

Introduction

Maria Sangiuliano, Agostino Cortesi

Università Ca' Foscari Venezia, Italia

marisangiuliano@gmail.com, cortesi@unive.it

Gender balance in research organizations is considered as a key step for ensuring research excellence and quality and inclusive-sustainable innovation. ERA (European Research Area) objectives have stressed the importance of gender equality in research, at the three levels of fostering equality in scientific careers, achieving gender balance in decision making and integrating a gender dimension in scientific research content. Still, in spite of an increasing number of Higher Education and research institutions committed to make science more equal and some slow but positive trends in figures on Gender equality in STEM (Science, Technology, Mathematics and Engineering) research (She Figures, 2018), it still appears to be difficult to prioritize gender equality. This is particularly true for disciplines such as ICT (Information Communication Technologies) and IST (Information Systems Studies) where female representation at all levels is among the lowest ones among STEM topics and where a gender sensitive approach to ICT design and to programming is far from being understood in its implications among computer and information systems scientists.

After the policies initiated during the late '90s to address these problems which were mostly informed by a 'fixing the women' approach, the concept of institutional change for gender equality has gained momentum. By merging change management and gender equality policies, the focus shifted to changing the institutions themselves, promoting the use of encompassing measures such as GEPs (Gender Equality Plans), able to cover a variety of actions in response to multifaceted challenges: several research projects have been funded by the European Union in this field in the last 2 programming periods starting from FP7 already and continuing with H2020.

This volume stems as an unforeseen output from one of those projects, namely EQUAL-IST (2017-2019), where a consortium of ICT/IST Research Performing Organizations (RPOs) has joined forces to use gender equality as a leverage to influence, innovate and transform Human Resources management, academic governance processes, institutional communication, research design, as well as teaching & services to students. Ca' Foscari University and the Department of Informatics, Environmental Sciences and Statistics being an active promoter of gender equality in ICT since several years already, has taken the role of supporting institution in EQUAL-IST, guiding all partner Universities in building internal capacity on gender equality policies, and ensuring that Gender Equality Plans were designed and implemented in a comprehensive, consistent and sustainable way. By the end of the project, and having accomplished all the reports and tools planned as part of the EQUAL-IST workplan, we have come to the conclusion that creating a legacy for EQUAL-IST by way of a comprehensive volume could serve a twofold purpose: on one side, we identified writing as a way to further enhancing reflexivity internally to the consortium on accomplishments, limits, encountered resistances. On the other hand, the mere fact of collecting, distilling and systematizing main results in one single Open Access volume, was thought to be the best option for dissemination purposes. We believe this can be an useful reading in particular for all those Universities and Research Organizations in the ICT/IST disciplines and beyond, that will engage themselves in similar initiatives in the future.

We have structured the volume in three main sections. The first one, from Chapter 1 to 4, presents some of the main methodologies and tools which have been designed to enable research organizations to go through the steps of assessment, design and implementation of GEPs, as well as the outcomes of the internal audits which lead to identify challenges and main actions to be worked out and included in the GEPs.

In Chapter 1, Maria Sangiuliano, Claudia Canali and Vasiliki Madesi look at the results of the participatory gender audit conducted by the EQUAL-IST through a series of consultation and the process of identifying/defining the existing processes while at the same time shaping the potential solutions. The discrepancies between these two levels, the diagnostic and the prognostic one, point at the always present risks of losing the transformative side of gender equality policies along the continuous tensions and negotiations which feature the institutional change process.

In Chapter 2, the main features of the EQUAL-IST project emerge, namely an emphasis on participatory methodologies and a bottom up approach hand in hand with an evidence based orientation. In fact,

Claudia Canali, Tindara Addabbo and Maria Sangiuliano present the gender assessment methodology which was developed in the EQUAL-IST project starting from the ILO Participatory Gender Audit: It kept together on one side, a quantitative approach, based on measurable indicators computed on gender disaggregated data, and on the other hand a qualitative approach, based on participatory techniques and tools such as focus groups, workshops, semi-structured interviews, thought of for playing also a raising awareness role and set up the building blocks for a common vocabulary and basic knowledge of gender equality issues at each University.

After the Gender Audit, participation of academic communities and staff at each RPO was further triggered by introducing an on line crowdsourcing tool for further consultations and preliminarily to the final design of the Gender Equality Plans: in Chapter 3, Elena Gorbacheva, Vasiliki Moutzi and Armin Stein illustrate the CrowdEquality platform, which is an Open Source, re-usable and adaptable tool, but can also serve as inspiration or as a model for similar customized platforms to be designed and programmed from scratch.

As anticipated, in Section 2, readers can delve into the EQUAL-IST GEPs implementing phase, with its peculiar challenges, resistances included, and the not easy goal of making the achieved results sustainable after the life cycle of the project. In Chapter 4 the analytical framework used in Chapter 1 is further refined and the authors look at results from the first implementation phase of the Plans: Maria Sangiuliano, Claudia Canali and Elena Gorbacheva. As all partners have put major efforts to attract more girls in ICT studies (externally oriented actions, not in all cases made structural/permanent) due to the fact that the gender leak in the ICT-IST recruitment pipeline starting at the enrollment at university easily recognized by ICT/IST academics, the authors aimed at understanding to what point this could imply a risk to bend the process towards more externally-oriented actions, which might be less likely to impact internal power structures, at least in the short run. The chapter also explores whether structural change actions, which have the potential to go beyond mere raising awareness on the topics at stake, tend to be concentrated in the Human Resources and Management Practices area, and recognizes the weakness of a lack of actions aimed at integrating a gender dimension in ICT/IST research content.

