to promote sensitivity to cultural differences.

Growth of women owned businesses

According to a series of studies conducted and/or analysed by the National Foundation for Women Business Owners (NFWBO), across the world, women-owned firms typically comprise between one quarter and one third of the business population. As of 1999, women-owned firms accounted for 38% of all firms in the US. The number of women-owned enterprises is growing faster than the economy at large in many countries.

Women-owned businesses are starting in every industry sector. Women are also starting businesses faster than their male counterparts. In the US, the number of women-owned firms is increasing at nearly twice the national average. In Canada, the number of women-led firms has increased at over twice the national rate.

Women are comparable to men in their level of ambition for their businesses. The US Census Bureau found in its 1994 Survey of Businesses by Gender of Ownership, that looking ahead to the next five years, 30.4 percent of the responding women-owned firms said they planned to increase their work force, 28.6% expected to add new products, 20% intended to increase the hours their employees work, 7.7% planned to increase the number of locations, 6.4% expected to expand government contracting, and 4.2% to expand into international markets. All of these plans mirrored similar percentages for all firms and for male-owned firms in the survey.

In Ireland, a Network Ireland and IBM survey in 1998 showed that 63% of the women business owner members of Network Ireland were planning for business expansion over the following two years, through increasing sales and employment, opening new stores and expanding part-time businesses in to full-time enterprises.

Women business owners in international trade

Recent statistics reported by the US Small Business Administration demonstrate that the number of small businesses engaging in exporting has been increasing steadily, with the number tripling in the last decade, from approximately 66,000 in 1987 to 202,000 in 1997. According to the UN Development Program's Human Development Report 1998, a survey showed that four out of ten women business leaders are currently involved in the international marketplace. Of the women surveyed, about half became involved only within the past year. Moreover, nearly half of those surveyed who were not yet involved in trade say they planned to do so within the next three years. Accurate data about the number of women entrepreneurs involved in international business is sketchy, however current measures suggest that in Ireland, of the women surveyed, 38% are in international trade, compared with 30% in Canada.

Differences between women and men owned businesses

Women's enterprises are qualitatively different from men's. Studies indicate that women business owners create a clear culture of their own and female enterprises tend to centre on the delivery of services in response to non-traditional customer needs. A 1997 NFWBO and IBM report showed that regardless of size of business US women business owners employ roughly half women employees (52%) while men business owners employ only 38% women.

Even when viewed by industry, in 6 out of 7 of the industry groupings women business owners employed women at a rate greater than the national average, e.g. in wholesale and retail trade women business owners employ women at 20% more than men.

A 2001 NFWBO study which explored growth among US women and men owned firms, pointed to a number of characteristics particular to US women owners of fast-growth businesses:

- Women who own fast-growth businesses are more likely than men to depend on their business earnings and personal debt for business financing; men are more likely to have a business or commercial bank loan.
- Women (48%) were more likely to have Hi-tech firms, which were fast growing, than men (28%).
- Women fast-growth entrepreneurs have a greater variety of business-related characteristics and life experiences than men business owners. They are also more likely to have had a role model, a managerial or executive professional background or past experience in owning a business.

- Women owners of fast-growth firms are less likely to share ownership with outside investors (28%) than men (49%).
- More women owners of fast-growth firms (60%) consult with accountants than male owners (44%).

In the UK women entrepreneurs represent one of the fastest growing segments of the economy (IBM and NFWBO 2001). Similar to the US survey, women entrepreneurs (80-90%) are more likely than men (30-59%) to use personal savings to finance business start-up, men are more likely to use an overdraft or commercial bank loan. UK women are also more concerned than men with obtaining training and education in business, management and technology issues and they are more likely to rate government funded business support services as either a very or extremely important business factor.

Women owned businesses and technology

Technology is seen as an important aid to women business owners. 83% of UK women business owners, use computers in their businesses and 37% have a web site, 60% use the Internet for communication, research, and e-commerce and 26% sell their products or services online. In Ireland, the 1998 survey with Network Ireland members showed that technology was a very or extremely important factor in their businesses for 53% of Irish women business owners. The majority of women who recognised an important role for technology had newer firms. 81% used computers in their business, 36% were on the Internet, 19% had a business web page.

US women in the 1997 NFWBO survey, however, are a little more technologically advanced than those in Ireland and the UK. 92% use computers in their businesses, 47% subscribe to an online service and 23% have a web page for their firms

4.2.2 Issues affecting women business owners

Women business owners are affected by most of the issues that impact on women in management in other organisations (see 4.1 women in management). This can be perceived through the attitudes and behaviours of the male “engendered” organisations with which women owners must negotiate. An example of the possible negative impact might be a women entrepreneur seeking funding from a source which perceived women as suited to a supporter rather than a leadership role. Other impediments are societal, cultural and religious attitudes, (e.g. the double load of full-time work and all domestic responsibilities). There is also the issue of a lack of data about

women entrepreneurs which is a barrier not only because women are under counted but also because they are not taken into account when public policies are formulated.

However, the majority of challenges facing women's businesses are common to all small and mid-sized enterprises. For example:

- Securing funding
- Developing marketing and management skills
- Devising suitable business strategies
- Banking
- Legal aspects
- Political contacts
- Customs tariffs
- Bureaucracy

Women involved in international business are particularly affected by:

- Limited international business experience
- Inadequate business education
- Lack of access to international networks
- Competition from foreign products
- Technological advancements outpacing current technology now used in one's business
- Insufficient skills to conduct business in the global marketplace

In NFWBO 1998 surveys from Ireland, Argentina, Mexico, Brazil, Russia and Latin and Iber-American countries the uppermost business concerns mirror those of women in the US, Canada and Britain, these are:

- Making profits
- Hiring and keeping qualified employees
- Acquiring state of the art technology
- Complying with Government laws and policies
- Obtaining business management training
- Securing adequate credit
- Improving the overall state of the economy

Central business themes across most issues identified for women business owners have been related to, financing, training and technology. The other key theme, which is particularly relevant to women business owners, is family responsibilities.

Credit Barriers

Women in particular tend to seek small personal loans because, they tend to start small firms. This trend has caused the banking world to show relatively little interest in women owned start-ups due to its disinterest in small loans or micro-credits, given the high handling costs. A NFWBO 1998 survey indicated that for large banks the profit margins are too narrow to enter the micro-credit market. World wide, women have reported difficulties in dealing with banks, with some women feeling that the banks did not give them due respect and were pessimistic about their creditworthiness. However, this trend is decreasing and more and more organisations (Advocacy groups, existing banks, NGOs, alliances, etc...) are promoting and offering funding to women entrepreneurs. The 1997 Micro-credit Summit was a high point in mainstreaming the micro-credit approach by bringing together leaders of governments and development organisations.

Technology, Education, Training Issues

The need for training be it skill-based, technical, technological or management technique is an essential contributor to producing an able body of entrepreneurs, who not only survive but thrive and can contribute to both the local and global economies. Training can also help empower the associations, which work to assist women, to work more effectively. The findings of NFWBO surveys across a number of countries including Ireland strongly emphasised a desire for training, management and technical assistance. This reflects a Russian business owners' survey where over half of respondents (59%) asked for training in finance, marketing and related business topics.

Family Responsibilities

The commitment and energy required to begin and grow a successful business is considerable. For women, the combination of two sets of responsibilities, business and domestic, can be a huge strain unless carefully managed. The need for facilities for child and elder care is great, especially in countries where the woman's role is still heavily associated with sole responsibility for domestic care.

4.3 WOMEN IN SCIENCE, ENGINEERING AND TECHNOLOGY (SET)

This section on Women in Science, Engineering and Technology outlines the current situation for women in the area and highlights the lack of women entering the SET workforce as an important issue at a time when there are world-wide SET skill-shortages.

4.3.1 Overview

Without women's contribution to the science, engineering and technology workforce organisations may find it increasingly difficult to meet the demands of their markets and their fields of interest.

Skill Requirements

The Expert Group on Skill Requirements looked at the science sector and found that although skills shortages are less noticeable in the chemical and biotechnology industries than the IT sector, the group has expressed concerns about the decline in take up of science at a time when biotechnology developments point to a significant growth potential in these professions. The group projected a need by 2005 for:

- 290 extra graduate professionals
- 120 extra technicians.

Which implies the need to create 1,150 additional third level places (700 in biological sciences, 400 in chemistry and 50 in chemical engineering). The Irish Pharmaceutical and Chemical Manufacturers Federation carried out a survey of its Members which showed expected shortages in the immediate future of approximately 750 including 250 science graduates. They also predicted a worrying fall in the output of non-computing science graduates of over 1,000 in the next couple of years.

An very rapid expansion in research activity is also projected, by the Future Skills Group, through the expanded Department of Education and the Technology Foresight Research Programmes, which sees demand for science and technology PhD graduates from a current level of 200 to 800 by 2004.

Among occupations, professional jobs in the SET area will increase faster than in any other area, and will add the most employment in the coming years. According to the US Department of Labour Bureau of Labour Statistics, the number of jobs requiring these skills is going to increase dramatically and two-thirds of the projected growth (a total of 5.3 million jobs

by 2008 in the US) is expected to be among educators and specialists in computer technology and health care.

Skill Shortages

The projected increase in demand comes at a time when the take up of postgraduate options has actually started to decline due to the attractiveness of immediate employment opportunities. In Ireland the Higher Education Authority has provided the Joint Committee on Education and Science with information on University Post-Graduate students in science. They show that post-graduate students in science peaked in 1995 at 2,950 but have fallen back by 400 since then.

Skill shortages, however, in the SET area are a world wide issue. Without the contribution of skilled women in these sectors it is difficult to see how these shortages can be addressed. In the US in 1997, for example, women represented just 19% of the SET workforce in comparison with 46% of the workforce as a whole (US Census Bureau 1997). The percentage of female life scientists, physical scientists, and engineers remained the same between 1993 and 1997, and the percentage of female computer and mathematical scientists dropped from 1993 to 1997 (CAWMSET 2000). In the UK, the picture is worse than in the US, with less than 15% of the full and part time professional and technical workforce in science and engineering being female (British Council 2000) as compared with 45% in the general workforce (UK National Labour Force Survey Spring 2000).

The report of the ETAN Expert Working Group on Women and Science (1999) described the position of women in science in Europe as “an extraordinary story”. Women had until quite recently, been legally excluded from many areas of science in some European countries, e.g. in the UK, in the early part of this century. The issue of women and science was first taken up in the Nordic countries in the 1980s and Germany published the first national report on the Promotion of Women in Science in 1989. The group pointed to the increasing attention on gender equality and science in the 1990s within Member States, although this has not been sufficient to significantly improve the levels of women’s representation in SET.

The choice between industry, public sector or academia

In SET in the US, approximately 62% of women are employed in industry, compared to 73% of men (CAWMSET 2000). CAWMSET found that “women were attracted to applied science and product development.

They perceived industry as offering a faster-paced and more diverse career path, together with economic stability and liberation from the necessity of writing grant proposals to

support research projects.” According to Catalyst, academia is viewed by many as unwelcoming to women scientists. Despite the fact that their advisors tended to steer them toward academia rather than business, many of the women who participated in the study stated that they chose the business arena simply because they did not feel welcomed into academia. (Catalyst 1999) Within the EU, however, despite fewer statistics, the picture is different. Women science professionals tend to work in the public sector, especially in universities, rather than in the private sector. (Talapessy 1993).

Since men are more likely than women to be engineers or physical scientists, “more men than women identify research and development as their primary or secondary work activity (59% versus 51%) (CAWMSET 2000).

Occupational Breakdown of Women in SET

There are diverse sub sectors within Science, Engineering and Technology throughout industry, academia and the public sector. These sectors each have their own individual profile for female representation. However, there is a lack of statistics available to measure these differences which frequently occur on a region by region basis. Nevertheless, it is possible to ascertain a number of key areas for concern.

In science, few statistics were available, however, CAWMSET figures for women in the US science workforce in 1997 were 36% of the life science workforce and 22% of the physical science workforce.

Within the IT industry, an area with huge potential for growth, women’s employment is falling behind that of men, especially in recent years. UK representation of women in IT has fallen from 25% in the mid 1980’s to under 19% in the mid 90’s (Promoting SET for Women, Department of Trade and Industry, UK). . The US occupational gap between men and women in IT is also widening. Women accounted for just over a quarter of employees in 1999 (US Department of Labour, 2000). CAWMSET shows figures of 27% for women in computer science in 1997. In Ireland the Irish Software Association estimates that the percentage of women in the industry in Ireland is approximately 34%, somewhat more positive than the US and UK experience, but still low

In education there is little to show that these figures will rise in the near future. Women into Computing, a UK network, reported the number of women on computer science degree courses falling from 25% to 12%. In Ireland Forbairt (now Enterprise Ireland) reported in 1998 that 25% of computer graduates from third level institutions in Ireland were women.

Engineering is another area with low levels of representation of women. Women made up approximately 11% of all US engineers in 1998 (US Dept of Labour 1998). This compares

with a figure of 19% for women in SET in general. Although the employment gap is not widening these figures are very low.

In the UK, the University of Wolverhampton ascertained that women are least likely to be employed as engineers and technologists, and they form only 10.6% of those in employment (University of Wolverhampton 2000). In Ireland, although no statistics exist for women in employment as engineers, only 6% of members of the Institution of Engineering are women.

In education, like IT, there is also little to provide optimism. In the US in 1997, 18.6% graduates of bachelor degrees in engineering were female (US Dept Labour 1998). In Ireland women accounted for only 17% of engineering graduates in 2000.

4.3.2 Issues particular to women in education in Science Engineering and Technology

Education – the ‘Leaky Pipeline’

The most commonly discussed issue relating to the representation of women in SET concerns the ‘pipeline’ issue, or the numbers of girls and women progressing between the various stages of the education system, and the consequent effects that these statistics have on women’s representation in SET employment.

In the UK, the statistics first reveal difficulties at age 16, when despite exam success at O level or equivalent fewer girls than boys go on to study science at A level. At each critical stage of the education system the numbers get lower, thereby significantly affecting the employment outcomes for women – this effect is known as the ‘leaky pipeline’.

The direct ‘cause and effect’ relationship between this issue and representation of women in the workplace can be seen in the areas of computer science / IT and engineering – two industry sectors which have been highlighted earlier in this report as those of principal concern where women’s representation is an issue.

In engineering in terms of absolute numbers, the first issue is the amount of women taking up engineering at third level. In the US in 1998 for example, while women earned over half of all bachelor degrees awarded, a figure which is slightly above the EU average, only 17% of these degrees were awarded to women in engineering, an increase of less than 6% on 1966 data (CAWMSET 2000). Throughout the EU, the picture is similar, where although there is an increased participation of women in higher education and in women taking science subjects and moving into doctoral and postdoctoral studies, with a rate of less than 20% the outlook for increasing the

engineering workforce through increasing its representation of women is not good. (ETAN 1999).

In terms of identifiable trends over time, computer science / IT is also in the spotlight for poor female representation. In the UK, for example, the percentage of women entering undergraduate computing places has fallen from 25% in the seventies to 13% in the late nineties (SET Unit within the Department of Trade and Industry, UK). Equally, in 1984 the percentage of women getting bachelor's degrees in computer science and engineering was approximately 37%. Today that number has fallen to 20% (Wired News Collection 2000-2001).

In international terms for both men and women however, the National Competitiveness Council have shown that Ireland is in the top third of OECD countries both in terms of science and engineering degrees as a proportion of total degrees awarded (31%) and the proportion of 24 year olds in the population who have science and engineering degrees (5.7%). This, however, still needs to be improved.

The Joint Committee on Education and Science produced a report on Science and Technology in Ireland in October 2000. This report identified a number of key issues for education in science.

Decline in take up of science subjects

At Leaving Certificate level the take up of science subjects has been in steady decline for the past 20 years with the decline in Chemistry being most pronounced, halving from 20% to 10%. The figures for 2000 also suggest that the pace of decline in science is accelerating. There were 3,200 fewer science papers taken than in 1999, a fall of 6.5% in just one year. The proportion taking science was down noticeably in every subject area. The proportion of girls taking the subject at Leaving Cert Level has fallen to 65% and is well short of the targeted 80%. However, the decline in take up of science has been almost three times as great among boys as girls. At this point, in fact, marginally more girls take up science subjects than boys. Although the decline in the percentage take up of science has been almost continuous throughout the period, the decline in the actual numbers studying the subjects is comparatively recent. The rising size of the cohort shielded the decline until comparatively recently. The size of the cohort is itself now in decline and this reinforces a picture of quite sharp fall offs in study of the science subjects. In 1998/99 alone, science subjects saw a reduction of 5,783 in participating students.

Choice of Science Subjects

Biology is most popular, attracting 60% of all girls doing the Leaving Certificate. Three out of every four girls who do a

science subject are taking Biology and among boys Biology is still the leading subject selected, attracting one-third of all students. However, Physics is also popular with almost a quarter of boys taking the subject.

Late exposure to Science

Ireland is almost unique in not having science taught at primary level. Irish pupils do seem to catch up on lost ground quite quickly in science at second level.

Perceived difficulty of Science

Within Ireland, the perceived difficulty of obtaining points in science subjects has frequently been cited as one of the reasons for the decline in the take up in recent years. Using the ratio of high performers taking a subject to those who emerge with high grades, as an index of the difficulty of a subject, Physics and Chemistry emerge as by far the most difficult subjects at both levels, but particularly so at ordinary level. Longitudinal studies also show that pupils who took Ordinary Level science in the Junior Certificate find it much harder to score high grades in Physics and Chemistry than students who continue on in other subjects having taken Ordinary Level. At Ordinary level, fewer pupils get high grades in Physics and Chemistry than in some of the key subject choices that compete with science. There is a considerably higher failure rate at Ordinary Level in all of the science subjects.

Student Indifference.

There is little demand from students for science courses. In 1999, the number of first preference applicants for science exceeded offers by just 3%. This compared to a 64% excess of applications over offers in other subjects. At diploma and certificate level, first preference applications fell 20% short of available offers. In every other subject area, there was an excess of first preference applications over offers. Only 9% of all first preference applications for degree or diploma level courses are for science or applied science.

Inadequate facilities for science subjects

The Department does not have a proper database of laboratory facilities at second level. However, a questionnaire sent to schools by the Department revealed that -

- 65% of schools had insufficient equipment for the physical science subjects
- Over 75% had no computer in the laboratory
- 95% indicated that a computer was not used for experimental data acquisition/analysis.

-

In Ireland, the average class size in the sciences is 24 students which is high by European standards. Large classes may negatively impact students' opportunities for participation and interaction especially in subjects with practical applications. There can also be concerns about the health and safety aspects of doing practical work with large classes without adequate technical assistance and student supervision.

Social and Cultural Influences

The lack of girls choosing science subject areas has been attributed to a wide variety of influences which appear to begin as early as during the pre-school years. Many reports have been written exploring the barriers to girls and women choosing science subjects and careers. Even from the age of five, both girls and boys have definite views about what constitutes "men's work" and "women's work", (Engineering Council UK, 1991) these attitudes have a powerful impact on children's views of their own strengths and weaknesses and thereby influence choices. While teachers exert a major influence on children, parental attitudes are also a key factor in children's career choices. A study conducted by Somerset careers education and guidance service at the end of 1995 suggested that not only should careers education and guidance begin much earlier in secondary schools but it should be targeted at parents as well as pupils if girls are to feel free to choose non-traditional career paths.

4.3.3 Issues particular to women in Science, Engineering and Technology Careers

'Least Unattractive Option' as a Basis for Career Choice

Women are not making decisions on whether to pursue academic, public sector or business careers based on positive criteria. They seem to be being 'turned off' one option rather than being 'turned on' to the alternative. For women choosing the business option in the US, for example, they saw academia as unwelcoming to women scientists (Catalyst 1999). For those pursuing academic careers, Catalyst found that it was partly due to female graduate students in the sciences remaining uninformed about potential careers in business (Catalyst 1999). Women said that they were given very little or no information about the corporate job market upon the completion of their academic studies. They also claimed that their university advisors prepared them solely for academic careers. (CAWMSET 2000).

Field Switching and Exit Rates

There are much higher rates of turnover and field switching in the female than in the male labour force. A survey conducted in the US over a seven-year period estimated that women are almost twice as likely as men to leave occupations related to science and engineering for occupations in other fields, and fifteen times more likely than men to leave the labor force altogether (Preston, A. 1994). CAWMSET found that “Women scientists and engineers in industrial jobs are more likely to leave technical occupations—and more likely to leave the labor force altogether—than women who work in other sectors. Attrition data on women in industry show that their exit rates are not only double those of men (25 percent versus 12 percent), but they are also much higher than those of women in other employment sectors.”

Preston found that “high skill-depreciation rates, changes in labor-market conditions that lower wages, family circumstances, and occupational mismatches” were the main causes. However, “since women are more likely than men to have a working spouse, they are more often affected by these factors and more likely to leave their professions” (Preston 1994).

Issues in Academia

Women seeking to pursue careers within academia face particular issues. These are numerous and varied, but a number are mentioned here. The casualisation of research careers is an issue which impacts particularly on women. In the EU there has been an increase in short term contracts. Staff failing to get tenure and thereby attain security may be lost to the profession, and given that in the UK for example women are disproportionately represented within staff on short term contracts, this means that women are particularly vulnerable to being lost. Within some academic and research institutions there are age bars to the attainment of being a chair of department, and again this impacts particularly on women, being an indirect form of discrimination. According to ETAN “Old style recruitment practices characterise employment and promotion procedures in some academic institutions. Reliance on patronage, the ‘old boys network’ and personal invitations to fill posts cuts across fair and effective employment procedures” (ETAN 1999). The peer review process is an excellent example of such a practice.

4.3.3 Issues also experienced outside SET

Glass Ceiling – Particularly Acute for Women in SET

Women in the SET area are poorly represented at management level. This is a key factor which in turn reinforces many of the other issues faced by women, whether they be with regard to

cultural challenges, issues with organisational HR policies, recruitment etc. CAWMSET found that “Women and underrepresented minorities are severely underrepresented in the highest levels of industrial management. A 1998 census of women corporate officers found that only 11 percent of all corporate officers were women, and of the forty corporate officers who held senior titles in research, only two were women.” Catalyst also collates statistics for female representation throughout the US workforce. In 2000 their research found that the percentage of women corporate officers for science and technology was low at 12.5%. A similar US survey in 1999 looking at the technology sector, in particular, found that 13.3% of women were at executive level, 19.2% at senior management level, 29.6% at middle management level, and 35.7% at ‘staff’ level (Women in Technology International 1999).

Within academia the pattern also continues, with women forming 7% or less of full professors in six Member States. “Despite country variations in systems and structures, the proportion of women in senior scientific positions is consistently extremely small. In many Member States less than 5% of the members of learned academies are female” (ETAN Report). Within the public sector a similar situation exists, and in the US public sector women SET workers are less likely than men to be primarily engaged in management (CAWMSET 2000).

For the EU as a whole, the best rough estimate of the proportion of top positions in the science and technology industry occupied by women, drawing on a range of sources is extremely low at around 3% (ETAN 1999).

