GENDER EQUALITY

PLAN

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MÜNSTER

3 WWU Gender Equality Plan

3.1   Introduction

This Gender Equality Plan (GEP) was developed for the Department of Information Systems (DIS) of the University of Muenster (WWU) based on the results of an internal gender audit, a "bottom-up" idea crowdsourcing process supported by the CrowdEquality[1] platform, discussions with the WWU Working Group members of the EQUAL-IST project ("Gender Equality Plans for Information Sciences and Technology Research Institutions")[2], and meetings with the other stakeholders involved in the GEP implementation (see below).

The challenges related to gender equality and diversity (hereinafter referred to as "the challenges") were identified at the DIS during the internal gender audit conducted in December 2016 - April 2017. The gender audit process was designed and discussed during the regular meetings of the WWU Working Group members of the EQUAL-IST project.

The internal gender audit at the DIS involved students, academic staff-members, and non-academic staff members who work or study at the DIS and included five studies. First, comprehensive gender-disaggregated statistics were collected. Second, a comprehensive survey was conducted. Third, a workshop with the students enrolled in the Information Systems (IS) study programme took place. Fourth, interviews with decision-makers were conducted. Finally, a focus group with non-academic staff members was organised. As a result, the gender audit, initial challenges and potential ideas to address them (hereinafter referred to as "the ideas") could be identified. These challenges and ideas could act as an input to the "bottom-up" idea crowdsourcing process supported by the CrowdEquality[1] platform.

The "bottom-up" idea crowdsourcing process was conducted in March 2017 - July 2017. During this process, the ideas to address the identified challenges were first further extended, then reviewed and refined, and finally voted on. The ideas were reviewed and continuously discussed during the regular meetings of the WWU Working Group members of the EQUAL-IST project. An action plan was developed for the selected ideas and discussed with such stakeholders involved in their implementation as the DIS study coordinator, representatives of the IS student council, and representatives of the WWU Equal Opportunities Office. The final list of challenges is presented in section 3.2, while the approved action plan for each of the selected ideas is presented in section 3.3.

The GEP is aligned with the following principles set out in the European Charter for Researchers[3] and the Code of Conduct for the Recruitment of Researchers[4]:

- Non-discrimination against researchers in any way based on gender, age, ethnic, national or social origin, religion or belief, sexual orientation, language, disability, political opinion, social or economic condition.
  - These principles are also highlighted in Article 1 of the German General Equal Treatment Act[5] (federal law) and the WWU Agreement on Respectful and Cooperative Behaviour[6].

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[1] https://www.crowdequality.eu
[2] https://www.uni-muenster.de/forschungaz/project/10219?lang=en
[3] https://euraxess.ec.europa.eu/jobs/charter/european-charter
[4] https://euraxess.ec.europa.eu/jobs/charter/code
[5] https://www.gesetze-im-internet.de/agg/BJNR189710006.html
[6] https://goo.gl/NucQQr

- Provision of working conditions for researchers, including for disabled researchers, which allow both women and men to have flexibility deemed essential for successful research performance and to combine family and work, children and career. Paying attention, inter alia, to flexible working hours, part-time working, tele-working and sabbatical leave, as well as to the necessary financial and administrative provisions governing such arrangements.
  - These principles are also highlighted in the WWU Mission Statement[7], goals of the equal opportunity efforts at the WWU[8], and models and approaches for family-friendly working hours at the WWU[9].
- Gender balance at all levels of staff, including at supervisory and managerial levels. Ensuring equal opportunity policy at recruitment and at the subsequent career stages without, however, taking precedence over quality and competence criteria. Striving for equal treatment by ensuring an adequate gender balance in selection and evaluation committees. Ensuring that career breaks or variations in the chronological order of candidate CVs are not penalised, but regarded as an evolution of a career.
  - These principles are also highlighted in the policies at the state and university levels. At the state level, these principles are included in §11c and §37a of the Higher Education Act of North Rhine-Westphalia (Hochschulgesetz NRW)[10], as well as in §7 and §9 of the North Rhine-Westphalian Equal Opportunities Act (Landesgleichstellungsgesetz NRW)[11]. At the university level, these principles are included in the WWU Mission Statement7, goals of the equal opportunity efforts at the WWU8, as well as §3 Section 6, §4 Section 5, and §11 of the WWU Appointment Regulations[12] and Point 2.2.10 of the Explanations to the Implementation of the WWU Appointment Regulations[13]. Moreover, newly appointed professors at the WWU are invited to attend to a training programme on human resource management[14].
- Ensuring that the entry and admission standards for researchers, particularly at the beginning at their careers, are clearly specified and should also facilitate access for disadvantaged groups or for researchers returning to a research career.
  - These principles are also highlighted in the Treaty on Good Employment Conditions for University Staff Members[15], which was signed between the WWU and the state of North Rhine-Westphalia.

