

## “GM-Styleguide“ : Gender Mainstreaming in digital media

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The main objective of Gender Mainstreaming (GM) is to promote gender equality by the integration of gender questions into all decisions, areas and programs.

The following advises (“GM-Styleguide”) aim at promoting GM in digital media in academia. It is directed towards women and men in leading positions at university-level institutions, researchers working in project organisation and management and towards women and men dealing with evaluation, didactics, technology and production of content in the context of digital media. The styleguide is divided into five subsections (project organisation, didactics, teaching and learning contents, evaluation). Each subsection contains recommendations concerning the design of learning environments. Further comments and description as well as related literature can be found in a more comprehensive German version of the GM-Styleguide called GM-Guideline ([www.dimeb.de](http://www.dimeb.de)).

### 1. Project organisation

Especially in Germany only few women can be found in leading and responsible positions. Within the European Union, Germany is bottom of the class in equal opportunity. Therefore, one should pay attention on having women in leading positions, as well as in multimedia projects. In social processes the principle of similarity plays an important role, namely men usually orient themselves on other men while women orient themselves on other women. This principle works in both directions: up (role models) and down (promotion). Realising these processes not only helps to recognize them, it helps to work against this hidden machinery and to search openly for existing qualifications as well as for qualifications that can be developed.

A first step towards that goal can be disclosure (starting with the project’s application), awareness and reflection of gender questions in project planning and implementation. Even if there are no alternatives in choosing someone for a leading position, the disclosure can create an atmosphere of openness concerning gender equality questions. To summarize: to understand Gender Mainstreaming as a part of project management, the first step is to implement Gender Mainstreaming.

#### Recommendations:

- *Understand and implement GM as a scope of duties in project management*
- *apply qualification in GM for both women and men*
- *involve the gender commissioner into project management and into the whole projects*
- *accept wishes for qualification and create opportunities to qualify*
- *link background information and reasoning of GM into platforms*
- *integrate GM into the project's milestones*
- *require gender competences in job advertisements and as qualifications during recruitment*
- *In case of gender imbalances (30 % or less), promote women as the case may be men for (responsible) tasks in the project.*
- *accommodate wishes for qualification and create qualification possibilities*
- *Broach the issue of proportion of women and men in project and project management.*
- *avoid stereotypical assignment of tasks*

- *promote self-dependent work and open conversations*
- *promote interdisciplinary work in the project through participation of groups with different status and profession*
- *enlarge participation in decision making*
- *integrate co-workers in networks (publications, expertises, congresses and working sessions)*

## 2. Technology and Design

A key factor for acceptance, effect and creative use of digital media are students and teachers that feel comfortable with the technology. That requires the user not only to know how to „click a button“, but to receive an impression of being able to express himself, to design and create content and to be involved. That means for the development of technology especially in an educational context it is not only a task for technicians, but a task that requires participation of the user and that is influenced by the user.

Projects that develop technology therefore must have a close cooperation and discussion between Technology, didactics and content and the potential users have to be part of the developing process from the scratch on.

It is important that the skills of the user in using software, access to technology and having tools installed as well as designing them are not requirements but a part of the development concept. Not computer experienced students, which are a minority even under male students should be the rule, but average male and female students who still have to develop know-how in technology.

Differences in income, time resources and access between different sexes should be considered during the implementation of virtual learning environments. On a concrete level, that means system requirements, e.g. processor power, bandwidth or special software should be defined after knowing the target audience.

An advantage of individually configurable start pages is not only the possibility of designing colour and fonts by oneself. Start pages that are configurable individually provide hands-on access to the platform – and can therefore help to support internet literacy and make it possible to delegate responsibility in administration and moderation to the user.

### Recommendations

- *provide social, technological and didactical understanding for every member of the project (e.g. by peer teaching)*
- *Influence the culture of technology by merging didactics, evaluation and technology*
- *Fill the field of activity in the project as gender heterogeneous as possible*
- *Provide the possibility of participation of the user in the development process of technology*
- *Make the design of technology transparent for the user. Technology lives from new requirements of users*
- *System requirements e.g. processor power, bandwidth or special software (e.g. internet browsers or plug-ins like Flash, Java or Acrobat) should be defined after knowing the target audience (competencies, equipment, general setting).*
- *Provide individual ways of learning (e.g. tool for annotations in every function)*
- *Separate structure and content (up-to-dateness, different formats)*
- *Provide different and fast possibilities of orientation (subtitles, accentuation) and flat hierarchies*
- *Offer context sensitive help: provide adequate explanation in every situation*
- *Be aware of cultural differences in using colours and symbols*
- *Be aware of colour-blindness (9% of all males are red-green colour blind)*
- *Provide demonstration access*
- *Make rights management within the learning platform transparent*
- *Provide gradual activities as administrator and moderator for the users*
- *Support access (e.g. supply low cost internet access, public computers pools or devices e.g. notebooks)*
- *Do not assume competencies in computers and internet*
- *Offer additional classes where the users have to be present, if required on a monoeducative base (e.g. propaedeutics, technical introduction, use of the learning platform)*

- *Provide support dependent on the differences in users background and skills*
- *Introduce the online support staff (e-mail, telephone, fax, forum, FAQ) with images and short texts.*
- *Appoint personal support and telephone support for the users*

### **3. Didactics**

Many didactical concepts originated in educational environments based on physical presence can't be applied in virtual educational environments without a translation. The use of digital media raises the question of specific or even "new" didactic concepts. Just to post a presence course on the internet does not use the innovative chance of designing educational content in a new way and to tap the full didactical and technological potential.