Wage Gap

The CAWMSET report states that in the USA “Discouragingly, women and underrepresented minorities continue to make less money than white males in SET careers, though this may be improving with time. For example, while full-time employed women scientists and engineers generally earn less than men, the disparity may be due to differences in age, occupation, and highest degree. The overall median salary in 1997 of full-time women in the SET workforce was \$48,800—much lower than that for men (\$59,000). But within certain occupations and younger age categories, the median salaries of men and women are more similar. On the other hand, the gap in salary between men and women tends to widen with age, except for engineers employed in business or industry.”

The percentage difference between male and female salaries within the SET area in the States, is approximate to the EU average which is also 20 – 25%. No Europe wide figures for pay

in the SET area specifically exist, but the ETAN report found that in the area of academia “such figures as do exist illustrate that women in science are paid less than men are. For example, the recent Bett review of academic salaries in the UK revealed quite shocking statistics. It found that women received less pay than men at every single grade throughout the university hierarchy” (ETAN 1999).

Lack of Statistics (An Issue for Women in the EU)

While statistics in the US are up to date and accurate, across the EU difficulties of consistency and the basic lack of statistics hamper the progress of women in SET. The EU ETAN report stated that “The major difficulty encountered in reviewing the position of women in science in the EU today is the lack of systematically collected and published statistics (ETAN 1999). Many employers and managers of science and technology in Europe do not routinely collect gender dis-aggregated statistics; nor do they take advantage of gender monitoring as a human resource and management tool. Where figures are collected, they are not always published. Where they are published, they are not always presented in a manner that makes it straightforward to see the gendered picture.

Where statistics are collected, presented and arranged systematically, there can be problems of interpretation in the absence of other data”. Where there are no statistics, arguments and counter arguments tend to be based on anecdotal evidence, and this is not a basis for moving on the debate regarding women’s representation in the SET workforce.

Social Attitudes and Cultural Biases

Women science graduates’ rejection of science career areas has also been a key area of focus. A number of cultural factors have come to light which are not dissimilar to the issues affecting women in other occupations, however, the perception is that these are more pronounced in science and engineering careers. Reports have pointed to a number of areas:

The male-dominated culture of most science and engineering departments has an important role to play. UK research, quoted in the February issue of Labour Market Trends, indicates that women actively choose not to enter SET careers in the knowledge that they are likely to feel “cultural discomfort”. Research has suggested that women in science and engineering can find themselves working within values, systems and performance criteria which do not suit their preferred ways of working. For example, in a documentary film about the Silicon Valley work culture and its effects on women, Monika Khushf found that women were frustrated by the ‘geek culture’ of playing video games or chasing each other down corridors. They expressed irritation with team based exercises which

mostly involved competitive male oriented activities such as trips to the amusement arcade. Women stated that they have been criticised in reviews for not being able to bond with their peers. These cultural issues were particularly noticeable in smaller organisations and start ups. Many women were leaving their companies as a result (Khushf, M. 1999).

A very crucial stereotype is the perception that “women don’t ‘do’ science”. This can manifest itself in several ways. According to CAWMSET, for example, women scientists’ progress early in their careers may be impeded by their having to prove their technical credibility again and again. “This may be the result of stereotyping of women’s abilities as well as the perception that promoting women is riskier than promoting men. The perception that women cannot “do science” is one that women scientists in corporations have to battle constantly. The competencies and traits associated with success in science are generally viewed as male attributes.” The lack of female role models within the SET area compounds these stereotypes and prejudices, in turn adding to the pipeline issue discussed earlier.

In a recent article in "Scientific American" it was argued, that “women have a different management style from men. They organise their laboratories in a less hierarchical way than men and prefer to work collaboratively rather than in competition. They are also more likely to be interested in scientific problems if they have a social relevance or could produce a social benefit.”

Old Boy Networks

For many women, the very fact of being in the minority can initiate a cycle of barriers to career progression. The isolation that many women in SET experience can have a particular implication for their ability to link in with informal networks within a company or institution which would be helpful to them. “Women engineers and scientists often find themselves the sole woman in their group during both academic training and their professional careers. The lack of a critical mass in industry for women scientists makes it hard for them to tap into informal networks that could lend them support” CAWMSET. Women in small companies face particular challenges in this area, where it can be that the only other female company exists in the form of support staff (SET Unit within the Department of Trade and Industry, UK).

Career Path Barriers (Glass Walls)

Catalyst found that women in SET were encouraged to enter technical or research roles that supported the production line, rather than line management roles, and that consequently they did not get the required experience in direct budgetary responsibility. Further evidence suggests that women do not get appointed to high visibility teams or projects within organisations

(Catalyst 1999). The Association of Women in Computing in the US, for example, estimated that although women make up only 20% of the IT workforce, they managed 30% to 40% of Y2K projects, because when the issue first arose it was not seen as an organisation critical project.

Family Responsibilities

The issues of family responsibility, which pertain to women in all areas of the work force, reflect on women in SET in particular ways. CAWMSET found that with longer than average hours being the norm and physical presence denoting dedication to the job at hand, women in this area are particularly disadvantaged. Furthermore, "in the culture of the scientific and technological workplace, taking leave still reflects poorly on science professionals' commitment to science."

Difficulty in returning after a career break

Women leaving the SET workforce for reasons of family responsibility find it particularly hard to re-enter given the pace of change in the area.

5. THE BUSINESSES CASE FOR WOMEN IN ENTERPRISE

The nature of business, how it operates and with whom, is changing. With the advances in technology and transportation the world is rapidly shrinking and international market influences and competitors affect all organisations. The need for more flexible and open working practices in order to compete in this dynamic global economy is becoming more and more evident, and organisations have had to rethink their structures, systems and markets in order to meet these needs and retain both their customers and their workforce.

This section gives a brief overview of some of the key issues which business need to address in today's marketplace and which the development of women within organisations may offer part of a solution.

5.1 CHANGING MANAGEMENT STYLE

Management is becoming more complex. Different styles are needed for different people in different circumstances. The manager of the future is prescribed as a listening, sensitive individual with highly developed inter-personal skills with which

to manage an increasingly troubled workforce which is more prone to career and company changes and more affected by family responsibilities. There is increasing evidence that women's management style fits the future demands of managing for competitive advantage.

5.1.1 Women's and Men's Management Styles

A number of studies have been carried out to explore the differences between men and women's management styles. The following brief distillation of differences is drawn from just two studies: A NFWBO 1994 study which looked at the thinking and management styles of women and men entrepreneurs and goes some way to show how the combined forces of both women and men's management styles complement each other to provide a better management result overall. A Hagberg Consulting 1998 report of a survey carried out with men and women senior managers.

The following table shows some of the different features of women and men's management styles which studies have identified. However, these differences are not generalisations and individual characteristics and abilities play a not inconsiderable role in the development of any management style.

Women Managers	Men Managers
<ul style="list-style-type: none">• Intuitive or right-brain thinking• Innovating• Values-based decision-making• Reflecting on decisions• Perceptiveness• Team playing• Communicating• Influencing• Tolerating	<ul style="list-style-type: none">• Logical or left-brained thinking• Analysing• Facts-based decision-making• Systems and procedure development• Delegating• Directing• Dynamism• Aggressiveness

While these characteristics are not typical of all men or women, they do suggest the benefits of combining both styles. For example, in any changing marketplace, creativity and values-based decision-making are necessary contributors to innovation,

just as effective analysis and methodology are also critical to the proper implementation of new ideas. Also, accurate perceptions of employees and customers make valuable data for business strategies, while delegating responsibility effectively allows for greater leverage of time and talent

Business success through assimilation of managers to the traditional norm blinds men to the potential limitations of the system and how others are disadvantaged by the system. (Maier 97). By the time the effects of these limitations begin to show e.g. decreased staff retention or cultural conflicts with suppliers and customers, it may be very difficult to effect rapid change.

5.2 DIVERSITY

It is long known that international business is demanding diversity and to some extent greater industrial democracy, because change and flexibility are required in order to respond to shifting markets of diverse consumers (Slater and Bennes '91). Closed, hierarchical organisations must 'open up', learn how to communicate and be more responsive. The culture of command and control is no longer the preferred norm. Attaining this change, however, is difficult for organisations because of the short-term focus of finance and politics, and because of the effects of disadvantage and discrimination in organisational life.

Businesses need the contribution and the abilities of both women and men at senior level in order to reflect and address in their management teams the gender make up of the markets into which they are selling. They should also reflect the changing consumer markets, work force demographics, and international competition in today's global economy.

Diversity of ideas and perspectives feeds the creativity which businesses need to compete in today's world market. In fact, some studies suggest that a critical mass of around 30% of women is required to create the necessary dynamic for decisions to allow the concerns, needs and interests of women to be taken into account. (Flynn 2000, EU Women in Decision-making Conference)

5.3 ATTAINING AND RETAINING QUALITY EMPLOYEES

As the recruitment pool shrinks, it becomes more difficult for employers to find suitably experienced staff. The increasingly competitive economic climate demands that all companies fully utilise every available resource, regardless of gender. Overt and covert discrimination against women means that skills are being wasted and potential thrown away (Bentinck Group 97)

By the year 2005, women and minorities are estimated to have reached 62% of the US workforce. It is necessary to use all of this work force to it's fullest potential. Glass ceilings and walls which exclude able women from top leadership of organisations, prevent businesses from competing successfully.

5.4 DEMONSTRATION OF VALUES

The ethical issue of promoting fair working practices should not be discounted. Today's organisations are both negatively and positively affected by their reputation, which is developed and affected through their dealings with a wide variety of environmental, societal and personal issues.

6. ADVANCING WOMEN IN BUSINESS

There is much that has been done to assist in the advancement of women in business. One school of thought would suggest that organisations have a responsibility to work towards encouraging women to join the workforce and assist them in developing their careers. Another school would place the majority of responsibility with government and legislative bodies, seeing the advancement of women as part of ensuring the right of women to equality with men. Another opinion again, would be that it's the woman's responsibility to manage and enable her own career development and ensure that she is the best candidate for the job.

For the purpose of this report, to fit with Enterprise Ireland's aims for encouraging and enabling women in its client companies, activities for the following organisations have been looked at:

- Employer organisations
- Public bodies
- Women's associations

6.1 EMPLOYER ORGANISATIONS

6.1.1 Activities

The following activities are commonly used by organisations to increase and develop women employees. Some rely on women working off their own initiative e.g. informal mentoring programmes and networks, while others are highly structured, and their effectiveness regularly monitored e.g. management development programmes and recruitment processes.

Mentoring

It is widely acknowledged that mentoring is an important factor in building a successful career (Klenke 1996, Ragins et al 1998). Women who do not have a mentor because they lack access to informal networks may be invisible to organisation decision-makers and consequently may have reduced chances of being selected for leadership roles (Klenke 96)

Organisations' approach to mentoring varies. In some companies the mentoring role is formalised, for example a manager sponsors a person, coaches him or her and shares the responsibility for his or her success or failure. In the vast

majority of cases, however, mentoring is informal and may be initiated by either the potential mentor or mentee. Women are also increasingly serving as mentors to other women both within and across organisations.

Pay System Reviews

A regular review of pay systems can be undertaken to ensure that no sex bias exists.

Management Development Programmes

Managing the composition of internal feeder pools for mid and upper level management positions can help to ensure a gender-balanced pipeline for these jobs which is based on merit and ability.

Programmes for "grooming" future management personnel are useful and can take a variety of guises, e.g. human resource development plans, succession plans, replacements tables, developmental needs assessment, fast track programs, career path programmes, developmental assignments, special training opportunities, mentoring programmes, promotion rosters etc... These programmes can expand women's access to core areas of the business and to various developmental experiences such as rotational and non-traditional job assignments that broaden the base of a candidate's experience and visibility.

Family Friendly Policies

Family friendly policies recognise and accommodate the balance between work and family responsibilities that impact the lifelong career paths of all employees. According to Bevan, Dench, Tamkin and Cummings (1999) the business benefits of flexible employment practices have been well documented and include reduced casual sickness absence, improved retention, improved productivity and improved morale and commitment.

Family friendly practices may include, flexible hours, child care and elderly care programmes, job sharing, financial assistance such as subsidies, loans, etc. Additionally, as important as the formal policies, are informal practices that support these e.g. reinforcing flexitime by prohibiting meetings outside the core flexitime hours.

Networks

Employee sponsored/promoted networks and affinity groups are also useful supports to career development and provide leadership opportunities through interactions with persons of influence at conferences, seminars and workshops.

Review of Recruitment and Promotion Systems

A business that does not identify and encourage high potential women early in their careers is unlikely ever to have them in leadership positions. Innovative outreach and recruitment programmes can be designed to attract women to work in careers with advancement potential up to and including the top levels of management. Some strategies are:

- Providing internships targeted to women during their undergraduate years as a means of identifying potential managers.
- Emphasising the responsibility of managers for recruitment.
- Using executive search firms that specialise in placement of women. These firms have their own networks that lead to candidates who are often invisible to traditional search firms.
- Asking female MDs for advice and referrals.
- Recruiting entry level candidates in groups of two or three removes a sense of isolation which may otherwise arise.

Awareness raising

Education at all levels of an organisation, helps to sensitise to, and familiarise employees about, the strengths and challenges of gender differences. Diversity training - training that addresses stereotypes and preconceptions, issues of sexual harassment, cultural differences and styles of communication - has been used by many organisations.

This type of training is useful for debunking the myths about the unsuitability of women for careers in business and has three common elements:

- All employees participate.
- Training sessions do not separate top managers from lower level workers. The presence and participation of top management is important and signals commitment.
- Women are not isolated for special training. Such special programmes can have the serious disadvantage of appearing to address the 'shortcomings' of a particular group.

6.1.2 Approach

The success of activities and programmes initiated by organisations to advance women is not guaranteed. Organisations may require culture and attitude shifts and these do not happen easily. The following outlines a number of

elements common to most successful efforts to encourage the increase and development of women within organisations.

Top level Commitment

Top level commitment, with heads of companies communicating their visible and continuing commitment to workforce diversity throughout the organisation is highly effective. Some companies include diversity in all strategic business plans:

“ Instruments’ diversity vision is to create an environment that recognises, understand, values and utilises the unique skills and abilities of all employees” *Texas Instruments Inc.*

“As an organisation, we have set standards and goals for ourselves to ensure that we are focused on our diversity vision. Fundamental to our organisation’s structure are equal opportunity, fair employment practices and the creation of a workforce that reflects the diversity of our consumers”
Kraft Foods Inc.

Specific to the Organisation

No two organisations are alike. Organisations need to identify their own specific internal barriers to the advancement of women and address these rather than benchmark against the actions of other organisations. What works in one situation may not be effective elsewhere.

Accountability

Top level and line management can be measured for performance in the area of equal employment opportunity. Performance appraisals, compensation incentives and other evaluation measures can be designed to reflect manager’s ability to set a high standard and demonstrate progress toward equality (e.g. ensuring that qualified women have access to line management positions and lateral placements).

Inclusive

Successful company efforts to remove barriers to women’s advancement are not necessarily excluding men. Inclusive initiatives make good business sense because:

- The entire organisation benefits from accountability, leadership training, career development, succession planning, mentoring and diversity training.
- Programmes targeted at only one group may contribute to a stereotype that the members of that targeted group are inadequate or unqualified.

- Programmes that are open to all qualified employees overcome suspicions about selective treatment.

Holistic and Comprehensive

Ensuring that equal employment opportunity and affirmative action principles and responsibilities are more effective when internalised throughout the corporation not only as a function of human resources departments.

6.2 PUBLIC BODIES

The work of public bodies around the issue of encouraging and enabling women in business is commonly based around one or more of the following activities.

Encouragement of Voluntary Efforts

Public bodies can encourage volunteer efforts, which promote and enhance equality in employment (e.g. formulation of networks).

Public Recognition

Through awards and approvals, outstanding associations, community groups and businesses can be honoured for their demonstration of innovative efforts to increase career development opportunities for women.

Promote Higher Education

Initiation of scholarship programmes for women pursuing degrees in non-traditional areas.

Co-operation Among Businesses

Promoting co-operative relationships among businesses, and government to encourage programmes and policies that address women's concerns and needs.

Pledges

Signing up public and private large and small organisations that pledge to institute changes affecting women.

Information Collection

Promoting or improving the collection and publication of statistics to provide a picture of how women and men are represented at all levels and functions of business. For example, compiling local and national directories on women entrepreneurs at all levels, in all sectors and including international trade activity. Supporting, developing and encouraging quantitative and qualitative studies on the legal, social or cultural obstacles impeding women in business.

Information Analysis and Dissemination

Analysing and reporting programmes and policies implemented by organisations to measure the effectiveness of their methodologies.

Education

Alerting all those involved in education and training to the importance of an image of “women's role in society”, which is free of prejudice and discriminatory stereotypes, has a more balanced sharing of professional, domestic and social responsibilities between women and men, and involves a more balanced participation of women and men in the decision-making process.

Training is the essential component for producing a group of able women who not only survive but thrive and contribute to the local and ultimately the global economy. Surveying women to establish a baseline for technology, education and training needs allows for the generation of appropriate supporting training structures and/or partnerships to develop businesses and overcome obstacles.

For example provision of training to women entrepreneurs in a variety of pertinent areas such as management, marketing, business planning, technology and technical assistance is generally beneficial.

Access to credit

Access to credit for women entrepreneurs can be improved by linking women's business associations' awareness campaigns and public policy platforms to government and institutional policies. Research may also be useful to identify, define and explain the problems women currently experience in obtaining credit.

6.3 WOMEN'S BUSINESS ASSOCIATIONS

Women organise associations to overcome isolation, achieve goals, gain support, educate, train, market products and services, promote one another's interests and expand their businesses. These organisations also frequently provide a collective voice to advocate for public policies that benefit members.

Women's business associations are increasing steadily with approximately 700 registered in the US alone, representing over 8 million women owned businesses.

Global surveys reveal numerous opinions and suggestions from women on what associations could do to help.

- Provide advice, training and skill development
- Offer international linkages
- Identification of useful contacts
- Negotiation assistance
- Collection and dissemination of information and trends
- Mentoring and professional peer counselling
- Legislative pressure techniques and policymaking assistance

According to Women Entrepreneurs in the Global Economy (2000), what women's business organisations can provide may be summed up in three words: Access, Organisation and Advocacy.

Access

Women's business organisations are in a position to offer contacts for sources of credit, access to training in international trade issues, access to mentoring, and the more basic skills of operations management and marketing. They can offer access to information technology which in turn can help identify markets, provide important industry information, spotlight trends and highlight potential niches.

Organisation

Women's business organisations can work to advance women within the business community, identify their interests and advocate for them. Organisations need to explore how they can expand their capacity and better serve the needs of the women's business community world wide.

Advocacy

Women's business organisations are able to demonstrate how successfully targeted advocacy is critical if women are to overcome the institutional and informal constraints that, in many parts of the world, continue to hamper them. Advocacy can be a pathway to increasing access to education, fostering the growth and dynamism of women owned businesses, spurring the reform of laws, raising the awareness of international development organisations and most importantly, changing attitudes.

6.3.1 Women's Associations in Ireland

There are a number of networks working to assist and support women in Ireland. However many of these are established within organisations. During the research women's networks within organisations such as Aerlingus, An Post and the Civil Service were identified. There are undoubtedly many more groups working to assist the women within their organisations, however only a nation-wide survey could hope to identify the majority of these.

The key business network for women in Ireland is "Network Ireland". Network Ireland promotes itself as a "progressive dynamic organisation for women in business, the Professions, Industry, Trades, Government Departments and the Arts". The organisation was formed in Dublin in 1983, and has developed both a quality reputation and a quality distribution system for ideas and information it currently comprises 17 branches around the country.

Through networking events women from a wide variety of backgrounds can interact. Entrepreneurs can learn skills from managers working in large corporations or industry and managers in an organisation structure can gain experience and broaden their thinking through contact with entrepreneurs.

A number of overseas and international networks have branches based in Ireland. These would include the "International Alliance for Women", the "Women Chemists Network" and "Women in Technology and Science".

Ireland is also served by a number of different women's associations and groups which work to support women across a variety of areas. These would include the "Council for the Status of Women", "Joint Committee on Women's Rights", "Irish Country Woman's Association", "Women's Political Association" and "The National Women's Council of Ireland". The National Women's Council of Ireland is the national representative body for women and women's organisations in Ireland. It works to achieve change through a very broad range of action and

activity and increasingly works in partnership with other organisations in the public, private and voluntary sectors.

Regionally, women's groups have been established with a view to encouraging women back to the workforce and to provide personal development opportunities. Groups which were identified during the course of this research were "Mitchelstown Women Together Group", "Tullamore Women's Education Group" and the "Longford Women's Centre".

Women business owner networks are also evident regionally, e.g. Network of Enterprising Women in Longford involves a core group of women who completed a Pre-enterprise and an Enterprise programme run by the ICA/NOW project and who now run their own businesses. As mentioned, Network Ireland's branches are nation-wide and they are still developing e.g. the recent establishment of Network Ireland West Cork. The County Enterprise Boards are particularly active in developing initiatives for women. For example, Kildare County Enterprise Board has established a Women's Network and West Cork County Enterprise Board was involved in the establishment of the Network Ireland West Cork branch, and both it and South Dublin County Enterprise Board offer enterprise development training for women.

7. PRIMARY RESEARCH FINDINGS

Although the key focus of the methodology was secondary research, it was important, once the position of women in enterprise world-wide began to take shape, to explore how relevant this picture was for women in Ireland. Two methods were used to examine this picture, a focus group and a series of qualitative depth interviews.

7.1 FOCUS GROUP

The focus group was held with representatives of women in business in Ireland. Representatives were present from:

- Network Ireland
- Irish Business Employers Confederation
- Irish Management Institute
- Women in Business Project (AIB)
- Women in Technology (Intel)
- Banks dealing with Business Women
- Women in Science
- Women Entrepreneurs

A focus group process creates a permissive environment, allowing for different perceptions and points of view, without pressure to vote, plan or reach consensus. In this way the group works to promote self-disclosure among participants. In this environment the representatives sought to identify and discuss the following;

- A positive future for women in enterprise in Ireland
- Understanding of the key issues affecting women in enterprise in Ireland
- Suggestions for actions or initiatives which would work to improve the situation for women in enterprise in Ireland

7.1.1 Vision

The participants were asked to visualise a future Ireland where there was equality in work and life for men and women. The key themes of the vision which arose were:

- Men stepping up to take on an equal level of parental responsibility as women.

E.g. “All the juggling isn’t done by women” and “It’s not the most usual occurrence that the woman puts her career to one side”.

- Working women aren’t expected to have children as soon as they get married.

E.g. “Marriage wouldn’t be a pressure” and “People wouldn’t say “so when are you going to start a family?”

- Working mothers aren’t seen to be less committed to their jobs.

E.g. “The perception of married woman is gone” and “starting a family does not equal the end of your career”

- Workplaces are more flexible in terms of time spent at desks.

E.g. “Part-time jobs are valued” and “Company culture doesn’t see the use of family friendly facilities as a disability”

- Women in businesses aren’t made to feel “token’s.

E.g. “High achiever women will be supported and surrounded by other women” and “The old boy network is gone”

- Women can be open and honest about their needs and concerns.

E.g. “You don’t have to second-guess what you say” and “There’s no need to pretend that you aren’t worrying and everything is OK”

The key elements in this vision for the future are, a more balanced relationship between women and men and business and family life and a more open and appreciative attitude about the role of the parent or carer.

