



Case Studies from 3rd Action Learning Set, February 2011

### **PROFESSOR GILL SCOTT**





Connecting cities Building successes

## Women, Innovation and the Knowledge Economy

## Case Study Compendium

## Supplement to WEED Action Learning Set 3 Report

Gill Scott, March 2011

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## Introduction

The 'WEED project is part of the URBACT II programme<sup>1</sup> and brings together practitioners and policy makers in partnerships from a variety of cities within the cohesion and competitive regions of the European Union (EU). The objective of the project is to capitalize knowledge and practice around fostering the participation of women in the labour market and entrepreneurship development. It is based on the premise that local authorities can play an important role in transforming women's participation in local economic life. The overall goal of the project is to assist the partner cities to improve practice in relation to women, employment, entrepreneurship and the knowledge economy and to develop multi-stakeholder Local Action Plans that are linked to good practice project proposals for possible funding from ERDF, ESF or other EU or National sources of funding

The case studies presented here relate to actions that develop, use and retain the skills of women in a knowledge-based economy, particularly in sectors where they are currently under-represented particularly ICT systems and product development; low carbon and other green technologies. They were prepared prior to and following the third Action Learning Set, carried out in 2011. They reflect the diversity of interventions, organisations and funding involved. A significant number comprise examples of good practice from partners in WEED and show how the adoption of locally based innovation can play a major role in exploring and implementing solutions to the economic crisis in away that does not lose sight of the European strategic framework for gender equality and show that measures to promote gender equality can be an important part of a strategy to address the economic and financial crisis

The case studies are organised in the following themes:

- Actions that increase and maintain the interest and success of girls and women in training and education for innovation.
- Initiatives that help women use innovative ways to expand their businesses or improve services.
- Actions to produce greater gender awareness
- Actions to keep women in the knowledge economy and innovation pipeline
- Actions funded under the EU FP7 Programme
- Actions to make collaborative ventures between universities, local authorities and business (e.g. science parks) more woman friendly

Some are more detailed than others. Some have been the subject of research and evaluation others have not. Some are examples that WEED partners have provided or are the result of research by the Lead Expert. All have direction to contacts or further information that readers can chase up. It is hoped they will provide a valuable resources for those wanting to consider the varied ways in which initiatives can be developed to improve women's position in the knowledge economy.

The compendium should be read alongside the report of the Third Action Learning Set of WEED *Women, Innovation and the Knowledge Economy.* Available at http://urbact.eu/en/projects/human-capital-entrepreneurship/weed/our-activities/

<sup>&</sup>lt;sup>1</sup> URBACT is a European exchange and learning programme promoting sustainable economic development. For details see http://urbact.eu/

## Section One: Increase and maintain the interest and success of girls and women in training and education for innovation

### 1. Investment into an Inter-company Education Centre at the School Centre. Celje, Slovenia (WEED partner example)

Despite the traditional division into "men and women occupations" in Celje the proportion between men and women is slowly changing. Unfortunately this has not been fast enough to address growing shortages in certain occupations. In 2010/2011 38 of the 55 industries in which shortages were noted were "male" occupations such as mason, welder, electro installateur, carpenter, bus and truck driver, butcher, mechanical and civil engineer, tiler, toolmaker, construction workers, tinsmith.

One barrier to addressing the problem has been the highly segregated education system when it comes to career decision-making among youth in Slovenia. Stereotypes are very strong and affect the youth (male and female) when deciding into which secondary school they should enrol.

The School Centre Celje has been developing new ways to change the situation, increase the interest of boys and girls in technology and innovation and address gender segregation and labour shortages at the same time. The result is the project *Inter Company Education Centre*. It comprises a contract on co-financing between the School Centre Celje and Ministry of Education and Sport of Slovenia, agreed within the Operational Programme for strengthening Regional Development Potentials 2007-2013.



#### Aims and objectives

The key aims of the Inter Company Education Centre are to: -

- Establish a funded system of education and qualification capable of responding to new demands for key competences for individuals within a common European policy frame.
- Organize and implement programmes of practical training for pupils, students, unemployed, those employed in economy and other interested individuals.
- Establish learning partnerships with economy.

#### **Development and methods**

The School Centre found its motivation in children. When giving them interesting tools to work and learn with, they are better motivated to learn and study. The methods used are to provide practical training that is generally no longer available at schools. Each subject offered at the Centre is combined of theory, exercise and practise depending on a programme and its duration.

Inter-company Education Centre offers modern infrastructure for:

- practical qualification of their students
- flexible, to customers adjusted qualifications of employees in craft and economy
- onto market oriented qualifications of unemployed
- cooperation with economic subjects at development and testing of products and services

ICEC's vision is to become a recognized development-education institution, which will create equal opportunities and conditions of qualifications for more successful and better quality of work.

In order to achieve purposes and goals of the investment they are investing in modern technologic equipment in a number of fields including auto repair activity, robotics, pneumatics, prototype technology, photovoltaics, ICT, media techniques and welding. In addition the Secondary School for Engineering, Mechatronics and Media established a Multimedia Centre, which consists of TV, radio, printing and photo studios. The centre has the latest technology giving students possibility to learn occupations in media in detail.

#### Resources

The project is co-financed by Ministry of Education and Sport through European Regional Development Fund (ERDF).

#### Budget

Source	Amount	%
Own sources	420.852€	16,7
ERDF	2.104.260 €	83,3
	2.525.112€	100

#### Impact

The investment will provide for:

- high-quality education for youth and adults in order to gain key competences for acting on the European market
- acceleration of lifelong learning of individuals and contribution to the learning society and by that to competitiveness of companies
- adjustment of the education system in a way that fast response on new demands on competences of individuals on common European market will be possible
- contribution to understanding of basic concepts of science and technology and object specific competences
- transfer of knowledge through common projects with companies
- establishing a system of employees' professional development concerning their specific needs
- offering counselling services for planning of career development
- expand competitiveness of the environment for investors
- contribute to balanced regional development

The project is due to end in August 2012. After its end the centre will be able to offer better technological equipment for purposes of practical qualifications on field of vocational and specialized education, practical education of adults and qualifications according to companies' needs such as: qualification, retraining plus improvement, specialization and certification of knowledge, skills and capabilities of those already employed and unemployed. The Centre has to assure for expansion and specialization of education programmes in order to contribute to development of expertise and create new employments for experts, who will be responsible for qualifications of professional and competent labour force and for planning and implementing development projects. One of the obligations is also to assure for equal opportunities for both sexes according to the Council Regulation (EU) No. 1083/2006. Any discrimination must be avoided.

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### 2. Girls in Technology (USA)

Today, women account for only 20% of technology professionals and, in recent years, fewer girls have pursued science and technology-related academic studies and careers. This provides a problem for the IT industry, as it needs many more workers in the next five years. Women's representation in the computing and information technology workforce has been falling from a peak of 38% in the mid-1980s. Increasing young women and girls interest in technology and in careers in the technological sector and there are a number of locally based initiatives that have attempted to do this.

#### Aims and objectives

The key aims of *Girls in Technology* are to increase and support girls interest in technology and in careers in technology. It organises a variety of programmes and events to support girls and young women interested in the sector. Events include conferences with networking game, hands-on demonstrations, refreshments, door prizes and women speakers who discussed their experiences of combining their love of technology with passions such as art, geography, science, education, and law enforcement/security. Structured programmes include the GIT Mentor Programme. The GIT Mentor Protégé Programme are to support a process whereby mentor and protégé work together to discover and develop the protégés latent abilities, to provide the protégé with knowledge and skills as opportunities and needs arise, and for the mentor to serve as an effective tutor, counsellor, friend and foil who enables the protégé to sharpen skills and hone her thinking.

#### **Development and Methods**

Girls in Technology supports academic and community programs that engage schoolage girls in technology and computer-related learning. This support can take many forms such as providing mentors and speakers, assisting with program and curriculum development, providing financial support, and collaborating with strategic partners to expose school-age girls to technology. The organisation especially targets underserved and disadvantaged communities. It is part of the Women in Technology organisation, a not for profit organization founded in 1994 and dedicated to offering women involved in all levels of the technology industry a wide range of professional development and networking opportunities. The organization serves as an advocate for and a representative of the interests of women in the technology industry, acts as a liaison with other similar organizations on women's issues, and plays an advocacy role for technology issues in the Greater Washington, D.C., region. The GIT Mentor Protégé Programme is one of its most successful programmes where GIT works with schools and after schools organisations to provide three 2-hour sessions over three months. Each session includes: Small group mentoring, a networking forum, a speaker or presentation from industry leaders, and a light meal. It exposes secondary school age girls to careers in technology and involves small group mentoring (1 mentor/3-4 girls). The programme offers secondary school aged girls the opportunity to learn and be mentored by women from a wide variety of technology careers. It also provides a two tier mentoring element where mentors are supported by experienced mentors.

#### Funding and Resources

Women in Technology and Girls in Technology are non-profit organisations working within a local area – Washington DC. Their funding is varied and has, during the last four years included sponsorship from private companies such as CISCO systems, the Hispanic Youth Foundation, local learning partnerships, municipal and federal funding.

**Contact:** Robin Steis at <u>robinsteis@gmail.com</u> website <u>http://www.girlsintechnology.net/</u>

### 3. HUMLAB, UMEA, Sweden (WEED partner example)

Ensuring a gender and age neutral environment in which men and women, boys and girls can develop an interest in areas such as new media is essential if the sector is to attract the interest and creative potential of as wide a range of people as possible. Research by Gartner found two main stereotypical views of the IT industry that reduced women's interest in the sector: views that the sector attracts only the 'techno nerd' and that it is an almost exclusively 'male dominated environment' 2. HUMLAB, based in the University of Umea provides an example of how such stereotypes can be broken down. HUMLAB it is an internationally established platform for the digital humanities and new media that engages with all levels of competencies and ages.

#### Aims and objectives



HumLab at the University of Umea aims to provide a hive of activity, with people creating, working together, teaching one another, faculty and students and artists and others just using the space for their multimedia ideas. It is a central node on the Umea campus, right in the main student building. The point of entry is open: anyone in the town or the university can apply to use the computer lab, almost everyone is accepted, day or night people are here

creating things.

A mathematician was foundational in getting the HumLab started but now anyone might be there, writing code or making art. It is a vibrant meeting place for the humanities and information technology. A large and diverse studio environment serves as the most important manifestation of this basic idea that involves bringing people together, looking at information technology as tool, medium, study object, and activist venue, and doing things that have never been done before.

Centred on an exciting studio environment of about 500 m2, HUMlab offers interesting technology, prominent international visitors, often several simultaneously ongoing activities and a rich mixture of competences and interests.

