MAPPING TOOLS FOR THE EVALUATION OF GENDER EQUALITY PLANS

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D2.4 – Mapping of Tools for the Evaluation of Gender Equality Plans

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Aim of the Report

As a Coordination and Support Action (CSA), one of the tasks of the SAGE project is to learn from and extend the findings, tools, and results from previous FP7 and other EU projects, as well as to adapt or update what is available to meet the needs of SAGE partners and other forthcoming Horizon 2020 projects.

This report emphasises the importance of using gender indicators to measure and compare the position of women and men over time in a certain policy area, a specific programme, an activity, or an institution as whole.

Therefore, the report provides a synthesis of recent EU and non-EU projects on gender and structural change, which have presented methodologies relating to gender indicators and evaluation of gender equality plans (GEPs). The deliverables of the following recent projects were examined:

- ADVANCE – Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers
- EGERA – Effective Gender Equality in Research and the Academia
- FESTA – Female Empowerment in Science and Technology Academia
- GARCIA – Gendering the Academy and Research: combating Career Instability and Asymmetries
- GENDER TIME – Transferring Implementing Monitoring Equality
- GENDER-NET – Promoting gender equality in research institutions and the integration of the gender dimension in research contents
- GENIS LAB – Gender in Science and Technology Lab
- GENOVATE – Transforming Organisational Culture for Gender Equality in Research and Innovation
- GENPORT Project
- HELENA – Higher Education Leading to Engineering And scientific careers
- INTEGER – Institutional Transformation for Effecting Gender Equality in Research
- PRAGES – Practising Gender Equality in Science
- QUING – Quality in Gender+ Equality Policies
- PHASES – Structural Change Toward Gender Equality in Science
- TIST – Towards Women in Science & Technology
- WHIST – Women’s Careers Hitting the Target: Gender Management in Scientific and Technological Research
- WISAT – Women in Global Science & Technology

Each of these projects made or are making use of quantitative and/or qualitative techniques in evaluation, and several also produced guidelines or resource material on how to develop effective indicators (these include FESTA, GENOVATE, GARCIA, GENDER TIME and INTEGER). Several of these are consequently summarised in this report.

This report is designed to be usable and accessible even by who are not familiar with institutional actions promoting gender equality, but who are interested in using gender indicators in their institutions or sectors. Comprehensive evaluation tools can serve a number of critical functions for institutions pursuing a gender equality agenda, such as providing an evidence-base for future actions, offering accountability in order to ensure transparency,
benchmarking to promote collective learning, and contributing to organisational learning and decision-making.

Methodology

This report provides a “mapping” exercise of methodologies relating to gender measures drawn from previous EU Framework Programme funded projects. It draws upon the experience and efforts undertaken through these actions as summarised in a range of project outputs. Given the spectrum of methodologies uncovered, it is clear that there is no single form of evaluation, or ‘one size fits all’, particularly for gender equality plans that focus on changing structural inequalities in institutions through targeted actions.

In collecting the available methodologies, we tried to distinguish, wherever possible, between quantitative and qualitative approaches. While quantitative methods try to assess the problem by capturing numerical data or data that can be transformed into useable statistics, qualitative methods ask broad questions and collect data, from a selected set of participants, through semi-structured or structured individual interviews, thereby capturing interviewees’ personal experiences, opinions, and feelings. For example, individual interviews are useful for extracting sensitive information about processes and results, but they require a considerable amount of time and may involve problems of reliability and validity.

Usually the two approaches are complementary. Qualitative research is often used in an exploratory manner to gain an initial understanding of a trend or pattern and to develop ideas or hypotheses for potential quantitative research. Qualitative methods can also be used to further research a problem or trend identified through quantitative research in order to understand or unveil the underlying reasons why. The choice of the starting point is up to the researcher, but it must be stressed that data collection is the baseline for any action that aims at making a difference in the area of gender equality and structural change. Benchmarking is important to determine where the institution stands and to set appropriate goals.

Evaluation should not be confused with monitoring, although both are techniques for collecting feedback. While the latter relates to general management of a project and how to improve it, evaluation provides in-depth analysis for action planning. Like SAGE, GENOVATE (FP7-funded) was an action-project aimed at ensuring equal opportunities for women and men in research institutions, with a focus on universities. It lasted for 48 months from 2013 to 2016.