This would point to the key areas for change surrounding family responsibilities especially for the business women with children who took part in the research. The other area for change pointed to the isolation of women in many work places, the sheer lack of numbers.

7.1.2 Issues and suggestions

Participants were more focused on making suggestions for change than dwelling on issues. On the whole, the group was very practical, positive and forward thinking. The focus group was particularly useful in terms of making suggestions to help develop women in enterprise and highlighting areas where initiatives could be focused.

The participants highlighted some key issues which have particular relevance for Ireland and Irish working women in the areas of:

- Social and conventional attitudes condition and distort thinking about women and girls
- Lack of support systems for facilitating change for women
- Women's lack of confidence to drive for top positions
- Low adoption of flexible working practices
- Low numbers of girls choosing careers in science

The following gives examples of the initiatives and activities suggested during the focus group for tackling the issues discussed.

Social and conventional attitudes condition and distort thinking about women and girls

- Information that is regularly and comprehensively gathered can track gender patterns and trends and allow positive discoveries to be communicated.
- Children can be encouraged from a home level to develop all their skills and aptitudes regardless of their gender, however, parents are also affected by conditioning and can pass this on without realising.
- The media can send a more balanced message to children; e.g. girls can be good leaders and business people, boys can be good parents.
- Training programmes can be developed to create awareness of self, break the mould of traditional working practices, make people sit up and think, challenge them, recognise how they exclude others, etc...

- Decision-makers and influencers (Both male and female) can be targeted and shown the importance of retaining women in the workplace, the issues with time-intensive work practices and an appreciation of the level of covert discrimination that can occur in work environments. Education can show that there isn't just one way to do business. All women are not the same, there's no one solution to fit all (Women at different levels of career and different stages of life have different requirement sets and these sets vary for different women).

Lack of support systems for facilitating change for women

- Support networks/mentoring programmes can be developed to assist people to implement change in their lives, e.g. working and raising a family, choosing to stay at home (for men and women), managing flexible working effectively, etc...
- A formalised structure could offer support to organisations for change to happen.
- Successful women can be targeted and promoted as advisors and educators and role models.
- The internet has many uses, e.g. e-mentoring, e-networking, talent banks, etc... for advancing women in all industries.
- An organisation or association could openly support and facilitate child care, e.g. provide a panel of approved references for childcare with practical information like rates and hours that is easily accessible to anyone who needs it.
- More female representatives can be promoted to decision-making positions, e.g. on state boards, directorships, etc...

Women's lack of confidence to drive for top positions

- Developing women to be more assertive is important. Women can limit their own choices and frequently need someone to say "go for it". Women who've "made it" are also in a good position to reach back and help others to develop.
- Targeted intervention is helpful for those stuck in the middle management rut. Working with, motivating, educating and inspiring confidence in these people to evolve and develop their careers to get out of the blockage, (e.g. use of a formal buddy system) could be invaluable.
- Enterprise Development Programme – focusing on middle managers in organisations and working to develop them, could be used to target women; support, confidence, etc...

Low adoption of flexible working practices

- Flexible working has a bad image (Usually only taken up by women and people at lower levels out of necessity, The effective management of remote working requires trust and relaxed controls) promotion of its benefits and user-friendliness would be helpful.
- The “ever working” culture could be challenged at a number of different levels e.g. creativity burn-out, health, lifestyle, nurturing the next generation, retention, efficiency, etc...
- Show how technology can be used as an enabler to a more flexible and less time intensive working culture.
- Identify and promote role models, compile an “Honour Role” to celebrate managers who have championed a more modern workplace and the positive results they have achieved for their organisations.
- Family friendly policies are not just the realm of mothers, to achieve equality in the home they should be open to fathers also.
- Public organisations can lead by example in the move to “normalising” the retention of core skills through flexible working and childcare support, etc...

Low numbers of girls choosing careers in science

- Science has a bad image (not glamorous, harder to get into). Working on promoting it's advantages would be useful.
- Need to encourage girls to take science and technology subjects, show them what that working world would be like and how they could shine in it, build enthusiasm and optimism (e.g. in conjunction with the Science Teachers Association) e.g. choosing the astronauts created a huge interest in science in schools.
- Enterprise entrepreneurs competition in schools is good, should do something similar for science e.g. “science entrepreneurs”.
- Organisations could be encouraged to target schools to educate children about the options open to them across all industries.

7.2 INTERVIEWS

Seven qualitative depth interviews were held with representatives of women in business in Ireland. Representatives were chosen from:

- Enterprise Ireland's client base

- Flexible working practitioners
- Women business owners

The interviews provided an opportunity for in-depth discussion around the issues raised during the focus group. The key topics which guided the discussions were:

- The key barriers and issues which significantly slow or prevent women's career progression.
- The benefit and difficulties of implementing family friendly policies such as flexible working and child care support programmes.
- The role of Enterprise Ireland in assisting with the advancement of women in enterprise.

7.2.1 Themes

The interviews allowed discussion across a number of themes which raised comments about the following areas:

- Commitment to work
- The nature of business
- Flexible working
- SMEs dealing with leave
- Businesses attitude to families
- Women's attitude to families
- Developing women
- Government's role
- Enterprise Ireland's role

Commitment to work

Two key findings were common across all interviewees. The extra time commitment required from women to who raise families and also work, and the ability of women to manage that commitment efficiently and effectively. In fact, it was suggested by a number of interviewees that women who managed both family and business responsibilities had heightened time management skills and took ownership of problems more readily than other employees.

An interesting point made in one interview was the idea that men lack the same sense of freedom as women. That society is becoming open to the idea of women in business, but is still relatively closed to the idea of men in the home.

"It's merely a time issue. Women find it difficult to commit time to a job if they also have to commit time to their children, however, they still do the same work, if not over the same hours."

"Men can work later in the evening and earlier in the morning and are freer, because they leave the necessary family work to women."

"Outside commitments can force more efficient working, e.g. Women with children work the day better, are better time keepers and are more efficient."

"Women with children have a tendency to take ownership of a business problem just as they might a family problem, they don't pass or drop the ball, they don't walk away, they just get it done."

"In a family business women work incredibly hard, they keep both the home and the business going, they have to be able to do everything."

The nature of business

The majority of interviewees questioned the value of traditional working practices, especially the idea that "being present" meant "working effectively". The interviewees seemed very open to the idea of a more flexible and diverse workplace.

"There is a need to change how businesses view what business is about. A business has more value than just the number of bums on seats. Business traditionally dictates that work is put into the walls of the organisation, but that is not necessarily the best place for it. Better work may be possible in a better environment."

"There's lots of time wasting in organisations. A big workplace education is needed to show that being present and visible doesn't mean that work is happening effectively."

"There is a need to show the business imperative for employing women through research and examples so that businesses can see the value of developing women in their companies."

Flexible working

Flexible working was seen by interviewees as a good positive way forward for businesses in terms of developing and improving working practices. There was an understanding that its implementation would necessitate a mindset shift and careful organisation and training, however the benefits to a more flexible approach were seen to be immense in terms of balancing life and work and getting the most out of employees when employees were in the best position to give it. One

interviewee saw it as the beginning of a more win-win relationship between businesses and employees.

"It's about adjusting the mindset to work. If you respect a person and they respect you, you can trust them to get the job done, regardless of when or where they do it."

"Set it up properly with the right facilities, give access to office files, properly organise the communication mechanisms. Set a core area of week/day to meet with colleagues."

"Not everyone is suited to tele-working, it needs a careful selection of the right type of person. Motivation, isolation, demoralisation can become issues. Businesses need to train people to tele-work effectively."

"Flexible working practices also depend on the variety of work done, e.g. reception work would be impossible. This can also lead to divisions in the workplace, e.g. in production there are specific skills which would not allow for tele-working, this may create animosity between office and shift people."

Flexible working should be open to and encouraged for everyone. People have to become more flexible to juggle the difficulties of living in our booming economy, e.g. necessary commuting imposed by huge property prices. To be flexible, people need to think outside 9-5."

SMEs dealing with leave

All of the business owner interviewees were comfortable with the idea of maternity leave as a likely outcome of employing women. There was an acceptance of it as just another aspect of business to be managed just like any other. One business owner interviewee admitted that she would have been concerned about employing women when she first started her business but that her thinking has developed over the years and it is no longer a concern for her.

"No business should be crippled by the absence of an employee. If a person gets pregnant or becomes ill or has unavoidable commitments you just get someone to cover. It's about good business management. Businesses should spend some time planning not to be held up by illness or any other absence. Business continuity planning and shared skill sets are essential."

"If you have the right person for the job you don't care about a few months, you deal with it."

"People in an organisation taking leave can also have some positive results. Time out can give a fresher outlook, more objectivity, the ability to think outside the box, see the inefficiencies, and come up with a fresh approach."

Businesses' attitude to families

The traditional role of women as responsible for family also affects how businesses view and behave towards women. A number of interviewees pointed to the double standards of businesses towards women with children and men with children. It was also pointed out that even if women do avail of flexible working practices they can be perceived by their colleagues as not taking their job seriously enough.

"Businesses don't see children in terms of parents but in terms of mothers. If a man has a child it is assumed that the job of dealing with that child will be left to someone else."

"Business creates difficulties for women with children, e.g. family commitments, childcare and child health. Women working outside normal hours can suffer from the perception in their companies that they are not taking their job seriously"

Women's attitude to families

The interviewees had a very practical attitude to combining children and a career. They emphasised the importance of planning, just as you would any other conflict of interest, such as a prolonged trip or a career break. However the interviewees also recognised that planning was not always fool proof and that holding off having children could have negative consequences for both women and the economy.

"Women, being put off having children is bad for the country. We need to avoid the future depletion of our workforce."

"Children are something you have to plan into your career because of the conflicts that arise between the two. However, even women who decide to not have children for the sake of their careers can change their mind as they get older and end up having babies at the high point in their careers when they should be free of the difficulties of very young children."

Developing women

The majority of interviewees saw two key areas for intervention in order to advance women in business. The first was to target children and ensure that girls are encouraged to develop all their skills and see themselves as contributors to the economy, not just the family. The second was to bring women together, to enable them to learn from each other, be they successful or starting in business or with families and encourage their further development through networks and mentoring programmes.

"There is a need to take women more seriously which needs to start at an early age. Training of girls in education needs to teach them to take themselves seriously, and to be business

people. Even in homes, girls tend to get pretty or silly toys like Barbies. Boys seem to be taken more seriously with construction sets, etc."

"Competitiveness should be encouraged more in girls. Boys are encouraged to be competitive, girls are encouraged to play nicely, even today men's sport is more emphasised."

"Life educates you and having a family is the greatest management education ever, it requires every management, organisational and interpersonal skill that a business could need."

"Successful women have to give something back, not pull up the ladder, they need to be role models for schools and share the knowledge that go them where they are."

"Networks are important, they provide a voice. More and more networks are forming, some are social circles, some are for business or personal development. But there is a need for a combined effort, for integration of networks through an umbrella organisation."

"Mentoring requires attention in organisations, mentoring women to go further."

Government's role

Interviewees made a couple of suggestions in the areas of quality of life, education, women returning to the workforce, development of a better childcare infrastructure.

"Government policy to deal with this good economy needs to address quality of life. Without quality of life for both women and men the country can't be expected to retain the young work force it needs to develop."

"Incentives could be given to qualified people to set up more crèches and childcare could be subsidised."

"There could be grants offered to companies to take on and re-adjust women who stayed at home with their children, who have been on a re-education programme, to good jobs in a workplace environment, especially women with 3rd level qualifications and those in science engineering and technology."

Enterprise Ireland's role

Interviewees were unsure of how Enterprise Ireland could best act to advance women in enterprise. The key elements required were funding and incentives and an improved childcare infrastructure. However, the interviewees had difficulty in defining a role or a set of clear initiatives that would suit Enterprise Ireland. Two interviewees could not see any role for Enterprise Ireland in advancing women.

“Show the value of women who chose to rear their children from home through some sort of incentive to attract women in key industry sectors back from families to the workplace.”

“Help the networks to increase their resources. Networks are voluntary and meet on personal time, they need full time staff and funding for research and other activities.”

“Encourage the development of more crèches and negotiate better rates for childcare and crèche opening hours for groups of SMEs.”

8. RECOMMENDATIONS

Much information has been gathered through the course of this research which shows both the areas where interventions can assist in the development of women in enterprise and what form those interventions might take. Issues for women, which have shown themselves to be particularly relevant for Enterprise Ireland's client base, are:

- Family responsibilities
- Skill shortages, Training and education, Career path barriers
- Social and cultural stereotypes, Exceeding expectations, Personal and professional style
- Wage gap
- Lack of gender disparate information
- Lack of structures to provide a unified effort to develop women in enterprise

The following briefly describes these issues and gives examples of how Enterprise Ireland might work towards addressing them. A final section is also included which offers recommendations for areas of attention which although outside the remit of Enterprise Ireland are still crucial for addressing the issue of women's development in Ireland.

8.1 FAMILY RESPONSIBILITIES

Family responsibilities are traditionally left to women. This imbalance can create a "Double-jobbing" syndrome, which is not only an unfair distribution of work, but is also seen as a reduction of commitment to work responsibilities.

- Identify small companies who have successfully implemented flexible working practices and showcase them.
- Link good equality and family friendly practice in client and supplier organisations to awards and eligibility for programmes.

8.2 SKILL SHORTAGES AND EDUCATION AND TRAINING

A skill shortage for feeding into organisations in science, engineering and technology is imminent. The image of science, engineering and technology, both as a subject for study and as

a career choice is crucial. The need to present more positive and welcoming picture is a key concern.

Training and education is a key issue both for women and men to break down stereotypes, develop latent skills, provide necessary experience, get full benefit from technology, etc...

- Organise an equivalent of the Enterprise Development Programme which focuses on developing women.
- Organise an equivalent of the Enterprise Entrepreneurs scheme in schools which focuses on Science Entrepreneurs.
- Develop a partnership with a good management school, e.g. The Smurfit Graduate Business School to reserve places for women in Science Engineering and Technology to develop their management ability.

Career path barriers prevent women gaining the experience they need in crucial elements of their business or field in order to move to senior positions.

- Use the existing EI mentor programme as a facility for women in enterprise to seek advice and guidance from mentors of the right age and experience profile (not necessarily female)
- In conjunction with the IMI, target those women stuck in lower management positions to offer training and confidence building programmes.

8.3 SOCIAL AND CULTURAL STEREOTYPES

Social and Cultural stereotypes about women and their characteristics and abilities distort opinions and evaluations of women's performance.

- Provide training for enterprises in "gender-blind" recruitment practices.
- Identify suitable female candidates for board positions and submit them to the IMI.
- Lead by example through ensuring equal opportunity for women in Enterprise Ireland and the implementation of family friendly policies and diversity programmes within Enterprise Ireland. Put all business advisors through a diversity awareness programme so that they understand the opportunities and issues surrounding this concept fully.

Exceeding expectations or the need to prove one's self repeatedly in order to be seen to be as competent as men is an

issue for all women in business, particularly those in areas traditionally worked by men.

- Support PR and promotional activities such as conferences, network events, honour rolls of industry role models, etc... Promotional media could contain examples of how the employment of women has solved particular work problems for organisations.

Personal and professional style differences can create conflict and exclusion between women and men. Exclusion is often most evident in the form of old boy networks.

- Encourage co-operation between women's network's in Ireland e.g. Network Ireland, Women in Science and Technology and other relevant networks and organisations e.g. IBEC, SFA, ISME, etc...

8.4 LACK OF INFORMATION AND MONITORING

The lack of gender disparate information gathered in Ireland provides only a vague picture of the situation for women in enterprise here. Wage gap is an issue which affects women world wide. It has been attributed to lack of experience and taking leave, however, more information is required to monitor this.

- Conduct primary research to provide conclusive statistical evidence of the extent of the issues for women in enterprise in Ireland. Use international measures and methodologies to ensure comparability of results to obtain a benchmark of Ireland's position relative to other countries and conduct research regularly to provide information for trend measurement and analysis. The National Competitiveness Council could conduct an annual barometer to measure how Ireland is positioned to facilitate women in work.

8.5 LACK OF STRUCTURES

A lack of funded and properly supported structures designed to encourage and develop women in enterprise is apparent. Internationally, many bodies have been established to monitor and enhance women's advancement in business, e.g. Women's Bureau (US), Women's Unit (UK), a body or structure dedicated to enhancing women in enterprise in Ireland would be useful.

- Establish a "Working Women's Unit" to champion the cause of advancing women in work and drive change.
- Establish a web-site as a central resource for and about working women in enterprise in Ireland. This could be

organised in conjunction with other interested bodies to provide a resource for all women in business in Ireland. The web-site could offer on line HR mentoring networks with HR managers in companies in Ireland who already implement flexible working programmes etc.. in their organisations and understand the practicalities of making them work. It could also provide an easily accessible register of women owned businesses in Ireland.

8.6 RECOMMENDATIONS OUTSIDE ENTERPRISE IRELAND'S REMIT

The following recommendations are not within Enterprise Ireland's core areas of operation. Other organisations would be more suited to the implementation of these proposals, however, Enterprise Ireland may contribute to these through an advocacy role may if its sees this to be appropriate.

- Seek to educate the educators in conjunction with other appropriate associations and government departments to ensure that schools seek to encourage rather than deter girls in key areas, e.g. leadership skills, science subjects, etc...
- Promote the benefits of summer courses between primary and secondary school for girls in female deficient subject areas to ensure a confident "head-start" when the second level school year begins.
- Target popular media to begin to "normalise" women in non-traditional roles and women's issues in enterprise, e.g. radio chat shows, television soap operas, regular columns in business publications, etc...

9. EXAMPLES OF INITIATIVES

The Appendix gives examples of initiatives, programmes, policies, special bodies, etc from world-wide sources which have been designed with the advancement of women (and sometimes other minority groups) in mind. The initiatives have been grouped as follows:

- Career development and entering management in a company
- Starting a business
- Entering new markets and exporting
- Expanding a business

- Managing a business
- Family friendly policies
- Advancing women in science, engineering and technology

Good examples of initiatives which are of particular relevance to Enterprise Ireland's role, and may be customised or combined to provide useful initiatives which Enterprise Ireland could offer or promote have been selected and summarised in this section.

9.1 CAREER DEVELOPMENT AND ENTERING MANAGEMENT IN A COMPANY

9.1.1 Bodies

International Research and Training Institute for the
Advancement of Women (INSTRAW) [WORLD-WIDE]

The International Research and Training Institute for the Advancement of Women (INSTRAW), stimulates and assists, through research, training and the collection and dissemination of information, the advancement of women and makes women's contribution to development more visible.

International Labour Organisation, Bureau for Employer's
Activities (Technical Co-operation Section) (ACT/EMP/CT):
[WORLD-WIDE]

ACT/EMP's primary work is associated with increasing the participation of women managers and business entrepreneurs has been in the areas of promoting gender equality in employment as well as mainstreaming women in management and entrepreneurship. Employers' organisations are becoming increasingly involved in specialised action programmes to integrate women into the mainstream of business. ILO (International Labour Organisation) projects have fully engaged the participation of employers' organisations around the world to raise awareness and promote neutrality. They have laid the groundwork for more programmes and activities in the future.

9.1.2 Career Development

The Bureau of National Affairs, Inc. (BNA), [US]

BNA has developed a Temporary Transfer Program, where managers can use temporary vacancies as a way to allow employees to move into other positions, where there is a need

for temporary help and the employees gain new skills that might be beneficial in moving to a permanent job at a later date. BNA gives the example of one young woman who used the temporary transfer program to gain new skills in the editorial arena, and was hired into a full-time position in the Editorial Department of BNA.

The BNA-Guild Traineeship Committee helps otherwise capable employees overcome obstacles to upward mobility. Several employees have moved from clerical/support positions to professional level positions. The traineeship committee takes long term employees which otherwise lack the necessary skills and places them in traineeship positions that eventually lead to permanent jobs.

The Leadership Development for Women Programme (LDW) [AUSTRALIA]

The LDW programme at the University of Western Australia, which began in 1994, is designed to redress the under-representation of women at higher levels of the University workforce. The programme features a core exploration of experiences, theories and attitudes towards leadership in higher education, a mentor scheme, a series of leadership skills and development workshops, networking lunches and informal sessions.

Price Waterhouse LLP (Price Waterhouse) [US]

Mentoring programs operate throughout the firm. Women and people of colour have been meeting informally for a number of years to support each other, discuss career strategies, and recommend action plans. Price Waterhouse actively supports their activities and makes firm resources available for meetings

Networking Circles is a group-mentoring program, developed and piloted in the Northeast region, to increase the representation of women at Partner and Director levels. Each Networking Circle consists of eight to twelve women, who are mentored by two to three partners. Designed to leverage the region's best mentors, both male and female, the program uses a group mentoring approach to avoid artificial pairing of people, recognising that many informal one-on-one and peer networking relationships are still likely to result from these sessions. A voluntary mentoring program in Chicago pairs new hires with senior staff members to help them feel like part of the team and more connected to the firm. The West region has formalised its mentoring process by matching staff with willing mentors and by counselling all participants so that both mentors and those being mentored clearly understand their roles. A Public Utilities Group matches a mentor with each staff member who desires such a relationship.

**Edith Cowan University Women in Leadership Project.
(WIL/ECU) [AUSTRALIA]**

The Women in Leadership (WIL) Project at Edith Cowan University (ECU) in Western Australia was launched in 1991. Since its inception the WIL Project has developed a strong national reputation for its expertise in identifying and responding to the challenges that face women in leadership roles in public and private sector organisations. The principal objective of the WIL Project is to engage women strategically in leadership processes and enable them to play an active role in shaping organisational structures and culture.

The WIL Project is made up of three formal elements; Collegial Group Programmes, the Public Lecture Series, and an annual International Women in Leadership Conference. These have been run each year since 1991. A mentoring programme, senior-level women's network and ad hoc workshops and seminars are now also part of the WIL Project's activities.

9.2 STARTING A BUSINESS

9.2.1 Training

EC LEI Network [EUROPE]

The LEI Network launched a business training and development project for women under the NOW initiative (New Opportunities for Women under the European Social Fund, intended to ensure equal opportunities for women and access to employment as well as the option of starting a business) which is implemented by the LEI experts in Greece, Spain, Portugal, UK and the Netherlands. The actions of the programme consist of:

- Training in enterprise creation, including the development of the business idea, management skills, and personal communication competencies.
- Training women as business advisers.
- Training for women's enterprises and job creation projects that have been in business for one to two years and help them to diagnose business problems.
- Business support centres which provide expert consultancy and business development assistance.
- Mentoring involving training for women business development advisers in mentoring techniques and gender awareness.
- Promotion and development of finance mechanisms for women's enterprises and job creation projects.

9.2.2 Support

Women's Enterprise Initiative [CANADA]

Funded through a contribution from Western Economic Diversification Canada, the Women's Enterprise Initiative provides business information and services specifically aimed at women entrepreneurs. Each western province has set up its own component of this pan-western initiative. The non-profit groups offer access to a loan fund, advisory services, path-finding to existing services plus a host of unique products and services tailored to meet the needs of women entrepreneurs in their province.