#### **Development and Methods**

HUMIab is localized at the very centre of the University campus, and attracts people from the whole university and from the outside. Many international visitors come to HUMIab, and there are often a number of simultaneous activities going on in the space. Everyone is invited to participate. The lab is accessible 24h year round. It is an environment of innovation that works as a place of study, a research laboratory, a place for project development, as well as a lecture hall or exhibition space. Sofas, an aquarium, and bookshelves placed amongst cutting edge technology create a space in which everyone feels welcome. Ongoing research projects include themes such as how youth are using YouTube, religious expression on the Internet, interactive architecture, and how European and Swedish cultural heritage can be made accessible in new ways. The Lab regularly works with young people as well as faculty members – exploring such things as Indie Games and activities to develop confidence and competence in ICT. Its welcoming atmosphere and strong connections with Humanities has led to a more gender equal use than other high tech facilities.

Seminars organised over the last few years include

- · Conference on Information Technology and Language Learning
- · Symposium on Digital Culture
- · Workshop on Interactive Narratives
- · Workshop on Next Generation GIS
- · Series of virtual conferences on IT and language learning

<sup>&</sup>lt;sup>2</sup> Gartner (2007) Women and Men in IT : Breaking through stereotypes

- · Symposium on language learning and technology
- Workshop on data mining

Community use has included a series of activities for young people to develop confidence in ICT. One such programme was the Game Gurus project where 8 to 9 year olds were supported to think about storytelling and create games outside the usual boundaries of male dominated games. The HUMLAB has also been supporting the development of resources for teaching new media in an interdisciplinary way. Cross disciplinarity is central to its activities with mathematicians, artists, linguists, philosophers and new media specialists working together in real and virtual environments. The focus is on participation with all faculties in the University and with the local and wider community beyond the University.

#### Funding and Resources

HUMlab is a part of the humanities faculty at Umeå University and is supported by the by a range of funds including the Kempe Foundation, the KK Foundation Riksbankens Jubileumsfond, Bank of Sweden Tercentenary Foundation and the Knut and Alice Wallenberg Foundation. It is a prioritized platform at Umeå University, and through strong support from the university and from several external funding agencies, a massive expansion and strengthening of research in the humanities and information technology will take place over the next couple of years.

Contact

Contact person: Patrik Svensson, Director, HUMlab Telephone: Int + 46 + (0)90 - 786 7913 E-mail: patrik.svensson@humlab.umu.se Website: http://www.humlab.umu.se/english/

## 4. Computer Clubs for Girls (CC4G), UK

The IT and Telecommunications industry is central to the UK economy and a key source of competitiveness for all sectors. The UK's IT industry alone produces an annual GVA of £30.6 billion, 3% of the total UK economy. Although women account for 45% of the UK labour force, they make up just 18% of IT and Telecoms professionals and only one in five of those undertaking IT-related degree courses are women. The image of the industry is inhospitable towards female attributes and ways of working3. E-skills UK has developed a number of initiatives to address this IT gender imbalance. The main one is Computer Club for Girls (CC4G). CC4G was developed in 2005 exclusively for girls in response to the gender imbalance within the IT industry. It was developed as a fun and educational package for 10 -14 year old girls in schools across England.

#### Aims and objectives

The aims of the CC4G project are to:

- Help redress the forecast skills shortage of IT professionals in the South East.
- Increase the number of women who enter jobs and careers in the ICT sector
- Engage the IT industry so that the future needs of industry are properly met through the joint efforts of government, industry and education providers.
- Change the perception of IT as a career for women within the target group of girls participating in the Computer Clubs.
- Counter the perception that IT is a male profession.

It pursues these aims by finding and developing teaching materials that make students as excited about technology in the classroom as they are outside school; to provide ideas for delivery of IT programmes that are fun, relevant and real and which address student perceptions of IT as 'boring'.

The programmes have been designed for the 10 to 14 year old age range and include interactive resources that bring out the excitement and creative potential. Their realism and relevance is seen to derive from the fact they are all created in conjunction with employers. The project showcases the exciting possibilities of technology within an innovative learning environment and provides materials mapped to the UK National Curriculum at Key Stages 2 and 3 for all students – boys and girls. It is an award-winning initiative that captures students' imagination at an age when young people typically become disinterested in IT. CC4G is designed for students aged 10-14 and the gender neutral materials are suitable for both girls and boys.

#### **Development and Methods**

The programme is delivered by e-skills UK. This is a not-for-profit, employer-led organisation, licensed by the UK government as the Sector Skills Council for business and information technology. e-skills UK's mission is to ensure the UK has the skills it needs to compete in the global economy. It brings together employers, educators and Government to address together technology-related skills issues. It provides advice, services and programmes that have a measurable impact on IT related skills development in the UK.

The actual CC4G programme is web based and includes: -

<sup>&</sup>lt;sup>3</sup> E-skills UK (2010) Women in the IT and Telecoms Workforce

- Popular content and materials (from sport, music, fashion and the environment) presented in learning journeys that allow bite-sized nuggets to be used with clearly defined and diverse learning outcomes.
- Flexibility to use e-Skills recommended journeys, create personalised learning journeys or upload new content
- Fully searchable based on the curriculum, software skill or interest

The website is in a magazine format and includes news items, a current campaign. feature articles, interviews, 'how to' guides, competitions, guizzes, a message board as well as courseware. There are 10 modules providing interactive activities and extended challenges for individuals and groups in desk top publishing, sound editing, dance animation, fashion and fashion design, organising an event and communication, producing a publicity campaign, crime investigation, interior/garden design, games and video creation: sports coaching. promotion. and fitness. The website is frequently updated and also provides up-to-the-minute guizzes, feedback forums, news bites, topical comments, hints and tips to looking or feeling good, a day in the life of a female role model, seasonal games and competitions.

It is delivered by partners in schools and with those from local authority departments such as Curriculum ICT, Extended Schools or Study Support as well as other educationally based organisation such as a City Learning Centre, Playing for Success Centre or a local library. Over 3,600 schools across England have been involved in delivering the material.

Employer involvement has been critical to the success of CC4G, as it enables students to understand the relevance of what they are learning and its connection to a career in technology. **Over 100 employers actively supported CC4G** throughout delivery of the DCSF contract.

#### Funding and Resources

CC4G was officially launched in England in June 2005 with a national programme supported by the Department of Children Schools and Families (DCSF). After a highly successful threeyear project, funded by DCSF, the initiative was re-launched in October 2008 with support in England from Becta. Following feedback from schools during the first phase of the 3 year project funded by the DCSF, CC4G evolved and is now gender neutral - meaning that schools are able to run clubs and classes with boys as well as girls.

Contact <u>cc4ghelpdesk@e-skills.com</u> website <u>http://www.cc4g.net/</u>

### 5. Recruiting women into Science and Technology Careers, California, USA

When females are only about 10% of all engineers, 20% of computer software engineers, 7% of installation and maintenance repair workers, and 2% of automotive service technicians then women and girls don't envision themselves as engineers or technicians. Finding ways to attract them to training in these sectors is essential.

A National Science Foundation initiative in the USA took up this challenge - to broaden the participation of girls and women in Science, Technology, Engineering, and Math (STEM) education with its CalwomenTech project.

#### Aims and Objectives

The CalWomenTech Project had three goals:

- Increase the number of women enrolled and retained in STEM education in the eight selected CalWomenTech community colleges.
- Institutionalize gender equity strategies in each participating college to make sure that the successful recruitment and retention strategies are used beyond the life of the project.
- Illustrate to the California and national community college system that STEM gender equity strategies increase recruitment and retention of women in STEM courses through both state and national dissemination of the project.

#### Development ad Methods

Eight California community colleges were selected in a competitive process to participate in the CalWomenTech Project. Colleges targeted particular programs where women were under-represented on which to focus their recruitment and retention efforts and to collect data on the college's progress, such as Geographic Information Systems (GIS) and welding technology. One of the colleges was Los Positas in California

All eight colleges in the project were required to carry out four core recruitment strategies during their first year of participation. In addition, the college could incorporate custom recruitment strategies into their annual strategic plans. Las Positas College in Livermore, CA successfully completed all four core recruitment strategies and developed an active press strategy. The required recruitment strategies revolved around four key pieces of outreach collateral featuring female role models:

- Posters
- Flyers
- Brochures
- A website

The college also developed an extensive distribution plan in their second year with the help of a member of the business and marketing faculty and posted collateral in both community locations such as local Laundromats and on-campus locations such as the counseling offices.

#### Impact

Las Positas College's recruitment efforts paid off after 2 years of participation in the CalWomenTech Project. The introductory automotive and welding classes at Las Positas College went from a baseline of 5.4% women to 14.3% in spring 2010 -- an increase of 8.6%. In introductory and advanced courses overall, Las Positas College saw an increase from a baseline of 5.2% to 6.4% (a small increase) with an earlier jump in summer 2009 when the percentage of female students went to 13.3% -- an increase of 8.1%.

A major accomplishment of the CalWomenTech Project has been the improved retention of both women and men. This improvement, evident among both female and male students, is attributed to classroom strategies employed by instructors. They included:

- Teaching to female learning styles, providing building block skills, ensuring all students (including women) spend equal time using the equipment in the labs and integrating female students into the classroom.
- Revising the program's curriculum to be more female-friendly. Some changes included using more contextual examples that appeal to women, more collaborative projects and providing additional open lab time.

Las Positas College also saw a significant increase in the completion rates of both female and male welding and automotive technology students after implementing the classroom strategies from the WomenTech Training and developing a retention plan. Over two years, retention rates went from a baseline for female students of 74.2% to an average completion rate of 97.6% (an increase of 23.4%), while the male completion rate went from a baseline of 88.2% to an aggregate of 95.8% (an increase of 7.6%). At baseline the female completion rate was 14% lower than the male completion rate -- two years into the Project they are comparable.

See more details at: http://www.iwitts.org/projects/calwomentech-project/casestudies/index.php?option=com\_content&view=article&id=121#ixzz1Fq2IHRX3

### 6. Challenging Stereotypes, Czech Republic

"Women into IT" was a programme in the Czech Republic organized in 2007 to challenge stereotypes around women and ICTs and attract more women into the IT field. The project was sponsored by IBM and aimed at secondary school-leavers, women reinserting themselves into the labour market after maternity leave (which can last up to four years), and those attracted to IT but lacking the confidence to pursue a job in the sector. It was organised by the Association for Preogressive Communications (APC Europe) and sponsored by IBM to challenge stereotypes around women and ICTs and attract more women into the IT field.

During the year gender and IT awareness sessions, training sessions and public roundtable discussions were held in the cities of Prague and Brno. Twenty women in high-level positions at IBM exemplified the diversity of professions in the IT field and were keen to support the project, serving as role models during sessions, talking about their work, and challenging myths around women and IT. The project was very well received by educators, media, other IT companies and women's organisations, who all participated in the public roundtable discussions, and especially by women and girls who took part in the workshops.

#### IMPACT

The major point emphasised by participants in their evaluations was that the project provided not only technical training and know-how, but also a space to share and reflect on women's personal and work-related goals and issues, their relationship to ICTs, and their motivation to work in technology.

