

Gender Mainstreaming and the Development of E-Learning Content and Tools

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MultiMedia Instruction in Safe Systems

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Abstract

After the definition of gender mainstreaming and evaluation as two basic terms, you will be introduced to the research and working field “gender mainstreaming and digital media”. In the following section some common problems are mentioned. After these considerations regarding different working fields are introduced and some examples show the meaning of gender mainstreaming in daily work. Some notices from the MMiSS-project show that even a rather theoretical field like Computer Science brings up some gender weaknesses. Some prospects finish this paper.

1 Definitions

1.1 Gender and Gender Mainstreaming

“Gender, as distinguished from sex, does not refer to the biological differences between women and men, but to the different roles and characteristics that are attributed to them in society. These roles and images are not fixed; rather they are historically and culturally determined.” (Stevens and Van Lamoen 2001, 18)

The main target of gender mainstreaming is the incorporation of “equal opportunities for women and men into all Community policies and activities” (European Commission 1996). The viewpoints of the European Union (EU) and the United Nations (UN) add the facet “evaluation”:

“Gender mainstreaming is the (re)organisation, improvement, development and evaluation of policy processes so that a gender equality perspective is incorporated in all policies and at all stages by the actors normally involved in policy-making.” (Council of Europe 1998, 15)

The UN does not stop at the view of policy, they add the economic and social field:

“Mainstreaming a gender perspective is the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes in all areas and at all levels. It is a strategy for making women’s as well as men’s concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality.” (ECOSOC 1997)

Working in a project aiming for developing content and tools for e-learning, gender mainstreaming is about the integration of gender in the fields research, planning, development, use, and evaluation of e-learning. The knowledge about gender mainstreaming is a key qualification and has to be well-integrated in the day-to-day work and in all areas and phases of the project.

1.2 Evaluation

“Evaluation - the systematic process of determining the merit, value, and worth of someone (the evaluatee, such as a teacher, student, or employee) or something (the evaluand, such as a product, program, policy, procedure, or process).” (Wheeler, Haertel and Scriven 1992)

The evaluation process consists of different stages, in many cases a stage of data collection and always an analysis and an assessment stage. At the end there is an evaluation result. If possible, the results are used for optimization.

The evaluand in the field of e-learning can be a virtual product like a learning platform, a digital video or a learning object. It can be a process like the development of a learning object or a person’s learning process. Sometimes the result of a process, for instance an instruction manual, is evaluated.

2 Introduction

Often the founding of e-learning projects with third-party funds is restricted by certain requirements. Since 1995 gender mainstreaming has been one requirement of call for tenders in the European Union, later in the different member countries. It had to be mentioned within requests regarding the program “New Media in Education” of the bmbf (German Ministry for Education and Research). But the words “gender” and “mainstreaming” did not appear in these calls for tenders, it was just important to consider women.

Gender mainstreaming first appeared at the start of the accompanying project “Gender Mainstreaming and Digital Media”¹. Main targets of the project have been to analyse the other projects, with respect to how equality is handled, and to support and consult the members of these projects.

Gender mainstreaming is a top-down program. This means that the leader of a project should know about this subject and share his/her knowledge with the other members. But the first workshop of the accompanying project showed a complete different scenario. The participants came from

¹Have a look at <http://dimeb.informatik.uni-bremen.de/projekte/gender> and http://www.medien-bildung.net/gender_mainstreaming/gender_mainstreaming_uebersicht_db.php/spezialthemen/.

the basis of the project—authors, designers, didacts, evaluators, programmers and software architects. These people did not want to learn what gender mainstreaming means for universities or society, they needed support for their daily work. But it turned out to be difficult to say what gender mainstreaming means for e-learning. There have been some hints in the literature, but the members of the different projects realized that they had to do some research by themselves.

Some workshops and meetings later there were two German reports available with guidelines stating how to regard gender mainstreaming in developing and executing e-learning (Jelitto 2004, Wiesner et al. 2004). The next sections of this paper show the main details of the first report, followed by some exemplary results of the evaluation of the MMiSS project.

3 Notes

Acting in the field of gender mainstreaming, you will realize that you have to cope with a difficult topic. You will find platitudes like “all men play soccer” or “all women use make-up”. But life is not that simple. You have to deal with exceptions, controversial reports and different situations. Every project has to be analyzed separately because in some cases women and in other cases men are disadvantaged.

You will realize that you own characteristics normally attributed to people belonging to the other gender. This shows that not sex but gender is the relevant facet.

Preparing guidelines, you should keep in mind that you have to avoid ageism and heterosexism. Further on, you should not discriminate against people because of their race, ethnicity, citizenship, nationality, religion, disabilities, medical conditions or sexual orientation (Schwartz 1995).

Gender mainstreaming does not mean that only women take advantages of this policy. Generally software and e-learning content will be more useful for all users.