GROW [EUROPE]

GROWth in your region – the partnership approach, was a project within the Leonardo programme. Seven regions in Europe worked together on promoting women's entrepreneurship.

The GROW approach emphasises the reinforcement of the regional infrastructure for supporting women entrepreneurship by establishing reference groups plus an interactive concept of planning and implementation of support actions.

Adding networking on regional and transnational levels as essential components the projects have produced a structural and organisational model by combining well-known tools in an innovative and fruitful manner.

The seven regions who took part in the GROW project were Verviers in Belgium, Emilia Romagna and Sicily in Italy, Catalonia in Spain, Halland and Östergötland in Sweden and Wales in the UK. Wales developed a very interesting strategic plan for promoting women's entrepreneurship as a result of the GROW project.

Resource Centres for Women [SWEDEN]

Resource centres for women work to increase women's influence in the region and to strengthen women's position in society. A resource centre bases its approach on local conditions, and women can obtain help there according to their region's needs. Many resource centres work with different projects promoting women's entrepreneurship. The centres are financed on a project basis, by the state, local and regional authorities and EU structural funds.

Regional and local resource centres for women have been set up in about 120 locations around Sweden. This undertaking is co-ordinated by NUTEK in consultation with the National Rural Development Agency via the National Resource Centre for Women (NRC). In the 1999 budget, the Government proposed

earmarking funds for the integration of this project into NUTEK's regular activities.

9.2.3 Awareness Raising

NUTEK (Swedish Business Development Agency) [SWEDEN]

Since 1991 NUTEK has been running programmes for promoting women's entrepreneurship. From the start this has been in collaboration with what is now ALMI Businesspartner and also with a strong network of County Administrative Boards. Due to reorganisation and Sweden joining the European Union, the regional authorities also subsequently financed programmes and projects directly at regional level.

NUTEK has run a project together with one of the major banks investigation the reasons why women have difficulties accessing loans and this week is now aiming at getting more banks involved in discussions and training programmes.

NUTEK's work on promoting women's entrepreneurship has included a new way of presenting statistics. Videos, magazines and conferences have also been used to make women business owners more visible in society. Developing material, training and consultation methods have been the main tools to promote women's entrepreneurship. Resulting data and knowledge have been published in books and reports. The most extensive programme has been the Business Advisors for Women.

The business advisors have also started many projects targeting the development of SMEs run by women.

NUTEK also launched the research programme Female Entrepreneurship and Management (FEM) which started as a four-year programme under the organisation umbrella of the Swedish Foundation for Small Business Research (FSF). It is the first major programme within this field and is supported directly by the government. The main issues are Entrepreneurship as a lifestyle for women, and women's invisibility in entrepreneurship.

9.2.4 Funding

Full Circle [UK]

A service of WEETU (Women's Employment, Enterprise and Training Unit), this is a new kind of business support programme which is piloting peer lending in the UK. Clients follow a pre-enterprise course during which time many of them refine their business ideas and the subsequent Business Skills course enables them to develop the skills and understanding to develop an effective business plan.

To access the Loan Fund, a “Lending Circle” of between four to six businesses at similar stages of start-up is formed. These businesses make a formal pledge to work together to support and develop each other's businesses. They are also responsible for assessing each other's business plans and approving loan applications. WEETU provides training to enable them to do this. Should the business they have approved experience difficulties they use their emergency loan fund (into which they put 5% of any granted loans) and provide practical support. To date, no businesses have defaulted on their loan repayments. WEETU supports each “Circle” for the first six months and remains in monthly contact thereafter.

This business approach has enabled WEETU to support businesses and provide an effective long-term support structure. Over the last two years 105 women have formed 21 lending circles and the Full Circle Fund has financed 40 businesses.

Small Firms Loan Guarantee Scheme [UK]

This SBS scheme guarantees loans from the banks and other financial institutions for small firms that have viable business proposals but who have tried and failed to get a conventional loan due to a lack of security.

9.3 ENTERING NEW MARKETS AND EXPORTING

9.3.1 Bodies

Department of Foreign Affairs and International Trade (DFAIT) [CANADA]

DFAIT is working to ensure that Canadian trade promotion services are adapted to the needs of women entrepreneurs who lead small and medium-sized enterprises (SMEs), and that these services are fully accessible to women business owners to increase their successes in export markets.

Canadian International Development Agency (CIDA) [CANADA]

The CIDA Industrial Co-operation Program can provide financial support and advice to Canadian businesses planning sustainable business activities in developing countries in a variety of sectors. It reduces the risks to Canadian firms by sharing the costs unique to doing business in developing countries and those associated with providing training, the participation of women, and a clean environment.

9.3.2 Web

Department of Foreign Affairs and International Trade (DFAIT) [CANADA]

A web site has been created for Canadian businesswomen to find information relevant to exporting and export activities.

9.3.3 Trade Missions

Trade missions for women business owners [US]

The White House led a trade mission for women business owners to England and the Netherlands. With the help of U.S. embassy officials, these women entrepreneurs met with prospective customers and brought back millions of dollars of new business.

9.4 EXPANDING A BUSINESS

9.4.1 Bodies

US Small Business Administration, Office of Women's Business Ownership [US]

The Women's Business Ownership branch of the SBA works to create better information about women entrepreneurs and addresses it to the policymakers.

Small Business Advocacy Councils [US]

These Dept. of Defence councils frequently take the form of a technical and contracting advocate working group which meets monthly. Membership usually consists of representatives from each Division of the organisation and the Small Business Liaison Officer (SBLO) or Small Business Specialist (SBS). The advocates share leads for new programs and/or contracting requirements in which small business participation may be viable. The SBLO or SBS may assist with researching appropriate small business sources to fulfil the requirements. The Small Business Advocacy Council also serves as an informational channel and a forum for technical personnel to become more familiar with the small business program in general. It provides the opportunity to form closer working relationships and allows for questions to be answered in an informal environment.

9.4.2 Awareness Raising

Increasing Awareness [US]

The Department of the Army Small Business Specialist has used a number of methods to increase awareness on various types of business opportunities and assistance. Methods used include, local radio and television broadcasts, advertisements in appropriate trade and business publications, adult education classes, enhanced web-site, PowerPoint presentation and speaker notes, and regional business fairs.

THRUST [US]

The THRUST programme, concentrates on five areas of industry (Environmental, Manufacturing, Health Care, Telecommunications, and Management Information including Simulation) and seeks to provide small business concerns, SDBs, and women-owned business with increased awareness of Dept of Defence contracting and subcontracting opportunities available in those areas.

Outreach Conferences [US]

Outreach conferences, which specifically target women owned small business concerns, are sponsored by Dept. of Defence contracting activities, large DoD prime contractors, or Procurement Technical Assistance Centres. These events are co-ordinated or co-sponsored with local women owned business organisations (e.g. NAWBO).

9.4.3 Incentives

Buyer Incentive/ Recognition Programs for promoting women owned small businesses [US]

Dept. of Defence recognition or incentive programs for outstanding performance, by buyers in support of the small business program. For example, plaques, money, public recognition, increased performance status, vouchers, parking places, and opportunities for career advancement.

9.5 MANAGING A BUSINESS

9.5.1 Support

SBA's Women's Demonstration Program [US]

SBA's Women's Demonstration Program, through locally supported centres, provides training and counselling in all aspects of owning and managing a business. In 1995, the program added 19 new centres, for a total of 54 nation-wide.

Small Business Service (SBS) [UK]

Supports SMEs at start-up and beyond in England. Launched by the Government in April 2000 in recognition of how important SMEs are to the economy. SBS is dedicated to helping small firms and representing their interests. It aims to help build an enterprise society in which small firms of all kinds thrive and achieve their potential. Support will be provided through a wide range of services at local level using a network of 45 Business Link Partnerships. These will range from general business planning, assistance with exporting, quality, employment issues, training and development, or design, through to advice on information, communication technology and e-commerce issues.

In doing this the SBS network will provide a gateway to a further comprehensive network of business support organisations, initiatives and information from the public, private and voluntary sectors. The gateway will make extensive use of Internet and call centre technology and will be accessible directly or via local or sectoral organisations such as trade organisations.

ALMI Businesspartner [SWEDEN]

Between 1998-2000 ALMI Businesspartner received government funding specifically designated for projects promoting women business owners.

“Coaching – a way to develop your company”, has been a very successful programme offered to women business owners by ALMI Businesspartner. The business owner gets a coach and they work together for 30 hours. The business owner herself adds an extra 30 hours to work through a plan very similar to a business plan. The coach is a speaking partner, not a doer.

Mentoring has been a tool used for a long time by ALMI Businesspartner to work with strengthening women business owners. The programme includes educating both mentors and adepts, at some occasions together.

9.5.2 Funding

Smart [UK]

An SBS initiative, that provides grants to help individuals and small and medium-sized businesses to make better use of technology. In England the following is available: Technology reviews and studies, Micro projects, Feasibility studies and Development projects.

9.6 FAMILY FRIENDLY INITIATIVES

9.6.1 Childcare

The Rouse Company (Rouse), [US]

LOCATE, a service provided by the Maryland Committee for Children, assists in locating convenient and affordable child-care, and is available through the Rouse company. The service also provides counselling and educational support to assist parents in addressing their child care needs.

CIGNA [US]

CIGNA holds a “Bring Your Child to Work Day” which lets approximately 6,000 boys and girls see a diverse group of successful employees and managers; and provides about fifty-four special events held at two headquarters sites.

The International Business Machines Corporation (IBM), [US]

IBM indicates it has been a national leader in providing employees information on resources in their community on child and elder care programs.

Over the years these services have been expanded to include resources and consultation for adoption, education, and adult disabilities.

9.6.2 Flexible Working

Ernst and Young LLP [US]

Supports and facilitates employees who desire flexible work schedules and recently launched through its Office for Retention, a Flexible Work Arrangements Database, which includes a Tool Kit supporting a partnership between the firm and the individuals.

9.6.3 Training

First Tennessee Bank (First Tennessee) [US]

The cornerstone of the Family Matters commitment is the development of its managers' abilities to work with their employees in resolving work-family conflicts. Accordingly, managers receive training on how to incorporate workplace flexibility and related family initiatives into their departments as part of its ongoing leadership curriculum. Managers are also evaluated yearly by their employees on how they work with employees to manage work and family conflict issues and conduct feedback sessions with their employees to find additional ways to be more supportive of these issues.

9.6.4 Support

Entrepreneurial Mothers Association [US]

Entrepreneurial Mothers Association (EMA) is a non-profit business organisation for self-employed women who are also mothers. EMA provides the opportunity for self-employed mothers to enhance their professional and personal development by offering support.

9.7 ADVANCING WOMEN IN SCIENCE, ENGINEERING AND TECHNOLOGY

9.7.1 Bodies

National Research Council Committee on Women in Science and Engineering (CWSE) [US]

"The Committee was established in 1991 as a standing committee of the NRC. Its mandate is to co-ordinate, monitor and advocate action to increase the participation of women in science and engineering.

The Committee collects and disseminates information, and recommends ways to enhance women's involvement. It also publishes reports, convenes conferences, and acts as a liaison with other relevant bodies."

Unit for Promoting SET for Women within the Department of Trade and Industry [UK]

The Promoting Science, Engineering and Technology (SET) for Women Unit was created following a recommendation in the 1994 'Rising Tide' report. Its key aims are: to focus effort on attracting more girls into SET subjects, to promote SET as a

fulfilling higher education career, to identify ways of improving progression for women up the career ladder, and to promote industry careers for women. The unit is within the Office of Science and Technology within the Department of Trade and Industry.

Texas Instruments Women's Professional Development Team [US]

The Team was created in 1994 to address the low number of women in the technical sector. It holds annual diversity reviews of technical ladder statistics, provides technical training and sponsors mentoring workshops and conferences for women in the industry.

9.7.2 Conferences

Women Unlimited [UK]

The first ever national opportunities fair in the UK specifically designed for women, led by the Women's Unit of the Cabinet Office in association with the Department of Trade and Industry in the UK. The fair had a particularly strong emphasis on IT.

Women in Technology International Annual Conference [US]

An annual conference for women in IT, which also runs a 'Bring your Daughter to the Conference' programme.

9.7.3 Support

CRA – W: mentoring workshops [US]

Career Mentoring Workshops for women in academia. Established professionals provide practical information, advice and support to their younger colleagues. Each of the workshops is associated with a major professional meeting.

Cracking It! [UK]

Cracking It! A comprehensive handbook to help women succeed in SET, published by Training Publications Ltd in the UK.

Pathways Project (ACM-W)

The Pathways Project matches young women with women scientists to serve as mentors through on line contact.

Lets TWIST (Lets Train Women in Science and Technology)
[UK]

Lets TWIST (Lets Train Women in Science and Technology): WITEC UK were a partner in this Employment NOW funded project co-ordinated by Bradford and Ilkley Community College (UK). The Lets TWIST project consisted of 2 main parts: Training the Trainers and providing a Careers Resource.

Within the Training the Trainers section, staff involved have provided training to lecturers on women-friendly training methods in an effort to increase the number of girls studying SET, particularly at craft level. This has also taken the form of staff exchanges across the transnational partnership in order to transfer best practice.

The Careers Resource part of the project has developed a physical resource centre within Bradford College containing useful resources and a careers advisor to be available as a drop-in for student support and to inform girls of the choices available in SET. Several publications have been produced as part of this project including a Role Models booklet, Video and Final report document.

9.7.4 Awareness Raising

Role Model Project for Girls (ACM-W) [US]

A sample of women in a wide range of non traditional careers is being developed that will take the form of a CD ROM and a supporting web site.

Progress (WITEC) [UK]

A one year mentoring scheme within seven UK universities to improve career progression for women in SET in HEI's. The project's main aim was to develop a course to train academic staff in the SET area in mentoring skills as a possible means of increasing the number and retention of women academics in these areas. A report on the current experience of mentoring was commissioned and a flyer for training in mentoring produced.

WITEC Ireland Panel Discussion

WITEC Ireland's panel discussion entitled 'The Voice of Women in Science' was aimed at promoting women in science in all forms of the media.

9.7.5 Databases

European Database of Women Experts in SET (WITEC Project)

An online database helping governments and EC departments to source expert women for committees and working groups.

WITI for Hire [US]

A search service allowing women to research companies, post their CV's or list jobs for their companies.

Unit for Promoting SET for Women Database Catalogue [UK]

The Unit holds a catalogue of databases entitled Women in Science, Engineering and Technology which provides information about how to find women experts in these areas.

9.7.6 Targeting Education

Institution of Engineers in Ireland STEPS Promotional Campaign in association with WITI (Women in Technology International) (IRL)

This is a campaign designed to encourage students, and particularly girls, to consider engineering as a career. Major industrial companies in Cork, Limerick, Dublin and Galway opened their doors to girls who met with engineers and got hands on experience of their work.

WISE Insight [UK]

An annual one week residential course for female 5th and 6th year pupils held in a variety of Universities throughout the UK. The course is aimed at pupils considering pursuing a career in engineering.

AT&T Graduate Fellowship Programme (Summer Programme) [US]

This Programme is for women or minority students in their third year in college in a relevant subject. Participating students work on individual projects which are part of the ongoing research in the lab. The projects are ideally designed so that they can be completed and reported on over the 10-week course of the summer.

WITS Role Model Scheme [IRL]

Promotes interaction between WITS members and second level students around the country, and the scheme is now funded by the Department of Education and Science.

CRA-W Lucent Technologies Distinguished Lecture Series [US]

Sends faculty and industry researchers to campuses to encourage women and minorities to attend graduate school. The visits include a technical talk as well as a variety of 'recruiting' events.

CRA-W Distributed Mentor Project [US]

Matches outstanding female undergraduates with female mentors for a Summer of research at the mentor's institution.

Levelling the CS1 Playing Field (ACM-W) [US]

A project whereby female undergraduates in US institutions are encouraged to enrol on computer science courses through the provision of a 'head start' course which will enable them to overcome some of the early 'confidence' issues in the SET area.

Women in Computing Academic Resource (ACM-W) [US]

A compiled list of colleges and universities that have formal and/or informal programmes for encouraging and promoting women in computer science.

CRA-W Collaborative Research Experience for Women [US]

Designed to provide collaborative research experiences for groups of two to three undergraduate women during the academic year. Financial assistance and other help is provided.

10. CONCLUSION

Ireland's key issues for women in enterprise mirror those identified internationally and there is much scope for learning from institutions and programmes in other countries in developing successful initiatives to operate here.

Enterprise Ireland's role in Irish enterprise makes it well placed to reach out to women in enterprise and work with them and the various groups and programmes which are currently in operation to advance women's career development in the high growth, high tech, internationally traded organisations which typify its client base. The initiatives and recommendations suggested here will only add to the wide range of programmes and initiatives already benefiting individuals and businesses in Irish enterprise.

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APPENDIX

CAREER DEVELOPMENT AND ENTERING MANAGEMENT IN A COMPANY

Bodies

<p>International Labour Organisation, Bureau for Employer's Activities (Technical Co-operation Section) (ACT/EMP/CT): [WORLD-WIDE]</p>	<p>ACT/EMP's primary work associated with increasing the participation of women managers and business entrepreneurs has been in the areas of promoting gender equality in employment as well as mainstreaming women in management and entrepreneurship. Employers' organisations are becoming increasingly involved in specialised action programmes to integrate women into the mainstream of business. ILO projects have fully engaged the participation of employers' organisations around the world to raise awareness and promote neutrality. They have laid the groundwork for more programmes and activities in the future.</p>
<p>UN Division for the Advancement of Women (DAW) [WORLD-WIDE]</p>	<p>UN Division for the Advancement of Women (DAW), 'acts as a focal point for co-ordination and mainstreaming of gender issues in the UN system. It has been the Secretariat for the four UN world conferences on women and is also responsible for servicing CSW and CEDAW. It carries out gender analysis in the 12 critical areas of the Platform for Action and on emerging issues.</p>
<p>International Research and Training Institute for the Advancement of Women (INSTRAW) [WORLD-WIDE]</p>	<p>International Research and Training Institute for the Advancement of Women (INSTRAW), stimulates and assists, through research, training and the collection and dissemination of information, the advancement of women and making women's contribution to development more visible.</p>
<p>United Nations Development Fund for Women (UNIFEM) [WORLD-WIDE]</p>	<p>United Nations Development Fund for Women (UNIFEM), promotes women's empowerment and gender equality working primarily at country level. It works to ensure the participation of women in all levels of development planning and practice, and acts as a catalyst, supporting the efforts that link the needs and concerns of women to all critical issues in the national, regional and global agendas.</p>
<p>UN Commission on the Status of Women [WORLD-WIDE]</p>	<p>UN Commission on the Status of Women, prepares recommendations and reports to the Economic and Social Council on promoting women's rights and monitors, within the UN system, the implementation of the Beijing Platform for Action.</p>
<p>The International Business Machines Corporation (IBM), [US]</p>	<p>IBM has established thirty-one diversity councils around the world, comprised of men and women representing a variety of backgrounds, cultures and work and life experiences. The councils' vision is to build on IBM's diverse workforce, resulting in all employees realising their full potential and thus enhancing business achievement.</p>
<p>Department of Labour Women's Bureau [US]</p> <p>Women's Unit of the Cabinet Office [UK]</p>	<p>Promoting women's legal rights in the workplace</p> <p>The Women's Unit, situated in the Cabinet Office, provides a two-way voice between Government and the women of the UK. It works closely with No. 10, Government Departments and others to bring about measurable improvements to the position of women which benefit society generally. In this way the Unit ensures that the concerns of women in the UK are fed directly into policy making across Government. There are two Government Ministers for Women within the Women's Unit</p>

Price Waterhouse LLP (Price Waterhouse) [US]	<p>Price Waterhouse formed a new Human Resources Committee within the firm's Policy Board to focus specifically on its people, including the advancement of women and minorities. To foster accountability, partners are evaluated on their success in actively fostering the careers of women and minority staff; seeking innovative alternative workplace solutions to retain top performers, e.g., part-time, telecommuting arrangements; and attaining goals for recruiting and retaining high-performing women and minority staff.</p> <p>Bi-monthly Female Leaders Luncheon meetings, held by the firm's female leaders in the Northeast, discuss issues affecting women in the firm and seek to generate concrete ideas that will lead to improvements in the retention and advancement of women in the firm.</p>
Deloitte and Touche LLP [US]	<p>In 1991, the CEO established a Task Force on the Retention and Advancement of Women, and asked it to help the company find out why women were leaving the firm in greater numbers than men, and what the company could do to confront the issues. The Task Force went directly to the people of the company and identified three key reasons: the environment; perceived barriers to career advancement; and the need to balance work-life commitments. Those findings formed the basis of the Initiative for the Retention and Advancement of Women, which was officially launched in April 1991. The recommended solutions won unanimous approval in 1993, and included gender awareness workshops for all employees; formal career planning for women (including mentoring); an informal monitoring system which was to ensure that women were not bypassed for the best assignments; flexible work arrangements, such as telecommuting and flexible hours, for women and men throughout the company; no major committee would be formed without naming at least one woman to it; and an outside group of business leaders was to be formed to track the company's progress. (Lynn Martin, former U.S. Secretary of Labour, was named to head the company's Council on the Advancement of Women.)</p>
International Labour Organisation: Promotion of Women in Private Sector [WORLD-WIDE]	<p>This current, on-going project is managed through employer's organisations. It's objective is to equip employers in each of the participating countries in designing and conducting policies and programmes to encourage gender equality in employment and to increase the participation of women managers and entrepreneurs in order to fully utilise human resources for economic and social development through private sector activities. The project was approved by the Government of Norway in 1996, to assist employer's organisations to contribute to the design and implementation of equal opportunity policies at the work place. The project is meant not only to demonstrate equal opportunity guidelines, but also to develop the in house capacity of each organisation on gender awareness to impart to their members.</p>

Memberships and Contributions

Price Waterhouse LLP (Price Waterhouse) [US]	<p>Price Waterhouse is a member of Project Equality, a program committed to maintaining employment policies and practices that affirmatively promote equal employment opportunity for people of colour, women, persons with disabilities, and others who encounter discrimination.</p>
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Reducing Unemployment

NOW (New Opportunities for Women) [EUROPE]	Within the Employment Community Initiative, NOW focuses on improving participation by women in the labour market, on reducing unemployment among women by offering them training in Information Technology.
Business in the Community [UK]	Business in the Community is a unique movement of companies across the UK committed to continually improving their positive impact on society, with a core membership of 650 companies including 75% of the FTSE 100. Responsible for the Opportunity Now initiative and also the Now Inset initiative which focuses in particular on women in Science and Technology
WEETU (Women's Employment Enterprise & Training Unit) [UK]	Based in Norwich and established in 1987, WEETU is a locally based organisation, which delivers a range of practical services to keep women informed and to enable them to improve their employment prospects

Training

The Bureau of National Affairs, Inc. (BNA), [US]	BNA's Human Resources Training and Development Group has put together a number of programs which provide employees the opportunity to develop professionally and personally. Managing Personal Growth provides employees with tools to enter into a development discussion with their supervisors. The Human Resources Training and Development Group staff also has developed specific training curricula in a number of areas, and has established an Individual Learning Centre where employees can take advantage of a number of learning aids and work at their own pace. BNA's tuition aid program gives employees an opportunity to take classes that will help them complete an undergraduate degree, pursue a graduate degree in their professional field, or otherwise prepare for jobs in the company. The program provides up to \$9,000 a year in tuition reimbursement.
The Rouse Company (Rouse), [US]	Rouse has maintained an Educational Assistance Plan to help pay for job related courses, or courses which are part of an approved degree program. Education assistance has been used by employees to improve job performance, as well as to prepare for promotional opportunities.
Eastman Kodak Company (Kodak) [US]	Kodak has a tuition aid plan designed to encourage Kodak employees to continue their education in subject areas that will benefit both the individual and the company. Special training programs involved with both graduate and undergraduate release-time programs are also available to individuals meeting the approval requirements.
Wisconsin Electric Power Company (Wisconsin Electric) [US]	The company co-sponsors an annual Women in Hard Hats workshop that introduces women to non-traditional employment (the other sponsor is the NET project, Non-traditional Employment Training). The company offers tuition reimbursement to all employees up to \$5,000 per year. Employees are reimbursed up to 90% for courses related to the business or 60% for self-enhancement courses.