Further details at: <u>http://www.apc.org/en/news/gender/europe/breaking-stereotypes-about-women-girls-and-technol</u>

# Section Two: Initiatives that help women use innovative ways to expand their businesses or improve services.

### 7. LEIA Accelerator, Umea, Sweden (WEED partner example)

Female owned enterprises are a vital part of the European economy and play a vital significant role in job and wealth creation. Yet many female-owned enterprises experience less than optimal growth. Efforts to facilitate the growth of female owned businesses are essential for economic well being. Business accelerators and incubators are programmes designed to assist start up businesses with financial and/or operational resources that increase their chance of growth and success. They emerged in America but have become an increasingly common feature of the European landscape in the last few years. They generally assist those who come to them with business ideas to address the personal, professional, social and monetary issues that face them as they try to grow their businesses. They provide help through coaching, networks, business skill development and advice and assistance with seed and growth capital. The LEIA Accelerator in Umea shows how this can be done in a way that is particularly appropriate for women, particularly those involved in SMEs.

#### Aims and objectives



The LEIA Accelerator's purpose is to accelerate gender equal business, based on cooperation and innovation. There are now 20 companies with more than 50% ownership by women in the Business hotel where LEIA is located and the aim is to work as a natural meeting point for growing companies with gender equal management. It is based on the belief that there are not enough role models for women who want to create their own enterprises

and even fewer for those who want their businesses to grow. It is not an Incubator but an Accelerator owned by Magma Vaterbotten, a non-profit organisation and run by three staff. Incubators differ from research and technology parks in their dedication to start-up and early-stage companies. Research and technology parks, on the other hand, tend to be large-scale projects that house everything from corporate, government or university labs to very small companies. Accelerators are less place specific and focus on growth and development rather than the new company focus of Incubators. LEIA Accelerator addresses the real challenge for women of making small enterprises grow.

#### **Development and Methods**

Leia Accelerator is a physical meeting place located in a business development set of offices designed for innovative companies with a flexible concept that stimulates and develops human business, and helps men and women own and operate businesses to the same level. It provides rooms and space at market rates, mentoring and coaching and networking possibilities. A Leia company must be owned at least to 50% by a woman and have been in operation in 3 years or more. It offers 'real world' skills training, assists clients to build a network of resources and provides access to seminars, workshops. Experienced business advisors provide clients with tools and confidence through a supportive, individual and practical approach. Advice for business challenges and growth strategies, as well as marketing and financial issues are offered and of particular significance is the stress on cooperation in enterprise. In doing so it uses one of the strengths of women's approach to business.

#### Source of funding

Funding for the core staff has come from the Muncipality of Umea (25%), the Regional Development Office (25%) and EU (50%). The Municipality has invested as part of its strong and strategic approach to promoting gender equality.

#### Impact and Results

Since its inception 5 companies (owned 50% by women) have accelerated, i.e. begun to employ more staff, cooperate with others to expand and bring in enough to be a sole income. At least three companies owned by a foreign-born woman have expanded and the number of companies (owned 50% by women) in the Västerbotten region has increased by at least 10. The Leia Accelerator has also created and developed a network of at least 150 active female entrepreneurs in northern Sweden. Its success is a result of working with soft values, being run by women entrepreneurs with a vision of cooperation and growth. It has put Umeå and Västerbotten on to the map as an area for gender equal business and has supported new ideas of how to run a business and business clusters.

#### For further information, contact:

Ingrid Bernston, Verksamthetschef LEIA Tel: 0705522038 Email: <u>ingrid.lindelow.bernston@leia-accelerator.se</u> Website: http://www.leia-accelerator.se/

## 8. Acelerador Programme, Alzira, Spain (WEED partner example)

In Alzira the Accelerator principle has also been expanded, albeit with less specific focus on making it gender equal. There is more difficulty to get a strong gender equality programme built into economic development strategy in Alzira than in Umea. The Acelerador programme is a new program of advanced services for entrepreneurs with a high growth potential, particularly in the ICT field. The focus is on SMEs with less than five years growth but not in the start up phase. It is a tool for entrepreneurs and small business that have an innovative idea in Valencia Region and provides help in the process of elaborating a business plan, strategy design, searching and funding opportunities.

The Acelerador Programme was launched in 2010. It is a regional imitative led by the BIC of Valencia and the IMPIVA which is funded by ERDF funds. It aims to support the growth of innovative business projects of entrepreneurs and newly established SMEs through the provision of advanced services for companies with high growth potential.

It is the first programme of comprehensive and individualised support for the growth of young innovative companies in emerging sectors that are located in niches of opportunity and aims to accompany them in their process of access to national and international markets.

The programme includes the provision of high value added services that are designed to support innovative companies with how to implement growth strategies, search for public and private funding, recover investment in R&D, develop business plans and improve the skills in the company.

The Acelerador helps innovative start-ups to improve their position and grow. It has been developed by CEEI Valencia. CEEI Valencia was founded in 1991 under the initiative of the Valencian Government in order to promote business creation and innovation in the province. CEEI Valencia also supports companies after their creation, giving them advice for their consolidation and growth. It is a member of EBN (European Business and Innovation Centre Network. Together with the CEEI Alcoy, Castellón and Elche Centres, they are part of a CEEI Network fostered by IMPIVA (Valencian SME Institute) whose mission consists in creating the conditions leading to the development of new companies and diversifying and consolidating the regional economy.

#### For further information, contact:

Website: http://www.ceei-alcoy.com/index.php?cm=186

### 9. Developing Science into Commercial Enterprise, Yorkshire, UK

Ensuring women have a role to play in commercialising the knowledge economy is challenging when they either leave the field or remain solely in University research. A recent example of specialist business support of women in science and technology comes from the Bioscience Yorkshire Enterprise Fellowship Pilot project. A one-year enterprise programme for post-doctoral researchers, the scheme led to the creation of several new bioscience enterprises. Whilst not specifically focused on women Enterprising Women provided mentors and some of the training. The methods used proved particularly attractive to them as nearly one third of the Fellows recruited were women, and women led more than half of the resulting businesses. This unique success demonstrates that, given the right support, women-owned high-growth science and technology businesses can thrive.

#### Aims and Objectives

The Fellowships were designed to help university and clinical scientists create a business based on their research. It ran between 2007 and 2010 and provided practical support to commercialise ideas and research findings from the region's universities and NHS Trusts. A total of 65 Fellowships were awarded across the eligible disciplines of biosciences, chemicals and healthcare technologies offering a fully managed proof of concept support scheme.

#### Development and Methods

Each Fellowship comprised: -

- Tailored science and business development training delivered by experienced professionals
- A personal mentor from relevant industry sector
- £10,000 direct support to develop the science and aid the commercialisation process
- Customised market research
- A dedicated online project management facility
- Assistance to source finance to progress idea to commercialisation
- A highly experienced programme management team

Projects fell into 3 categories: Bioscience, healthcare technologies and chemicals. Examples of projects include a new method advance drug delivery for the benefit of women's health, the development of new obstetric forceps and the development of the Shieldhall Foetal Shield.

#### Impact

Simon Hill, Executive Director of Business at Yorkshire Forward said of the scheme,

"YEF is one of the flagship programmes for bioscience and healthcare technologies sectors development. We have invested a little under £3m so far, but the return has been significant, with 30 fellowships created at the pilot stage and 65 in the current programme. All expectations in terms of volume and quality of outputs have been exceeded by a substantial margin and the amount of private sector funding attracted has been more than double the original target. Focusing resources in this proof of concept activity helps universities concentrate on increasing the throughput of their technology transfer, incentivising them to use the fastest, least resource-intensive route to market."

#### For further information, contact:

YEF Team, YTKO Consulting Ltd, Round Foundry Media Centre, Foundry Street, Leeds LS115QP Email: info@yef.org.uk

# 10. Growing a woman led business in a changing economy, Celje, Slovenia (WEED partner example)

In time of transition in Slovenia most of the legislation changed, especially after year 2004 when Slovenia harmonised legislation with EU. Services, such as accountancy, were needed and used before 1990 only by small entrepreneurs. Before 1990 companies have been owned by the society. Companies have been large with several thousands people employed and they had own accountancy departments. There weren't small or medium sized companies. Only a few tradesmen with state permission for working had been on market. A classical accounting function simply wasn't necessary or developed. Since then small private companies and entrepreneurs have been formed – all needing the services of bookkeeping and accountancy. After 2005 with the acceptance of new European directives and tax legislations, bookkeeping and advice became necessary. One of the new private companies to develop to provide these services was Finera Ltd, founded in 1991 and transformed in 2007 to provide fiscal and legal counselling, one of the few tax and fiscally consulting houses.

#### **Development and Methods**



Finera Ltd is a small family business, started in 1991 and offering financial and accounting services. In the recent years it has also widened its activities onto the fields of tax consulting and legal practise. It is located in a Technology and Business park and benefits from that location. The company is female led and owned. It employs 7 employees. Since 2005 they have turned into a family business, as the two daughters, both university graduates, joined the company.

In order to grow as a company Finera joined an accountancy and law network/ cluster - the franchise group Simič & Partnerji Ljubljana. The network already links 20 accounting firms from all over Slovenia. Clusters are geographic concentrations of interconnected companies, specialized suppliers, service providers, and associated institutions in a particular field that are present in a nation or region. They arise because they increase the productivity with which companies can compete. The development and upgrading of clusters is an important agenda for governments, companies, and other institutions. Cluster development initiatives are an important new direction in economic policy, building on earlier efforts in macroeconomic stabilization, privatization, market opening, and reducing the costs of doing business. In the case of Finera joining Simič & Partnerji has meant increased access to business and expertise. The strategic partnership and networking has also enhanced the value of permanent training in the company and services for customers. The firm has managed to sustain and grow even at a time of economic crisis, when many companies are closing.

After year 2000 there was a large competition among accounting companies. Former large companies were going bankrupt within time of transition. Challenges that Finera faced were that many accounting companies were on the market and competition was high. Providing accounting services wasn't enough anymore for creating added value. At that time the general goals of the company were: servicing of needs of customers; sustaining solid growth of company; and providing new occupation for daughters in company i.e. growing as a family business. Specific goals were the introduction of new services and enlargement of company in other regions. As a member of the Simič&Partnerji network Finera's capacity to provide these additional services has increased, as has the possibility of influencing the adoption and alteration of legislation. Company Simič&Partnerji is one of the most influential companies in the field of tax consulting in Slovenia. Without membership in the network, Finera Ltd would be only

local accounting company. It was a risky decision to join the network as, although the Ministry of the Economy has between 2000 and 2003 encouraged unofficial networking between private companies, universities and consulters, many networks occurred only because of the possibility of non-refundable funds and many of these networks no long exist.

The firm contributes to the local economy in its major functions but also from the point of view of development of local economic society it is very important to cooperate with local environment. Company cooperates with Visoka poslovna šola (High business school) in Celje and is also transmitting their knowledge and experiences to younger generations. Students of high business school carry out practice every year and they are gaining practical knowledge and experiences in Finera Ltd.

**Contact details:** Zdenka Draznik, Director Finera zdenka.draznik@finera.si

## 11. Supporting SMEs use of new technology, UK

Making the most of IT could boost the European economy by £350 billion over the next five to seven years – and the most important step towards achieving this is the increased take up of technology by small firms. Technology can transform a small business. It has the power to improve efficiency, open up new markets and enhance customer service. But for many smaller firms, particularly in the sectors where women dominate, it can be difficult to know where to start. Research has found that many small businesses don't know where to go for trusted information and worry about skills implications, cost and what the business will do if the technology doesn't work properly. In addition, they are unsure about how to plan for growth and changing needs.