Even if gender mainstreaming is introduced in an organisation, this does not mean that the promotion of women is unnecessary at all. If the initial situation is bad for women, more support has to be given.

4 Considerations for different working fields

In the report (Jelitto 2003) eleven working fields are considered.

1. content
2. didactic
3. evaluation
4. marking
5. organisation at the university
6. project management
7. speech
8. support from teacher
9. support from tutor
10. teamwork
11. technology

Below, three scenarios will show which effects gender mainstreaming can have. The first two perspectives take into account two parts of development processes, namely content and tools. The third perspective shows the effects for the process of e-learning.

4.1 Development of content

One facet is “content”: Use men and women as role models in texts, pictures, or videos. Try to cite female and male authors. In case of writing a text about a historical topic, highlight the efforts of both gender. In the bibliographical reference do not abbreviate the first name to make the gender visible.

In examples illustrated by pictures men and women have to be represented. You should avoid clichés and stereotypes like “the housewife” or “the active boy and the passive girl in school”. You should use a female programmer and a male illustrator. Stickmen² can change their gender by wearing a drawn skirt. If you offer some examples to the learner, you have to consider both gender. Especially in medicine it is important to verify if the examples fit both sexes.

Another facet is the “didactic” one. It is useful to offer an opportunity for self-assessment. Women often undervalue their knowledge while men tend to overvalue it. Check and define the time, learners need to avoid overwork.

“Evaluation” can be used to find out which themes are relevant for women or men. Elements like pictures, text passages or videos or even the whole content have to be checked by an expert for gender equality. And the material should be tested by students to find out whether the right level of understanding is achieved.

²In another context you should use the term “stick-figures”.

Considering the facet “project management” it is important to have female and male authors writing texts. This should ensure that the two gender are represented in the texts.

Looking at the “speech” used in e-learning content you have to avoid the generic “he”. Women and men have to be audible and visible. See Schwartz (1995) for more details. It is reasonable to work out a guideline for the use of gender-fair language at the beginning of the development.

Planning content, bear the used “technology” in mind. The “toys versus tools”-theory states that men prefer games like competitions, while women prefer working with tools. And content for toys or tools differs heavily.

4.2 Development of tools

“Evaluation” helps to define the technical equipment used by learners and teachers. This can vary between the gender. Asking the users what they want and need helps to define goals. Testing with men and women while developing optimizes the software early in the process.

Regard gender and “project management” when setting up a new team. Women and men should work at all levels of the organisation and in all working fields. Posts should be filled against the existing prejudices (e.g. male designer and female programmer). Offering telecommuting and part-time employment helps women and men with children to work. Discuss the possible aspects of gender relevant for the development and write a guideline to consider these aspects.

Also “technology” is influenced by gender facets. You should not develop software for high end computers, because women often use older computers. Use different styles of navigation because many women prefer free navigation or hypertext, while most men like static or hierarchic navigation. Avatars can be male, female or neutral, so you should strive for balance.

4.3 Process of e-learning

“Evaluation” can be used to find a program to reach a learning target suitable for women and men. Evaluations can help to discover if the software will be accepted by the users and how effective they will learn.

Looking at “marking” there are two aspects to look at. Teachers give different grades to male and female students, while at the same time students give different marks to male and female teachers.

When e-learning is introduced, sometimes the “organisation at the university” has to be modified. The topics in the curricula have to consider both gender. The results of e-learning have to be accepted as students’ achievements.

The “speech” both of the teachers and students has to reflect the existence of women and men, oral and written.

Talking about the “support from teacher”, there are different opportunities. It is important to give positive feedback (especially women want that). Sexual jokes, virtual rapes and other negative behavior have to be condemned.

Often a “support from tutor” exists. It is useful to have male and female tutors as role models.

It seems to be that some men prefer learning alone, while most women like “teamwork”. But working together is a key qualification, which means that men have to learn to work in groups.

5 Notices from the MMiSS-project

Looking at the project management, it is obvious that there are ten male and only one female professors. 22 male colleagues but only 3 female ones have been employed. This does not look like gender equality. Somebody told the evaluator that gender aspects play no role at the Computer Science topic “secure systems”. But the evaluation of the learning materials showed another world. Examples only showed men, neutral terms like “regional manager” have been used a few words later in a masculine way like “in his region”. Or the author of a book which provided the basic groundwork was just called C. Eckert. But she is a female author named Claudia and can be a valuable role model for female students! The evaluator of the project uncovered many problems in the learning materials and then suggested better alternatives.

6 Prospects

Today first attempts to anchor gender mainstreaming in e-learning projects appear. A lot of research has to be done to find out how to bear gender facets in mind and handle them. It will need some time to reach gender equality in e-learning, but careful evaluations will help to fight this challenge.

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