GENOVATE researchers identified three distinct types/steps of evaluation. First, we need to define what we want to evaluate and how. This is the design and conceptualization phase and it is necessary to obtain an overview of the action which is to be evaluated. Second, there is the step called valuation, which is a systematic assessment of the design, implementation and, eventually, the results of the evaluation. The valuation must commence with evaluation, rather than in a final phase/end of the project. The final step is the assessment of results, to encompass the outputs and outcomes. Outputs relate to the tangible products of the action, such as toolkits, reports, articles, but also activities in a broader sense. Outcomes refer to the intangible results, such as the effects and impacts produced (e.g. on attitudes/behaviour) by the outputs.
In the context of SAGE specifically, an evaluation workshop was held early on in the project’s lifespan (December 2016). Through small group work, partners examined tools for evaluation, and then regrouped to share identified strengths and missing aspects of each. The evaluation tools analysed were the FESTA Handbook, EIGE GEAR Toolkit and an NSF Advance Toolkit. This led to the decision to develop customised key indicators for the evaluation of results at the end of SAGE. A draft methodology is being prepared, and one-to-one meetings with all institutions to discuss these indicators further have been incorporated.

Evaluation Techniques

A comprehensive overview of quantitative techniques can be found in the Female Empowerment in Science and Technology Academia (FESTA) toolkit, developed by the namesake EU project financed under FP7. It ran from 2012-17, aimed at pursuing a change in the working environment of academic researchers, thus encouraging female researchers to stay and make an academic career.

The toolkit involves two sets of tools, developed through the FESTA activities. The first deals with quantitative data-collection and interpreting the statistics while the second focuses on raising institutional awareness.

The first set is divided into four sub-tools. Sub-tool Dimensions describes what is to be measured, including how to work with indicators and take account for their potential limitations. Dimensions may have more than one indicator and indicators may have more than one variable. For example, the dimension “work-life balance” may be measured through the indicators “parental leave” and “job satisfaction and motivation” which, in turn, may rely on variables “working hours”, “absence and leave”, and “scientific productions”.

The second sub-tool Hypotheses deals with the expectations of what indicators will show. If investigating gender mainstreaming in research and the indicator is the number of funded projects with gender aspects, the basic hypothesis might be that gender expertise within the group of researchers is insufficient. The formulation of hypotheses, however, depends on the institutional context.

Indicators – the third sub-tool – includes information on how indicators have been defined and where, when and how data are collected. Attention is given to the source of data and whether it may be considered reliable. Reliability of indicators is a core issue and must be continuously monitored. An indicator which proves to no longer be reliable must be abandoned or replaced.

Finally, the FESTA toolkit suggests Log books as a fourth sub-tool relating to ‘good practice’ of recording and tracking all decisions taken in the process of data-collection, from the formulation of indicators to the processing of data. This tool may help both in problem-solving during the data-collection and for keeping track of what is done for future actions. The toolkit also provides examples of log entries.

Another set of methodologies that is worth noting is included in the *Guidelines for Evaluating Gender Equality Action Plans*, produced by the GENOVATE project. GENOVATE researchers identified six steps by which gender equality plans can be developed.

First, it is important to define the scope and the main structural elements to be included. The resulting draft is called an “evaluand”, or a working plan, and sets out a preliminary assessment of the changes necessary to move towards greater equality, as well as what must happen for such changes to occur. It is important to develop consensus among stakeholders to ensure a shared agenda, as well as to develop common performance indicators for evaluating final results.

The first step paves the way for the second, which concerns the engagement of potential stakeholders, both individuals and organisations. This is a crucial phase, because the more stakeholders are engaged, the more likely the results will spread and be exploited. Due to the challenges that gender equality plans tend to face in the implementation process, stakeholder engagement is especially important for receiving support and aid. Hence stakeholders must not only be consulted, but must also be involved in an active and engaged manner, and encouraged to take ownership of the actions. For the same reason, the evaluation process must be as transparent and accountable as possible: “be sensitive”, “be participatory” and “be reflective”.

Stakeholders may be divided into Agents – people who are implementing the plan; Beneficiaries – people who may be affected by the plan in a positive way; and Resisters – people who may experience the impact of the plan in a negative way.

The development of a strategy to keep stakeholders’ interest high should also be considered. GENOVATE researchers suggest periodically capturing the comments of stakeholders through accessible and cost-effective qualitative methods, thereby paying attention to the limited time of stakeholders.