#### Aims and Objectives

Half of Europe's productivity gains in recent years can be attributed to investments in IT. Making the most of technology reaps measurable benefits. For example, the 2008 ICT Regional Benchmarking Survey for Yorkshire and Humberside in the UK found that of companies that had received support for IT implementation, 77% increased their turnover and 73% their productivity. By providing a guide to IT e-skills UK this sector skills organisation hopes to provide SMEs with some of the essential first steps to using and exploiting IT for business development and growth.

#### **Development and Methods**

The e-skills Business IT Guide is an online tool that is available free of charge. Developed by e-skills UK with over 200 small businesses, it is aimed mainly at companies with fewer than ten employees, or those that do not have their own IT staff. e-skills UK is the Sector Skills Council for Business and Information Technology. The organisation works on behalf of employers 'to ensure the UK has the technology skills it needs to succeed in a global digital economy'. Their work covers software, internet & web, IT services, telecommunications and business change.

The Business IT Guide helps companies to explore what technology is right for their business; where to go for trusted information; how to **UECBusiness IT Guide** introduce and manage technology and deal with the cost and training implications; and how to plan for growth and **IT** explained changing needs. Presented in clear and accessible language, the online service includes hundreds of high quality, independent guides, tips and facts. It covers topics ranging from developing a website, investing in hardware (a)and software and installing appropriate security measures, to using technology to enhance sales and customer expert quides on getting started with IT. securing your data, getting online, and marketing and selling online. relationships and manage communications.

#### Impact

More than 85% of small companies that have used the guide would recommend it to others.

#### **Resources and Funding**

It has been partly funded by EC FP7 & CIP funding - Research for SMEs. This line of funding supports innovative SMEs to solve common or complementary technological problems.

For more information see: http://www.businessitguide.com/page/about-guide/

### 12. Supporting IT entrepreneurs, Paris, France

New technologies need new ways of working and new means of support. Silicon Sentier (Silicon Pathway) – an organisation dedicated to supporting French innovation –launched the first business accelerator for IT start-ups in France called Le Camping on 7 January, 2011 at the former Paris Stock Exchange building.

#### Aims and Objectives

To provide 12 IT-based start-ups with intensive support over six months in three phases. The initial three-month acceleration phase takes the idea and turns it into a demonstrator; the second phase involves meeting with financiers on 'Investment Day'; and the third growth phase takes the prototype demonstrator and turns it into a business.

Supported by the ESF, the accelerator uses online mentoring – four per start-up – to help and guide the budding entrepreneurs, as well as networking and workshops to encourage creative solutions. Based on the concept of 'bootstrapping', the three main elements of the first phase are: business, design and technology. Each of the mentors is an expert in at least one of these fields, and they will get involved each and every day to help the start-up teams move onto the next stage. Legal support and English language tutoring are available at any necessary point.

#### **Development and Methods**

The Camping programme provides support for 24 start-ups each year. It is open every six months to 12 new projects. These start-ups are selected according to various criteria, including: the composition of the team, the business idea web and the ambition of international deployment. Each selected company is part of the Camping programme for a period of 6 months that includes a unique combination of mentorship and emulation by the group. The first three months focuses on taking an idea to a demo, the second on growing the company. Halfway through the program, each of the 12 projects will pitch their idea to 100 Seed investors at an Investor Day. At the end of this Acceleration Phase participants move on to the Growth phase – gathering users, clients, competitors, and partners, and establishing a business strategy.



#### Accelerator Phase

Growth Phase



Among the first start-ups are Kawet that is developing customised I-Phone applications, and Qeiru, which is building an application to compare supermarket products and prices online. The Silicon Sentier promoter is an association of over 100 technology-based businesses in the Paris region that supports innovation and the growth and employment opportunities it brings.

To facilitate the transmission of skills and know-how, more than 60 mentors accompany the programme mainly from the web, which have one thing in common: an entrepreneurial spirit. The mentors were chosen for their expertise, their willingness to open their networks professionals to become start-ups and their willingness to forward the culture of innovation to a wide audience. 20% of mentors are women and 50% of the staff supporting CAMPING is female.

To ensure wide dissemination of good practices, the 80 course sessions presented by experts will be open to companies outside the campsite, reflecting a desire of Camping for networking practices that lie at the heart of the new economy.

#### Funding

The project is a European initiative set up by Silicon Sentier and supported by lle de France, European Union, Google, SNCF, and BNP Paribas

Silicon Sentier is a non-profit organization which has been working with startups for over eight years in Paris, France. One hundred and fifty great start-ups have already become members of Silicon Sentier since its inauguration. It has also created a coworking space, La Cantine, where people can come and work on their own projects and where more than 400 events for start-ups have taken place since 2008.

http://www.lecamping.org/story - who

For further information, contact: contact@lecamping.org website: http://www.lecamping.org/

## Section Three: Raising women's profile and increasing gender awareness in the business and knowledge economy sectors

### 13. European Centre for Women and Technology, National Points of Contact in 21 countries

"Women in ICT need actions at many levels and by all involved – in schools, universities and in the workplace, by educators, employers and employment legislators. This calls for the cooperation of Member States, academia, and industry" (Viviane Reading, EU Commissioner for Information Society at International Women's Day, 2007)

The European Centre for Women and Technology (ECWT) is a sustainable European multi-stakeholder partnership representing high-level expertise in women and technology development from business, government, academia and non-profit sectors and supporting regional innovation through leveraging resources, research, best practices and services.

#### Aims and Objectives

The mission of the European Centre for Women and Technology (ECWT) is to ensure based on a multi-stakeholder partnership (MSP) of representatives from the business sector, government, the academia and the non-profit sector - a major break-through and a measurable and significant European increase in the participation of women in education, entrepreneurship, employment and leadership in ICT and related sectors until the year 2015.

#### **Development and Methods**

The decision to establish the ECWT was taken on the 9th of May 2008 by the International Taskforce for Women and ICTs (ITF) - Europe and the founders on 18th of July 2008 approved the statutes. It is a European non-profit organization registered under Norwegian law and functions as the European Regional Point of Contact (R-POC), one of the Ten Regional Centres presently being established around the world, which together constitute Global Women and Technology (GWT).

The European Centre advocates the establishment of a National Point of Contact (N-POC) in each country functioning as a national platform of multi-stakeholders to ensure women's full participation in the knowledge based economy and to implement the Commission's Digital Agenda in the Member States. ECWT functions as the European Regional Point of Contact (R-POC), one of the Ten Regional Centres presently being established around the world, which together constitute Global Women and Technology (GWT).

ECWT adopts the core values set down in 2005 by the International Taskforce for Women and ICTs (ITF) in the Declaration of Agreement in support of Girls and Women in Information and Communication Technology and embraces the Millennium Goals and UN GAID principles for guiding the actions and behaviour of ECWT Members.

The activities of the European Centre for Women and Technology are based on a holistic approach and the customized Global Framework of the International Taskforce on Women and ICTs (ITF). It has involved setting up National Points of Contact across Europe and the work focuses on five areas:

Policy and Actions

- Research and Impact Metrics
- Resources and Service Development
- Dissemination and Communication
- Context and culture

The ECWT is particularly concerned about:

- the broad differences amongst the nations of Europe in the level of opportunity and quality of services available for girls and women in access, education, and workforce participation of ICT.
- the cultural and structural barriers that disproportionately affect women's access to ICT education;
- the lack of basic infrastructure and support for ICT access and education in several countries and in rural areas of all countries which confound the continuing challenge of girls' and women's unequal access to education

The ECWT is therefore instead of a single action plan developing multiple models that are both broad and flexible to allow for modifications and suit national and cultural requirements.

In 2010 activities included

- an exhibition and a networking session "eGEN Powergirls in ICT, engineering and innovation' at the Commission's flagship event ICT 2010 the 27-29 September in Brussels
- participating in the Commission's strategic meeting with signatories of the Code of Best Practices for Women and ICT the 29 September 2010
- a transatlantic networking session on 'Women's entrepreneurship and innovation in the technology sector' at the annual Global Forum 2010 event organized by ITEMS the 8-9 November in Washington D.C.
- participating in a European level women and technology event planned during the Hungarian EU Presidency spring 2011
- co-ordinating preparations for a Parliamentary Hearing on Women in ICT in the Digital Age in 2011.

Contact details: The Secretariat of the European Centre for Women and Technology (ECWT) is at the regional innovation centre Papirbredden Innovasjon in Drammen, Norway.

Eva Fabry, Director of the ECWT, Papirbredden Innovasjon AS, Norway. Email: eva.fabry@womenandtechnology.eu

Web

http://www.womenandtechnology.eu/digitalcity/w\_homepage.jsp?dom=AAABECDQ&pr t=AAABDUAV&men=AAABEAGE&fmn=AAABEAGD

site:

# 14. Naixem Iguals, Cresquem iguals, Alzira, Spain (WEED partner example)



Less specifically focused on high technology are those measures that attempt to change the general cultural environment in which men and women grow up to adopt gender specific roles. In Alzira we see a project that is not specifically focused on technology, nevertheless it aims to challenge attitudes towards careers and roles by questioning roles within the home. The project Naixam iguals, Cresquem iguals (We born equal, we grow equal) isorganised for 3 months around the International Women's Day.

#### Aims and objectives

To raise awareness of the need to share family responsibilities.

#### **Development and Methods**

The Department of Culture and Women in the Municipality generated the campaign. It was started for International Women's Day in 2008 and each year has enjoyed the cooperation of the Business Association of Alzira: 18 retailers initially joined the campaign and more have joined each subsequent year.

18 campaign posters, each with a different sentence was created and displayed to create a route through the city. The campaign tries to make the general population realize the need to share family responsibilities.

Councillor for Women, Consuelo Berenguer stressed "This campaign is focused primarily on the domestic sphere where there are still inequalities, sexist attitudes that men still enjoy privileges in front of women. With this campaign we aim to create awareness among the general population of the need to share family responsibilities."

Alzira City Council is the starting point of the campaign which aims to discover the role each person plays against equality in a fun, entertaining and different way. From a central point pedestrians can follow a route through each of the 18 stores participating in the campaign to reach the House of Culture. At all points there are different phrases aimed at men and women. The intention is that each person finds the situation that identifies with their family responsibility. By identifying it is hoped a greater involvement develops and a greater chance of changing attitudes is generated.

#### **Funding and Resources**

Muncipality of Alzira

#### Contact:

Carmen Herrero Pardo, IDEA – Local Agency of Development europa@alzira.es

# 15. Changing Professional practice, Santiago di Compostela (WEED partner example )

The Official Psychology School of Galicia is a professional association of psychologists. It defends the interests of the profession, oversees the qualification and training of professionals and advises on the scientific and technical development of the profession. Over the last few years it has become concerned at the lack of women in senior positions and the gendered nature of psychologists practice. The Dean of the School was traditionally male, the Governing body was predominantly male and even the name of the School was masculinised. The message to women in the profession and in research and practice tied to the School was one that did not encourage women to think of themselves as senior members In order to address the position and help women in the profession a number of changes were made.