The WWU Mission Statement[7] includes gender mainstreaming and the commitment to treat men and women equally as one of its building blocks: *"WWU Münster considers gender equality to be a task of strategic importance. The aim is to make it easier for women to combine an academic career and family interests. It is in combination with the high quality of life offered by the Münster region that the university hopes to reap benefits in recruiting brilliant researchers in the future. WWU's second strategic objective in the field of gender mainstreaming is to apply suitable measures to strengthen women's social qualifications in pursuing academic*

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[7] https://www.uni-muenster.de/profil/en/mission_statement.html

[8] https://goo.gl/qYD2Yz

[9] https://www.uni-muenster.de/familien/beschaeftigte/zeitmodelle.html

[10] https://recht.nrw.de/lmi/owa/br_text_anzeigen?v_id=10000000000000000654

[11] https://recht.nrw.de/lmi/owa/br_text_anzeigen?v_id=220071121100436242

[12] https://goo.gl/ysb7R5

[13] https://goo.gl/iKMGfy

[14] https://sso.uni-muenster.de/intern/personal/entwicklung/erst-und-neuberufene.html

[15] https://goo.gl/2anSto

careers. In order to initiate such measures to reach these goals, WWU subjects its gender mainstreaming policies to an external "Family-friendly University" audit". Since 2008 the WWU has been awarded the "Family-friendly University" certificate[16].

The Equal Opportunities Office (Gleichstellungsbüro)[17] was established at the WWU in 1990 and since 1997 there has been a continuously updated GEP for the WWU[18]. Since 2000 a GEP has been developed for each faculty at the WWU, including the School of Business and Economics (SBE), which is the faculty that the DIS is part of.

3.2 Identified Challenges Related to Gender Equality and Diversity

In this section, the challenges related to gender equality and diversity (hereinafter referred to as "the challenges"), which were identified during the internal gender audit at the DIS, are introduced. The studies where each challenge was discovered are referred to as "Challenge source(s)". Each challenge belongs to one or several areas targeted in the EQUAL-IST project ("Challenge areas"), namely "HR and management practices", "Teaching and services for (potential) students", and "Institutional communication". In case a challenge belongs to several areas, the main area is highlighted with bold. Each challenge might affect one or several target groups ("Target group(s) affected by the challenge"), including students, academic staff members, and non-academic staff members. Finally, the specific objective(s) to address each challenge are formulated. The overview of challenges, their mapping to the "Challenge areas", and the objectives addressing them are provided the Table 1 below. It also contains references to the actions aimed at addressing the challenges and reaching respective objectives. Detailed information about each action is presented in section 3.3.

Challenge	Objective(s) to Address the Challenge	Action(s)	Main Area
Challenge 1: Low share of young women among Information Systems Bachelor students.	**Objective 1:** Increase the share of young women among Information Systems Bachelor students.	Action 1 Action 2 Action 3 Action 4 Action 5	Institutional communication
Challenge 2: Lack of awareness about the topic of gender equality and interest in it.	**Objective 2**: Raise awareness about the topic of gender equality and interest in it.	Action 6 Action 7	Institutional communication
Challenge 3: Lack of seeing value in gender-sensitive language.	**Objective 3:** Raise awareness about the value of gender-sensitive language.	Action 6 Action 7	Institutional communication
Challenge 4: Negative attitude (of both men and women) towards existing actions promoting women.	**Objective 4:** Raise awareness about the goals and content of existing actions promoting women.	Action 7	HR and management practices
	Objective 5: Critically analyse existing actions promoting women and propose suggestions for their improvement.	Action 8	

European Union

Challenge 5: Perceived exclusion of international students.	Objective 6: Enhance inclusion of international students.	Action 9	Teaching and services for (potential) students
Challenge 6: Difficulties in balancing work and family life.	Objective 7: Improve work-family balance of academic staff members.	Action 10 Action 11	HR and management practices
Challenge 7: Vertical gender segregation.	Objective 8: Improve gender balance at higher academic ranks.	Action 12	HR and management practices

Table 1: Overview of Challenges, Objectives, and Actions.

The challenges are presented in the order of their priority for the DIS. A priority was identified based on the frequency of encountering each of the challenges during the internal gender audit. The priority order of challenges was approved by the WWU Working Group members of the EQUAL-IST project and considered when deciding on the list of actions to be included in the GEP.

During the internal gender audit, it was revealed that the root problem for the under-representation of women at the DIS is the low share of young women among IS Bachelor students, namely 13.2% in 2017 (Challenge 1). The issue of the lack of women at higher academic levels at the DIS (professors, doctoral and postdoctoral researchers) is a consequence thereof. Therefore, addressing this challenge forms the GEP focus and corresponds with the largest number of actions (Action 1 – Action 5).

The second priority is to address the attitudinal challenges (Challenge 2 – Challenge 4) related to the overall lack of interest and even hostility towards the topic of gender equality that could be observed during the internal gender audit. Therefore, three actions (Action 6 – Action 8) specifically deal with changing such negative attitudes.

The third priority is to address the challenge admitted by all international students who participated in the workshop during the internal gender audit that they felt excluded by local students from group work (Challenge 5). Inclusion of international students is crucial for achieving overall equality and diversity. Therefore, development and implementation of a strategy for connecting international students with local students is required (Action 9).

