

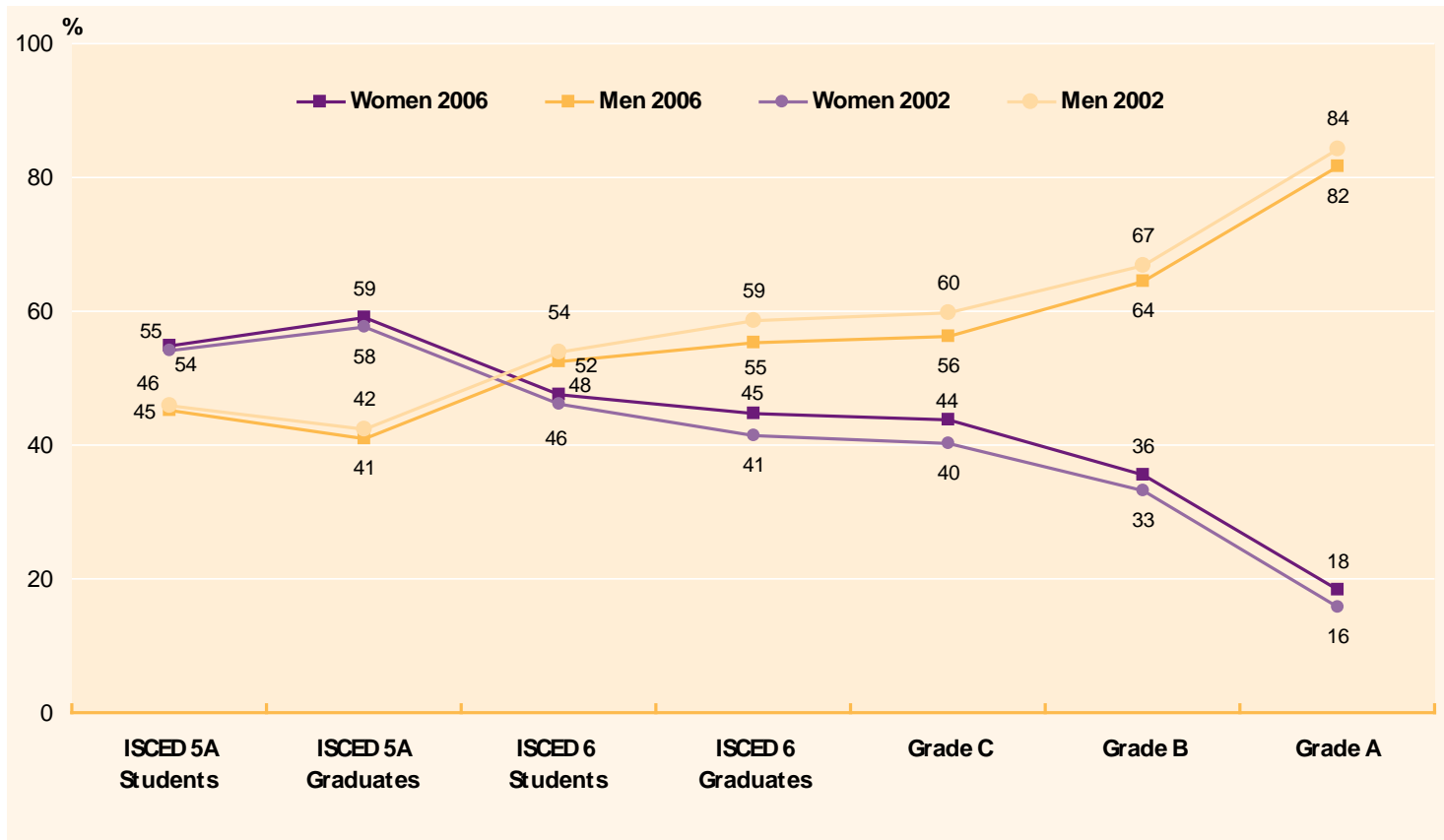


Towards gender equality in scientific careers

NEGOTIATING CHANGE: THE STAGES PROJECT

**Marina Cacace, ASDO
Iași, October 5th 2012**

The starting point



Not just a European problem

- Usa (2004)
 - Researchers: 42%
 - Associates: 35%
 - Full professors 18%

- Canada (2007)
 - Researchers: 41%
 - Associates: 35%
 - Full professors 18%

- Australia
 - Researchers: 27%
 - Associates: 34%
 - Full professors 19%

Institutional framework

- **FP7 Cooperation, Work programme Science in Society**
- **Co-funding from the IGRUE/Inspectorate General for Financial Relations with the European Union, Ministry for Economy and Finance – Italy, Italian Government**
- **The partners:**
 - Italian Department for Equal Opportunities (co-ordinator)
 - ASDO (Italy)
 - State University of Milan (Italy)
 - Fraunhofer Society for the Promotion of Applied Research (Germany)
 - Aarhus University (Denmark)
 - University Alexandru Ioan Cuza, Iași (Romania)
 - Radboud University, Nijmegen (The Netherlands)

An unprecedented opportunity

- Leaving the logic of pilot projects behind
- Launching strategies addressing the many interconnected layers of gender inequality in science
- Applying self-tailored integrated action plans
- Making the most of partnerships by fostering mutual learning practices

... but also an unprecedented risk!

- What happens when projects try a change of scale, implementing measures in many different areas of the organisation (which is always possible in pilot projects)? The risk is exasperating negative reactions
- A “structural” project can not be easily marginalised within the organisation, so that the risk of backlash is higher and needs to be knowingly addressed by the project

The outcome of a series of projects

- A shared path behind the STAGES project (2012-2015)
 - PRAGES project (2008-2009)
 - WHIST project (2009-2011)

Lessons learned from previous projects/1

- From PRAGES and previous research experience on gender inequality:
 - **Deep-rootedness of discriminatory habits and environments** - the cultural, social and psychological matrix of science as a male domain
 - **Persistence** - change is slow, the “generation effect” weak
 - **Systematic nature** - beyond full professorship: women lack from many different important positions in post-academic science; moreover, the gender dimension itself is lacking in the very understanding of science