#### Aims and objectives

To develop good practice in the official Psychology School of Galicia.

#### **Development and Methods**

The School is intersectoral, comprising an overall Coordinator, representatives from each of the following sectors: social intervention, educational psychology, juridical psychology, clinical psychology, work and organisational psychology, psychological assistance for female victims and male perpetrators of gender violence. It has an international reputation for advancing the science and practice of psychology. The School provides high-level expertise in professional psychology practice. It is the Learned Society and Professional Body for the discipline of Psychology and aims to promote and advance the discipline, determine the highest standards in the profession, make psychology responsive to all. It is engaged in research, training, professional accreditation and professional development as well as supporting networking and regional innovation through leveraging resources, research, best practices and services.

A review of professional practice led to more research and training from a gender perspective. This was carried out in relation to clinical practice, to the relationship between gender and care, to co-educational and equal opportunities possibilities in schools and family and to an examination of policy and practice in relation to gender and work. Since 2009 measures have included changing the name of the School to School of Psychology rather than School of Psychologists as in Spanish psychologists word is masculine. The Board was made more gender balanced. Training programmes were revised to include a gender perspective, additional training programmes on gender violence, gender and care, gender and work were introduced.

The School works closely with government departments and other decision makers to ensure good practice and evidence based policy development. As a result of the gender review the School has signed the Institutional Declaration for the Elimination of Violence against Women along with the Professional College of Journalists and the Council of Advocacy on the International Day for Women.

Other activities with stakeholders include

• Conference:

"Las mujeres piensan el s. XXI" ("Women think in the 21st Century")

• Opinion articles:

"Pensando el Día Internacional de las Mujeres", (Thinking the International Women's Day)

"La psicología y las mujeres" (Psychology and women)

"Al hilo de la Violencia de Género" (In the brink of Gender Violence)

#### Impact

The expected impact of the changes include a more gender equal profession, a more gender sensitive service and a knowledge base that can be used to improve policy and practice. Recognition of the changes and their value has also resulted in the School being regularly consulted by municipal and regional government on how to make services and professions more gender sensitive.

Funding and Resources includes Professional Fees and research grants.

**Contact:** M<sup>a</sup> Rosa Álvarez Prada Santiago de Compostela copgalicia@cop.es **website:** <u>www.copgalicia.es</u>

### 16. Role Model Platform: Raising awareness of women in Science and Technology, Newcastle, UK

Women are underrepresented in certain scientific sectors and activities, and face professional and personal barriers such as stereotyping, institutional sexism and a lack of access to local female scientific role models and mentors. The North East of England Role Model Platform for Innovative Women was an initiative in which successful female scientists acted as role models and mentors to encourage greater participation of women and young girls in science and innovation.

#### Aims and objectives

- To raise awareness of female scientific and innovative activities and highlight other women participating in scientific fields.
- To highlight the success stories of role models by having them on hand for advice, guidance and mentoring.

#### **Development and Methods**

The Director of the Small Enterprise Research Unit at the University of Newcastle Business School led the initiative. It arose from her earlier work funded by the Economic and Social Research Council (ESRC) Science in Society Programme. The initiative was developed when plans for a £300m science complex were coming together for the Newcastle Science City Initiative, which aims to create some 20,000 jobs before 2020. The city had been designated as one of six Science cities in a government backed programme aimed at boosting the country's competitiveness in scientific fields. The Role Model Programme was supported by a high profile advisory board with more than 20 national and regional members from public and private sectors.

The Role Model Platform was formally launched in December 2007. It involved workshops, surgeries, mentoring, networking and partnership events, with experts and business advisors based at the local Business and Innovation Centre.

Topics included confidence building, or finding solutions to personal and practical barriers to innovation; help with accessing finance for innovation; assistance with patent and design; and hands on support with creating and running a successful science, technology and innovative business.

Events included presentations from role models, and analysis of their experiences, as well as major sessions on major EU and UK awards and initiatives such as the UK Resource Centre for Women in Science, Engineering and Technology. Activities were undertaken in close consultation with advisory board members, who helped with the design and delivery of activities and dissemination to a wider range of people.

#### Impact

More than 95% of participants rated events as 'useful' or 'very useful' and more than 93% said that use of role models and mentors was 'excellent' or 'very useful'. Without the initiative Newcastle Science City would not have had the 'positive action' on women that the Science City appeared to offer.

Professor Pooran Wynarczyk, Director of the project said

"The Role Model Platform is unique in that it is about 'success'. It has raised the profile of women in the region and has encouraged greater participation by them in science, technology and innovation. The project has clearly demonstrated that women in the region are as capable as men at innovation and their contribution is not trivial."

#### Funding and Resources includes ESRC

**Contact:** Professor Pooran Wynarczyk, Director SERU, Business School, University of Newcastle Email: <u>pooran.wynarczyk@ncl.ac.uk</u>

# 17. Raising the Profile of Professional Women, EVAP, Alzira, Spain (WEED partner example)

The Asociacion de Empresarias y Profesionales de Valencia (EVAP) is made up of entrepreneurs and professionals from different sectors of the Valencian economy. The association is established as a female lobby group, pressurising to make women in the business world visible, to increase their participation in decision-making areas, defend their rights and show to society the existing inequalities based on gender.

#### Aims and objectives

- To increase the representation of women entrepreneurs and professionals in the different committees public, private, regional, national and international affecting both conditions women and business or professional.
- To provide a forum meeting between women and practitioners to exchange experiences at professional and personal level.
- To provide support and information to business and professional women in Valencia

#### **Development and Methods**



EVAP has a number of working committees. These include International, Training, Mentoring, Networking, Social Responsibility, Communication and Youth Committees. Participation of members is high, with more than 30% of members actively involved in the committees. There are more than 200 members. It is part of the International Federation of Business and Professional Women (BPW) which aims to develop the professional, leadership and business potential of women on all levels through advocacy, mentoring, networking, skill building and economic empowerment programs and projects around the world.

In addition to mentoring, networking activities the Association has recently launched a new project to promote entrepreneurship amongst women who are at risk of social exclusion. The programme involves a training and business start up phase. It focuses on Cleaning Express Services. Each member of the Association contributes to the programme and some are involved as Business Angels, providing seed funding for new businesses.

The association also organises regular networking events and conferences. In October 2010 this included organising with BPW an International Congress: 'Women in the World, leading the Millennium'. Themes of the conference were finding alternative approaches to economic policy; Living on the Planet; Creating Happiness and Science, ICT and the Media. In February 2011 members participated in the Equal Pay Day campaign organised by the Spanish government.

**Contact details:** EVAP, C/Convento Santa Clara. 12-10, 46002 Valencia Email: <u>info@evap.es</u>

# Section Four: Keeping women in the knowledge economy and innovation pipeline

# 18. Supporting women in SET Careers: the ATHENA SWAN Charter, UK

Recognising excellence in Science, Engineering and Technology employment in higher education is one way in which institutions can be encouraged to enhance the promotion of women in careers in higher education and research. The ATHENA Swan Charter is a scheme to promote and recognise good employment practice for universities and research institutes recruiting and promoting women to senior positions in science, engineering, medicine and mathematics departments. It is based on the belief that

- The advancement of science, engineering and technology (SET) is fundamental to quality of life across the globe.
- It is vitally important that women are adequately represented in what has traditionally been, and is still, a male-dominated area.
- Science cannot reach its full potential unless it can benefit from the talents of the whole population, and until women and men can benefit equally from the opportunities it affords.

It gathers examples of good practice from UK Institutions of Higher Education through a scheme whereby they apply for Charter Recognition.

#### Aims and Objectives

To promote, recognise and disseminate good employment practice for the retention and promotion of women in SET departments in higher education institutions and reduce the loss of women from the sector.

#### Development and methods

The Charter Scheme was started in 2005 with 10 founder members. By 2011 there were 53 members. In 2010 30 Awards were made: 13 Bronze awards, 16 Silver and 1 Gold. They highlight the innovative work being carried out across Universities in the UK to encourage greater engagement and interest from women seeking employment and careers in SET departments.

Good practice highlighted during the process include:

- University mentoring and appraisal schemes to encourage career development for female postdoctoral staff (Department of Chemistry, University of York)
- Greater encouragement of technical staff to become more directly involved in frontline teaching and course development (Keele University)
- Development of Fellowship schemes to encourage and recruit female staff (Bristol University)
- Hosting family friendly events (University of York)
- Easing transition points for those returning to research and teaching following maternity leave (Leicester University)
- Reduction in administrative duties for those returning from maternity leave (King's College, London)
- Broadening career development mentoring for researchers to include both academic and industrial careers (Reading University)
- Monitoring of gender statistics of staff and students (Manchester University)
- Increasing involvement of female staff on key committees (University of Nottingham)
- Introduction of childcare vouchers (University of Southampton)

**Funding:** UK Resource Centre for Women in SET and Equality Challenge Unit. **Contact details:** <u>www.athenaswan.org.uk</u>

## 19. Reducing the risks of self employment: Portage Salarial, France (WEED partner example)

Gender diversity in the knowledge economy and enterprise contributes to greater innovation. It renders research more creative and will therefore ultimately result in a higher success of innovation. To ensure the production of knowledge and enterprise matching the interest of all European citizens, it is of crucial importance that the fear of risk that affects many women engaged in SMEs is reduced. The following two case studies from France provide examples of how the risks of new enterprises, particularly in the area of IT and technology, can be reduced. The Umbrella Company or Portage Salarial scheme and the Couveuse

#### Portage Salarial

The Portage Salarial is a new Umbrella company model, another way for a salaried person to go into entrepreneurship. It is specific to the French legal environment. It is an alternative to business creation that allows individuals to exercise freely as a self-employed person while enjoying the status of an employee. It reduces the risk of setting up as self-employed. Essentially it is an umbrella structure and offers an environment from which people with suitable activities can carry out their work without having to register as a business or become involved in the administrative tasks connected to being self-employed in France. It is suitable for people involved in intellectual services as such IT and design, translation, business consulting, editorial, tele-marketing, selling to commission and other similar occupations, whether working from home or on-site. People working on their own projects through a Portage have salarié (employee) status rather than self-employed status and therefore do not have the same obligations as those registered as an independent business.

Created in 1985 by two associations, umbrella companies played a peripheral role until 1995, but have developed significantly since then. Estimations on the number of people working for umbrella companies vary from 10,000 to 25,000. The companies who are members of the National Union of Umbrella Companies (Syndicat national des entreprises de portage salarial, SNEPS) experienced an average growth rate of 30% per year between 2001 and 2004.

Traditionally, the 'employees' of umbrella companies are usually 'older' executives aged 45. However growing numbers of newcomers are young and females employees.