Difficulties in balancing work and family life (Challenge 6) were highlighted in only few survey responses and mostly dealt with the miscommunication of the expectations from academic staff members during the hiring process (Action 10). One major challenge highlighted by several parents working at the DIS was that the current offer of places in kindergartens for children of the WWU staff members was not sufficient (although since 2008 the WWU has been certified as a "Family-friendly university"[16]). This challenge though can only be addressed centrally at the WWU level and thus no specific actions to increase the number of kindergarten places could be included in the GEP. It is however important to investigate further ideas how this issue could be tackled at the DIS level. Moreover, potential other difficulties faced by the DIS staff members and IS students who have children need to be investigated, as these groups were not analysed separately during the internal gender audit. (Action 11)

Vertical gender segregation (Challenge 7) could be observed at the DIS in 2017 only when moving from doctoral researchers (24% are women) to postdoctoral researchers (12% are women). The share of women among full professors at the DIS (1 out of 6, 16.7%) corresponds with the shares of postdoctoral researchers and female IS Bachelor students (13.2%). In the IS Master study programme the share of women is higher (25%) due to the higher share of women among international students. A relatively high share of women

among doctoral researchers at the DIS (24%) can be explained by favourable working conditions and multidisciplinary projects, which attract women with non-IS backgrounds to join the DIS. The challenge of vertical gender segregation is of the last priority in the GEP also because several interventions aimed at advancing women in their academic careers have already been implemented by the WWU Equal Opportunities Office. Interventions are specific activities aimed at changing a state of affairs (e.g., Craig, 2015). These interventions include the networking and coaching of female professors [19], the "Erstklassig" mentoring programme [20] and "Frauen managen Hochschule" leadership programme [21] for female postdoctoral researchers, as well as the opportunities for female researchers at all levels to receive funding for individual projects[22] or for covering travel expenses to conferences[23] to enhance visibility of their research. The results of the internal gender audit showed that there was a lack of awareness about these interventions at the DIS, which needs to be changed (Action 12).

In addition to the challenges that can be addressed within the GEP (Challenge 1 – Challenge 7), during the internal gender audit it was found out that stereotypes about the role, appearance, and behaviour of women and men that still exist in the German society are also present at the DIS. Moreover, a stereotypical perception that women tend to be less interested and less capable than men in certain tasks (e.g., programming) due to biological and psychological differences could be observed. Such prejudice provokes the development of impostor syndrome [24] among female IS students, leading to their underestimation of own technical competences. Addressing these challenges remains out of the GEP scope, as it would require large-scale societal interventions. Nevertheless, it is intended to transmit in all GEP actions the message that women are as capable as men in any kind of intellectual work and that a variety of social and personality characteristics are much more powerful predictors of human behaviour than biological sex (e.g., Loiacono et al., 2016; Trauth et al., 2016; Trauth, 2017).

Another phenomenon, which was highlighted during the internal gender audit at the DIS, but was not included in the GEP, is the gender imbalance among non-academic staff members. At the DIS all members of the System Administration team are men, while all team assistants and the librarian are women. This phenomenon is, however, common for any university department worldwide independently from its field. At the WWU, there are currently two intervention programmes that specifically target female non-academic staff members, namely the "Volltreffer" [25] programme offering seminars to improve various competences and the "Frauenvollversammlung" [26] annual workshops, where the participants have a chance to discuss the challenges they face and exchange experiences. Further interventions to address the gender imbalance among non-academic staff members are planned by the WWU Equal Opportunities Office (i.e. at the university level) and are out of the GEP scope.

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[19] https://www.uni-muenster.de/Gleichstellung/Programme_fuer_Professorinnen.html
[20] http://www.uni-muenster.de/Gleichstellung/mentoring.html
[21] http://www.uni-muenster.de/Gleichstellung/FmH.html
[22] https://www.uni-muenster.de/Gleichstellung/Frauenfoerderpreis.html
[23] http://www.uni-muenster.de/Gleichstellung/Einzelfoerderung.html
[24] https://en.wikipedia.org/wiki/Impostor_syndrome
[25] http://www.uni-muenster.de/Gleichstellung/Volltreffer.html
[26] https://www.uni-muenster.de/Gleichstellung/frauenvollversammlung-2017.html

European Union

3.2.1 Challenge 1: Low share of young women among Information Systems Bachelor students.

Challenge source(s): survey, workshop, interviews.

Challenge area(s): Teaching and services for (potential) students; **Institutional communication**.

Target group(s) affected by the challenge: students, academic staff members.

Challenge description:

In 2017 among the students enrolled in the IS Bachelor study programme at the WWU only 13.2% were women (vs. 46% of women among all WWU students). The share of women among the *first semester* IS Bachelor students was slightly higher (17.2%), but still remained very low. This challenge also exists in other IS study programmes in Germany and worldwide. There are several reasons that might discourage young women to enter the IS field. Often young women have a distorted and even wrong image of IS careers. They might perceive such careers as uninteresting, while lacking a comprehensive understanding of their variety. Horizontal gender segregation exists in Germany and worldwide, meaning that the STEM fields (Science, Technology, Engineering, and Mathematics), specifically the IS field (as part of the Technology field), as well as academia in general, are perceived as masculine domains. The lack of visible role models of women working in the IS field reinforce this stereotype.

3.2.2 Challenge 2: Lack of awareness about the topic of gender equality and interest in it.

Challenge source(s): survey, workshop.

Challenge area(s): Institutional communication.

Target group(s) affected by the challenge: students, academic staff members, non-academic staff members.

Challenge description:

Although the DIS faces an under-representation of women at all levels (from Bachelor students up to professors), the topic of gender equality until now has *not* been extensively discussed or recognised as important. Overall lack of interest and even hostility towards the topic could be revealed during the internal gender audit at the DIS. The understanding of gender inequality tends to be limited to direct discrimination. As direct discrimination does not exist at the DIS, it is a common argument that gender equality has already been achieved and no further action is required.