 - **Common frame vs. contextual situations** - dealing with the difficult issue of transferring analysis and solutions: the strategy of benchmarking

Lessons learned from previous projects /2

- From WHIST:
 - **Confronting reality**/Obstacles and facilitating factors: a roadmap for the action plans in STAGES
 - **The risk of denial and backlash**/the capacity to negotiate:
 - Interpretation
 - Symbolic dimensions
 - Institutional change
 - Operational change
 - **The perspective of social innovation**

In synthesis, the analysis of PRAGES ...

- **Friendly environments for women**
 - Changing cultures and behaviours
 - Promoting work-life balance
 - Supporting early-stage career development
- **Gender-aware science**
 - Overcoming gender stereotypes
 - Gendering scientific contents and methods
- **Scientific leadership**
 - Women's leadership in research practice
 - Women's leadership in research management
 - Women's leadership in scientific communication
 - Women's leadership in innovation and science-society relationships

... plus the dynamic of WHIST

- Projects as evolving, complex, non-linear fields
- Negotiation in practice: actors, conflicts and alliances
- The methodology of supporting change by providing continuous technical assistance, monitoring and evaluation, but also on-going accompanying research

Agents of change

- **To translate a policy into social action, the role of “trasformational groups” is paramount**
 - Groups established by the project
 - External individuals and groups within the University
 - External individuals and groups outside the University

The “what to do” and the “how to do it”

- The design has therefore focused on two aspects, for each action plan:
 - not only the "**what**" to do, i.e., what actions to choose to have maximum impact on the specific problems of individual organisations (from PRAGES)
 - but also the "**how**" to do it, trying to build consensus and gain support through forms of negotiation at all levels, to involve the different actors more or less directly affected by the actions or their effects and to create strategic alliances (from WHIST)

STAGES approach to planning structural change – Analytical step

Identifying needed actions and fields of action through the PRAGES grid ...

STAGES approach to planning structural change – Proactive step

- Drafting self-tailored action plans through internal negotiation and mutual learning among partners ...