While some professions have traditionally been carried out by self-employed workers (translating and interpreting, for example), the practice of outsourcing in a certain number of sectors is helping to increase the number of self-employed workers. This is the case in publishing, the press and the media (proofreaders and local press correspondents, for example). Self employment also seems to be increasing in professions using the new information and communication technologies (ICT). According to INSEE, 8.5% of those working in the IT sector in 2005 were self-employed, making for a total of 31,100 people (up 26% in relation to 2003). Numbers have risen sharply in the equipment maintenance and repair sectors.

Like a traditional position of employment, those working through the Portage pay social charges only on income as (and if) it is earned and this is seen as one of the main benefits of the system. Social charges are deducted at source by the Portage when income from projects or assignments is received.

The Portage system is suitable for a wide range of activities, but deals mostly with consulting roles such as graphic design, IT and marketing. In general, work such as hairdressing and medical roles or work carried out by artisans are some of the activities

that cannot be undertaken through the Portage structure and work such as gardening or baby-sitting may be more suited to the cheque emploi scheme.

People who choose to work through a Portage Salarial find their own projects and customers/clients as they would in a typical Freelance capacity and work as and when they choose, but have "employee" (or salarié) status while working under the umbrella of the Portage. On the ground the trader is free to explore, negotiate and perform his deliveries autonomously. his customer belongs to him. however, in legal terms he is an employee of the umbrella company that handles all the administrative and accounting of his missions, giving him advice and services to facilitate his daily life.

The process of working through a Portage involves workers finding their own clients and work opportunities and agreeing a rate for their services with these clients as they would in a self-employed role.

For more details see European Observatory of Industrial Relations <u>http://www.eurofound.europa.eu/eiro/2010/07/articles/fr1007061i.htm</u>

### 20. Reducing the risks of self employment: Couveuse, France (WEED partner example)

Business incubators in France are of two types. The first ones are called incubateurs. They gather managers who have recently created an innovative company, generally in the High tech or science field. These managers are generally scientists who have gained a PhD. They are provided with accommodation, training and follow up. The second type is called 'couveuse'. They are not specific to high tech companies but they provide entrepreneurs with all the services provided by 'incubateurs' except accommodation. They support only entrepreneurs who have not yet created a company. The 'couveuse' allows a possible entrepreneur to test their activity without leaving their current status and losing something like their unemployment allocations.

#### **Development and Methods**

The couveuses emerged in 1995, due to the need of support and follow up of entrepreneurs and due to the lack of entrepreneurial culture and financial support to create new enterprises. The couveuses give a juridical and legal framework to entrepreneurs which allows them to have their economic activity: the couveuses organize a real test of the activity, giving entrepreneurs the necessary conditions to analyse the pertinence and economic viability of their project, with the support of partners and finance, and giving them the opportunity of evaluating their capacities to develop their project and decide about the creation or not of the enterprise. A couveuse is a structure that allows the reduction of risk and protects the initial phase of an activity. It optimizes the success possibilities of an entrepreneurial project, giving the promoters the learning about the "entrepreneurs profession": the entrepreneurs gets used to the emission of invoices, manipulation of information, studying the market and the clients, and on the other side, gives them the possibility of testing the commercial viability of their project. The added value of the couveuses is to permit, before the creation of the enterprise, the test of a business in real context, giving the entrepreneur a legal and secure framework, a learning process and a network of beneficiaries. The couveuses are a support structure of enterprise creation, which allows the test and experimentation of a business idea, without the need of a formal creation of an enterprise: individual support, training, start up finance are all available.

The businesses supported by the couveuses can be of several areas, that is, services, handicraft, commerce, cultural and artistic. Nevertheless, some areas cannot be supported by couveuses, namely, areas with high risk, demands and obligations. For instance: enterprises that need industrial or environmental licence, enterprises that need to have hygiene and security, can not be supported because the couveuse will need to ask for all the licences and certifications for the development of the businesses. As an example, couveuses can support the following activities: services to individuals: hair dresser, musical animation, gardening, cleaning, massages and services and activities to enterprises: design, web design, decoration, translation, informatics, graphic work and independent professions.

The couveuses stakeholders are public and private entities that work for social and economic local development, of a certain region, namely entities that work in the support of enterprise creation. In France, the partners of the couveuse are usually:

Government Institutions Employment public institutions Local entities Development Associations and Agencies Local actors and insertion departments Enterprise associations Enterprise Support networks Enterprises and Foundations

#### Impact

The beneficiaries of the couveuses are, mainly, unemployed people, young people, disabled people, woman, people without entrepreneurial spirit; RSI people. Being an instrument that allows the social and professional insertion and training of disfavored people, it becomes indispensable for local development, promoting new wealth and the creation of new enterprises.

The results of the couveuses have been very positive. An evaluation in 2006 found:

- The couveuses supported 755 entrepreneurs in 2005, 1100 in 2005 and 1857 in 2006
- The positive exit of entrepreneurs during 2006 has been 80%: 58 resulted in the creation of an enterprise; 18% of the beneficiaries found a job; 4% go to training and 20% had another way out;
- The couveuses beneficiaries are long time unemployed people (54%) and unemployed people of short duration (34%); 12% are in other professional situation;
- In terms of age, 71% of the beneficiaries are between 26 and 45 years, 22% more than 46 years old and around 7% less than 26;
- The couveuse promotes equal opportunities: 58% of the beneficiaries are woman.
- The couveuses activities are in majority services: 67%; 12% are handicraft services and 6% are commerce; 15% of the activities are in the cultural and artistic field.
- The turnover of the entrepreneurs during the evaluation, was, in 2006 4,6 million Euros.

Funding: Generally ESF and stakeholder funding.

For more details see: http://www.uniondescouveuses.eu/

**Contact:** COUVEUSE d'entreprise de la Somme, 3, Avenue du Pays d'Auge, 80000 Amiens, Somme - France

# 21. Fostering new areas of growth, Life and Crafts programme, Alzira, Spain (WEED partner example)

Whilst the economic downturn has hit key sectors of the economy there are areas of the economy where which will grow in coming years and where innovative approaches are needed. Not least amongst these is the area of health and social care, particularly in the context of the ageing population. In Alzira, like the rest of Spain, the ageing population means that the social care sector will be a major employer. It is a sector, however, where skills have not been fully developed or utilised and social innovation and training has been underdeveloped. The TESTIMO Employment Programme – Life and Crafts project in Alzira is an example of how this issue can be addressed by providing up to date and more technological training for women in the sector and partnership working

#### Aims and Objectives

The objectives are to facilitate the inclusion of the women in the labour market through training in new sources of employment such as "Help at Home", completing the training with new technologies and methodology care.

#### **Development and methods**

10 students have been recruited and trained each year since 2007. Training is for one year: 405



theory time, 60% work experience in public companies.

The roles for the care assistants have been redesigned and training and career pathways developed across the range of care. Students receive a salary of €1000 per month.

The programme was developed by the IDEA in partnership with the Municipality. The training and employment partnership is made possible by agreements between the Department of Economic and Employment Development, Muciplaity of Alzira, hospitals, Day Care Centre, the Association of Alzheimers Alzira,

organized by IDEA.

There is recognition in the training that Person Centred Technology can improve the quality of life for clients and increase their chances of living independently. The service to the end user and assistive technologies for the promotion of health and safety in the home is addressed in the course. The new technologies implemented in this course include:

- Assistive technology with a focus on making it possible for the elderly and disabled to remain at home, safe and comfortable e.g. telecare technologies, SMART homes, sensors
- Activities based in Snoezelen method.
- Technologies to promote independence e.g. better use of mobile phones, tagging and prompts
- Technologies to improve quality of life. Snoezelen or controlled multisensory stimulation is used for people with mental disabilities, and involves exposing them to a soothing and stimulating environment, the "snoezelen room".

The project is part of a European network of learning exchange.

## Funding: €200.000 - financed 90% by the Valencian Regional Employment Service, Municiplaity of Alzira. SERVEF)

Contact details: Carmen Herrero Pardo, IDEA email: europa@alzira.es

# 22. Supporting women in SET Careers: the ATHENA SWAN Charter, UK

Recognising excellence in Science, Engineering and Technology employment in higher education is one way in which institutions can be encouraged to enhance the promotion of women in careers in higher education and research. The ATHENA Swan Charter is a scheme to promote and recognise good employment practice for universities and research institutes recruiting and promoting women to senior positions in science, engineering, medicine and mathematics departments. It is based on the belief that

- The advancement of science, engineering and technology (SET) is fundamental to quality of life across the globe.
- It is vitally important that women are adequately represented in what has traditionally been, and is still, a male-dominated area.
- Science cannot reach its full potential unless it can benefit from the talents of the whole population, and until women and men can benefit equally from the opportunities it affords.

It gathers examples of good practice from UK Institutions of Higher Education through a scheme whereby they apply for Charter Recognition.

#### Aims and Objectives

To promote, recognise and disseminate good employment practice for the retention and promotion of women in SET departments in higher education institutions and reduce the loss of women from the sector.

#### Development and methods

The Charter Scheme was started in 2005 with 10 founder members. By 2011 there were 53 members. In 2010 30 Awards were made: 13 Bronze awards, 16 Silver and 1 Gold. They highlight the innovative work being carried out across Universities in the UK to encourage greater engagement and interest from women seeking employment and careers in SET departments.

Good practice highlighted during the process include:

- University mentoring and appraisal schemes to encourage career development for female postdoctoral staff (Department of Chemistry, University of York)
- Greater encouragement of technical staff to become more directly involved in frontline teaching and course development (Keele University)
- Development of Fellowship schemes to encourage and recruit female staff (Bristol University)
- Hosting family friendly events (University of York)
- Easing transition points for those returning to research and teaching following maternity leave (Leicester University)
- Reduction in administrative duties for those returning from maternity leave (King's College, London)
- Broadening career development mentoring for researchers to include both academic and industrial careers (Reading University)
- Monitoring of gender statistics of staff and students (Manchester University)
- Increasing involvement of female staff on key committees (University of Nottingham)
- Introduction of childcare vouchers (University of Southampton)

**Funding:** UK Resource Centre for Women in SET and Equality Challenge Unit. **Contact details:** <u>www.athenaswan.org.uk</u>

## 23. Making innovations empower women, ICRW

Innovation can transform women's lives. Questions about women and innovation and science are not simply about whether women are present but also about whether science and innovation can improve women's lives. Are there alternative areas for research that would improve women's lives? Both innovation and gender equality underpin all of the Millennium Development Goals (MDGs) and the International Centre for Research on Women (ICWR) argue both require thinking and acting beyond existing, predefined parameters. Their report *Innovation and Women's Empowerment* highlights a number of ways in which innovations in social norms, economic resilience and technology have empowered women. The two selected here are the technology innovations they highlight: the oral contraceptive pill in the USA and Grameem village phones in Bangladesh. The report shows how innovations in technology have the potential to address a wide spectrum of areas where women are disadvantaged: knowledge and information, reproductive health, mobility and communications.