Especially worrisome is the negative attitude of some men towards all existing and possible future activities promoting gender equality. As men form the majority, they also have more influence on the course of future action. Therefore, it is crucial to enhance the understanding of the importance of promotion of gender equality especially among men.

Low interest in the topic of gender equality often stems from the lack of awareness, (a) what gender equality is about, (b) what constitutes gender inequality issues beyond direct discrimination, why it is important to tackle these issues and how, as well as (c) what interventions already exist at the department, university, and country levels.

Especially when it comes to subtle indirect forms of discrimination, one often needs to be sensitised to recognise them. Raising awareness about the topic of gender equality at all levels could help to raise interest in it and mobilize the potentials needed to make sustainable change possible.

3.2.3 Challenge 3: Lack of seeing value in gender-sensitive language.

Challenge source(s): survey, workshop.

Challenge area(s): HR and management practices; Teaching and services for (potential) students; **Institutional communication**.

Target group(s) affected by the challenge: students, academic staff members, non-academic staff members.

Challenge description:

Gender-sensitive language aims at acknowledging gender equality in written and spoken language[27]. During the internal gender the audit was revealed that at the DIS gender-sensitive language is not consistently used by lecturers and in institutional communication. Moreover, a lack of awareness about the value of using gender-sensitive language could be observed, leading to a hostile attitude towards this topic and the argument that the change to gender-sensitive language requires a lot of resources and is not worth the efforts. It is important to design strategies to influence the discourse on gender-sensitive language, focusing on communicating its value. It is important to avoid a situation when people feel forced to use gender-sensitive language, but rather transmit the reasons for using it.

3.2.4 Challenge 4: Negative attitude (of both men and women) towards existing actions promoting women.

Challenge source(s): survey, workshop, interviews.

Challenge area(s): **HR and management practices**; Institutional communication.

Target group(s) affected by the challenge: students, academic staff members, non-academic staff members.

Challenge description:

It is often perceived by both male and female staff members and students that the actions promoting women, such as gender parity quotas in committees and decision-making bodies, as well as in target values for hiring staff, do more harm than provide value.

On the one hand, many women feel the danger of being unfairly promoted based on their gender, not their capabilities, or being accused by their male colleagues that they received promotion only because they are women. On the other hand, many men feel disadvantaged or discriminated. Results of the internal gender audit at the DIS showed that the only events and interventions, where gender-based exclusion was observed, were those aimed at the promotion of women, where only women could participate. Furthermore, gender parity quotas in committees and decision-making bodies create excessive additional workload for female professors in the areas where women are under-represented, which is often perceived as hindering career

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[27] http://eige.europa.eu/rdc/thesaurus/terms/1215

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European Union

progress rather than supporting it. It is important to think about strategies how the unintended negative perceptions and impacts of the actions promoting women could be avoided.

It is also important to highlight that the phenomenon of the low share of women at all levels at the DIS is only partly perceived as a problem to be tackled. Some staff members agree that it is indeed an issue, while others rather perceive the low share of women as "natural" and "normal", i.e. that women are just not interested in the STEM professions due to their innate and/or socially formed characteristics. A possible underlying reason here could be the fact that formal gender equality has already been largely achieved in Germany. Here measures to raise awareness will be needed at all levels to sensitise staff members, as well as students, about (a) the reasons, why this is an issue to be tackled, (b) the far-reaching negative consequences of under-representation of women in IS, and (c) the real roots of the perceived "lack of interest" of women in the STEM professions.

3.2.5 Challenge 5: Perceived exclusion of international students.

Challenge source(s): workshop.

Challenge area(s): **Teaching and services for (potential) students**; Institutional communication.

Target group(s) affected by the challenge: students.

Challenge description:

The internal gender audit at the DIS revealed that some international students felt excluded by local students from group work, which often forms part of a course curriculum. In case the students were asked to form groups, German students tended to team up with other German students. On the other hand, if groups were assigned by a lecturer and international students appeared to be a minority in a group dominated by German students, the international students tended to be excluded from group discussions, because German students were often hesitant to speak English.

Note: The phenomenon that people sharing the same mother tongue tend to build teams among each other can be observed in any context.

Note: This challenge is related to the equality, diversity, and social inclusion of all IS students. The focus on the intersectionality of gender and cultural background of students could provide further insights into tackling this challenge.

3.2.6 Challenge 6: Difficulties in balancing work and family life.

Challenge source(s): survey, interviews.

Challenge area(s): HR and management practices.

Target group(s) affected by the challenge: academic staff members.

Challenge description:

Since academic careers in Germany are associated with high workload and the culture of long working hours on the one hand and insecure working conditions (temporary contracts) on the other hand, men and women who have children or would like to have children tend to be disadvantaged. Therefore, existing activities supporting work-family balance need to be promoted and new activities in this area that address the needs of staff members in a more comprehensive way need to be identified.

Another aspect here is that male academic staff members at the DIS tend to take only short parental leave (usually only two months), meaning a lack of family time for them and that their spouses are out of the workforce for a significantly longer period. There are two main reasons for this phenomenon: (1) traditions and societal roles where a man is perceived as a primary breadwinner and a woman as a caretaker and (2) the fact that men in Germany earn on average more than women. At the same time, the German national law supports parents to share parental leave by prolonging it up to 14 months (vs. 12 months if only one parent, usually the mother, takes parental leave).