Negotiation

- **Negotiation as a tool for social change**

Any activity involving two or more people or groups of people who interact to produce an agreement over courses of action, to bargain for individual or collective advantage, or to craft outcomes to satisfy various interests. Dynamics of power are implied by definition

- **Applied to gender dynamics in organisations**

It includes all actions – at micro, meso or macro level – aimed at directly or indirectly redefine gender arrangements and the distribution of power, in its different forms, between men and women, therefore producing deep and systematic change

How to do it: designing negotiations

The practice of negotiation as a means of promoting change the structure of gender in organizations, at four levels:

- ❑ Negotiating **interpretations**
- ❑ Negotiating **symbols**
- ❑ Negotiating the **rules** of the game
- ❑ Negotiating **to have things done**

The interpretive dimension

Negotiating an interpretation of the real situation of women within the organisation, whereas the existence of gender discrimination is often denied, even by women themselves, especially in science- and technology-related professional areas. Interpretive negotiation aims at **building a common understanding of problems** by raising awareness about the extent of horizontal and vertical segregation, demonstrating the falsity of the assumption of the gender-neutrality of science, showing the flaws and discriminatory effects of internal procedures, etc., thus creating the necessary **preconditions for action**.

The symbolic dimension

Negotiating the strongly masculine symbolism of science. Action is needed to redress the situation by inserting women and women's priorities, qualities and excellence in the very **image of science**, being aware that the symbolic level represents a crucial engine to mobilise people. Symbolic negotiation may take the form of actions oriented at supporting women scientists' **visibility** or removing belittling or **stereotyped images** of women scientists in institutional websites and newsletters, promoting women's qualified presence in scientific communication events, but also paying attention to and displaying full and visible leadership support to gender **gendered language** equality-oriented initiatives.

Institutional negotiation

Negotiating **norms and procedures**, as the most classical form of negotiation, and one of the most urgent. Institutional negotiation has the objective of **modifying the rules of the game** which reinforce overt or hidden structures of discrimination. It can happen in already existing institutional structures or lead to the creation of new ones (equal opportunity commissions, thematic working groups, etc.). It can also imply the **creation of alternative institutions**, such as women's networks or associations.

Operational aspects

Negotiating to have things done effectively and in a reasonable time. This implies the power of translating good will and declarations into reality, activating **monitoring and assessment mechanisms**, providing for **problem solving**, speaking out when **commitments are not respected**.

STAGES approaches to planning

- **Participative design:** managing negotiation activities as critical project areas, and not just “additional” initiatives, implying the prior identification of internal and also external stakeholders, as well as the definition of suitable forms of inclusion in the design process for the different categories (bottom/up; top/down)
- **Design in progress:** negotiation entails continuous programme adjustment and redefinition

The 5 Action Plans

- **University of Milan** (Italy): Advancing gender equality. How to enhance change in scientific careers
- **Fraunhofer Society** (Germany): Building an internal market for gender diversity in science and innovation
- **Aarhus University** (Denmark): Taking advantage of restructuration to build a fully gender-equal institution
- **AIC University of Iași** (Romania): Bridging the gender gap through an active knowledge brokerage
- **Radboud University** (Netherlands): Taking change one step further at the two faculties

University of Milan - presentation

- The University of Milan is a **public teaching and research university**, which - with **9 faculties**, 134 study courses, 21 Doctoral Schools and 92 Specialisation Schools - is distinguished by its wide variety of disciplinary fields
- The teaching staff consists of **2,196 professors**
- A leading institute in Italy and Europe for **scientific productivity**, the University of Milan is the largest university in the region, with around **65,000 students**

University of Milan - rationale

- The University of Milan promotes gender equality, equal opportunities and gender studies through **different institutional actors** which carry out differentiated tasks: the Delegate of the Chancellor for Gender Studies and Equal Opportunities; the Equal Opportunities Committee; the Office for Equal Opportunities and the Centre for Study and Research “Women and Gender Differences”
- **The Centre for Study and Research Women and Gender Differences**, founded in 1995, is one of the first centres in Italian universities devoted to gender studies. Since 2007 it has become an interdepartmental research center with a multidisciplinary approach
- **Results** on academic outcomes of women are however disappointing, and the University of Milan is only (very) slightly above the Italian and European averages as for women among full and associate professors and researchers
- **Two Faculties** are particularly targeted: Medicine and Agriculture

