Gender and E-Tutoring – A Concept for Gender Sensitive E-Tutor Training Programs

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ABSTRACT

In this paper we will give an insight of how we implemented aspects of gender-sensitive instructional design into University Duisburg-Essen's e-tutor training program. The basic idea was to integrate research findings about gender differences in computer and new media access and appliance into concepts and realizations of online support. We will provide a detailed description of the concept and the implementation of guidelines for gender-sensitive online learning environments into our e-tutor-training program. Thus we will show that it is possible to create and conduct a gender-sensitive training program successfully.

Keywords

Online support, online learning, e-tutoring, instructional design, gender sensitive, e-tutor training program

E-TUTORING AND SUPPORT IN ONLINE LEARNING ENVIRONMENTS

The increasing adaption of new media and especially online learning tools in higher education has led to the demand of special forms of support for learners in these environments. Even well designed learning environments do not automatically facilitate learning processes. [8]

In distance-education the use of tutors who help and support the learners has proven to be a successful concept. [8] In the context of e-learning environments its main ideas were adopted and adjusted to the new and different needs of online learners. Although the expression of e-tutoring is quite common is not the only existing notion. There are many others like e-instructor, e-facilitator, e-moderator etc. We decided to use the term e-tutor because it implies the widest range of possible functions. These can include the setting and administration of learning-environments as well as technical and social support. [3, 4] In addition this term also seems to imply the modified view of the role of the teacher in higher education which has changed from a negotiator to a tutor in learning processes. [8]

While performing e-tutors have to account for each individual learner and hers or his needs and state of knowledge. Thus gender becomes an important factor for good and adequate support in online learning environments. In the following section we will outline the gender based differences concerning computer and new media which from our point of view have the most important impacts on the conception and accomplishment of e-tutorial support.

GENDER DIFFERENCES CONCERNING ACCESS AND APPLIANCE OF COMPUTER AND NEW MEDIA: THE CONSEQUENCES FOR ONLINE SUPPORT

One of the most important differences in the way women and men access new media and computer technologies seems to be their approach to computers in general. Regarding the metaphorical level women understand computers as tools which are used to reach a certain goal. Men however see them as machines; they are more interested in their operating modes and technical workflow [11].

The male dominance among hard- and software developers has lead to the impression that computers and the internet are mainly technical media, neglecting their social facets [11]. It is this strong emphasis on the technical aspects that serves as a possible obstacle for women in their approach to computer and the new media. Dealing with technical issues and the acquirement of technological skills are even in our modern societies regarded as typical parts of male identity. Thus for women it seems not to be worthwhile to reach a high level of competences in this area because it can be inconsistent with their ideas of female gender identity [11]. Empirical research showed that girls with a more female self-perception opposed computer culture more than those with a less female self-perception. The first group seems to judge computers as part of male culture and thus non-compliant with their gender identity [7].

On a more concrete level differences in the approach to computer technologies are grounded in computer usage during childhood and adolescence. Computer games which are often considered as the first approach into the world of new media appeal in most cases more to boys than to girls

[11]. According to the JIM-Study[1] 2008 47% of the interviewed boys stated that they play computer games on a PC several times a week. Among the group of the girls the number is with only 13% much lower [6]. Through their exposure to computer games boys achieve two advantages: They are more likely to playful learning according to the principle of trial and error and as a second point they receive knowledge about computer hardware by tuning their computers which is often necessary to play actual computer games. Thus boys' technical knowledge is fostered [10].

This development is even reinforced during computer science courses at school. According to Heidi Schelhowe tendencies of fraternization between teachers and technophile male students can be observed here which give boys also room to enact their masculinity. As a consequence girls leave these courses - if they had even chosen them. Thus school cannot help to negotiate the differences in computer skills and knowledge, school rather even intensifies them [9].

There are not only gender differences which can be described by the contradiction of using or not using computers and new media but also in the way women and men make use of them. Women prefer – according to their point of view of computers as social media – communicative activities. Thus the development of the internet to what we today call web 2.0 with its focus on communication and social tools has lead to the increasing number of female internet users [12].

This female focus on communication and cooperation (and on the other hand the male tendency to dominate and enact) also highly influence learning situations. Men tend to give longer and more frequent statements, women show more openness for other's proposals and willingness to cooperate. Women prefer working in groups while men are more likely to solve problems on their own [5].

The discussed aspects lead to the following consequences for the tutorial support in e-learning environments:

- Women have in most cases less and often different knowledge about computers and new media than men. Therefore they need on the one hand more support, especially at the beginning of an e-learning course. On the other hand they also need different ways of support. (Women tend to prefer phone-hotlines, whereas men are mostly satisfied with support via e-mail.)
- Women prefer other and different approaches to new media and technology than men. This aspect

must be considered in the conception of an online learning-environment as well as in support situations and in the assignments of tasks.

- Women and men differ in their favorite learning stiles. Women prefer working in teams and care more for exercises that require communication and cooperation. Men tend to prefer working on their own. Women also show a preference for well-structured tasks, playful experimenting (trial and error principle) is in contrast the way of learning preferred by men.

E-tutors do not only have to considerate these aspects during the support in e-learning environments but also during the construction of the environments. A gender-sensitive design in this context also implies an adequate choice of pictures and exercises. Another important aspect in this context is the language used for example in the formulation of texts or exercises. E-tutors are supposed to use gender-sensitive and non-sexistic expressions.