Results of the internal gender audit also showed that not all Chairs at the DIS welcomed gradual return to work of the staff members (for instance, allow a parent to first work only half of a position, then three quarters of a position etc.). The underlying reason here might be the lack of women having children in leading positions who could lead by example in raising awareness about family-related issues and possible solutions to deal with them.

3.2.7 Challenge 7: Vertical gender segregation.

Challenge source(s): survey, interviews.

Challenge area(s): HR and management practices; Institutional communication.

Target group(s) affected by the challenge: academic staff members.

Challenge description:

The issue of vertical gender segregation or 'glass ceiling', i.e. lower shares of women at each higher position level, is relevant for the majority of fields in academia and in practice in Germany and worldwide, including the IS field. In 2017 the 'glass ceiling' phenomenon could be observed at the DIS when moving from doctoral researchers (24% are women) to postdoctoral researchers (12% are women). The lack of women at higher IS academic ranks leads to the lack of visible role models for young women and reinforces the image of IS as a male-dominated domain. Such an indirect societal message that women are not demanded or not suitable for managerial positions remains common. Thus, it is important to reveal and understand, how to tackle the subtle systemic and societal mechanisms that hinder women to strive for higher academic ranks in the IS field in general and at the DIS in particular.

3.3   Action Plan to Address the Identified Challenges

In this section, the approved action plan is presented for each of the selected ideas aimed at addressing the challenges and reaching respective objectives introduced in section 3.2. The ideas were collected, reviewed, and voted on during the "bottom-up" idea crowdsourcing process supported by the CrowdEquality[1] platform. During the reviewing phase, the collected ideas were critically discussed by the WWU Working Group members of the EQUAL-IST project. Only the ideas considered as feasible to be implemented were either voted on by the DIS staff members and IS students or considered as important to be included in the GEP without voting. Due to limited available resources, only the subset of the pre-selected ideas could enter the implementation phase. The ideas were prioritised based on the voting results and the priorities of corresponding challenges (see section 3.2). The final list of ideas was then determined by the WWU Working Group members of the EQUAL-IST project and the action plan for their implementation was developed and discussed with further involved stakeholders.

The EQUAL-IST project leader at the WWU overtakes the leadership of the action management and implementation. Several other stakeholders specified for each action committed to provide informational and advisory support. These stakeholders include the WWU Working Group members of the EQUAL-IST project, where, among the other members, the GEP signatories are involved; the DIS study coordinator; the IS student council; and the WWU Equal Opportunities Office. It is intended to involve further stakeholders in the course of the GEP implementation.

The proposed actions are both tangible (e.g., evaluation of marketing materials) and intangible (e.g., raising awareness about the importance of gender equality). Each of the proposed actions can address one or several objectives introduced in this section. Two actions are relevant for all objectives, namely "Action 13 Dissemination of the Gender Equality Plan" and "Action 14: Development of the sustainability plan for all actions within the Gender Equality Plan". Furthermore, all actions should contain activities aimed at raising awareness about the importance of gender equality (in addition to dedicated Action 6 – Action 7). All actions aimed at addressing "Objective 1: Increase the share of young women among Information Systems Bachelor students" (Action 1 – Action 5) need to include the explanation, what is about, highlighting that it is an interdisciplinary and diverse field, why it is interesting, what benefits and opportunities the IS profession provides etc. It needs to be underlined that the IS study programme at the WWU welcomes everyone and that it is an outdated stereotype that the IS field is for men only.

Specific tasks that are foreseen to be performed within the first iteration of the GEP implementation (Iteration 1, 10/2017 – 04/2018) are described in detail. As for the tasks planned for the second iteration of the GEP implementation (Iteration 2, 07/2018 – 04/2019), only their summary is presented in the GEP current version. It is intended to describe them in more detail in the GEP refined version, which will be developed in 05/2018-06/2018.

The Table 2 below (*WWU Actions- Target Indicators-Involved Stakeholders and Period of Implementation)* presents a summary of the stakeholders involved in the implementation of each action, as well as the target indicators to be achieved within Iteration 1 of the GEP implementation and the timeline for achieving these indicators. Detailed timeline and resources required to perform the tasks within each action are summarised in Table 3. A detailed description of each action is presented afterwards.

European Union

3.3.1 Action 1: Identification of the promising activities and communication channels to promote the Information Systems study programme.

A strategy for promoting the IS study programme at the WWU needs to be developed and structures for its implementation need to be established. In order to develop the strategy, first information about the ways secondary-school students in Germany, and especially young women, inform themselves about potential study programmes needs to be collected and analysed. Taking into consideration the results of this analysis, a survey on the choice of the IS study programme at the WWU needs to be designed and implemented. The survey needs to be distributed among first semester Bachelor and Master IS students. The students need to be asked, how they learned about the IS study programme and what motivated them to choose it. A comparative analysis of responses from male and female students needs to be performed.

The analysis of related work and the survey results should reveal the most influential factor(s) and promising communication channel(s) for (further) promoting the IS study programme. The outcomes of this analysis need to act as a basis for workshops with the WWU Working Group members of the EQUAL-IST project and the IS student council, where the promising activities to promote the IS study programme need to be identified. Furthermore, contacts with the WWU press office need to be established and the opportunities for collaboration need to be explored.