The Pacific Telesis Group (Pacific Telesis) [US]	<p>Pacific Bell offers tuition aid to employees pursuing any of twenty majors, with no dollar limit attached to first-time undergraduate degrees. Through its Self-Directed Education program, Pacific Bell has established relationships with community colleges and four-year institutions throughout California. Under this program, groups of employees attend accelerated and work co-ordinated degree programs on company premises state-wide. In conjunction with the University of LaVerne, Pacific Bell has created another program, consisting of college equivalency course work, with instruction and textbooks in Spanish, leading to a bachelor of science in business administration.</p> <p>Pacific Bell offers employees a wealth of educational and training experiences on the job and in classrooms, by distance learning over a satellite link, and through a variety of self-instruction programs. Through a wide network of education and training resources, employees and their managers can select appropriate educational and training resources to help meet both individual and organisational development needs. These resources include leadership and quality education, self-directed education, development for marketing professionals, customised educational programs, corporate-support and customer-focused training, network and information services training, and a range of technical training options.</p> <p>Pacific Bell is a co-sponsor of the ten-week Entrepreneurial Management Program designed to teach Minority and Women Business Enterprises/Disabled Veterans Business Enterprises (MWBE/DVBE) and small-business suppliers graduate-level managerial skills. It is a founding investor in a state-wide consortium composed of thirty-three California banks and several corporations called the California Economic Development Initiative designed to provide loans to California's small and emerging businesses, which may have difficulty obtaining capital otherwise because of conventional loan criteria.</p>
EWA – Equal Opportunity through New European Approaches to Continuing Vocational Training for Female Employees [EUROPE]	<p>EWA is a pilot project financed in the framework of the European Vocational Training Programme LEONARDO DA VINCI with a duration of 2 years. EWA is carried out by a trans-national project partnership. The steering committee is composed of the representatives of universities, trade unions, companies and further vocational training institutes in Germany, Finland, the UK and Spain. Each project partner realises the project on the regional level co-operating intensively with local and regional networks of companies, universities and other institutions. EWA activities include, regional data collection, publications and training modules</p>

Career Planning Advice

The Pacific Telesis Group (Pacific Telesis) [US]	<p>Pacific Telesis' Employee Career Centres offer services for all employees to help them balance individual development needs and business requirements. Thousands of employees have taken advantage of the career and life planning workshops, interviewing preparation, resume writing, individual career counselling, skill and self-assessment help, and a variety of career and job resources.</p>
Eastman Kodak Company (Kodak) [US]	<p>Employees can access available job opportunities on-line via computer. This provides an individual with the ability to know what opportunities are</p>

	available throughout the company, but also provides an overview of skills required and a good basis to go forward with one's career planning goals and objectives.
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Placements

The Bureau of National Affairs, Inc. (BNA), [US]	<p>BNA has developed a Temporary Transfer Program, where managers can use temporary vacancies as a way to allow employees to move into other positions, where there is a need for temporary help and the employees gain new skills that might be beneficial in moving to a permanent job at a later date. BNA gives the example of one young woman who used the temporary transfer program to gain new skills in the editorial arena, and was hired into a full-time position in the Editorial Department of BNA.</p> <p>The BNA-Guild Traineeship Committee helps otherwise capable employees overcome obstacles to upward mobility. Several employees have moved from clerical/support positions to professional level positions. The traineeship committee takes long term employees which otherwise lack the necessary skills and places them in traineeship positions that eventually lead to permanent jobs.</p>
The Pacific Telesis Group (Pacific Telesis) [US]	<p>The Jobs Preparation Program was instituted at Nevada Bell in partnership with its Communications Workers of America (CWA) union local. It provides opportunities for employees to gain experience in different jobs without necessarily having the prerequisite qualifications and skills. According to Pacific Telesis, the program has been very successful in giving women and minorities the opportunity to learn higher-level jobs and to become more competitive for new job openings.</p>
United Technologies Corporation (UTC) [US]	<p>The Leadership Associates Program, is designed to supply its companies with Master's (MBA) level business talent and to seed the Company's future Executive-level placements. The program provides two years of rotational training assignments in general management disciplines (finance, manufacturing management, global customer relations and strategic planning). UTC has ensured that women and people of colour are well represented in the program which has historically been 30% minority and 26% female. The 1996 entering class was 30% minority and 42% female.</p>

Management of Career Path Candidates

The Bureau of National Affairs, Inc. (BNA), [US]	<p>A management succession committee, consisting of the three outside board directors and one inside director, works with department heads on succession planning matters. In a questionnaire to be submitted to the committee, department heads must identify staff members with the capacity to become members of the senior management team, paying particular attention to qualified minorities and women. The questionnaire also requests that department heads identify assignments, course work, and other development opportunities that should be made available to these individuals.</p> <p>A career management booklet was developed, and this focuses on careers within each department, explaining what is needed in terms of performance, technical skills, and education level.</p>
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The Pacific Telesis Group (Pacific Telesis) [US]	<p>Pacific Telesis has a number of executive and management development programs. Its succession planning process places extra attention on upward mobility for women and people of colour.</p> <p>Its Accelerated Development Process includes all managers who show potential for advancement, providing for participation in formal mentoring, regular formal and informal interactions with senior managers, individual development planning, and planned job moves. Pacific Telesis also has Executive Education Programs, the AMP, and monitors progress through report cards.</p>
The Rouse Company (Rouse), [US]	<p>The company has an Upward Mobility Program. Each year the heads of each of the company's divisions meet to identify minorities and women with strong potential for advancement. At present there are seven women and two minorities who have progressed through the corporate ranks to the level of Vice President.</p> <p>Under the direction of the President of the company, meetings are held during the Spring and/or Summer of each year between the Affirmative Action Officer, the General Counsel, and the heads of the various corporate divisions. The purpose of these meetings is to identify opportunities for recruiting, training, and promotion of minorities and women into upper management of the company.</p>
Eastman Kodak Company (Kodak) [US]	<p>The purpose of Kodak's Gold-Succession Plan is to ensure a continuous stream of diverse leaders/managers capable of creating effective organisations and executing business strategies. Qualified candidates are sought from a broad range of sources with the goal of promoting diversity of leadership. Kodak states that future leaders are identified and developed on the basis of demonstrated capability. Individuals are involved and share ownership for determining their development plans.</p>
Baltimore Gas and Electric [US]	<p>The company has a "promote from within" tradition and it revised its Job Posting Policy to state clearly that diversity is a corporate value and a consideration in filling jobs and added diversity as an important tiebreaker, rather than seniority, in workforce selection.</p> <p>Baltimore has used Human Resources/Succession Planning for years; now it encourages leaders of the company, in completing profiles of employees and in selecting replacement candidates for their own positions, to include women and minorities in these pools. It emphasises the importance of including women and/or minorities in supervisory roles, and links incentive pay to progress.</p>
Motorola [US]	<p>The CEO and the President led the effort to break the Glass Ceiling for women and minorities. As a result, the number of women and minorities has increased. Succession planning has been an instrument of major significance in identifying talented employees for leadership positions in the future.</p>
PPG Industries, Inc. [US]	<p>PPG's top level management replacement program attempts to include a minority and/or a woman to be among the nominees for every job opening that occurs above middle-level management; Jobs are posted; Human Resources monitors hires and placements and provides feedback to business units for developmental activities. Mentoring teams also operate.</p>
Xerox [US]	<p>Upward mobility for women and minorities is integrated into the Management Resources Planning programme, a management candidate identification and succession planning process. Each of the twenty-five organisations reviews its organisation, lists women and minorities at middle management level and above in that organisation, and makes</p>

	recommendations for their next potential career move. These assessments are next reviewed by the Presidents of the major Xerox organisations; and those inputs are subsequently reviewed by the corporate office to determine bench strength for key executive positions.
The Leadership Development for Women Programme [AUSTRALIA]	The LDW programme at the University of Western Australia which began in 1994 is designed to redress the under-representation of women at higher levels of the University workforce. The programme features a core programme to explore experiences, theories and attitudes towards leadership in higher education, a mentor scheme, a series of leadership skills and development workshops, networking lunches and informal sessions.

Recruitment

The Bureau of National Affairs, Inc. (BNA), [US]	BNA recently established a scholarship program which awards scholarships of \$3,500 to students at three area minority universities, who are working toward degrees in law, information systems, and marketing. In addition, BNA provides those students with opportunities to participate in summer internship programs. Included in its opportunities for traineeships, BNA has a minority editorial traineeship, which allows the person to begin work at BNA at a grade that is just below the experienced reporter level. After a one-year traineeship, the trainee is eligible to bid on positions that have been posted internally in the same manner as other employees. Eventually, the trainee is moved into a position as an experienced employee.
The International Business Machines Corporation (IBM), [US]	<p>Project View, is a national effort to reach outstanding young people, who have potential for challenging and fulfilling careers. It is a diversity recruitment program that affords collegians an inside glimpse of corporate life. Project View is open to African American, Hispanic, and Native American graduating BS, MS, and Ph.D. students in such academic areas as computer science; electrical, computer, and chemical engineering; computer and management information systems; technical marketing and sales; finance; and business administration. The program provides students the opportunity to meet with managers, one-on-one, to discuss entry level positions at IBM facilities throughout the U.S. A call for student applications to the program is sent out to publications, minority professional associations, colleges, and to IBM's campus recruiting managers. A determination is made of which IBM jobs need to be filled, which managers will be participating in the Project View sessions, and what kind of qualifications those managers are looking for. From among the applications, which number among the thousands each year, IBM looks for a good match of skills and interests, and also for academic excellence; and qualified applicants are paired with the jobs that need to be filled.</p> <p>The program's three-day format is a combination of networking, career fair, and interviewing. Eight sessions - beginning in September and running through February - are held annually at various sites around the country. During each session, the students get plenty of opportunities to talk with managers about specific job openings. Approximately thirty-five IBM managers conduct individual interviews with about seventy-five students at each of the eight three-day sessions. Students are evaluated on their overall college and university achievements: GPA; co-</p>

	op/internship or summer work experience; and demonstrated leadership skills.
Price Waterhouse LLP (Price Waterhouse) [US]	The firm has formed partnerships with national organisations, such as the National Association of Black Accountants, A Better Chance, INROADS, Women's Society of CPAs, American Institute of CPAs, and the American Association of Hispanic CPAs, to attract women and people of colour to the accounting profession and the firm before it's time for the individuals to make career decisions. Among its many internship programs, almost twenty of its practice offices participate in the INROADS internship program to encourage students who are members of minority groups to consider careers at Price Waterhouse.
The Rouse Company (Rouse), [US]	<p>The company has maintained a Special Affirmative Action Program since 1978. Its purpose is to recruit minorities into professional and management positions for the company.</p> <p>The company has implemented a Special Rotational Assignments/Mentoring Program, which tries to attract minority candidates directly out of graduate school. The first such participant was recruited and hired during the summer of 1995 and has received special rotational assignments with the most senior levels of management in the Division to which she was assigned.</p>

<p>The Pacific Telesis Group (Pacific Telesis) [US]</p>	<p>Pacific Telesis engages in campus and targeted recruiting at career fairs, colleges, and through civic and professional organisations, including the Society for Hispanic Professional Engineers, the Society for Women Engineers, the National Society for Black MBAs, and the National Society for Hispanic MBAs, as well as through agencies and advertising. It works closely with colleges and universities having notable engineering and science programs and significant women and minority enrolment.</p> <p>The company's Summer Internship Program for college students, within a year or two of graduation, focuses on attracting high-calibre students for the summer and placing them in paid management positions. From 1991 through 1994, it had 346 summer interns in the program, 47.7% of whom were minorities - 9.8% Black, 13.3% Hispanic, 24.6% Asian - and Women 40.2%.</p> <p>The Accelerated Management Program (AMP) is a recruiting and development effort targeted at high-potential recent college graduates. Its objective is to enrich the source pool from which promotions are made to middle management and above. Components of the program include supervisory and customer-facing experience, technical and management training, planned job moves, and mentoring. Pacific Telesis states that AMP hiring has been especially effective for recruiting minority and women managers with leading-edge skills.</p> <p>Pacific Telesis participates in the Industry Initiatives for Science & Math Education Summer Fellowship Hires Program. During school summer vacation months, the company hires middle and high school science, math, and computer teachers. They are assigned a company mentor and work on projects that can be accomplished during an eight-week period. Company co-ordinators help teachers extend the experience to their classrooms by arranging class trips to the company, visits of company speakers to the classroom, and company donations of equipment and materials.</p> <p>The company has non-salaried (hourly) placement centres. These centres focus on outreach for minority and/or women applicants, and applicants for non-traditional occupations. Traditional sources, such as governmental referral agencies and women and minority organisations, receive periodic contact, briefing sessions, tours, technical and sales career fairs, and recruiting materials.</p>
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Diversity Awareness Raising

<p>The Bureau of National Affairs, Inc. (BNA), [US]</p>	<p>Brown-bag lunches to discuss diversity issues were started over five years ago by a group of BNA employees. These lunches give all BNA employees an opportunity to come together to informally discuss issues concerning diversity in the workplace and the community outside of BNA.</p>
<p>Price Waterhouse LLP (Price Waterhouse) [US]</p>	<p>The firm has a gender awareness course designed to help break down gender barriers, help partners and staff better understand and appreciate differences in the way men and women communicate, and to build a shared language for discussing those differences.</p>

The Pacific Telesis Group (Pacific Telesis) [US]	<p>Pacific Telesis is supportive of a diverse workforce. Eight employee organizations reflect the interests and needs of its employees, with chapters statewide: Asians for Corporate and Community Action, Bell Employees for Adaptability, Community Involvement Teams In Every Sector, Gay and Lesbian Employee Association, Latino Professional Association, Pacific Bell Minority and Women's Advisory Board, Telephone Pioneers of America, and Pacific Telesis Employees for Women's Affirmative Action. The company's employee publication featured a lengthy series of articles in 1996 on celebrating diversity</p> <p>The Telesis Management Institute provides courses to help managers, among other things, meet the specific needs of newly hired or promoted managers, persons of color, and women. All newly hired and promoted managers attend a one-day seminar to learn the fundamentals of fair, effective, and lawful personnel practices, including, according to the company, a good working knowledge of the basics of EEO, affirmative action, and sexual harassment prevention. Mandatory training, called "How to Recognize and Manage Subtle Sexual Harassment in the Workplace," is required for all supervising managers and professionals and for all managers in middle management and above.</p>
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Mentoring, Counselling and Networking

The International Business Machines Corporation (IBM), [US]	<p>One of the ways IBM managers show their support for the company's workforce diversity program is to participate in the mentoring program, which encourages people from diverse backgrounds to enhance their career potential through the help of a seasoned professional. Mentoring is designed to eliminate the traditional disadvantage of women and minorities being "out of the loop."</p>
The Bureau of National Affairs, Inc. (BNA), [US]	<p>The EEO career development subcommittee, with the assistance of the Human Resources department, started an informal mentoring program.</p>
The Pacific Telesis Group (Pacific Telesis) [US]	<p>Mentoring is a part of Pacific Telesis' programs. The mentor, typically at least two levels senior to the protégé, provides additional development and support. Mentors help to broaden their protégés' understanding of business issues, expand professional networks, and facilitate opportunities for developmental work experience. Pacific Telesis Chairman Phil Quigley helped ensure the success of the program by personally inviting company executives to be mentors and by serving as a mentor himself. Pacific Bell has been recognised for its mentoring program in a number of publications, including the September 21, 1992 <i>Fortune</i> magazine cover story, "Working Women: When will they make it to the top?"</p>
Ernst and Young LLP [US]	<p>Is launching and monitoring prototypes in four locations, each with a single focus on external networking, internal networking, mentoring, and succession planning for women. Women's networks provide a forum for mentoring, developing leadership skills, and highlighting women's contributions to the firm.</p>
The Rouse Company (Rouse), [US]	<p>Rouse encourages and supports a Network program, which is designed to enhance the career growth of women at all levels of the company; emphasis is placed on the career advancement of salaried (non-hourly paid) women within the company. The Network sponsors programs which feature presentations by members of senior management on industry</p>

<p>Price Waterhouse LLP (Price Waterhouse) [US]</p>	<p>trends and corporate challenges. The women members of the company's Board of Directors meet periodically with Network members to discuss the role of women and other issues of interest in the company.</p> <p>Mentoring programs operate throughout the firm. Women and people of colour have been meeting informally for a number of years to support each other, discuss career strategies, and recommend action plans. Price Waterhouse actively supports their activities and makes firm resources available for meetings</p> <p>Networking Circles is a new group mentoring program recently developed and being piloted in the Northeast region to increase the representation of women at the Partner and Director levels. Each Networking Circle consists of eight to twelve women, who are mentored by two to three partners. Designed to leverage the region's best mentors, both male and female, the program uses a group mentoring approach to avoid artificial pairing of people, recognising that many informal one-on-one and peer networking relationships are still likely to result from these sessions. A voluntary mentoring program in Chicago pairs new hires with senior staff members to help them feel like part of the team and more connected to the firm. The West region has formalised its mentoring process by matching staff with willing mentors and by counselling all participants so that both mentors and those being mentored clearly understand their roles. The Public Utilities Group matches a mentor with each staff member who desires such a relationship.</p>
<p>Wisconsin Electric Power Company (Wisconsin Electric) [US]</p>	<p>A mentoring program has been established to allow professional new hires and employees entering professional occupations to better acclimate to the environment of the company. Employees are matched with mentors who have or may have similar job duties, are in the same department, or have a similar education background.</p> <p>To help resolve internal conflicts, Wisconsin Electric initiated the Consulting Pairs Program. According to Wisconsin Electric, Consulting Pairs teams are taking the lead in breaking down relationship barriers within the workforce. Their primary mission is to confidentially mediate a broad range of "issue resolutions" and, in the process, improve the quality of work relations among employees. Consulting Pairs also facilitate "join-ups" for new or transferred employees to reduce the orientation period and allow them to make a contribution to their work area as quickly as possible. Consulting Pairs are active for an eighteen-month period at which time a new team of Consulting Pairs is selected for training. The previous team members assist the new team as mentors and continue to provide support as needed. Consulting Pairs are chosen after an extensive interview process conducted by a consultant to ensure that the employees selected are able to effectively participate. The program is expected to serve as a referral for EEO complaints within the company and reduce the number of complaints that go outside of the company. The company expects that enhanced relationships and improved productivity should result from the corporate support for diversity efforts.</p>

Edith Cowan University Women in Leadership Project. [AUSTRALIA]	<p>The Women in Leadership (WIL) Project at Edith Cowan University (ECU) in Western Australia was launched in 1991. Since its inception the WIL Project has developed a strong national reputation for its expertise in identifying and responding to the challenges that face women in leadership roles in public and private sector organisations. The principal objective of the WIL Project is to engage women strategically in leadership processes and enable them to play an active role in shaping organisational structures and culture.,</p> <p>The WIL Project is made up of three formal elements; Collegial Group Programmes, the Public Lecture Series, and an annual International Women in Leadership Conference. These have been run each year since 1991. A mentoring programme, senior-level women's network and ad hoc workshops and seminars are now also part of the WIL project's activities.</p>
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Reward Systems

Price Waterhouse LLP (Price Waterhouse) [US]	Price Waterhouse has revamped its recognition and rewards program to incorporate criteria that reinforce and reward, encouraging the advancement of women and people of colour.
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Internet Site

Women Watch [WORLD-WIDE]	WomenWatch is a joint UN project to create a core Internet space on global women's issues. It was created to monitor the results of the Fourth World Conference on Women, held in Beijing in 1995. It was founded in March 1997 by the Division for the Advancement of Women (DAW), the United Nations Development Fund for Women (UNIFEM) and the International Research and Training Institute for the Advancement of Women (INSTRAW).
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Equality of Pay

Wisconsin Electric Power Company (Wisconsin Electric) [US]	Wisconsin Electric also seeks to ensure pay equity. Accordingly, it conducts an annual audit of its compensation policies and practices, including incentive pay, base pay, and performance ratings. As a result of the audits, some back pay was issued to employees where unexplainable inconsistencies, concerning compensation, were found. According to Wisconsin Electric, a more equitable compensation system has also resulted.
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Accountability

Northern States Power Company (NSP) [US]	Demonstrating executive commitment and support through a Common Officer Goal and performance evaluations, all company officers have been accountable for Glass Ceiling Initiative (GCI) progress in their business areas. A liaison from GCI's task force also held one-on-one
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	meetings with each officer to familiarise them with the GCI process and to gain their personal involvement. The CEO and the Vice President of Human Resources also met quarterly with program developers to closely monitor progress.
Allstate Insurance Company	Managers' compensation is affected by their ability to demonstrate that they've helped employees develop their careers. That means Allstate managers must arrange seminars and training programs that will help their subordinates learn new skills and better their chances for promotion.