UNITED STATES: ORAL CONTRACEPTIVE PILL (1960s-1980s) The oral contraceptive pill was the first highly effective, easy-to-use, reliable birth control option entirely within a woman's control. As a reproductive technology that met a growing demand among American women to reduce family size, the Pill rapidly became a catalyst in radically transforming women's lives and gender relations. Within 10 to 15 years, more than 10 million women in the United States and several million more around the world used the Pill, which enabled them to make decisions over fundamental life interests such as reproduction and sexuality. Most importantly, the Pill was developed and diffused during a time of significant social, economic and political changes in the United States. It had a profound ripple effect in facilitating new ideas about women's roles in American society. By allowing women to plan their reproductive lives, it opened up opportunities in education, employment and politics; changed sexual relations; and led to shifting power relations in the family and workplace. Women and men championed the development of the Pill. Activist Margaret Sanger mobilized a female philanthropist to provide funding and a male researcher to develop the technology. A broad range of sectors from the pharmaceutical industry, the medical community, nonprofit groups such as Planned Parenthood, the Food and Drug Administration, the Social Security Administration, marketing experts, and of course, women themselves facilitated the successful adoption and diffusion of the Pill.

BANGLADESH: GRAMEEN VILLAGE PHONES (late 1990s-2000s) The Grameen Village Phone program used information and communications technologies to improve the livelihoods of poor women entrepreneurs financed by microcredit. Rural women clients of Grameen Bank were provided with financing and training to become operators of mobile phone booths, became key players in a profitable, strategic venture to increase telephone access in rural villages. Most women phone operators successfully increased their revenues and improved their household well-being. Many women also raised their profiles in their communities by becoming visible and influential economic agents and marketers of technology. The innovation capitalized on the rise of the telecommunications industry and the microfinance movement in South Asia. It built a successful social-private sector partnership that benefited women, despite the lack of a supportive social, economic and political context. The major actors in shaping the innovation were Bangladeshi male social entrepreneurs like Igbal Quadir, who founded Grameen Phone with Muhammad Yunus, founder of Grameen Bank, as well as women participants in the program. Their social and economic networks also facilitated diffusion, reaching over 200,000 women within 10 years.

**Source:** , J. Schulte, P. Patel and P. Petesch (2009) Innovation for Women's Empowerment. ICRW, http://www.icrw.org/

## Section Five: EU Seventh Framework Programme

FP7 is the short name for the Seventh Framework Programme for Research and Technological Development. This is the EU's main instrument for funding research in Europe and it will run from 2007 to 2013. The EC budget for the period is  $\in$ 50.5 billion and the Euratom budget is  $\in$ 2.7 billion. Overall, this represents a 41% increase from FP6 at 2004 prices and 63% at current prices. FP7 is also designed to respond to Europe's employment needs and competitiveness. FP7 supports research in selected priority areas - the aim being to make, or keep, the EU as a world leader in those sectors. Key to the interests of WEED partners are the projects funded to support SMEs use and development of technology and those funded to address gender issues in science and technology. See ec.europa.eu/research/fp7/pdf/fp7-factsheets\_en.pdf

# 24. Changing the structures of science: PRAGES, FP7 project

The European Union has been active in the field of women in science for over 10 years now. Much is now known, from collecting information, on the situation of women in European science, and on funding measures that encourage and retain women in science and technology careers. Many national governments have developed various measures to increase women's participation in science and technology (S&T). Since the mid-1990s, the European Commission has greatly developed its actions in this regard, including an ever-broader array of different initiatives and measures. In this changed environment, many universities, research institutions, professional networks and women's associations have designed and developed projects focusing on gender equality in S&T to develop more coherent strategy. There is, however, still a need to capitalise on their experience. PRActising Gender Equality in Science (PRAGES) was the main aim of PRAGES, the first project funded on gender in the Seventh Framework Programme between 2008 -2010. It aimed to go beyond this understanding and to answer what is now the main question now is to better understand what effects all these programmes and initiatives can actually produce, and how they can be effectively disseminated.

Aims and objectives

- Identifying successful programmes, and understanding how to make the most of their achievements
- To produce Guidelines and a Database of Good Practice based on the research, focusing on
  - Actions to promote work life balance in science
  - o Actions to support early stage career development
  - Actions to change culture and behaviours
  - o Actions to make science more gender aware
  - $\circ\,$  Actions to increase women's role in the leadership of science in a changing society

#### **Development and Methods**

The project was characterised by a set of general approaches. First, a comparative approach among the initiatives promoted in the different European countries and those implemented in Canada, Australia and the Unites States. Second, an analytical approach, highlighting the different sides of the "gender-and-science issue", in order to identify suitable strategies and tools to deal with them. Third, a benchmarking approach, to single out the most successful solutions and provide suggestions regarding their possible adaptation and transfer to different contexts.

#### Output

The "Guidelines for Gender Equality Programmes in Science" is the main output of the project. They are based on a complex work of collection and assessment of practices developed in Europe, North America and Australia, resulting in a database of gender equality programmes in science and technology that is available on the Web.

The Guidelines are organised into five parts.

- Part A, entitled "Women and science: Problems and issues at stake", firstly aims to provide a picture of women's position in S&T sectors, highlighting the main risks affecting their progression. Secondly, how the programmes tend to react and manage these risks is described, showing that three main strategiesare devised, addressing the fundamental issues underlying the many obstacles women usually face.
- Part B, entitled "A friendly environment for women", deals with the first strategy, using a wealth of examples to illustrate the efforts of the programmes in building an enabling environment for women's progression. Recommendations and lines of action that have been drawn by such experiences include three areas: promoting change in the culture and traditional behaviours of science- and technology-related work environments; supporting work-life balance for all; providing early-stage career-development.
- Part C, entitled "Gender-aware science" addresses the second strategy, aimed at inserting the gender dimension in the very process of research and innovation design. Through concrete examples, two areas of recommendations are identified: overcoming stereotypes of women and science and influencing scientific contents and methods.
- Part D, entitled "Women's leadership of science in a changing society", is concerned with the issue of scientific leadership in a broad sense, and highlights four areas of recommendations, again derived from the actions identified in the programmes: supporting women's leadership in the practice of research; supporting women's leadership in the management of research; supporting women's role in science communication; increasing women's presence and weight in managing innovation processes and the related science-society relationships.
- Part E, entitled "Programmes that work", collects the practical indications coming from the promoters of the programmes, organising them into "Tools for action", "Action patterns" and some overall "Methodological suggestions". In this part, it was decided to increase the empirical grounding of the guidelines by including opinions and tips coming from those who actually run the programmes.

The guidelines are firstly targeting scientific leaderships and management as well as women's networks and associations within public and private universities and research institutions, in order to provide them with ideas and suggestions to start or enhance gender-equality initiatives in their organisations. At a more general level, the guidelines are also targeting public, private and non-profit institutions involved in research policy; public, private and non-profit institutions involved in equal opportunity policies; civil society organisations; business associations and trade unions; national and European scientific societies and networks; the media.

**Funding:** European Community's Seventh Framework Programme FP7/2007 - 2013 under the grant agreement n° 217754 and from IGRUE - Inspectorate General for Financial Relations with the European Union, Ministry for Economy and Finance - Italy.

Further details: http://www.retepariopportunita.it/prages/

## 25. Making SMEs more innovative, ECOINNO2SME, FP7 project

SMEs are the backbone of the EUs economy. They represent over 90% of total enterprises and employ 2/3 of the labour force. Finding ways to make SMEs more innovative is essential if the Lisbon 2020 aim of is to be achieved. Is this a gender issue? Certainly it is if we recognise that over 90% of female-headed businesses have 5 employees or fewer. They are the backbone of the smaller enterprise and any attempt to focus support on innovation and competitiveness for innovative enterprise has the potential to affect them positively. Through the Framework Programme7 the EU is trying to strengthen the innovation performance of SMEs and the ECOINNO2SMEs is an example of a project that can help women and men use technology and research in one sector to improve and grow their businesses.

ECOINNO2SME comprises 7 partners from 7 European countries (DE, EE; ES; HU, IT, SE, UK) all with long experiences in supporting SMEs in dissemination and exploitation of research results. The overall aim of the project is to reinforce the dissemination and exploitation of project results of SMEs in the areas Eco-Innovation in such a way that they are supported to bridge the gap between research and exploitation, hence expand their businesses and, accordingly, raise their competitiveness in the world markets. As ECO-Innovation is of crucial importance for the economic development and of high actual public interest in Europe, ECOINNO2SME concentrated on this cluster.

The project identified key success factors and good practices for dissemination and exploitation of results. Through different kinds of activities like interdisciplinary platform meetings (regional, EU-level) as well as through specific road shows in partner countries, SMEs have been able to exchange good practices and to meet strategic exploitation partners. The project identified a lot of facts about the mechanisms of successful dissemination and exploitation of RTD results. Their analysis showed that only 28% of the SMEs they surveyed were able to successfully start their exploitation process quickly. It also provides examples of how SMEs requiring additional help with exploitation strategies can be supported. Two examples are given here.

1 An Estonian contract research SME focusing on the development of reproductive medicine requested specific support.

#### Exploitation Needs

Need of partners in the pharmaceutical industry for process development and search for new collaboration partners for joint development of projects

#### Support provided

ECOINNO2SME supported the Estonian company to update their business strategy, to develop an export plan and get in touch with potential exploitation partners. Several contacts were initiated with SMEs in Ireland, Finland, Spain and Latvia for contract synthesis.

#### Results achieved

New cooperation with a Finnish SME for a new production technology for a cancer drug. This cooperation allows the Estonian company to develop new API production technologies for zoledronic acid, trans-urocanic (Eurocanic) acid and amrubicin.

2 A Finnish SME offers specialized laser and water jet cutting (e.g. in bending, welding and machining, coating and final assembly of the cut pieces). Their customers are major companies in Finland and internationally in the fields of metalworking, construction, fittings, electricity and the electronics industries. They participated in a

project that developed a new technology for removing coatings. The new method is environmentally more friendly, more efficient and healthier for the workers, and the company is looking for support for the exploitation of the technology developed.

#### Exploitation Needs

New market access, new cooperation with RTD providers in order to launch pilot projects in order to study the viability, profitability and effectiveness of such new technologies on a national or European level.

#### Support provided

ECOINNO2SME offered support and matching services and in writing an exploitation profile. The company participated in an ECOINNO2SME workshop. Direct contacts have been made to the Estonian Science Foundation, Innovative Women in the North and Tallinn University of Technology. After participating in the workshop, the company has been getting more invitations to participate in different EU-projects.

#### Results achieved

Training for Intellectual Property Rights management; training on exploitation and dissemination of RTD results that served the needs for the better management of a new EU-project called BIOHYBRID, and business cooperation with an Estonian company.

**Funding:** Framework 7 Programme, SME3- Coordination and Support Activities €728742.00. Date 2008-2010

**Contact:** ecoinno2sme@steinbeis-europa.de Website: <u>www.eccoinno2sme.eu</u>

### 26. Harmonising child rearing and scientific careers. Hungary.

This case study is drawn from the Good Practice Database of GENDERA initiative– funded under the FP7 capacities programme to re-address the balance of gender within research organisations and higher education organisations across Europe.