3.3.2 Action 2: Revision of existing marketing materials promoting the Information Systems study programme.

It needs to be evaluated, whether existing marketing materials promoting the IS study programme at the WWU present the programme in an attractive and welcoming way for all, also for young women, and, if applicable, propose suggestions for their improvement.

The evaluation needs to be based on the results of the analysis of related work. First, an overview of the guidelines on using the gender-sensitive approach in marketing materials needs to be performed. Second, the marketing materials of IS departments in Germany and worldwide, which were designed considering the gender equality principles, need to be collected and analysed. The evaluation of marketing materials needs to focus on ensuring that there is a balanced representation of men and women in images, that gender-sensitive language is used in texts, and that *no* gender stereotypes are transmitted in images or texts.

The following marketing materials promoting the IS study programme need to be evaluated using the gender-sensitive approach: the flyer promoting the IS Bachelor study programme, the brochure promoting the IS Bachelor study programme, the slides introducing the IS Bachelor study programme, the brochure promoting the IS Master study programme, the slides introducing the IS Master study programme, and the static pages of the DIS Website. Based on the results of this evaluation, suggestions for improvement need to be proposed and implemented during the next revision round of a respective marketing material.

3.3.3 Action 3: Promotion of the Information Systems study programme at existing interventions for female pupils.

There are interventions both at the WWU and outside the WWU aimed at motivating female pupils to select one of the STEM study programmes. The IS study programme at the WWU needs to become present there

and the activities engaging female pupils to select it for their future studies need to be developed. A respective strategy needs to be developed and structures for its implementation need to be established.

The MExLab (MExLab ExperiMINTe)[28] organisation at the WWU organises different interventions for primary and secondary school pupils aimed at encouraging them to select one of the STEM study programmes. Several interventions conducted by MExLab are specifically targeted at female pupils. Until now the IS study programme at the WWU has not been specifically included into the MExLab interventions and opportunities for increasing its presence there need to be explored. One possible suitable intervention outside the WWU is the Technovation[29] international technology competition for female pupils, where the DIS staff members could act as mentors and promote the IS study programme to the participants.

Contacts with the intervention organisers need to be established and the opportunities for collaboration need to be explored. A list of suitable activities to promote the IS field and the IS study programme at the identified interventions needs to be developed. Possible ideas could include the presentation of the role of information systems in disaster management, social media, online shopping etc. Existing activities for the other STEM study programmes can be used as best practices for initial inspiration. Based on the attained outcomes, the further course of action will need to be developed.

3.3.4 Action 4: Promotion of the Information Systems study programme at surrounding schools.

A strategy for promoting the IS study programme at surrounding schools needs to be developed and structures for its implementation need to be established. The Central Student Advisory Services Office at the WWU (Zentrale Studienberatung der Universität Münster)[30] needs to be consulted regarding the existing contacts with surrounding schools, best practices, further ideas etc.

Contacts with school principals need to be established and the opportunities for collaboration need to be explored. A set of innovative activities to promote the IS field and the IS study programme at schools needs to be developed and followed by their implementation.

One possible intervention could be the organisation of regular (instead of sporadic) school visits and online meetings with pupils done by IS students, academic staff members, and professionals. Female speakers need to be encouraged to participate in the school visits and online meetings to act as role models for potential female students. Female speakers can be invited from the pool of current IS students, academic staff members at the DIS, and/or professionals (IS alumni). Incentives for them need to be developed.

Another intervention could be the organisation of an open day(s) at the DIS campus, where teachers of surrounding schools are invited. The intention is to encourage teachers attending such event(s) to disseminate the correct and comprehensive information about the IS field and the IS study programme to pupils.

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[28] https://www.uni-muenster.de/MExLab/mexlabexperiminte/index.html
[29] http://technovationchallenge.org
[30] http://www.uni-muenster.de/ZSB

3.3.5 Action 5: Improvement of the activities promoting the Information Systems study programme at the annual information days for secondary-school students.

The IS study programme at the WWU needs to be promoted during the annual information days at the DIS for female pupils ("Girls' Day"[31]) and at the SBE for all secondary-school students ("Hochstetler"[32]). Respective strategies need to be developed and implemented.

Contacts with the organisers of the "Girls' Day" and "Hochschultag" information days need to be established and the opportunities for collaboration and improvement of the presentation of the IS study programme there need to be explored. Female IS students need to be encouraged to participate in both information days to act as role models for potential female students. Incentives for them need to be developed.

A special event within the "Girls' Day" intervention focusing on the IS profession and the IS study programme at the WWU needs to be launched. The materials and agenda for the "Girls' Day" events at the DIS need to be developed. Possible activities for the participants could include resolving an IS case challenge, meeting with one of the student project seminar teams, informal meeting with female IS students etc. (Note: A project seminar is a special teaching format at the DIS, usually done in collaboration with companies, where IS students work in teams on some task relevant for practice.) The target audience of "Girls' Day" at the DIS needs to be extended, so that not only female secondary-school students (who are about to complete their studies at school), but also younger female pupils are invited.

3.3.6 Action 6: Raising awareness via marketing materials about the importance of gender equality and the value of gender-sensitive language.

An overview of the following related work needs to be performed: (a) on promising awareness-raising interventions and (b) on the value of gender-sensitive language. Based on the results of this analysis, a strategy for raising awareness via marketing materials about the importance of gender equality and the value of gender-sensitive language needs to be developed and structures for its implementation need to be established both at the SBE and WWU levels.