STARTING A BUSINESS

Bodies

Women's World Banking [WORLD-WIDE]	A global-local, non-profit financial institution, established in 1979 to advance and promote the full economic participation of women. It has its headquarters in New York and 50 affiliates in 40 countries, in Europe, Asia, Africa, Latin America. Its aim is to open access to finance, information and markets for women with small firms.
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Training

Women's World Banking [WORLD-WIDE]	The institution offers training through sending clients to work with other successful entrepreneurs operating in the same sector. A solidarity network has been established that helps women to better market their products and often to export them.
EC LEI Network [EUROPE]	<p>The LEI Network launched a business training and development project for women under the NOW initiative (New Opportunities for Women under the European Social Fund, intended to ensure equal opportunities to women and access to employment as well as to the option of starting business) which is implemented by the LEI experts in Greece, Spain, Portugal, UK and the Netherlands. The actions of the programme consist of:</p> <p>Training in enterprise creation, including the development of the business idea, management skills, and personal communication competencies.</p> <p>Training women as business advisers.</p> <p>Training for women's enterprises and job creation projects that have been in business for one to two years and help them to diagnose business problems.</p> <p>Business support centres which provide expert consultancy and business development assistance.</p> <p>Mentoring involving training for women business development advisers in mentoring techniques and gender awareness.</p> <p>Promotion and development of finance mechanisms for women's enterprises and job creation projects.</p>

Internet Site

Women's Online Business Centre [UK]	A partnership between the Small Business Service (SBS) and the Women's Unit will work to develop a "Women's Online Business Centre" which aims to address the particular issues women face when starting their own business.
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Miscellaneous Tailored Services

Women's World Banking [WORLD-WIDE]	Its aim is to open access to finance, information and markets for women with small firms. Almost 50% of affiliates conduct banking transactions directly, while all of them work closely with traditional banks to make it easy for them to deal with women entrepreneurs (e.g. acting as guarantor). The Women's World Banking also works to help build stronger local institutions and to lobby. Other innovations try to deal better with the special needs of women entrepreneurs in industrialised countries.
Women's Enterprise Initiative [CANADA]	Funded through a contribution from Western Economic Diversification Canada, the Women's Enterprise Initiative provides business information and services specifically aimed at women entrepreneurs. Each western province has set up its own component of this pan-western initiative. The non-profit groups offer access to a loan fund, advisory services, path-finding to existing services plus a host of unique products and services tailored to meet the needs of women entrepreneurs in their province.
GROW [EUROPE]	<p>GROWth in your region – the partnership approach, was a project within the Leonardo programme. Seven regions in Europe worked together on promoting women's Entrepreneurship.</p> <p>The GROW approach emphasises the reinforcement of the regional infrastructure for supporting women entrepreneurship by reference groups plus an interactive concept of planning and implementation of support actions. Adding networking on regional and transnational levels as essential components the projects have produced a structural and organisational model by combining well-known tools in an innovative and fruitful manner.</p> <p>The seven regions who took part in the GROW project were Verviers in Belgium, Emilia Romagna and Sicily in Italy, Catalonia in Spain, Halland and Östergötland in Sweden and Wales in the UK. Wales made a very interesting strategic plan for promoting women's entrepreneurship as a result of the GROW project.</p>
New Deal [UK]	UK Government programmes which provide specific assistance for helping unemployed people to explore the option of setting up their own businesses. The self-employment option incorporates relevant training and a period of test trading.
Well Park Enterprise Centre [UK]	<p>Wellpark is the UK's only integrated women's enterprise centre. Established in Glasgow in June 96, it provides information, advice and business counselling to women in business or considering business. It offers 20 managed workspaces, plus a resource centre, on-site nursery and a range of innovative programmes including:</p> <p>Pre start-up Advice and Counselling</p> <p>Women's Business Start-Up Courses and Enterprise Training Programmes (ETP) funded by the European Social Fund (ESF)</p> <p>Start-Up Funds and Micro-credit. For example, the European Regional Development Fund (ERDF) and Glasgow City Council finance a start-up grant of up to £2,000 for women applicants who live in Glasgow.</p>
Swedish National Labour Market Administration (AMS/AMV) [SWEDEN]	The key player regarding new starters is probably the Swedish National Labour Market Administration and their regional and local branches. It is the largest organisation, at least in terms of the number of women they support with education and unemployment insurance. (Under some circumstances, women who start a new business can be allowed to keep

	their unemployment insurance for up to a year. This is only possible if the new business is judged to be durable.)
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<p>Resource Centres for Women [SWEDEN]</p>	<p>Resource centres for women work to increase women's influence in the region and to strengthen women's position in society. A resource centre bases its approach on local conditions, and women can obtain help there according to their women and the regions needs. Many resource centres work with different projects promoting women's entrepreneurship. The centres are financed on a project base, by the state, local and regional authorities and EU structural funds.</p> <p>Regional and local resource centres for women have been set up in about 120 locations around Sweden. This undertaking is co-ordinated by NUTEK in consultation with the National Rural Development Agency via the National Resource Centre for Women (NRC). In the 1999 budget, the Government proposed earmarking funds for the integration of this project into NUTEK's regular activities.</p>
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Awareness Raising

<p>NUTEK (Swedish Business Development Agency) [SWEDEN]</p>	<p>Since 1991 NUTEK has been running programmes for promoting women's entrepreneurship. From the start this has been in collaboration with what is now ALMI Businesspartner and also with a strong network of County Administrative Boards. Due to reorganisation and Sweden joining the European Union, the regional authorities also subsequently financed programmes and projects directly at regional level.</p> <p>NUTEK has run a project together with one of the major banks investigation the reasons why women have difficulties accessing loans and this week is now aiming at getting more banks involved in discussions and training programmes.</p> <p>NUTEK's work on promoting women's entrepreneurship has included a new way of presenting statistics. Videos, magazines and conferences have also been used to make women business owners more visible in society. Developing material, training and consultation methods have been the main tools to promote women's entrepreneurship. Results and knowledge have been published in books and reports. The most extensive programme has been the Business Advisors for Women. The business advisors have also started many projects targeting the development of SMEs run by women.</p> <p>NUTEK also launched the research programme Female Entrepreneurship and Management (FEM) which started as a four-year programme under the organisation umbrella of the Swedish Foundation for Small Business Research (FSF). It is the first major programme within this field and is supported directly by the government. The main issues are Entrepreneurship as a lifestyle for women and Women's invisibility in entrepreneurship.</p>
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Funding

<p>Business Development Bank of Canada [CANADA]</p>	<p>The federal government's bank dedicated specifically to small business. BDC is especially interested in women in business with several programs (like Step-Up) to help.</p>
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EC LEI Network [EUROPE]	Established in 1987, the Local Employment Initiatives (LEI) Network and grant scheme has formed part of the action to support women setting up enterprises and job creation. The goal of the programme is twofold; to encourage the development of women's entrepreneurship and to contribute to the fight against female unemployment. The network offers grants to European women creating their own enterprises which offer work to unemployed women and provides technical assistance through the European Network of experts LEI. The overall aim is to contribute to the diversification of women's economic activities, to encourage innovation and to help unemployed women find new ways of reintegrating into the labour market.
Phoenix Fund [UK]	<p>A £96 million fund that over the next three years will support entrepreneurship in England in deprived areas and amongst groups that are underrepresented in enterprise. As such the Fund is particularly suitable for those helping women. It currently has four elements</p> <p>A development fund to promote innovative ways of supporting enterprise in deprived areas</p> <p>A Challenge Fund to help resource Community Finance Initiatives (CFIs)</p> <p>Loan guarantees to encourage commercial and charitable lending to CFIs</p>
Full Circle [UK]	<p>A service of WEETU, this is a new kind of business support programme which is piloting peer lending in the UK. Clients follow a pre-enterprise course during which time many of them refine their business ideas and the subsequent Business Skills course enables them to develop the skills and understanding to develop an effective business plan.</p> <p>To access the Loan Fund, a "Lending Circle" of between Four to six businesses at similar stages of start-up is formed. These businesses make a formal pledge to work together to support and develop each other's businesses. They are also responsible for assessing each other's business plans and approving loan applications. WEETU provides training to enable them to do this. Should the business they have approved experience difficulties they use their emergency loan fund (into which they put 5% of any loans) and provide practical support. To date, no businesses have defaulted on their loan repayments. WEETU supports each "Circle" for the first six months and remains in monthly contact thereafter.</p> <p>This business approach has enabled WEETU to support businesses and provide an effective long-term support structure. Over the last two years 105 women have formed 21 lending circles and the Full Circle Fund has financed 40 businesses.</p>
Loan support scheme for women entrepreneurs [SWEDEN]	A special loan scheme set up for women business owners and new starters who do not need a large amount of money or do not want to have a limited company. The Scheme is administered by ALMI Businesspartner, a public owned consultancy firm. The business idea must be based on long-term profitability and provide a part-time salary for the owner(s). All kinds of businesses can apply for the loan scheme and all legal types of companies benefit.
Small Firms Loan Guarantee Scheme [UK]	This SBS scheme guarantees loans from the banks and other financial institutions for small firms that have viable business proposals but who have tried and failed to get a conventional loan due to a lack of security.

<p>Network Banking in Dalarna and Women Friendly Enterprise Finance and Commerce [SWEDEN]</p>	<p>This is an Employment NOW project and was selected best practice within the NOW programme. Network Banking has been modelled on Nerrerkskreditt in Norway, which in turn was modelled on the Grameen Bank in Bangladesh. Network Banking builds on offering a solution to two basic entrepreneurial needs when starting a business:</p> <p>The need for small credits and the need for belonging to, and being supported by a group with similar attitudes and values.</p> <p>The goal of the Network Banking project has been for the 15 chosen women participants to start some kind of business and then be able to remain in their home environment, independent of public funding. The goals for the second step, the transnational project, and exchange and a network among participants and project managers in Sweden, Spain, Italy and N.Ireland.</p>
<p>Racines [FRANCE]</p>	<p>The association Racines was created in 1989, taking over from the association "Femin'Autres", which was started in the early 1980s and which had introduced into France the system of African "tontines" in which groups of women pooled their savings quite informally in order to allow one of them to start a business. The system set up by Racines, the CLEFE (Club Locaux d'Epargne pour les Femmes qui Entreprennent, (Local Savings Clubs for Women Entrepreneurs) are neighbourhood solidarity savings schemes with a membership of about ten individuals who promise to save a certain monthly amount over a period of one year, the sums collected are then lent at a specified interest rate to women business creators. The financial aid is often combined with advice and support for the woman entrepreneur (project evaluation, monitoring of management, business accountancy generally subsidised by the public authorities).</p>

Mentoring, Counselling and Networking

<p>Women in the Network (WIN) [UK]</p>	<p>WIN is a networking project that aims to facilitate the development of women's enterprise. The project provides both specific services for women entrepreneurs and helps them become aware of mainstream business support services and networks. The concept of WIN was first started in Scotland in 1994 when the then Lanarkshire Development Agency established a programme for women starting and developing their own businesses. That programme of workshops, exhibitions, training sessions, counselling and mentoring services regularly attracts over 100 women to its events and is now in its 7th year. In 1998 the concept of WIN was adopted in the North East of England, based at The Foundation for Small and Medium Enterprise Development (FSMED), University of Durham. WIN in the North East comprises a number of different public and private sector business support partners and delivers a similar range of programmes and events to its predecessor in Scotland. However, it has further developed the WIN concept and used its European (ERDF) funding to be technologically based. It uses its website with on-line business directories, newsletters, business guides and role models as a mechanism for directly assisting and sign-posting its member to support services throughout the UK and beyond.</p>
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Enterprise Insight [UK]	<p>The mission of Enterprise Insight is to help create a more enterprising culture across the UK. In particular the organisation aims to "create opportunities for young people to talk with entrepreneurs and business people to reach a better understanding of each other's views of the role of enterprise". EI was launched in May 2000 and is backed by a partnership of the British Chambers of Commerce, Institute of Directors and the Confederation of British Industry. They work with a broad range of organisations including Business in the Community, The Prince's Trust, Shell LiveWire, Understanding Industry, Young Enterprise and the National Federation of Enterprise Agencies.</p>
Business Advisers for Women [SWEDEN]	<p>In 1999, Business advisers for women was chosen as one of 11 examples of Best Practice within the Employment Pact. The first programme started in 62 municipalities during 1994 and some advisers are still in place. The second programme started in 1997 as a two-year project in 33 municipalities and most communities had the project for three years and some will go on during a fourth year. At the most there were approximately 100 women business advisers. Researchers have followed the programmes.</p> <p>NUTEK has set up, co-ordinated and partly financed the projects. NUTEK has also supplied training and exchange of experience for the business advisers and information spread by the traditional ways as well as via an electronic network.</p> <p>The business adviser programme for women enables women to start and develop their own business and acts as a one-stop-shop. The adviser meets the women in her own surroundings. She is also prepared to discuss any kind of business and how one can manage to combine family life with the company. If the sector is unfamiliar, she will seek advice from her colleagues in the network of business advisers.</p>
Phoenix Fund [UK]	<p>A pilot network of volunteer mentors to pre- and early start-up businesses through the new Business Volunteer Mentoring Association</p>
Boutiques De Gestion [FRANCE]	<p>The Boutiques de Gestion (Local Enterprise Agencies) provide advice, business training and other services to would be entrepreneurs all over France. Each Boutique, although funded largely through public support schemes is run and managed independently as a private entity. The Comite de Liaison des Boutiques de Gestion (CLBG) in collaboration with the ILE Programme (OECD) and the NOW Programme (EC), identified five pilot sites where BGs are being created and designed to deal specifically with problems of unemployed women who want to start a business.</p> <p>A second wider aspect is to create a European support network for economic initiatives of women through creation of partnerships between the BGs and women's enterprise initiatives throughout the EC. Ten partners from Germany, Spain, Belgium, Portugal, UK have already been identified and paired with BGs in France.</p>

ENTERING NEW MARKETS/EXPORTING

Internet site

Department of Foreign Affairs and International Trade (DFAIT) [CANADA]	A web site is created for Canadian businesswomen to find information relevant to exporting and export activities
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Bodies

Department of Foreign Affairs and International Trade (DFAIT) [CANADA]	DFAIT is working to ensure that Canadian trade promotion services are adapted to the needs of women entrepreneurs who lead small and medium-sized enterprises (SMEs), and that these services are fully accessible to women business owners to increase their successes in export markets.
Canadian International Development Agency (CIDA) [CANADA]	The CIDA Industrial Co-operation Program can provide financial support and advice to Canadian businesses planning sustainable business activities in developing countries in a variety of sectors. It reduces the risks to Canadian firms by sharing the costs unique to doing business in developing countries and those associated with providing training, the participation of women, and a clean environment.

Training

US Small Business Administration, Office of Women's Business Ownership [US]	International workshops are organised to help women entrepreneurs in exports.
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Financial Assistance

Export Development Corporation (EDC) [CANADA]	<p>Has opened an SME division to cater to smaller companies.</p> <p>EDC is a customer-driven, self-funding federal Crown corporation dedicated to helping Canadian businesses by providing them and their customers a wide range of risk management services including Accounts Receivable Insurance, Political Risk Insurance, Export Financing, Buyer Financing and Coverage for Contract Bonds. Its mandate is to support and develop, directly or indirectly, Canada's export trade and Canadian capacity to engage in that trade and respond to international business opportunities.</p>
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Mentoring, Counselling and Networking

Atlantic Canada Opportunities Agency (ACOA) [CANADA]	<p>Has an export mentorship programme in Nova Scotia where new or near exporters receive support for a six month period.</p>
Export Assistance Centres [US]	<p>The Clinton Administration has opened 14 U.S. Export Assistance Centres to provide small businesses with a "one-stop shop" for export financing, information on international markets, and other export assistance. Centres are operating in Atlanta, Baltimore, Boston, Chicago, Cleveland, Dallas, Denver, Long Beach, Miami, New Orleans, New York, Philadelphia, Seattle and St. Louis.</p>

Export Development

New Exporters to Border States (NEBS) [CANADA]	The New Exporters to Border States program, focuses on export education and targets Canadian companies considering exporting to the United States. NEBS introduces the essentials of exporting, including practical export information and first-hand exposure to markets in the United States.
New Exporters Overseas (NEXOS) [CANADA]	The New Exporters to Overseas (NEXOS) program sponsors educational trade missions to help new exporters learn about emerging European markets.
Program for Export Market Development (PEMD) [CANADA]	<p>Market Development Strategies - Provides assistance on the basis of a company's one-year (or in some special instances, two-year) international marketing plan. Eligible costs include market visits, incoming buyers, trade fair participation abroad, product testing for market certification, legal fees for marketing agreements incurred abroad, air transportation costs for off-shore company trainees, product demonstration costs and other costs necessary to execute the marketing plan. Annual contribution per application is a minimum of \$5,000 and a maximum of \$50,000. The contribution is repayable based on four percent of incremental export sales in the target market over a four-year period.</p> <p>New-to-Exporting Companies - are regarded as having little or no export experience and lacking a consistent capability to export or even develop an international marketing strategy. A maximum contribution of \$7,500 is available to such companies for either a market identification visit or participation at an international trade fair. The contribution is repayable at four percent of any export sales in the target market over the next two years.</p>
Trade missions for women business owners [US]	The White House recently led a trade mission for women business owners to England and the Netherlands. With the help of U.S. embassy officials, these women entrepreneurs met with prospective customers and brought back millions of dollars of new business. Another mission is scheduled for spring 1996.

EXPANDING A BUSINESS

Miscellaneous tailored services

<p>US Small Business Administration [US]</p>	<p>Provides assistance on managing and financing a women-owned small business. The SBA provides information to women business owners about existing programmes that can be of use in having more access to capital. The programmes are made by the SBA, cities, states or even private associations.</p> <p>The SBA also offers loan guarantees so that banks giving credit to small firms are protected from risk up to a maximum of 90% of the total loan.</p>
<p>National Women's Business Council [US]</p>	<p>In partnership with the IACWBE, the National Women's Business Council worked to set up interagency task forces focused on four issues of vital concern to women:</p> <ul style="list-style-type: none"> Expanding access to capital Opening up the federal procurement market Providing business training and technical assistance Expanding the knowledge base about women-owned businesses <p>The task forces reviewed programmes in each issue area resulting in the first comprehensive inventory of federal resources available to women entrepreneurs.</p> <p>Through the Council, the Council the Interagency Committee has also reached out to women entrepreneurs for the customer's view of how well these programmes actually work and how best to improve them.</p>

Awareness Raising

<p>US Small Business Administration, Office of Women's Business Ownership [US]</p>	<p>The Women's Business Ownership branch of the SBA works to create better information about women entrepreneurs and addresses it to the policymakers.</p>
<p>Increasing Awareness [US]</p> <p>THRUST [US]</p>	<p>The Department of the Army Small Business Specialist has used a number of methods to increase awareness on various types of business opportunities and assistance. Methods used include, local radio and television broadcasts, advertisements in appropriate trade and business publications, adult education classes, enhanced website, powerpoint presentation and speaker notes, regional business fairs</p> <p>The THRUST program, concentrates on five areas of industry (Environmental, Manufacturing, Health Care, Telecommunications, and Management Information including Simulation) seeks to provide small business concerns, SDBs, and women-owned business with increased awareness of Dept of Defence contracting and subcontracting opportunities available in those areas.</p>

Bodies

Office of Federal Contract Compliance Program [US]	Enforces affirmative action and non-discrimination laws that apply to federal contractors and subcontractors
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Funding

Department of Transportation Short-Term Lending Programme [US]	Provides an application for a short-term loan, particularly for women in small businesses
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Recognition Incentives

Buyer Incentive/Recognition Programs for promoting women owned small business [US]	Dept of Defence recognition or incentive programs for outstanding performance, by buyers in support of the small business program. For example, plaques, money, public recognition, increased performance status, vouchers, parking places, opportunities for career advancement.
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Mentoring, Counselling and Networks

Small Business Advocacy Councils [US]	These Dept of Defence councils frequently take the form of a technical and contracting advocate working group which meets monthly. Membership usually consists of representatives from each Division of the organisation and the Small Business Liaison Officer (SBLO) or Small Business Specialist (SBS). The advocates share leads for new programs and/or contracting requirements in which small business participation may be viable. The SBLO or SBS may assist with researching appropriate small business sources to fulfil the requirements. The Small Business Advocacy Council also serves as an informational channel and a forum for technical personnel to become more familiar with the small business program in general. It provides the opportunity to form closer working relationships and allows for questions to be answered in an informal environment.
Outreach Conferences [US]	Outreach conferences which specifically target women owned small business concerns are sponsored by Dept of Defence contracting activities, large DoD prime contractors, or Procurement Technical Assistance Centres. These events are co-ordinated or co-sponsored with local women owned business organisations (e.g. NAWBO).

Sales Assistance

Rule of Many [US]	<p>The Department of the Air Force piloted the "rule of one", i.e. that on all procurements over \$100K at least one qualified woman-owned small business should be solicited. The North Central Dept of Defence Regional Small Business Council women owned small business Process Action Team recommends the "rule of many". Under this process, the small business specialist, small business liaison officer, or contracting office attempts to encourage/solicit as many qualified women owned businesses as possible to bid on a contract thus increasing the odds of a women owned business winning the award.</p>
Regional Data Base [US]	<p>The North Central Regional Small Business Council prime contractors are establishing a database of existing contractors who currently have subcontracts or have in the past been awarded subcontracts. This database will be shared among the members of the Dept of Defence Regional Small Business Council in an effort to increase participation by small business firms and gain access to firms which have successfully performed on previous requirements. This sharing of sources among the government, prime contractors, and procurement technical assistance centres in the region will increase participation by these small business contractors in both prime contracting and subcontracting opportunities.</p> <p>The Western Regional Small Business Council currently distributes a Small Business Directory internally. Plans are underway to provide the Small Business Directory on the Council's web page, currently under construction.</p>

MANAGING A COMPANY

Miscellaneous tailored services

SBA's Women's Demonstration Program [US]	SBA's Women's Demonstration Program, through locally supported centres, provides training and counselling in all aspects of owning and managing a business. In 1995, the program added 19 new centres, for a total of 54 nation-wide.
The Minority Business Development Agency [US]	The Minority Business Development Agency in the Department of Commerce provides technical and financial assistance to minority small business owners. In 1994, MBDA centres served 3,500 minority women entrepreneurs.
Small Business Service (SBS) [UK]	<p>Support for SMEs at start-up and beyond in England. Launched by the Government in April 2000 in recognition of how important SMEs are to the economy. SBS is dedicated to helping small firms and representing their interests. It aims to help build an enterprise society in which small firms of all kinds thrive and achieve their potential. Support will be provided through a wide range of services at local level using a network of 45 Business Link partnerships. These will range from general business planning, assistance with exporting, quality, employment issues, training and development, or design, through to advice on information, communication technology and e-commerce issues.</p> <p>In doing this the SBS network will provide a gateway to a further comprehensive network of business support organisations, initiatives and information from the public, private and voluntary sectors. The gateway will make extensive use of internet and call centre technology and will be accessible directly or via local or sectoral organisations such as trade organisations.</p>

Mentoring, Counselling and Networks

Mentor-Protégé programme [US]	<p>Large Dept of Defence prime contractors can as part of a supplier development programme, mentor women owned small businesses. As prime contractors identify potential women-owned small business suppliers they further develop the firms capabilities in technical expertise and business processes. This can include the introduction, through marketing, to federal contracting activities and other prime contractors with potential sub-contracting opportunities. Another strong component of this initiative is ensuring that the women owned small business form is afforded an opportunity through "in-house" marketing seminars to introduce their capabilities to targeted corporate personnel.</p> <p>In addition, DoD encourages mentors to establish long term strategic alliances with their proteges. Currently, the eligible proteges are limited to small disadvantaged business concerns and qualified organisations, which employ the severely disabled.</p>
Women-Owned Small Business Debriefs [US]	<p>A US Dept of Defence Networking program with women owned businesses, buyers of contracting activity, and a Small Business Specialist. If the buyer evaluates proposals and makes an award to other than a women-owned business, debriefing information is furnished to the Small Business Specialist for feedback to the business. In this way, every unsuccessful women owned business is informed of the reason it did not receive an award. These "lessons learned" help the business to better determine their future marketing/pricing techniques and enable them to be more successful on future bids.</p>

ALMI Businesspartner [SWEDEN]	<p>Between 1998-2000 ALMI Businesspartner received government funding specifically designated for projects promoting women business owners.</p> <p>Coaching – a way to develop your company has been a very successful programme offered to women business owners by ALMI Businesspartner. The business owner gets a coach and they work together for 30 hours. The business owner herself adds an extra 30 hours to work through a plan very similar to a business plan. The coach is a speaking partner, not a doer.</p> <p>Mentoring has been a tool used for a long time my ALMI Businesspartner to work with strengthening women business owners. The programme includes educating both mentors and adepts, at some occasions together.</p>
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Funding

Manufacturing Extension Partnership [US]	The Manufacturing Extension Partnership provides matching grants for locally managed centres to help modernise small manufacturing firms. The federal government has funded 53 centres since January 1993, for a total of 60 nation-wide.
Smart [UK]	An SBS initiative that provides grants to help individuals and small and medium-sized businesses to make better use of technology. In England the following is available: Technology reviews and studies, Micro projects, Feasibility studies and Development projects.