University of Milan - actions

■ **Friendly environments for women**

- Changing cultures and behaviours (2)
- Promoting work-life balance
- Supporting early-stage career development (1)

■ **Gender-aware science**

- Overcoming gender stereotypes (1)
- Gendering scientific contents and methods (1)

■ **Scientific leadership**

- Women's leadership in research practice (1)
- Women's leadership in research management (2)
- Women's leadership in scientific communication (2)
- Women's leadership in innovation and science-society relationships

Fraunhofer - presentation

- Fraunhofer Society is the **largest organization for applied research in Europe**. Funded for 30% by public funds and the remaining 70% through research contracts with clients of various kinds (industry, services sector, public administration), focuses its research interests in fields such as health, safety, communication, energy and the environment
- There are **more than 80 research units** in Europe, USA, Asia and the Middle East. 60 institutions are located in different parts of Germany, and are autonomous legally and from the point of view of management
- Most of the **18,000 employees** are highly qualified scientists and engineers
- The total annual **budget** for research is di1.66 billion

Fraunhofer - rationale

- Women have been increasing among scientific staff in recent years, but they remain on largely unsatisfactory levels (from 7.2% in 2006 to 19.2% in 2010). In the more lucrative positions, **women's presence** even fell between 2006 and 2010 (from 4.3 to 3.6%)
- Since 2003, each institute has its own responsibility for promoting **gender equality**
- There is not, however, systematic exchange of information between the different institutes and **the situation is extremely varied**
- **The project aims to overcome this situation by creating stable structures for the discussion of EO measures and their dissemination, involving the largest possible number of institutes and providing training and technical assistance to institutes with less experience**

Fraunhofer - actions

1. **Testing the exchange procedure** among the 5 institutes based in Stuttgart
2. Initial and final **surveys** on the existing measures for gender equality at all the institutes
3. **Involving the other Fraunhofer institutes** in the exchange process
4. Definition of **new platforms for action** in the involved institutes
5. **National meetings** of the involved institutes
6. **National Conference** on “Gender and Diversity Management in Research Organisations”
7. Launch of exchange procedures with **external S&T institutions**

Aarhus University - presentation

- Aarhus University is rated among the top 100 higher education institutions in the world for both scientific disciplines and humanities
- It is able to attract 25% of Danish research funds and hosts 15 centres of excellence funded by the National Research Foundation
- It has around **35.000 studenti** and 8.500 employees
- More than 60% of its students are enrolled at **postgraduate level**

Aarhus - rationale

- **Women only account for 14,5% of all full and associate professors**, and they are even less in scientific disciplines
- In 2008 a **Task Force on Gender Equality** was launched to implement the “Charter for more women in management”, entailing many targets for women’s equal representation
- However, programmes implemented so far are still largely insufficient
- **The STAGES action plan therefore represents an important tool to reach the targets**
- **Moreover, the University is currently undergoing a radical restructuration process, with Faculties reduced at four. The aim is including gender in the transition process as a central variable**

Aarhus - actions

■ **Friendly environments for women**

- Changing cultures and behaviours (2)
- Promoting work-life balance
- Supporting early-stage career development (1)

■ **Gender-aware science**

- Overcoming gender stereotypes (1)
- Gendering scientific contents and methods (1)

■ **Scientific leadership**

- Women's leadership in research practice (1)
- Women's leadership in research management (2)
- Women's leadership in scientific communication (2)
- Women's leadership in innovation and science-society relationships

A.I.C. University - presentation

- The AIC, founded in 1860, is the second largest university in the country and the **oldest**
- In 2011 it was ranked first for the third time in the national rankings for **quality of research**
- It has **18 faculty** (they were 9 in 1990) and more than **38,000 students**, of which two thirds are women
- The **academic staff** consists of more than 800 people

A.I.C. University - rationale

- Although **women are far more numerous among students** (female to male ratio = 1.93), graduates (1.7) and doctorates (1.46), **the proportion is reversed** among researchers (0.86), associate professors (0.60), professors (0.38) and in managerial and leadership positions (0.24)
- **The action plan aims to introduce for the first time an integrated set of measures along the lines of the PRAGES project, in 9 out of 18 faculty**
- **The promoters will benefit, among other things, from an active exchange of knowledge and experience with European universities**