3.3.7 Action 7: Improvement of communication of the content of existing actions promoting women and the reasons behind them.

The following aspects need to be communicated in a more effective way: (a) the meaning and objectives of the actions specifically promoting women, (b) how these actions work, and (c) the reasons behind their implementation. A respective strategy needs to be developed and structures for its implementation need to be established both at the SBE and WWU levels.

Specific attention needs to be paid to raising awareness about the intentions behind and objectives of quotas and the obligatory sentence for all job vacancies at the WWU that in case of equal qualification a female

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[31] https://www.girls-day.de
[32] http://www.hochschultag-ms.de

candidate has a priority. It needs to be widely communicated that merit, but not gender, is the selection criteria. A discussion needs to be initiated about how the harm from quotas and other actions promoting women could be reduced. It needs to be communicated that direct discrimination against women existed not so long ago and that the recent achievements preventing it should not be taken for granted.

Clarification and justification of the actions promoting women at the WWU need to be summarised on the website of the WWU Equal Opportunities Office. The link to this information needs to be further disseminated, in particular, via the DIS and SBE websites, via email to all DIS and SBE staff members, as well as in all future communication with female academic staff members at the DIS and SBE (for instance, when inviting them to participate in the programmes aimed at advancing their academic careers).

3.3.8   Action 8: Formulation of suggestions for improvement of existing regulations related to gender equality.

Currently all job vacancies at the WWU must contain the following sentence: "In case of equal qualification a female candidate has a priority". The formulation of this sentence is done centrally at the WWU level. Results of the internal gender audit at the DIS showed that both men and women had negative attitude towards this sentence. Therefore, it needs to be proposed to the WWU Equal Opportunities Office to revise it.

Several suggestions to rephrase the sentence are as follows: "Gender, ethnicity, religious views etc. cannot act as a factor advantaging or disadvantaging a candidate." and/or "Our Department strives to achieve gender equality." and/or "Our Department is a place without gendered tasks." and/or "We believe that all genders can do the same job at our Department." In addition to that, further examples of how this sentence is formulated in other universities in Germany and, in particular, in the state of North Rhine-Westphalia need to be collected, analysed, and a comprehensive list of all promising suggestions needs to be communicated to the WWU Equal Opportunities Office.

Furthermore, according to the current regulations in the North Rhine-Westphalian Equal Opportunities Act (Landesgleichstellungsgesetz NRW)[11], only women can be equal opportunities officers at the universities. Results of the internal gender audit at the DIS showed that there was a demand at the SBE to enable both women and men to become faculty equal opportunities officers. As it might not be feasible to change the state regulations, one possible intervention could be to encourage men to become active members of the equal opportunities commissions at the faculty level.

Official letters communicating these suggestions need to be prepared and sent to the WWU Equal Opportunities Office. Each suggestion needs to be backed up with the data collected during the internal gender audit at the DIS. Implementation of these suggestions might not be feasible, but the WWU Equal Opportunities Office will be asked to consider them and communicate further to the state and country levels.

3.3.9   Action 9: Development and implementation of a strategy for connecting international students with local students.

A strategy for connecting international students with local students needs to be developed covering the following aspects. Structures for implementation of this strategy need to be established.

The share of international students is especially high in the IS Master study programme at the WWU, where English is the only language of instruction. Therefore, first, gender-disaggregated statistics on the share of international students in the IS Master study programme since its initiation in 2008 need to be collected. The

evidence needs to be provided that the share of international students has increased over time, which would act as further justification of the need for interventions for this target group.

Second, further group work activities aimed at connecting international students with local students need to be incorporated into lectures. The courses that take place at the beginning of the IS Master study programme need to be primarily targeted. The opportunities for introducing further short interactive exercises, where student groups are formed in a random way directly during the lecture, need to be explored. As new groups would be formed for each exercise, both local and international students would have a chance to get in contact with a larger number of their peers. The intention here is to overcome gender and culture prejudices that might currently exist.

Third, a buddy programme connecting international students with local students needs to be initiated. The idea behind the buddy programme is to match international students with local students at the beginning of the semester, and encourage them to meet and participate in various clubs, teams or activities.

Fourth, international students need to be encouraged to become members of the IS student council.

Fifth, the opportunities need to be explored, how regular international IS students could be further involved in existing initiatives supporting exchange students in Muenster. The initiatives supporting exchange students in Muenster include, for instance, the "Die Brücke" International Centre at the WWU[33], the WWU International Office[34], International Relations Center at the SBE[35], and the Erasmus Münster[36] informal movement.

3.3.10 Action 10: Improvement of communication of the expectations from academic staff members during the hiring process.

The expectations from academic staff members need to be communicated in a more effective way during the hiring process at the DIS. The professors at the DIS (as they are responsible for hiring their staff members) need to be notified that during the internal gender audit several staff members indicated that the expectations from them were not communicated clearly during the hiring process. A strategy for improving the hiring process at the DIS needs to be developed and structures for its implementation need to be established.

In particular, it needs to be communicated that there are no fixed working hours at the DIS. No fixed working hours at the DIS means, on the one hand, flexibility and opportunities for telework, but, on the other hand, that there might also be situations requiring working outside the regular working hours. Clear communication is important to manage expectations of applicants and make them better prepared for the type of job they will face as academic staff members.