Awareness Raising

White House Office for Women's Initiatives and Outreach	The President created the White House Office for Women's Initiatives and Outreach in June of 1995 to better serve and listen to his constituents. The office serves as a liaison between the White House and women's organisations, listening to women's concerns and proposals and bringing these ideas to the President and others in the Administration. Inside and outside of the White House, the office advocates issues that are important to women. The office schedules events and speeches for White House officials and presidential appointees and holds events and roundtables to amplify the president's pro-woman, pro-family agenda.
IACWBE	The Interagency Committee on Women's Business Enterprise was established by the United States Congress in 1994 to better co-ordinate the Administration's efforts on behalf of women entrepreneurs. The Committee includes 13 senior Government officials appointed by the President to lead a cross-agency collaborative effort to ensure that women's economic issues are being addressed at the highest policy levels. The IACWBE meets at least twice a year and provides annual reports to the President and Congress containing detailed descriptions of the Committee's activities, findings and conclusions, and recommendations for legislative and administrative actions.

FAMILY FRIENDLY POLICIES

Child and Elder Care

The Bureau of National Affairs, Inc. (BNA), [US]	Family services include child care and elder care referral services through the employee assistance plan, subsidised emergency back-up child care at a nearby day care centre, and providing for priority placement at a child care centre in Shady Grove, MD. BNA contracts with the Capital Kids to provide emergency care for children of BNA employees; contributes \$8,000 per year to the operation of the centre; and contributes more than half of the cost of care (per child) for each day that the centre is used by BNA employees.
The International Business Machines Corporation (IBM), [US]	In 1989, IBM established the IBM Funds for Dependent Care Initiative (FDCI). Over a five-year period, 1990 - 1994, the company invested \$25 million in more than 500 projects to increase the supply and enhance the quality of child and elder care services in communities where IBM employees live and work. The company replenished the fund at a level of \$50 million to cover the years 1995-2000. Through FDCI, IBM participated in The American Business Collaboration for Quality Dependent Care (ABC/QDC), a group of twenty-two "champion" companies that commit to long term investments in communities to provide high quality dependent care for its employees.
The Pacific Telesis Group (Pacific Telesis) [US]	Pacific Telesis also has a Take Our Children to Work Program
Price Waterhouse LLP (Price Waterhouse) [US]	<p>Price Waterhouse has partnered with other major U.S. businesses as one of twenty-one "champion" companies in the American Business Collaboration for Quality Dependent Care, collectively pledging \$100 million over six years to improve the quality and quantity of dependent care in communities across the country where its employees live and work. Price Waterhouse is participating in twenty-one dependent care American Business Collaboration projects in New York, San Francisco/San Jose, Tampa, and Washington, DC. More than 400 staff use the firm's dependent care services.</p> <p>Price Waterhouse also has family-friendly programs and services providing additional tools to help balance work and personal responsibilities. These programs include parenting and the secrets of smart families; child care referral services for advice; elder care referral services; in-home emergency child care services;</p>
The Rouse Company (Rouse), [US]	<p>LOCATE, a service provided by the Maryland Committee for Children, assists in locating convenient and affordable child care, and is available through the company. The service also provides counselling and educational support to assist parents in addressing their child care needs.</p> <p>Special On-Site Childcare, for school-aged children (kindergarten through middle school), which is made possible through an Educational Partnership between the company and Wilde Lake High School in Columbia, MD.</p>
Aetna, Inc. (Aetna) [US]	<p>Aetna has a multitude of information and support services, including:</p> <p>Child care resource and referral program;</p> <p>Elder care consultation and referral; and</p> <p>Adult disability care consultation and referral.</p>

Procter and Gamble [US]	Child/Elder Care Resource and Referral Service; Child Care Centers;
Bausch and Lomb (B & L) [US]	Work-Life Benefits, which provide to employees child care resource and referral, elder care resource and referral
CIGNA [US]	Bring Your Child to Work Day lets approximately 6,000 boys and girls see a diverse group of successful employees and managers; and provides about fifty-four special events held at two headquarters sites
Prudential Insurance of America [US]	Support of a number of day care centres.
First Tennessee Bank (First Tennessee) [US]	LifeWorks--Family resource program that includes resource and referral on child care, parenting and elder issues. Also provides Sick Child Care Centre
PPG Industries, Inc. (PPG), [US]	<p>The child care resource and referral service administered by the EAP and PPG's participation in a child care consortium help employees find the type of quality child care service that best fits their needs. PPG's Get Well Room provides parents with the opportunity to have a mildly ill child cared for by health professionals close to their workplace.</p> <p>PPG also provides referral services for adult day care, home health care, and nursing home facilities. Case management services are provided to assist care givers in assessing their own needs as well as the elder parent's service needs. In complex and difficult situations, the EAP serves as the gateway to specialised services provided by its geriatrics specialist, who may conduct home visits to gain a better understanding of the elder parent's situation and needs.</p>
Eli Lilly and Company [US]	Eli Lilly follows through with solid child-care services: This company completed a second child-development centre last year, bringing total capacity to more than 400 children. And, come summertime, Eli Lilly kids can head for the on-site summer science camp at headquarters in Indianapolis, which was enhanced this year with a new Sprayground water play area. Teens ages 13 to 16 can sign up for the science camp counsellor-in-training program. Eli Lilly also has a summer jobs program for college-bound kids: Nearly 100 students benefited last year, earning an average of about \$3,000 each.
Lincoln Financial Group [US]	Lincoln provides a child-care subsidy averaging \$160 a month, sponsors community-based child care and backup care, as well as reimbursement for business travel-related child-care costs. Launched in 1999: holiday child care and, for college-age kids, a summer-job-placement program and a job-readiness workshop that helps with résumés and interview skills. And if a child or elderly parent gets sick, Lincoln gives workers time to deal with the crisis: up to 23 days off per year, with pay.
Merrill Lynch & Co., Inc. [US]	One of the company's newest perks: a school-holiday program added last year to Merrill Lynch's backup child care. It's available during regular school holidays as well as during the last two weeks of June and August, to bridge the gaps between school and day camp. In all, 1,813 children used backup child care last year.
Novant Health, Inc. [US]	The company's 2,000-square-foot child-care centre in Winston-Salem is open from 6 a.m. to midnight, serving 341 kids whose parents work the first and second shifts. Novant has two other child-care centres as well, in Charlotte and Thomasville, N.C. And this year, Novant began offering care for mildly ill kids in Winston-Salem through Sniffles & Such
Prudential [US]	The company also introduced a national access program for child care that gives employees priority enrolment at a network of child-care centres.

Special Leave

Price Waterhouse LLP (Price Waterhouse) [US]	Price Waterhouse provides for paid sick leave for up to three months as a result of illness, injury, or pregnancy. For Maternity/Adoption, at the employee's request, an unpaid leave of absence for up to six months will be granted. In Maternity cases, this will follow the period of paid sick leave.
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The Bureau of National Affairs, Inc. (BNA), [US]	<p>Employees earn thirteen days of sick leave a year, and there is no limit to the amount of sick leave that may be carried over from year to year. Employees may use their sick leave to care for a sick child. In addition to sick leave, employees are credited with three days of personal leave that they may use during the course of the year. Employees earn up to five weeks of annual leave a year, and may use their personal or annual leave for whatever purposes they choose.</p> <p>BNA indicates that it goes far beyond compliance with the provisions of the federal Family and Medical Leave Act, which allows employees to take up to twelve weeks of unpaid leave for childbirth, adoption, or a serious medical condition. At BNA, a woman may take six to eight weeks of accumulated sick leave after the birth of a baby. In addition, male and female employees can take three weeks of accumulated sick leave called Parental Leave; and this is available to either parent during the first ninety days after birth or adoption.</p>
The Rouse Company (Rouse), [US]	<p>Family, Medical, and Other Leaves of Absence, which comply with the Federal Family and Medical Leave Act of 1993, and allow leaves of absences for, among other things, the birth or adoption of a child, or the placement of a child through foster care. TimeOff with Pay (i.e., vacations, floating holiday, occasional absence, sick leave, and retiree benefits).</p> <p>Time-Off-With-Pay Benefits, which, when it is necessary, excuses an employee from work for short periods of time to take care of personal matters. The company's time-off benefits include, but are not limited to occasional absences for parental commitments, sick leave (ninety-six hours per year for illness of the employee), short term disability, and long term disability.</p>
Aetna, Inc. (Aetna) [US]	Up to six months leave without pay may be granted after the birth or adoption of a child, or to care for a seriously ill parent, spouse or dependent child.
Procter and Gamble [US]	Maternity Leave; Child Care Leave;
PPG Industries, Inc. (PPG), [US]	<p>PPG's Family Leave Policy offers employees up to twelve consecutive weeks of employment-protected, unpaid leave. This leave policy can also be used as part-time leave for the same amount of time. Family situations for which this type of leave could be used range from the care of a newborn or newly adopted child to the care of a seriously ill family member or elderly parent whose condition requires their attention. Upon returning from Family Leave, employees will return to the same or similar position held before going on leave with an equivalent rate of pay.</p> <p>PPG grants up to twelve months of unpaid leave for an employee's personal needs. Eligibility is based on the reasons for the leave request, a satisfactory work performance record and PPG's business needs. Upon return from a leave of three months or less, the employee is reinstated to the same position, or a position as comparable as possible to the one held before the leave. For a leave longer than three months, PPG will make every effort to place the employee in a position consistent with the employee's qualifications. During an approved personal leave of absence, PPG benefits and pension credits continue to accrue.</p>
Eli Lilly and Company [US]	Moms can take up to 68 weeks of job-guaranteed time, and dads, 64 weeks. (In practice, moms took 29 weeks, on average, while dads took 1.5.)

Fannie Mae [US]	Beyond its own walls, the company gives workers up to 10 hours of paid time off each month so that they can volunteer; more than 1,600 employees volunteered some 30,000 hours in their communities last year.
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Life Technologies, Inc [US]	A paid-time-off policy that lets employees take "all the time they need" for school conferences, a parent's illness, or even buying a home; and moving-on-up perks like educational reimbursement for career-related course work. Life Technologies strongly supports volunteering: The company gives employees time off to assist in a child's classroom or to participate in student-mentoring programs.
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Tailored Working Hours

The International Business Machines Corporation (IBM), [US]	To accomplish flexible working arrangements, the Individualised Work Schedules Program permits employees to begin their workday up to two hours before, or two hours after, the normal location start and stop times, providing a four-hour window of flexibility. When employees need to be away from work for an extended period of time, they may take a personal leave of absence for up to three years. The employees also can reduce their workweeks for a broad array of personal needs, such as dependent care responsibilities, "once in a lifetime" opportunities, or other individual needs. Employees can perform their work at home or in another off-site location, with computers and other technology, to meet the demands of their day-to-day jobs.
The Pacific Telesis Group (Pacific Telesis) [US]	The company supports flexible work options. About 18% of its managers telecommute, ranging from one or two days per week to full time. It provides support for telecommuters from its San Ramon administrative offices by maintaining a shared office space and funding equipment for home offices. Telecommuters are able to reserve a designated shared office space, which provides resources, including phone, fax, and information system access. Options, such as flexible work schedules (or flextime), part-time work, compressed work weeks, and job sharing are available when employees are willing and it meets the needs of the business.
Wisconsin Electric Power Company (Wisconsin Electric) [US]	Wisconsin Electric offers flex time and alternate work schedules in many areas of the company
The Rouse Company (Rouse), [US]	Alternate Work Schedules, including part-time, temporary, on-call, telecommuting, job sharing and flextime.
Procter and Gamble [US]	Reduced Work Schedule; Flexible Work Schedule;
Bausch and Lomb (B & L) [US]	Alternative Work Arrangements, which include Compressed Work Week, Flextime, Job Sharing, Reduced Hours, and Telecommuting.
CIGNA [US]	Flexible Work provisions that apply to all employees: flextime; compressed work week; home based work/telecommuting; part time employment; and job sharing.
Allstate Insurance Company [US]	Allstate emphasises policies that encourage a work/life balance, including job-sharing and telecommuting, as well as full benefits for part-timers
Eli Lilly and Company [US]	. Employees can take advantage of excellent flex and advancement practices. Roughly half of the 16,038 employees telecommute on a regular or occasional basis. (This includes some 3,000 salespeople.)
PPG Industries, Inc. (PPG), [US]	The company provides for flexible work arrangements. Its Flextime Policy allows employees to vary "normal" starting and stopping times in order to meet personal and family needs. Part-time employment is available to all

Aetna, Inc. (Aetna) [US]	<p>employees in cases where it is consistent with PPG's business needs. This option allows PPG employees to accommodate family needs by working on a part-time basis.</p> <p>Aetna provides its employees considerable flexibility with regard to working hours: Staggered work hours; Compressed work weeks; Variable work schedules; Voluntary reduced hours; Flexible hours; Job sharing; and Work-at-home (telecommuting).</p> <p>People who want the full flexibility of working only when they wish to do so may enrol in the Temporary Services Program in Hartford and Middletown. Employees may gradually reduce their work hours in the two years immediately preceding their retirement. This program can help employees make the transition between full-time work and retirement. Aetna strives to hire, as temporary workers, employees who retire but also wish to work limited hours for the company.</p>
Ernst and Young LLP [US]	<p>Supports employees who desire flexible work schedules; recently launched through its Office for Retention, a Flexible Work Arrangements Database, which includes a Tool Kit supporting a partnership between the firm and the individuals.</p>
Prudential Insurance of America [US]	<p>Has adopted a number of "family-friendly" policies that have enabled employees to adapt to changing lifestyles and responsibilities, including: alternative work arrangements, job sharing, telecommuting, flexible hours, abbreviated and compressed work weeks</p>
Life Technologies, Inc [US]	<p>All employees can opt for flextime, and an estimated 90 percent regularly change their daily schedules — skipping lunch and leaving early, or taking a long lunch and working late.</p>
Merrill Lynch & Co., Inc. [US]	<p>Nearly 30 percent of Merrill Lynch's 51,537 U.S. employees use flexible work arrangements, including job-sharing, part-time work, compressed workweeks, and telecommuting. And employees working from home aren't left hanging out there by themselves: Telecommuters take a class (along with their managers) and spend six days in a simulation lab stocked with the equipment they'll be using at home.</p>
Novant Health, Inc. [US]	<p>Telecommuting for jobs that allow it (for example, medical transcription), job-sharing, part-time work with benefits</p> <p>Last year, the company expanded flexible work options such as telecommuting, launched mentoring programs, and publicised its work/life information and success stories throughout the company</p>

Information, Counselling and Advice

The Bureau of National Affairs, Inc. (BNA), [US]	<p>The BNA-Guild Work & Family Committee informs employees on work and family opportunities.</p>
The Pacific Telesis Group (Pacific Telesis) [US]	<p>Its Life Works Family resource program provides employees with access to personal consultation and resource and referral information for concerns such as parenting and child care, adoption, elder care, care for the disabled, education for school-age children, and personal care.</p>
The Rouse Company (Rouse), [US]	<p>Individual Assistance Program, which deals with the broad range of human relations problems, such as emotional or behavioural disorders, family and marital discord, alcohol and drug abuse, financial, legal, work-related and other personal problems. The program is available to everyone in the company and their dependants.</p>

Price Waterhouse LLP (Price Waterhouse) [US]	<p>Through Smart Families/Smart Business, employees benefit from a host of work-family balance techniques and resources that offer tips and insights to help them carve out more quality time with their children; discover and encourage the natural talents of their kids; learn creative ways to nurture their marriages; and redefine the relationship with their own parents.</p> <p>Price Waterhouse has a twenty-four hour employee assistance program to help people at the firm and their families cope with stressful personal issues such as marital difficulties, career concerns, substance abuse, concerns about children or parents, or financial stresses; adoption assistance reimbursement up to \$3,000; leaves of absence to take advantage of special opportunities; and practical tools and resources to strengthen parenting and work-life balance skills.</p>
Wisconsin Electric Power Company (Wisconsin Electric) [US]	<p>The company has an Employee Assistance Program which provides support to employees for personal or family related problems. A "Benefiting You" brochure is mailed to all employees..</p>
Aetna, Inc. (Aet na) [US]	<p>The company has work and family seminars during the work day on such family-related topics as:</p> <p>"Dealing with the Stress of Being a Working Parent;"</p> <p>"Choosing Quality Child Care;"</p> <p>"Communicating with Teens;" and</p> <p>"Legal Issues of the Elderly."</p>
Procter and Gamble [US]	<p>Lunchtime Education Seminars; and Corporate Lifestyles Health and Wellness Programs and Service).</p>
Bausch and Lomb (B & L) [US]	<p>Employee Assistance Program of Rochester, which helps employees with marriage and family issues, concerns about parent-child relations, alcohol and/or drug use, mental health and stress issues, single parent issues, work-related problems, stress due to changing work environment, and financial or legal problems</p> <p>LifeWorks Program, which provides employees and their families with easy access to: practical advice from experts; useful information, checklists, brochures, etc.; customised referrals; regulatory, financial, and insurance issues; and personalised reports about private schools, colleges, and financial aid. This support is provided for such areas of concern as parenting (birth and adoption); child development and educational issues; caring for oneself and one's loved ones; personal, professional, and business life transitions (e.g., relocations, living wills, elder or day care, and school selection), including planning ahead and finding adequate housing; and caring for those with disabilities.</p>
First Tennessee Bank (First Tennessee) [US]	<p>The cornerstone of the Family Matters commitment is the development of its managers' abilities to work with their employees in resolving work-family conflicts. Accordingly, managers receive training on how to incorporate workplace flexibility and related family initiatives into their departments as part of its ongoing leadership curriculum. Managers are also evaluated yearly by their employees on how they work with employees to manage work and family conflict issues and conduct feedback sessions with their employees to find additional ways to be more supportive of these issues.</p>

Bank of America [US]	The company's Women's Financial Initiative program, co-directed by former California State Treasurer Kathleen Brown, strives to demystify personal finance for employees, as well as for entrepreneurs and young women in the communities the bank serves.
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PPG Industries, Inc. (PPG), [US]	<p>The PPG Employee Assistance Program (EAP) is available to help employees deal with personal, family and work-related problems through confidential counselling, support and guidance. Professional EAP counsellors help employees and their families with a variety of problems including: Work-related problems; Marital and family distress; Alcohol and drug abuse; Financial concerns; Personal concerns; Personal stress; Child care resource and referral; Elder care assistance; and Legal assistance.</p> <p>The company also seeks to help its employees by bringing educational programs offering insights into ways to optimise employees' personal and family strengths and to better use available resources.</p>
Lincoln Financial Group [US]	The firm offered counselling services and help with the entire spectrum of relocation-related issues, from finding child care to career assistance for spouses.
Prudential [US]	Daddy Stress is a pilot program focusing on balancing fatherhood and work
Entrepreneurial Mothers Association [US]	Entrepreneurial Mothers Association (EMA) is a non-profit business organisation for self-employed women who are also mothers. EMA provides the opportunity for self-employed mothers to enhance their professional and personal development by offering support.

Financial Assistance

The International Business Machines Corporation (IBM), [US]	<p>The company also covers children with disabilities for expenses not reimbursed under IBM's medical plans, up to a lifetime maximum per child of \$50,000</p> <p>IBM Personal Financial Planning includes educational seminars, individual consultations and related services to help employees plan for their future. The Life Planning Account was established by IBM to provide financial assistance to employees, retirees, and eligible dependants when they complete a course or program that helps promote a healthier lifestyle. Programs eligible for financial assistance can cover such subjects as physical fitness, weight management, nutrition, stress management, cancer prevention, cardiovascular health, and financial planning.</p>
Wisconsin Electric Power Company (Wisconsin Electric) [US]	A Dependent Life Insurance option under Flex Benefits, Sick Child Care Plan which includes monetary vouchers for use at sick child care centres, and Wellness benefits under medical coverage such as well baby care and routine physicals.
The Rouse Company (Rouse), [US]	Adoption Assistance, which reimburses employees for costs associated with adoption (i.e., legal, medical) up to \$4,500 per adoption. Child and Elder Care Pre-Tax Spending Accounts, Health Insurance
Aetna, Inc. (Aetna) [US]	Aetna is a sponsor of ConSern, a national non-profit program, established by education and business leaders to provide financing for education. Employees who qualify financially may borrow from \$1,500 to \$25,000 per year for tuition expenses for themselves or their children in an accredited college, university, or private secondary school. ConSern Loans bear a variable interest rate with a repayment schedule of fifteen years.

The Rouse Company (Rouse), [US]	Academic Scholarships, which are provided to the dependants of employees, based on need, up to \$3,500 per academic year per student. World Learning, Inc., Scholarships (aka Experiment in International Living), which provide to dependants of employees the experience of a summer abroad.
Procter and Gamble [US]	Adoption Assistance of up to \$2,000 for adoption expenses; Flexcomp, which allows employees to make annual benefit choices; Other Benefits: Dependent Care Travel Reimbursements; Tuition Refund Program; Scholarship Program; Relocation Assistance Program; Employee Assistance Program
Bausch and Lomb (B & L) [US]	Adoption assistance, educational assistance
Bank of America [US]	Adoption aid, long-term-care insurance for employees and their parents, and an improved tuition-reimbursement program (where participation grew more than 200 percent to include almost 10,000 employees). Bank of America even reimburses for child-care expenses incurred due to business travel and overtime, and eligibility for work/life programs, such as child-care subsidies, is available from the first day of work. Last year, Bank of America introduced a home-ownership program, loaning out \$16 million to more than 3,200 associates, many of them first-time home buyers.
Fannie Mae [US]	Fannie Mae employees are eligible for loans (for down payments and closing costs) that are 100 percent forgivable: Borrow \$10,000 and you're forgiven \$2,000 a year for the next five years. The company expanded that sweet deal in 2000 to include workers who've been with the firm a mere 90 days.
Prudential [US]	The adoption benefit was doubled to \$5,000 last year, and medical coverage was extended to part-timers who work at least 20 hours a week.