Coming to the next phase of evaluation design is the development of the evaluation questions, taking account of stakeholders’ interests and the context of where the plan is being implemented. Not all questions are usable in every specific situation and policymaking context. GENOVATE guidelines provides good insights into this qualitative step by outlining different qualitative methods. First, there can be “inspiring” evaluation questions, which refers to the analysis of the processes by which the plan is implemented (coordination, management, communication, stakeholder participation, the use of human resources, and procedures, etc.), and to determine how these contribute to gender change. Second, are the “contextualised” evaluation questions. While interviews may start with inspiring evaluation questions, “contextualized” evaluation questions go deeper and are more sensitive to the plan and context. Since the plan seeks to promote structural change in that context, questions must focus on those areas. Some samples of questions are included in the guidelines. It is important to check the quality of the evaluation questions produced. For example, they should: be directed to the gender equality plan and not events or social dynamics; present the concerns

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2 http://www.genovate.eu/media/genovate/docs/intconferencebrusselsdocs/GENOVATE_Guidelines_for_evaluating_GEAPs.pdf
of stakeholders without considering how to measure them (i.e. they are not indicators); evaluate the whole plan, rather than merely inquiring into certain aspects of it.

The development of evaluation questions is the prerequisite for the following step, called “operationalisation process”, by which evaluation questions are transformed into indicators, based on the key attribute of each set of questions. It can be difficult to transform an opinion like ‘empowerment level’ into a number or a measure, so it is crucial to specify in advance the attributes that define each evaluation question. Attributes may change depending on the features of the project. So, there may be different attributes that define each question, as well as several indicators. Indicators chosen can of course be quantitative or qualitative.

Once the evaluation process is over, the ultimate step is the assessment of the information gathered. How effective was the gender equality plan? Even if no pre-defined quality criteria can be identified, GENOVATE guidelines distinguish between three different kinds of quality criteria. First of all, there are the core quality criteria, crucial for boosting structural change in terms of gender equality. Second, contributing quality criteria, refer to elements which are important, but not crucial; third, there are supporting quality criteria that are not essential to structural change. Obviously, all quality criteria have to be interpreted in a contextualised way and customised to the institution. An institution with high levels of expertise on gender, cannot have the same set of criteria as one with low levels. In the latter case, a core criterion should be whether a remedy for this lack of expertise has been found and whether, and how, it is effective.

GENDER TIME

A specific insight into how to measure gender equality in the field of science is provided by the guidelines A model for building a Gender Equality Index for academic institutions, produced within the activities of another EU-financed project, GENDER TIME. This toolbox is the main outcome of the project aimed at helping implement action plans with a solid gender perspective in which the gender dimension is evident.

GENDER TIME researchers distinguish between three approaches facing women in science. The first approach focuses on programmes and initiatives to boost the number of women in the field of science, both as students and in academic posts. However, this approach alone lacks efficacy because the problem is much more complex than simply fixing the numbers of women. The problem relates more widely to the issue of gender in determining the social reality and affecting women’s decisions not to pursue science careers. Thus it essential to adopt a second approach, fixing the institutions whose very structures mitigate against the full and equal participation of women. The third approach consists of fixing the knowledge, i.e. embedding the gender dimension in management and research.

Each approach has the same aim: to measure and achieve gender equality. A wide variety of indicators have been created to address the issue. GENDER TIME researchers analyse the most important, which can be listed as follows:

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<table>
<thead>
<tr>
<th>Index name</th>
<th>Dimensions covered</th>
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| The Global Gender Gap Index (World Economic Forum)                        | • Economic participation and opportunity  
• educational attainment  
• general health  
• political empowerment |
| Economic Opportunity Index (Economist Intelligence Unit)                  | • labour policy and practice  
• women’s economic opportunity  
• access to finance  
• education and training  
• women’s legal and social status  
• general business environment |
| The Gender Inequality Index (United Nations)                              | No specific dimension. It has a focus on poverty and it is used to better expose differences in the distribution of achievements between women and men |
| Social Institutions and Gender Index                                      | • discriminatory family code  
• restricted physical integrity  
• son bias  
• restricted resources and assets  
• restricted civil liberties |
| Gender Equity Index (Social Watch)                                        | • education  
• empowerment  
• economic participation |
| Gender Equality Index (EIGE)                                              | Core dimensions:  
• work  
• money  
• knowledge  
• time  
• power  
• health  

Satellite dimensions:  
• violence  
• intersecting inequalities |

According to GENDER TIME, none of these are specifically designed to monitor and evaluate research institutions. They concluded that the only element they have in common is a substantial lack of efficacy for higher education institutions. A new reliable system for measuring gender equality in academic institutions needs to be developed. Despite previous
efforts, no simple and flexible tool exists to monitor how gender equality has been implemented at University level.