3.3.11 Action 11: Development and implementation of a strategy for supporting staff members and students who have children.

A strategy for supporting staff members and students who have children needs to be developed covering the following aspects. Structures for implementation of this strategy need to be established.

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[33] http://www.uni-muenster.de/DieBruecke/en/index.html
[34] http://www.uni-muenster.de/InternationalOffice/en/
[35] https://www.wiwi.uni-muenster.de/fakultaet/en/international/irc
[36] https://www.facebook.com/erasmus.muenster

First, gender-disaggregated statistics on parental leave of the DIS staff members (both academic and non-academic) need to be collected and analysed. Furthermore, the opportunities for collecting gender-disaggregated statistics on IS students who have children need to be explored. No such statistics are currently collected at the WWU. As for the staff members, the statistics are available at the university level, but further exploration for the DIS is required. It is also important to collect statistics on the share of children who received a place in a kindergarten, which was reserved by the WWU. For the DIS staff members, it is relevant to also collect statistics on how many months a person (and, if available, his/her partner) took a parental leave. Based on the attained outcomes, the further course of action will need to be developed.

Second, the activities supporting staff members and students who have children, which were implemented in other universities in Germany, need to be collected, analysed, and compared with those offered at the WWU.

Third, the information about existing opportunities at the WWU for staff members and students who have children need to be communicated in a more effective way. A respective strategy needs to be developed and structures for its implementation need to be established considering the results of the analysis of statistics and related interventions. Information about the opportunities at the WWU for staff members and students who have children needs to be unified and updated, as it currently appears on several WWU webpages, which are not synchronised with each other. The link to this unified and updated information needs to be published then on the DIS and SBE websites.

Fourth, the DIS staff members and IS students who have children need to be asked, what further activities they would find useful. One possible intervention could be the organisation of a mailing list and/or of informal meetings for parents, where they could (a) exchange experiences on how they manage to combine academic work and parenting, what opportunities for parents they could use, and how existing opportunities could be improved to better address their needs, as well as (b) explore possibilities for potential collaboration, such as supporting each other in carpooling, sharing costs for a baby sitter, taking care of each other's children in urgent cases etc. However, before organising such an intervention, it is important to explore the demand for it from parents.

Fifth, the opportunities for conducting a training for the DIS professors about the importance of ensuring the balance of work and family life of their staff members need to be investigated. It needs to be explored, whether it could be feasible to organise and conduct such a training. The training needs to also contain activities aimed at raising awareness about the importance of gender equality, gender-sensitive language, avoidance of gender stereotypes, and promoting the culture of sharing family and care responsibilities. The ways to encourage the DIS professors to participate in this training need to be investigated. Moreover, the resources required to organise and conduct the training need to be estimated. Based on the attained outcomes, the further course of action will need to be developed.

3.3.12 Action 12: Promotion of existing activities aimed at advancing women in their academic careers.

Female academic staff members at the DIS need to be encouraged to participate more actively in the programmes offered by the WWU Equal Opportunities Office aimed at the promotion of their academic careers. The reasons behind their current low participation need to be explored. Possible reasons might include lack of time, lack of interest, lack of awareness, lack of encouragement from academic supervisors etc. Based on the results of this analysis, a strategy for addressing the needs of female academic staff members at

the DIS and encouraging them to participate in existing activities aimed at advancing their academic careers needs to be developed. Structures for implementation of this strategy need to be established.

3.3.13 Action 13: Dissemination of the Gender Equality Plan.

Both the overall GEP document and each of the designed actions need to be disseminated to all target groups at the DIS: academic staff members (in particular, professors), non-academic staff members, and students. Moreover, the GEP needs to be disseminated at the SBE and WWU levels. Specific GEP dissemination activities include press releases published on the DIS and SBE websites; presentations at a 'Brown Bag Meeting' of the DIS academic staff members (a meeting that occurs during a lunch period), as well as at DIS and SBE Board Meetings; posts published on the WWU social media channels; and emails sent to the DIS staff members, the IS student council, and the WWU Equal Opportunities Office.

3.3.14 Action 14: Development of the sustainability plan for all actions within the Gender Equality Plan.

The processes required for the improvement of gender equality and diversity at the DIS need to be sustainable to make a change. According to the work done by Athena Swan[37], the results of successful interventions promoting gender equality become visible only after at least five years since the start of their implementation. Therefore, it is crucial to ensure the sustainability of the actions outlined in the GEP.

At the end of Iteration 1 of the GEP implementation, the "lessons learned" workshop(s) need to be conducted with all involved stakeholders. Furthermore, it needs to be continuously explored, how the GEP actions could be incorporated into the routine tasks of permanent roles and structures at the DIS, the SBE, and the WWU. Moreover, the opportunities to fund the GEP actions beyond the runtime of the EQUAL-IST project need to be explored. If applicable, a proposal(s) for funding need to be prepared and submitted. As a result, a sustainability plan for each of the GEP actions needs to be prepared and then implemented. The experience of other universities, which developed GEPs within third-party funded projects, needs to be collected, analysed, and considered during the creation of the sustainability plan.

The GEP will become effective from the date of signature and shall remain in force for an initial period of seven months from October 2017 to April 2018. Thereafter, the GEP refined version shall be developed, approved, and signed.

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[37] http://www.ecu.ac.uk/equality-charters/athena-swan

3.5 Acknowledgements and References

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