Chapters 5 from to 10 report the case studies of GEPs actualization by the Portuguese, Lithuanian, German, Italian implementing partners of the EQUAL-IST consortium respectively. Isabel Ramos and Victor Barros present the case of the University of Minho (Chapter 5), where the Equality Plan was supported by a broad engagement strategy,

and internal consensus building relied on expanding the GEPs team from the Engineering faculty more broadly to the entire University and was fostered by the set-up of protocols and agreements with National Authorities. Chapter 6, authored by Daina Gudoniene and Danguole Rutkauskiene, reports on the experience from the Informatics Faculty Kaunas University of Technology: starting from a low level of internal awareness of gender inequalities in ICT and ICT and facing widespread stereotypes about girls and women being not inclined to study computer sciences ‘by nature’, the team managed to set up initiatives for attracting and retaining more female students in IST and involve the HR Management structures to revise their career guidance procedures. Chapter 7 is discussing the experience of the University of Modena and Reggio Emilia, where the Department of Computer Engineering has driven a change process involving the existing Equality Bodies already present at the broader University level. Claudia Canali and Tindara Addabbo explain how they have operated by way of carefully orchestrating internal networks and strategically exploring existing windows of opportunities such as the renewal of the Triannual Positive Action Plan due by Law to get the commitment of the University and promoting several structural changes. The GEP has touched upon in areas such as gender sensitive institutional communication, and last but not least, the University managed to set up an interdisciplinary network of STEM and socio-economic sciences/humanities researchers interested into developing joint scientific research which take gender into account as a research dimension.

Also Chapter 9 refers to a good practice developed by the University of Modena and Reggio Emilia, namely the so-called Digital Girls Summer Camps: Claudia Canali and Vicki Moutzi not only describe and analyse the features of an extremely and increasingly successful initiative which has started to positively impact on the number of enrolled girls in Computer Engineering studies, but they also highlight the collaborative model which has ultimately made it possible via a collaboration between the University, Women’s Ngos, and local/regional economic actors. Back to Chapter 8, we have the German case study about the implementation of the Gender Equality Plan at the University of Muenster, and its Department of Information Systems. The context is featured by an already very active central Gender Equality Office and less impactful policies at the Department and School levels. Here, Elena Gorbacheva explains how thanks to a systematic and evidence based approach, the GEP Working Group has managed to overcome most of the initial internal resistances towards the subject. The overall participation to the project has brought to increased attention and a higher visibility as well as enhanced legitimisation of gender equality, and to some important structural changes at the School level with allocation of extra Human Resources to support the work of the GE Officer.

The final Chapter of Section 2 looks into the important topic of sustainability after the end of the project, in search for an additional proof of the extent to which the triggered change has really been 'institutional', therefore supposedly permanently embedded in existing regulations and procedures and with adequate allocated resources. Here Maria Sangiuliano, Vasiliki MOUNTZI and Apostolos VONTAS unfold the EQUAL-IST approach to enhance sustainability of GEPs, based on keeping sustainability dimensions into account along all project phases and working on the design of individual Sustainability Plans by the end of the second implementation round, and fostered the commitment of high management levels. Although a 3 years long project with 2 years only devoted to implementation of GEPs is a limited time to guarantee that the initiated processes will smoothly continue in all of the involved universities, the emerging picture is overall positive.

The third and final Section of the volume moves away from the EQUAL-IST case to look into the bigger picture of Gender Equality Plans in Europe. In Chapter 11, Maria Sangiuliano elaborates on results from a study conducted as one of the first EQUAL-IST actions: drawing on 19 in depth interviews with representatives from Universities representatives with experience in implementing GEPs or in the process of commencing with such practice. Interviewed scholars and practitioners helped to understand to what point a systematic and comprehensive policy such as a GEP has added value in promoting structural change if compared with specific interventions or actions addressing particular inequality areas. Most common challenges and resistances to be met along the process are also highlighted in the study.

In Chapter 12, Thomas Berghoefer reports an overview of results from GENERA, another H2020 project on institutional change for gender equality which chose to adopt a disciplinary approach, addressing researcher organizations in Physics only. Methods and tools are described, such as the GENERA toolbox, for example, including more than 100 good practice measures to support gender equality in physics institutions have been compiled, the 'Gender in Physics days' - one-day national events invented by GENERA and organized and the involvement of some project partners in a new endeavour such as the ACT on Gender H2020 new project, which set up a series of Communities of Practices on institutional change. In such framework, the GENERA CoP is operating among others, which will ensure continuity to a peer learning process among RPOs in Physics interested in promoting gender equality within their institutions.

Insights from the H2020 GenderTime Project are instead to be found in Chapter 13, where Jennifer Dahmen Adkins and Helen Peterson focus on monitoring methodologies and tools used in the project

and frame monitoring as a key component of successful structural change. Their work goes beyond they typical vision of project monitoring as an on-going collection of data for continuous assessment: a dedicated toolbox, the use of cultural staff survey and national survey reports, peer consultation reflection sessions, present monitoring as one of the transformational leverages used within the project.

Last but not least, Chapter 14 closes the volume on a cautiously positive note: in their study on gender composition of Boards of Directors in all Italian Universities is and its correlation with the gender sensitivity of the University Strategic Plans, Romilda Mazzotta, Maria, Teresa Nardo, Patrizia Pastore and Giovanna Vingelli, suggest that from their analysis boards with higher gender diversity are positively correlated to the gender sensitivity of the strategic plans foreseen in the Italian regulatory framework and that the participation of women in the board of directors seems to bring new perspectives to the board in terms of addressing gender equality related issues. Along with the empirical findings from the study, the chapter presents 3 framing paragraphs with comprehensive and updated state of art reviews of EU policies on gender in research and on the debate on gender composition of boards, in the corporate sector as well as with focus on Academia.