GENDER TIME’s starting point is the eight-domains index developed by EIGE, which has the merit of condensing the complexity of gender equality as a multi-dimensional concept into a single summary measure ranging from 1 to 100. However, the Gender Equality Index (GEI) was designed for countries and not for small academic institutions dealing with micro-data. Hence, GENDER TIME focused on tailoring the EIGE framework to the academic world, re-formulating all questions and modifying almost all of the variables, but leaving the domain-based structure intact. Moreover, contrary to EIGE, the GENDER TIME index is not a “neutral” rating, but explicitly considers the direction toward which equality must go. It established, for each domain, the gender gap to be measured by the indicators to ensure the relevant points are uncovered concerning the disadvantaged gender. Each indicator relies on a choice of value, assuming, for example, that it is better to have a permanent contract than a non-permanent one and seeking to determine how women are situated in relation to permanent positions:

- Working Hypothesis (identifying the direction of the simple indicator and its conceptual assumptions);
- Collection of information from two different sources (both quantitative and qualitative);
- Coding information into variables. After collecting information, data are coded into variables;
- Calculation of the simple indicator by sex (calculating the specific indicator of a certain topic separately for males and females);
- Calculation of the simple unique indicator.4

For example, in the domain “Work”, the subdomain “participation” has the variable “types of contracts”, with the direction “Having a permanent contract is preferable than having a non-permanent contract”. In the domain “money”, there is the subdomain “gender pay gap” and the variable “non-institutional activities”, with the direction “performing additional remunerated activities” as positive.

GARCIA

GARCIA5, another EU-financed project focused on the implementation of actions in European Universities and research centres to promote a culture that supports gender equality, and to combat gender stereotypes and discrimination. GARCIA researchers produced The Gender Budgeting in Academia toolkit, which is a guide for integrating gender into the financial processes and procedures of higher education institutions.

Gender budgeting comprises activities and initiatives for preparing budgets or analysing policies and budgets from a gender perspective. Therefore, Gender budgeting is an instrument

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4 See the guidelines for more information. They can be accessed online at: http://www.gendertime.org/toolbox/toolbox_files/Page490.htm
for advancing gender equality that can create new approaches to policies and decision-making related to raising and allocating resources. It helps look beyond the numbers and pay attention to the indicators that direct the resources, which might have differential impacts on women compared to men.

GARCIA guidelines provide a guidance model on how to implement gender budgeting in seven steps. First, what activities to analyse from the perspective of allocation of resources: employment contracts, tasks, department funding, facilities, etc. However, activities which have a more gender impact or involve more employees, should be prioritised. Second, qualitative and/or quantitative data need to be collected on the chosen activities focusing on policies, objectives, and financial consequences of those activities and their impact on gender. The guidelines provide samples of questions to be used. Based on these findings, new objectives and measures should be formulated. It is important to brainstorm how to proceed and list the possibilities for change, including a re-allocation of resources. Relevant actors and stakeholders must be engaged to implement the new objectives. This is necessary to ensure that changes are effective and long-term. All results must be measured including indicators for monitoring and final evaluation. Finally, outcomes need a follow up, in order to identify the lessons learned, the obstacles encountered and long-term sustainability of gender structural changes.

INTEGER

Finally, the FP7 project INTEGR6 produced a set of evaluation guidelines7 and a toolkit8, aimed at supplying higher education and research institutions with tools and guidance for the assessment of their Transformational-Gender Action Plans. It suggests using evaluation methodology for quality assurance of gender action plans, to support legitimacy and in-house dialogue and to measure institutional performance of the implementation of these plans to foster gender equality. The target group of the guidelines comprises any actors in charge of, or interested in, conducting an assessment of Transformational-Gender Action Plan. These may include coordinators, gender equality bodies and quality management entities. The guidelines provide a structure which can form the basis of either a self-assessment or an external evaluation, and thus have multiple uses. Information and instructions are given regarding the proper collection and analysis of data regarding gender equality/inequality, as well as how to use the feedback from data-collection and analysis efforts to develop and implement targeted actions. Furthermore, the guidelines offer practical tools to develop methodological competence in the user, and are designed to be a resource for beginners in the field of self-assessment.

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6 http://www.integer-tools-for-action.eu/en
Further reading


PROMETEA (2008). Empowering Women Engineers in Industrial and Academic Research, Deliverable No 20, Periodic Progress Report on WP7 results Transversal integrating analysis and interpretation


Trauth, E.M. (2012). ‘Are There Enough Seats for Women at the IT Table?’ *ACM Inroads*. Vol 3, 4, pp. 9-54