A.I.C. University - actions

■ **Friendly environments for women**

- Changing cultures and behaviours (12)
- Promoting work-life balance (2)
- Supporting early-stage career development (3)

■ **Gender-aware science**

- Overcoming gender stereotypes (3)
- Gendering scientific contents and methods (1)

■ **Scientific leadership**

- Women's leadership in research practice (3)
- Women's leadership in research management (1)
- Women's leadership in scientific communication (4)
- Women's leadership in innovation and science-society relationships (1)

Radboud University - presentation

- The Radboud University Nijmegen has about **19,000 students and 4,000 employees**
- It is affiliated to the International Research Universities Network (IRUN) and is **internationally known for the quality of its research and teaching**, also providing several courses taught in English
- The **Nijmegen School of Management** has 2,600 students and covers a wide range of research topics, including: Business Administration, Economics and International Business, Political Science, Public Administration, Geography, Planning and Environment
- The **Donders Intitute for Brain, Cognition and Behaviour** is a recognised centre of excellence at the international level, where over 500 researchers are employed

Radboud - rationale

- The university has a **long tradition in EO measures**: funds targeting talented women researchers, mentoring programmes, rigorous procedures for the appointment of new professors, targets for the presence of women in more prestigious leadership positions, etc.
- **Results however are unsatisfactory**: women are 61.8% among graduates and 54.4% among PhDs, but represent only 32.1% of assistant professors, 21% of associate professors and 15.8% of full professors. Women are only 14.8% of top managers, there are no women on the Board of Directors (consisting of 3 persons) and only 2 women among the 21 vice-Deans
- **The Action Plan has therefore the objective of experimenting further structural change actions in two institutions, trying to identify unsolved problems and act on them, and then extend the application of the new measures across the university**

Radboud - actions

■ **Friendly environments for women**

- Changing cultures and behaviours (2)
- Promoting work-life balance (2)
- Supporting early-stage career development (3)

■ **Gender-aware science**

- Overcoming gender stereotypes (2)
- Gendering scientific contents and methods (2)

■ **Scientific leadership**

- Women's leadership in research practice (1)
- Women's leadership in research management (1)
- Women's leadership in scientific communication (2)
- **Women's leadership in innovation and science-society relationships**

In total: 71 + ...

- **Friendly environments for women (35)**
 - Changing cultures and behaviours (21)
 - Promoting work-life balance (6)
 - Supporting early-stage career development (8)
- **Gender-aware science (12)**
 - Overcoming gender stereotypes (8)
 - Gendering scientific contents and methods (4)
- **Scientific leadership (24)**
 - Women's leadership in research practice (8)
 - Women's leadership in research management (6)
 - Women's leadership in scientific communication (9)
 - Women's leadership in innovation and science-society relationships (1)

Some initial (“structural”?) results

- **Milan University (Italy)**
 - Reform of the Statute to insert the principle of the equal representation of men and women, plus quotas in the University Board
- **Fraunhofer Gesellschaft (Germany)**
 - Establishment of periodic surveys on women’s researchers’ satisfaction and needs
- **Aarhus University (Denmark)**
 - Insertion of a module on gender in the mandatory training of University leaders
- **Alexandru Ioan Cuza University (Romania)**
 - Launch of a Network of women researchers as a collective agent for change
- **Radboud University (The Netherlands)**
 - Establishment of a permanent PhD course on gender in research methodologies at the Graduate School

Producing, analysing, communicating results

- To help produce, evaluate and exploit results, sharing them among the partners first, and then outside the consortium, a number of common activities are foreseen
 - Technical assistance (ASDO)
 - Evaluation (ASDO)
 - Accompanying research and Guidelines drafting (ASDO)
 - Communication and networking (DPO)
 - General management (DPO)
- In addition to an International Board of Advisors, a National Committee is also to be established in each country, to discuss and disseminate project activities
- There will also be two international events at the end of the second and at the end of the fourth year, to promote the visibility of the project and the issue at national and international level