Back to Work

Price Waterhouse LLP (Price Waterhouse) [US]	Price Waterhouse offers a variety of flexible work arrangements that are used to accommodate diverse personal situations such as transitioning back to work following the birth or adoption of a child, juggling the responsibilities of caring for elderly or ill parents, or returning to school for an advanced degree. Examples of flexible arrangements at the firm include serving a reduced number of clients, working targeted hours or days, job sharing, telecommuting, and leaves of absence.
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Awareness Raising

Northern States Power Company (NSP) [US]	NSP introduced the issues of work and family in a bold, non-traditional way to the whole workforce. While lecture and video formats had been used in the past, NSP chose the live theatre format to add realism. A professional, live theatre group, Illusion Theatre Company, was contracted to create an original work, which was designed and written specifically for NSP's purposes in consultation with NSP's Human Resources staff.
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	<p>The program consists of twenty-three vignettes or "mini-plays" dramatising situations related to work and home life, sexual harassment, and general diversity issues. The play, which featured original songs and several dramatised situations which had actually been experienced by NSP employees, was followed by a group discussion led by the narrator and an NSP Human Resources representative.</p> <p>In the weeks prior to the first production, memos and letters were sent to management in various locations, introducing the program. After the first few productions, word of mouth and "the grapevine" served to market the program.</p>
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Organisation Wide Task Forces and Committees

Programme Name	Programme Description
J.P Morgan Chase & Co.: Diversity Councils initiative	J.P Morgan Chase & Co.'s Diversity Councils initiative, is a company wide Council chaired by the CEO as well as 45 councils at business level around the world. Each creates a diversity plan which is tailored to its local needs, and the elements of the plans include recruiting, training, mentoring, networking, work/life programmes, and career development.

PARTICIPATING IN SCIENCE AND TECHNOLOGY

Public Sector Bodies and Agencies with Relevant Special Responsibilities

Commission on the Advancement of Women and Minorities in Science, Engineering and Technology Development (CAWMSET) [US]	"This Commission was established by Congress in October 1998 with a mandate to research and recommend ways to improve the recruitment, retention and representation of women, underrepresented minorities and persons with disabilities in SET. The Commission reported in July 2000 during a Capitol Hill press briefing and presented the report 'Land of Plenty'. Partnered with the press briefing was a Technology Subcommittee Hearing entitled 'A Review of the Morella Commission Report: Recommendations to Attract more Women and Minorities into Science, Engineering and Technology.'"
National Science Foundation Programmes [US]	"The US Congress has enacted specific legislation to promote Equal Opportunities for Women and Minorities in Science and Technology. The first Act, in 1981, instructed the National Science Foundation (NSF) to mount an affirmative action programme and to report on the current situation biennially. Past NSF programmes have included Visiting Professorships, Faculty Awards, Research Planning Grants and Career Advancement Awards for Women. These have been integrated and incorporated into the current programme - Professional Opportunities for Women in Research and Education (POWRE). The 1981 instruction to monitor progress was highly significant. From 1982 on, a substantial volume of gender-disaggregated statistics, accompanied by in-depth discussion, has appeared every second year (now called Women, Minorities, and Persons with Disabilities in Science and Engineering, NSF, Arlington, Va). Other mechanisms are also in place. The 'contract compliance' clause is highly effective: federal funding can be made subject to the fulfilment of equal opportunities requirements. Another powerful mechanism is the use of class action suits for the enforcement of equal opportunities legislation. This achieved significant progress for women in academia in the 1970s (Chamberlain 1988). Universities can face US\$1million claims for falling foul of the law; this ensures the issue is taken seriously. European Member States are susceptible to losing their bright young scientists in the brain drain to the US because of the superior American investment in science. "
National Research Council Committee on Women in Science and Engineering (CWSE) [US]	"The Committee was established in 1991 as a standing committee of the NRC. Its mandate is to coordinate, monitor and advocate action to increase the participation of women in science and engineering. The Committee collects and disseminates information, and recommends ways to enhance women's involvement. It also publishes reports, convenes conferences, and acts as a liaison with other relevant bodies."
'Women and Science' Activity under the 'Improving Human Research Potential and the Socio Economic Knowledge Base' Programme [EUROPE]	This programme is one of the individual programmes under the EU's Fifth Framework Programme for research and technological development. Under the programme one activity relates to Women and Science under which the Commission is undertaking a series of measures to promote women's participation in research. There are two objectives: to develop the dialogue among member states, and with the different stake holders, and to develop the 'gender watch system' in the Fifth Framework Programme. A number of EU conferences have been held on this theme.

European Technology Assessment Network (ETAN) [EUROPE]	ETAN was set up in the Fourth Framework Programme as an activity of Area I "Evaluation of science and technology policy options" of the Targeted Socio-Economic Research (TSER) programme of Directorate General XII (Science, Research and Development) of the European Commission. "The purpose of ETAN is to promote communication and debate at the European level between policy researchers and policy makers on important science and technology (S&T) policy issues. Under this activity, a topic relating to women and research was set up under whose banner ETAN (European Technology Assessment Network) was established to formulate policy recommendations for the different levels of research policy (within research institutions, at regional, national and at Union's level). Topic 4 under this programme relates to addressing the gender balance in research policy, ultimately producing the report "Science policies in the European Union: Promoting Excellence through Mainstreaming Gender Equality".
UN Gender Working Group on Science and Technology for Development [WORLD-WIDE]	"In 1995, the United Nations Economic and Social Council accepted the recommendations made by the Gender Working Group (GWG) of the UN Commission on Science and Technology for Development which requires national governments and UN agencies to more effectively incorporate gender concerns into science and technology for development. The report issued by the working group identified seven critical areas for transformative action: Education, Careers, Needs of Society, S&T Decision Making, Local Knowledge Systems, Ethical Issues, and Collecting Gender Disaggregated Data." The UN's Gender Advisory Board was set up in response to this report, answering one of its key recommendations.
Unit for Promoting SET for Women within the Department of Trade and Industry [UK]	The Promoting Science, Engineering and Technology (SET) for Women Unit was created following a recommendation in the 1994 'Rising Tide' report. Its key aims are: to focus effort on attracting more girls into SET subjects, to promote SET as a fulfilling HEI career, to identify ways of improving progression for women up the career ladder, and to promote industry careers for women. The unit is within the Office of Science and Technology within the Department of Trade and Industry.

Education and training

Programme Name	Programme Description
WiTEC Short Course Programme [EUROPE]	WiTEC has co-ordinated a programme of several short courses for women running from 1994-1999, which covered areas such as IT updating for women returners, multimedia courses for women and IT and flexible working. The results of this project have been published in the European Guide of Best Practice in Educational Training which details all the courses and gives an overview of the programme.

<p>Project 'IT-Women' [EUROPE]</p>	<p>IT-Women is a trans-national Employment Initiative (1998-1999) with seven partners all over Europe. It works to encourage and qualify women to become professional actors in the information society by offering them an innovative additional IT qualification in order to improve their chances of employment.</p> <p>Transnational activities of the project involve communication in exchanges of information and working together</p> <ul style="list-style-type: none"> • Joint research and exchange of information/know-how and good practice • Elaboration of curricula • Mutual development of courseware and pedagogical material • Joint seminars • Common activities; website, presentation and information material, monitoring, evaluation and dissemination
<p>Tralee IT course 'Women Returning to Work – An Introduction to Computers and Enterprise' [IRL]</p>	<p>An adult education course aimed at preparing women for work in the information and communications sector. Provides women with a knowledge of computers, as well as encouraging them to look at self employment as an option.</p>
<p>Heriott Watt University's Women into Engineering Management course [UK]</p> <p>Causeway Institute of Higher and Further Education Certificate in IT and Professional Development for Women [NI]</p>	<p>A programme targeted at women with relevant undergraduate degrees who require a vocational qualification and graduates with relevant work experience requiring higher level skills for managerial development within the fields of civil, offshore or environmental engineering</p> <p>A high level and full time course in IT specifically for women</p>
<p>Keighley College, Computing and CAD for Women [UK]</p>	<p>A City and Guilds course specifically for women in CAD, with a nursery made available to students.</p>
<p>Middlesex University's Engineering Foundation Year for Women [UK]</p>	<p>A free programme in engineering designed for adult women who have been unemployed for at least 2 years</p>
<p>MBA Technology Management Programme</p>	<p>Distance learning programme suited to flexible study during career breaks and designed to develop the management career potential of women in SET</p>

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Award Schemes

Programme Name	Programme Description
GirlGeeks 'Golden Horn Rims' award [US]	Award for a woman excelling in the internet field.
WITI Science and Technology Hall of Fame [US]	Established in 1996 by WITI to recognise, honour and promote the outstanding contribution of women to the SET field. The profiles of the individuals are available on line
WITI CEO Recognition Award [US]	Created to recognise leaders for their support in advancing highly talented and well qualified women within their companies. The award also creates an online resource of profiles of companies and individuals with strong track records in the area
Young Woman Engineer of the Year (IIE and the Caroline Haslett Memorial Trust) [UK]	Awarded yearly to high calibre woman engineers from a variety of engineering fields.. A number of similar award schemes are available within the UK

Family Friendly Policies

Rank Xerox Strategy for Equality and Diversity [WORLD-WIDE]	Rank Xerox' policies include a commitment to improving maternity benefits, allowances for women to 'phase in' on return through part time working and also a career break scheme
Glaxo Wellcome [WORLD-WIDE]	Glaxo Wellcome analysed the reasons why staff left the company. The research highlighted maternity and childcare support issues. Their resulting portfolio of policies includes childcare allowance, childcare advice and guidance, community nursery funding scheme and a parent support network
GCHQ [UK]	To encourage women, GCHQ has developed policies including additional paid leave for sick dependents, unpaid leave where necessary, training management in equal opportunities issues, and an open learning centre
Unilever enhanced maternity benefits [WORLD-WIDE]	Unilever's policies include a lump sum that fills the gap between the maternity benefits and the full time salary that would have been earned during the time taken on maternity leave. Career breaks and flexible working are also included
Esso UK [UK]	Esso UK developed case studies in literature on men and women in SET, and also ensure a 'good mix' of women and men 'role models' for Esso University contacts and trained interviews

Northern Ireland Electricity [NI]	Career breaks, part time working, flexitime, work from home and job sharing are available to all employees. Childcare, extended maternity and paternity leave, adoptive leave etc all available. Gender specific initiatives include awareness visits to non traditional work areas and skills, and a women's mentoring scheme. Female employees are supported on the European Women Managers Development Programme and the Springboard Development Programme
Alfred P. Sloan Foundation Pre-Tenure Leave Fellowship Programme [US]	Responding to the trend towards the casualisation of work within the higher education science and technology area, this initiative facilitates 'stopping the tenure clock' leave policies within institutions. In this way pretenure faculty members can apply for funds to support leave that is necessitated by family issues.
Daphne Jackson Trust [UK]	The Daphne Jackson Trust distributes award fellowships to enable high level women scientists and engineers to return to their careers after a career break
Academic Age Concept [WORLD-WIDE]	So as not to penalise those taking career breaks or following atypical career paths the concept of academic age rather than chronological age gives employers a more realistic way of judging a candidates previous achievements and abilities. Applications for Research Fellowships from the Royal Society in the UK, for example, are being considered in this way to encourage women to apply

Promotional and Information Initiatives

Programme Name	Programme Description
Cracking It! [UK]	Cracking It! A comprehensive handbook to help women succeed in SET, published by Training Publications Ltd in the UK
National Science Week [UK]	While this initiative is not just for women, the Committee on Public Understanding of Science (COPUS) offers grants for people to run science events locally under which the Women's Institute gained funding to bring science demonstrations to its members and the general public
London Science Museum Women in Science Night [UK]	Under this initiative the museum opened open only to women over 18 for a full night
AWiSE's 'The Other Half' video [UK]	This video is aimed at helping employers develop career break policies for their women engineers and technicians.
Did I say Hairdressing? I Meant Astrophysics video [UK]	Subverting themes from traditional stories, this 'entertaining and thought provoking' cartoon film helps to show why women are under-represented in science, engineering and technology. Funded under the EC Medium Term Community Action Programme on Equal Opportunities for Women and Men (1996-2000)
Short Brothers (Northern Ireland) sponsored WISE Leaflet [NI]	Short Brothers (Northern Ireland) sponsored a WISE leaflet profiling the career of one of its leading female engineers, Catherine McKeever, Director of Core Engineering

Leaflet [NI]	
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British Council [UK]	The British Council publishes a number of briefing papers on the issue of women in SET which also detail initiatives in the area
Institution of Engineers in Ireland STEPS Promotional Campaign in association with WITI (IRL)	This is a campaign designed to encourage students, and particularly girls, to consider engineering as a career. Major industrial companies in Cork, Limerick, Dublin and Galway opened their doors to girls who met with engineers and got hands on experience of their work.
CRA – W – senior leadership development seminar [US]	The CRA – W network has a programme dedicated to lobbying for the appointment of women to senior awards.
ENIAC Programmers Oral Histories (ACM-W) [US]	A project to document the history of the first modern computer programmers of the world's first general purpose computing machine (the ENIAC). It is intended that the resulting information will be available on line
Women in Computing Video (ACM-W) [US]	A 28 minute video presenting accomplished female scientists and specialists working in the fields of computing, finance, health care, academia and publishing.
Women at Work (WITEC) [EU]	An online resource centre for women in SET
The Ada Project (ACM-W) [US]	An online clearing-house for information and resources related to women in computing.
Online Ethics Centre for Engineering and Science [WORLD-WIDE]	An information centre on a number of issues, with a particular focus on women's issues and gender differences in science and engineering
Women in Computer Science publication from CRA-W [US]	This publication profiles the life stories of eighteen successful women in CSE. Aimed at high school and early undergraduate students
Expanding the Pipeline regular column in Computing Research News [US]	The publication reaches 6,000 researchers and the column serves as a vehicle for describing projects and issues relating to women in computer science in academia
Sheffield Hallam University's Resource Centre for Women in SET	Online resource giving information on contacts, courses, conferences etc for women in the SET area

[UK]	
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Making the Most brochure from the Office of Science and Technology and Opportunity 2000 [UK]	The brochure - Making the Most: Women in Science, Engineering and Technology : Building a Workforce for Sustained Competitiveness - included six case studies demonstrating how businesses could improve their competitiveness by introducing management processes that attract and retain women in SET
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Work fairs and conferences

Programme Name	Programme Description
Women Unlimited [UK]	The first ever national opportunities fair in the UK specifically designed for women, led by the Women's Unit of the Cabinet Office in association with the Department of Trade and Industry in the UK The fair had a particularly strong emphasis on IT
IBM: EMEA Women's Leadership Conference [US]	The conference, held in April 1999, was the first of its kinds in Europe. It brought together approximately 250 IBM women leaders from IBM's EMEA regions. The conference theme was 'Women and Technology in the Next Millennium'.
Women in Technology International annual conference [US]	An annual conference for women in IT which also runs a 'Bring your Daughter to the Conference' programme
GirlGeeks first ever Forum for women at the Comdex conference 2000 [US]	COMDEX and Girlgeeks partnered to produce a programme within the overall conference specifically for IT women. The project consisted of a half day forum featuring 'Women in IT: Succeeding in Tech' which addressed career issues of particular interest to women in the IT industry. The forum will run at future shows
Hypatia's Daughters – Celebrating Women in Technology and Science [IRL]	A once off conference held by the Women's Education, Research and Resource Centre in UCD in association with Women in Technology and Science
Coalition of Women in Computing (CRA-W) [US]	An annual meeting which brings together representatives of professional societies that work to address the underrepresentation of women in CSE

Mentoring, Counselling and Networking

Programme Name	Programme Description
CRA – W: mentoring workshops [US]	Career Mentoring Workshops for women in academia. Established professionals provide practical information, advice and support to their younger colleagues. Each of the workshops is associated with a major professional meeting

Pathways Project (ACM-W)	The Pathways Project matches young women with women scientists to serve as mentors through on line contact
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Procter & Gamble MentorUp	The Procter & Gamble MentorUp programme allows junior women to mentor senior executives to increase their understanding of the young women's experiences
WITS (Women in Technology and Science) [IRL]	Set up in 1990 to actively promote the participation of women in science in Ireland, WITS currently has 300 members from a wide range of scientific and technological backgrounds.
WITEC Transnational partnership	A project facilitated by NowInset between WITEC (Ireland) and De Jong Van Doorne Huisken en Partners, a human resource management consultancy based in the Netherlands, which developed links with a number of companies in the West Midlands, and between the UK, Ireland and the Netherlands aiming to raise awareness of women's contribution to SET and encourage employers to adopt family friendly policies
WITEC Ireland Panel Discussion	WITEC Ireland's panel discussion entitled 'The Voice of Women in Science' was aimed at promoting women in science in all forms of the media
European Database of Women Experts in SET (WITEC Project)	An online database helping governments and EC departments to find expert women for committees and working groups
DAPHNET	The UK's email network for and about women in science, engineering and technology, including returning after a career break.
Progress (WITEC) [UK]	A one year mentoring scheme within seven UK universities to improve career progression for women in SET in HEI's. The project's main aim was to develop a course to train academic staff in SET in mentoring skills as a possible means of increasing the number and retention of women academics in these areas. A report on the current experience of mentoring was commissioned and a flyer for training in mentoring produced.
Mellow (WITEC) [UK]	A project to facilitate lifelong mentoring of women in technical positions
WITI for Hire [US]	A search service allowing women to research companies, post their CV's or list jobs for their companies
PhD Database from CRA-W [US]	This database of 800 PhD level women in computer science academia in North America has been used extensively by recruiters from academia, industry and government. The database will soon expand to include a resume directory
Unit for Promoting SET for Women Database Catalogue [UK]	The Unit holds a catalogue of databases entitled Women in Science, Engineering and Technology which provides information about how to find women experts in these areas
Glaxo Wellcome Chapter of AWiSE [UK]	This is a company based chapter of the UK wide network AWiSE for women in science and technology

Organisation Wide Task Forces and Committees

Programme Name	Programme Description
IBM's 'Women in Technology' programme:	IBM's Women in Technology Programme is a subcommittee set up under the company's <i>Executive Women's Diversity Task Force</i> which was formed in 1995. In September 2000 CIO Magazine reported that "the Women in Technology steering committee, headed by Linda Scherr, a computer scientist for 27 years, focuses on three goals: the support and advancement of in-house female tech talent, the active recruitment of college women and programs to encourage girls to pursue technical careers. Last summer, IBM sponsored five onsite technical camps for middle-school girls, facilitated by the company's female engineers. Says Scherr, "The idea is to let the girls actually do engineering, see what engineers do and see the difference that engineering makes in society. Women are very practical, and they want to know the societal impact of what they do."
MIT: Equity Action Committees	The female faculty appealed to the Dean of Science to set up a committee exploring the problem of women's representation within the institution. A number of steps taken as a result contributed to a 40% increase in the number of tenured female faculty. Equity Action Committees are now in place empowered to monitor women's progress across all of MIT and correct inequities that are found.
General Mills Women in Leadership – the Power to Build the Future	The General Mills Women in Leadership – the Power to Build the Future initiative has a number of smaller projects within its parameters all aimed at creating dialogue between diverse employees and senior leadership. At the core is the Women's Forum Offsite, an annual meeting of senior level women at which critical issues are voiced by women and addressed jointly by the CEO, senior management and the senior women themselves.
Texas Instruments Women's Professional Development Team [US]	The Team was created in 1994 to address the number of women in the technical sector. It holds annual diversity reviews of technical ladder statistics, provides technical training and sponsors mentoring workshops and conferences for women in the industry

Minority and Women Supplier Programmes

Programme Name	Programme Description
Texas Instruments Minority and Women Supplier Programme	Texas Instruments' Programme aims to seek out and enable both minority and women-owned suppliers to qualify and compete successfully for TI's business based upon merit. Companies must be 51% owned, controlled and operated by women to qualify.

Miscellaneous Initiatives Designed to Address the Education Pipeline Issue

Education and Training

WISE Insight [UK]	An annual one week residential course for female 5 th and 6 th year pupils held in a variety of Universities throughout the UK. The course is aimed at pupils considering pursuing a career in engineering.
Lets TWIST (Lets Train Women in Science and Technology) [UK]	<p>Lets TWIST (Lets Train Women in Science and Technology): WiTEC UK were a partner in this Employment NOW funded project co-ordinated by Bradford and Ilkley Community College (UK). The Lets TWIST project consisted of 2 main parts: Training the trainers and providing a Careers Resource.</p> <p>Within the Training the Trainers section, staff involved have been providing training to lecturers on women-friendly training methods in an effort to increase the number of girls studying SET, particularly at craft level. This has also taken the form of staff exchanges across the transnational partnership in order to transfer best practice.</p> <p>The Careers Resource part of the project has developed a physical resource centre within Bradford College containing useful resources and a careers advisor to be available as a drop-in for student support and to inform girls of the choices available in SET. Several publications have been produced as part of this project including a Role Models booklet, Video and Final report document.</p>
ACM-W Teacher Enhancement Programme [US]	A teacher enhancement programme for public school teachers in Colorado which centres on gender issues.
AT&T Graduate Fellowship Programme (Summer Programme) [US]	This Programme is for women or minority students in their third year in college in a relevant subject. Participating students work on individual projects which are parts of the ongoing research in the lab. The projects are ideally designed so that they can be completed and reported on over the 10-week course of the summer.
Intel [IRL]	Intel runs scholarship programmes for schools in the Kildare area
AT&T Graduate Fellowship Programme	A fellowship, launched in 1975, which covers educational expenses, living stipend, and organises a mentoring programme.
Texas Instruments Incorporated Grant Awards [US]	Texas Instruments Incorporated awards grants to the Dallas Women's Foundation (DWF) for math, science and technology programs that address the needs of women and girls.

Mentoring

WITS Role Model Scheme [IRL]	Promotes interaction between WITS members and second level students around the country, and the scheme is now funded by the Department of Education and Science
CRA-W Lucent Technologies Distinguished Lecture Series [US]	Sends faculty and industry researchers to campuses to encourage women and minorities to attend graduate school. The vists include a technical talk as well as a variety of 'recruiting' events.
CRA-W Distributed Mentor Project [US]	Matches outstanding female undergraduates with female mentors for a Summer of research at the mentor's institution.
MentorNet	This is the National Electronic Industrial Mentoring Network for women in SET which pairs women studying engineering or science with professional scientists working in industry, and help them to develop email mentoring relationships
NASA Women's Network and Resource	Developed to encourage women to pursue careers in SET. The main components of the project are interactive events such as webcasts, forums and live chats.
Levelling the CS1 Playing Field (ACM-W) [US]	A project wherevby female undergraduates in US institutions are encouraged to enrol on computer science courses through the provision of a 'head start' course which will enable them to overcome some of the early 'confidence' issues in the SET area

Promotion and Information

Role Model Project for Girls (ACM-W) [US]	An examplers sample of women in a wide range of non traditional careers is being developed that will take the form of a CD ROM and a supporting web site
Department of Environment Strengthening School Science Campaign [UK]	This is an initiative to strengthen school science which is due to start in September 2001. Questionnaires asking for suggestions on the area are currently being circulated
SPARK magazine	SPARK magazine for teenage girls promoting 'cool careers in science and engineering' is published by the Unit for Promoting SET for Women
Women in Computing Academic Resource (ACM-W) [US]	A compiled list of colleges and universities that have formal and/or informal programmes for encouraging and promoting women in computer science.

Miscellaneous

CRA-W Best Practise Recruitment Committee [US]	The Recruitment Committee brings together individuals with experience in retaining women students in CSE with the aim of producing a report to circulate to University department chairs
CRA-W Collaborative Research Experience for Women [US]	Designed to provide collaborative research experiences for groups of two to three undergraduate women during the academic year. Financial assistance and other help is provided