The 'Harmonising Child Rearing and Scientific Careers was started in 2009 and based in the Hungarian Academy of Sciences(HAS). It was the first practical example in Hungary to help researchers with children (mostly women) in pursuing a successful research career.

#### Aims and Objectives

Harmonise child rearing and scientific careers by providing extra 2 years in the age limit of the fellowships and grant possibilities announced by the Hungarian Academy of Sciences for young researchers.

The initiative was started to improve the work-life balance of researchers by helping women with children. A female researcher who has small children cannot devote as much time and energy to her work as women or men without children. The initiative was focused on reconciling research and childcare responsibilities by providing extra time for young parents to apply for fellowships and grants.

#### **Development and Methods**

Direct target groups were the research institutes of HAS and the research groups cofinanced by HAS. 41 institutions and 79 research groups were targeted.

Professor Csepe, Deputy General of HAS managed the Initiative i.e. it was championed and led by a woman in a senior position.

The initiative was managed by announcing the change of rules at internal HAS forums, on the website and in the media. Researchers, men and women, who have a child under 10 are eligible. They get and extra two years to apply for a fellowship/ grant per child. This is also combined with possibilities for part time presence and improvement of the informatics conditions of home working by providing outside computer access and broadband.

The initiative benefited from a committed team implementing the initiative, support from male members of HAS, attracted positive coverage as a significant step for women in science.

#### Impact

From the start all young female researchers with children have used the possibility when applying for HAS fellowship/ grants in the 2 year extra period. Talented women researchers are less frustrated by the double pressure.

The organisation has benefited, as talents are not lost.

Similar initiatives have been used by the EC when defining the conditions for application to Marie Curie fellowships. Further details at: <u>http://www.gendera.eu/index.php5?file=12&dg\_id=32</u>

# 27. Promoting gender debate in the European research area. GENDERA, FP7 project

Despite their increasing participation in higher education and research, women are significantly underrepresented in certain disciplines and remarkably few women remain in top jobs in science. As attracting the best researchers with proportional representation of women and men is integral to the success of the European Research Area and essential for the competitiveness of Europe, it is vital to ensure gender balance in research by changing the way of recruitment and career development. Based on available analyses and recommendations aimed to improve the situation of women in science, the project GENDERA is identifying and discussing good practices of gender balance on national and European levels by networking and in workshops.

The project is demonstrating the factors that limit the participation of women in specific scientific fields as well as in decision making positions, and introducing real-life implementation examples to top decision makers of research and higher education institutions. Using a shared Communication Plan, GENDERA partners will persuade the above leaders that the critical review and change of institutional recruitment, promotion and nomination policies and their gender-related aspects will contribute to the scientific, professional and economic success of their organisations.

The understanding of this correlation is expected to result in the commitment of the national actors who are in the position to advance the situation of women in research, with special emphasis to their representation in research management. Practical guidelines including recommendations and "model gender policies" are being developed during the project. The final European conference will discuss the project s results.

GENDERA will contribute to changing the conscious/unconscious "male-is-better" attitude widespread in research organisations, will foster improvements in the representation of women in decision making bodies, and thus increase the possibility to make their voices heard on the national.

It is a 30-month project that started in November 2009.

**Funding:** The project cost is 1.03 million Euros€:

This project is supported by the European Commission under the FP7 Capacities programme. 798666 euro€

**Contact Person:** BORSI Gabor, TUDOMANYOS ES TECHNOLOGIAI ALAPITVANY, Hungary Tel: +36-1-2147714.

Other partners in the project are the Centre for European Initiatives and Research in the Mediterranean (Spain), National Documentation Centre/ National Hellenic Research Foundation (EKT/NHRF) (Greece), Jozef Stefan Institute (Slovenia), Univerzita Mateja Bela (Slovakia), Joanneum Research Forschungsgesellschaft mbH (Austria), Steinbeis-Europa-Zentrum (Germany), Agencia per la Promozione della Ricerca European (Italy) and ORT Braude College of Engineering (Israel). Website: http://www.gendera.eu/

## Section Six: Actions to make collaborative ventures between universities, local authorities and business (e.g. science parks) more woman friendly

A Science Park is essentially a cluster of knowledge-based businesses, where support and advice are supplied to assist in the growth of the companies. In most instances, Science Parks are associated with a centre of technology such as a university or research institute. They have also been called Technology Parks, Research Parks and Industrial Parks. Common among these definitions is that a park is a type of publicprivate partnership that fosters knowledge flows - often between park firms and universities and among park firms - and contributes to regional economic growth and development. According to the European Economic and Social Committee they are essential structures that could support industrial change of the post Lisbon period by providing smart specialization, concentration of resources and knowledge base. However, whilst cooperation between scientific institutions, especially universities and research institutes, as well as R&D aspects, is becoming more and more important in park development there is room for improvement. Parks could better serve in their function as bridges between the academia and the industry and unless they are made more gender neutral women's position in the Parks means a loss of their skills and ideas. The three case studies here give some idea of how this can be achieved.

#### 28. **Gothia Science Park, Sweden**

The European Enterprise Awards have been organised by DG Enterprise since 2006 to identify and reward excellence among public authorities in promoting entrepreneurship and small business at national, regional and local level. Every year more than 300 initiatives in each of the participating countries (the EU member states and Norway) compete in the national rounds of the competition. A high-level European jury selects the best entries.



In 2009 the award was given to the Enterprise and Community Building Sector, Municipality of Skövde, Sweden for its SCIENCE PARK support of the Gothia Science Park (Sweden). The city has a population of

around 50000. The Park is an incubator, technology park and collaboration platform for IT companies with particular success in computer gaming development has created 50 businesses with 300 employees.

The Enterprise and Community Building Sector of the Skövde municipality (NSE) is the driving force behind the Gothia Science Park (GSP). This is an important element in diversification in a region heavily dependent on just two large automotive engineering plants. The goal was to attract companies developing information technology (IT) services and products and create employment for graduates from the University of Skövde.

The establishment of science parks in Sweden dates back to 1983. The co location of industrial activities was inspired by science parks abroad, particularly Silicon Valley. The parks are characterised by high technology environments that actively stimulate knowledge and research based enterprise development. Emphasising collaboration with universities and research.

Gothia Science Park was established in 1998/9 and is centrally sited at the University of Skovde, a University that was established in the 1970s. The profile of the Park covers human centred technology and software engineering within the fields of virtual

engineering and interactive media, e business and IT for care and home. The activities focus on developments of companies, start ups from the University of Skovde and spin off ventures from already existing companies.

The number of employees at the Park from its establishment to 2008 has increased to 300. Despite decreasing activity within the IT sector in Sweden both the number of companies and employees at the Park has increased. It is a small scale but highly successful Park. It attracts high technology manufacturing firms to a privileged space.

The key actors involved in the development of the park have been the municipality, private business and the University.

Lorentzon's analysis of the development states that

"The competence of local actors such as the municipal commissioners and builders is combined with knowledge of persons managing local, regional, national and international oriented businesses. ... Characteristic of the approach is the effort made by government to attract businesses and the engagement of local politicians to create work related to research and educational programmes. "

Further information

www.skovde.se, http://www.gsp.se/templates/start.php? top=0&me=0&sub=0 Contact

Kristina EklöfEnterprise and Community Building Manager Municipality of Skövde SE-541 83 Skövde, Sweden

Email: kristina.eklof@skovde.se

Academic source: S Lorentzon 'The Creation of Gotha Science Park' *Networks and Communication Studies, NETCOM,* vol 20 n0.1-2, 2006, pp 41-56

# 29. CITIUS, Santiago di Compostela, Spain (WEED Partner example)

In Santiago di Compostela there are a number of partnerships involving the municipality and universities and research institutions. WomenEmprende was included in WEED's first case study compendium (see http://urbact.eu/en/projects/human-capital-entrepreneurship/weed/homepage/). The case study presented here is another University/ Municpality initiative - INFORMATION TECHNOLOGIES RESEARCH CENTRE (CITIUS). Unlike WomenEmprende it is not solely focused on supporting women but there have been a number of women who have had their projects supported successfully.

CITIUS is a 3.200 sq m centre which by 2012 hopes to house 150 researchers. The basic scientific object of the CITIUS research centre is the development of activities (R+D) in the area of information technologies, giving an environment which boosts the interaction among scientists from different disciplines, and increasing the transference of knowledge and technology both to the productive sector and to society in general. The main areas of development are Artificial Intelligence, Computing Engineering,

#### Thematic areas

Three large areas or thematic unities can be identified (Artificial intelligence, Computing Engineering and Digital Image) and a large transverse area (System's Engineering) which is closely related to the first ones.

#### STAFF

In March 2010, an external advisor commission consisted of investigators of maximum prestige, analyzed the investigator activity of all the USC groups who develop their work in the sphere of the information technology, and identified the most thriving and with better perspectives of growth and renown areas, considering equally the ones with most possibilities as to the establishment of synergies and to the development of multi disciplinary projects.

The researchers previously selected by the External Adviser Commission to take part in the CITIUS include the following ones promoted by women.

- 1 New téchnics of artificial visual Carreira Nouche, María José INCITE Funding: 48.300
- 2 Explotatión of hardware systems Boo Cepeda, Montserrat INCITE Funding 66.930
- 3 Development and implantation of new technologies for fishing ecology Cernadas García, Eva INCITE Funding, 14.582

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### 30. Gender Mainstreaming in Science Parks, Finland

Since the 1980s policy in relation to science parks has increasingly emphasised the economic and social relevance of science for the needs of the knowledge intensive economy. Research conducted within the EU funded project Women in Innovation, Science and Technology in 2009 examined the participation of women in technology transfer in four countries (Finland, Germany, Romania and UK) and gender equality practices in science parks. The Project studied women's participation and advancement in intermediary organisations requiring hybrid competences e.g. science, business etc.

In Finland six case studies were examined: two university transfer office, two science parks and two social innovation groups. In-depth interviews were conducted with CEO's and 26 women employees on work history, work-life balance, and network participation.

The research showed that there are gendered hierarchies and divisions of work in the science parks that are not too different from the related science institutions but there are also practices that make the more innovatory spaces relatively favourable for women. Within the context of Finland the study of science parks and social innovation groups following were seen as being conducive to a more gendered environment.

- The Parks/ technology transfer institutions are all in new sectors of the economy and less bound by traditional barriers and work practices.
- Gender equality was a commonly shared goal for men and women in the institutions suggesting there is not cultural barrier but practices need changing.
- Women's groups and mutual support networks assist change.
- Getting women's names on lists of potential researchers is an important first step.
- Gender equality practices supported by the Finnish state give significant support to men and women. Many female experts in the science parks had small children. They used the full-time child care services guaranteed to them by their municipalities.
- Organisational practices for gendered equality are facilitated by legislation. All Finnish organizations – both public and private – with at lest 30 employees are obliged by law to prepare gender equality plans. In the science parks studied this tied the work communities to the planning and articulation of gender equality. Building up a gender equality plan can make all those involved more gender sensitive.
- Science parks deal with and further distribute public funding. Gender equality could be made a criterion for spreading the idea of gender equality to the technology field.

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