Many offers of virtual learning environments assume internet literacy and do not supply ways to achieve this literacy in their introductions and contents. That is one of the reasons why the drop-out rate is above average.

Studies in the field of virtual learning show that the drop-out rate of women is even higher than that of men. To test different learning scenarios is a powerful step towards finding out whether there are certain learning environments that engage women in classes and to identify them.

From a GM point of view constructivist (but cognitive as well) approaches are the best solution, because usually the members' engagement seems to be higher than in a behaviouristic learning model.

One should be careful about studies concerning the differences in user behaviour. The size of samples is often too small to derive general theses. That is why we only give some advices concerning the formation of hypotheses: online surveys show that women use the internet for investigation and research more often than men do. Games are still more often used by men (time plays a role, but also the male stereotypes in game development). It is astonishing that women, in spite of their lower self-confidence in using digital media, rate the importance of the use of digital media higher because they (in their own view) use them more pragmatic and closer to their studies than men do.

Nevertheless, men are usually better informed about virtual possibilities and offers. This view is often driven by the argument that men have a greater affinity towards digital media than women. Because the grading system within education is rarely practiced anonymously, intentional as well as unintentional biographical background-knowledge of teachers about their students becomes an integral part of gradings and result assessments. Through technological mediated, anonymous grading procedures, virtual learning platforms offer a way to assess performances and learning results in a way less bound to gender and cultural specifics.

#### **Recommendations:**

- *Focus on the learning interests of users*
- *Explore different learning scenarios in close collaboration with the users (coeducative/monoeducative in case of strong gender differences)*
- *Offer the same content within different learning settings and combined with different methods*
- *Bring results together*
- *Integrate learning contexts and usability*
- *Engage and enable informal communication (tutored chat rooms)*
- *Avoid technical jargon*
- *Do not expect net jargon*
- *Support online-communities*
- *Establish and moderate an integrative, gender sensible netiquette*
- *Develop a reflexive technical/media-didactical concept for students and teachers*

- *Offer the program (Propädeutikum?) “web studies”;*
- *Reflect on learning processes*
- *Discuss technologically mediated communication forms*
- *Reflect on former grading experiences; use anonymized grading systems*
- *Give detailed feedback*

## **4. Training and Content**

Trainings and especially ongoing, gender-sensitive training of teachers serve as a basis for a gender-sensible selection of materials. Because women experience additional barriers if they don't appeal to the texts in use, both sexes need to be made visible within texts. Providing learning materials via internet that focus on GM thus allows for a new treatment of content or an additional perspective. Establishing models and prototypes for both sexes also gets promoted if one looks at references and citation indices of men and women. In the history of the natural and technological sciences, woman become visible if one pays attention to them.

Unfortunately, curriculae and learning materials are often oriented towards interests and experiences of men. Teaching and learning materials for the natural sciences display men as active researchers and experimenters while women are often introduced as assistants, reduced to a mere passive role, or even treated as an additional “eyecatcher”. This approach has discriminatory effects for both sexes! In addition, the reproduction of stereotypes within knowledge representations, pictures and examples also works for cultures, individuals and lifestyles that are not part of the mainstream.

While the social sciences now offer an elaborated body of gender studies, the technosciences themselves seem to provide only limited space for gender reflections. Since the 1980s, the field of feminist analysis of science has been established, confronting the technosciences not only with their shortcomings but also enrich them through innovative results.

### **Recommendations:**

- *Make both sexes visible within language*
- *Use gender sensible language for contents as well as for product orientation and daily communication practices*
- *Use illustration, icons, pictures, symbols and metaphors which do not draw on gender stereotypes*
- *Draw on references from both sexes*
- *Reflect the situatedness of knowledge in contrast to the idea of “objectivity”*
- *Draft learning offers for different levels and make them explicit*
- *Integrate approaches and results from gender studies and feminist analysis of science into teaching materials*
- *Integrate science and technology studies*
- *Improve output and results with multiple perspectives*

## 5. Evaluation

Evaluation studies focussed on virtual learning have often neglected the analysis of gender relations. To gain insights into gender relations in virtual environments, interview guides and evaluation data need to be analyzed in a gender-sensible way. Because evaluation sheets often don't get conceptualized according to GM criteria, this alone will not be sufficient. As an example, the specific work and life situations of woman are often not taken into account. On the opposite, interview questions or research guidelines should not be drafted according to gender *alone* but should incorporate gender sensible thinking. With that, the students' changing lifeworld and work contexts (i.e. their additional earnings or required parental time for both men and women) become visible.

Because we assume that women and individuals who differ from mainstream culture often drop out from virtual programs, a sensitive view on these drop-out numbers is also required. As a consequence, virtual courses need to be treated, evaluated and accompanied in an overall gender-sensible way. In detail, this may require gender-sensitive comparison and evaluation of "online user relations" with "offline user relations".

Within any evaluation project, the variety of methods and instruments play an important role. Besides technical, often automatized quantitative surveys (logfile assessments, quantitative, "closed" email-questionnaires), qualitative methods like half-standardized surveys or email questionnaires should also be applied. The biggest obstacle here is not to evaluate and interpret results in a gender sensitive way, but to transform the "right" measures into concrete actions. Due to that, it is necessary to integrate evaluation on all project levels and to supply sufficient resources to do so.

### Recommendations:

- *Evaluate data in a gender-sensible way*
- *Focus on drop-out rates*
- *Ask for system requirements*
- *Take the work contexts and lifeworlds of men and women into account*
- *Integrate evaluation resources at all project levels*
- *Look for gender balances while selecting test candidates*
- *Establish a balanced evaluation team*
- *Apply multiple methods and evaluations instruments*