A GUIDELINE FOR GENDER-SENSITIVE LEARNING-ENVIRONMENTS AND ITS IMPLEMENTATION INTO AN EXISTING E-TUTOR TRAINING PROGRAM

The e-tutor-training program at University Duisburg-Essen is designed as a two semester blended learning course addressing students as well as staff members. The first semester focuses on the theoretical backgrounds of e-tutoring and gender-sensitiveness in instructional design. In the second semester the participants create gender-sensitive support concepts in projects. The program started in spring 2008 and will be finished in the beginning of 2009. With only 7 participants we had a very small group especially in comparison to former e-tutor trainings. They were 4 students and 3 staff members, 6 of them female and only one male participant. All completed the theoretical semester successful, except one student they all began with the implementation of their projects. At the time this article is written all of these projects are still in progress but will be finished by the end of February 2009.

In this section we will deal especially with the conception of the training program's first part. We chose moodle[2] as the program's learning environment. As regards content we decided to refer to the "10 rules of gender mainstreaming for the design of digital learning modules" by Zorn et. al. [13]. Proceeding through these rules and explaining how we implemented them into the training program will give a detailed insight into the conception of a gender-sensitive e-tutoring-training. [for further information see 1, 2]

The "10 rules of gender mainstreaming for the design of digital learning modules" were formulated as a part of the

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[1] JIM is the abbreviation for Jugend – Information – (Multi)Media (in english: youth – information – (multi)media). It is a representative interview survey among German juveniles at the ages from 12 to 19. The focus of the survey lies on youth' s ways of media usage, for example the time they spent with different forms of media, their most prefered types of media etc

[2] Moodle can be described as a form of electronic classroom. It is free software which allows creating courses and learning environments with lots of possibilities for the students as e.g. bulletin boards, wikis, chats etc.

results of a research project dealing with the adoption of new media in (higher) education in 2003. In an accompanying project the aspect of gender mainstreaming in the design of digital media was considered in more detail. As a result of this research these following guidelines for the implementation of gender-sensitiveness into e-learning environments were worked out.

Rule 1: A gender-sensitive learning module implies the use of gender-sensitive language

This rule requires the use of gender-sensitive and non-discriminating language. This demand was fulfilled by using no gender-specific expressions whenever possible. Alternatively we addressed both sexes equally by using slashes between the words or writing out both forms, male and female. This standard was acquired not only in all texts we wrote for the moodle-course; we also tried to reflect it in our verbal speech. The participants are expected to consider this rule in their projects too.

This topic caused a lot of discussions during the program. In the German language it is still common to use the male form of certain words and thus imply also the female form. Especially at the beginning of the training some participants regarded the effects of language as being not so important. We had to present them scientific studies and experiments to convince them of the opposite.

Rule 2: A gender-sensitive learning module offers an extensive socio-technical support &

Rule 4: A gender-sensitive learning module provides for the participants' different states of knowledge

From our point of view the second rule which requires an extensive socio-technical support and the fourth rule which implies the provision for the participants' different states of knowledge seem to be strongly linked with each other, so they will be considered together in this section.

Participants in our training program were not only offered a wide range of support possibilities (e.g. a FAQ[3]-list, e-mail, bulletin board, telephone etc.) we also offered an optional introduction lesson for using moodle and the possibility to get instructions to other e-learning tools when demanded by them. In the moodle environment as well as during the lessons we also pointed out that these offerings existed and where to find them. Our main goal was to communicate that no question or comment would be inept. This aspect is especially important for participants who lack knowledge in the context of new media and otherwise often report being afraid of asking inappropriate questions. The bulletin board in moodle was moderated, thus we could be sure there were no questions left unanswered. Questions which appeared

several times or also seemed to be of interest for other participants were transferred into the FAQ too.

Many different studies point out that especially women often do have less technological competence than men and consequently need more or special technical support. Since, as we have already mentioned above, there was only one male participant in our training who in addition had a background in computer science, it is quite difficult for us to agree or disagree with this statement. We also could not find any distinctions between the two genders considering the aspect which type of support they chose. However in summary we want to stress the importance of proving the participants' state of knowledge and experience with the new media and orientating the level and ways of support according to this state.

Rule 3: A gender-sensitive learning module implies a good and time-saving navigation

Empirical studies seem to proof that especially female students can not effort spending too much time on the internet or in an e-learning course only to adapt to the navigation. Thus time-saving navigation in a learning-environment is an essential aspect for them. Although there were several restrictions as a consequence from our choice for moodle it was possible to create an easy and clear arranged navigation. Each phase of the training was given a thematic headline and they were designed as thematic and not weekly blocks.

Each of these blocks was subdivided into three units: information, tasks and material. Additionally each unit was also represented via a specific icon, e.g. a piece of paper and a pencil for the unit tasks. Also the actual block was accentuated and it could be assessed directly after logging into moodle and avoided unnecessary scrolling.

We experienced no participant having problems with the navigation in the moodle course. After the optional introduction session for moodle even those for whom this environment was a totally new experience seemed to face no greater difficulties.

Rule 5: A gender-sensitive learning module offers a detailed overview over and in all of its contents (meta plan of learning goals)

To avoid any drop-outs[4] it is important that participants get a detailed overview of the course's contents from the beginning (meta plan of learning goals). We represented this information not only during a kick-off meeting, it was also available all time in the FAQ-list. From the training's starting point all materials and tasks were visible to give a detailed overview about the whole program. Additionally, each unit contained detailed information about

- the learning content

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[3] FAQ = frequently asked questions. In our FAQ-list we collected those questions and problems which from our experience are most important and appear very often when students start working with the moodle system.

[4] Drop-outs in the context of e-learning can be defined as students who do not finish the course. The causes for this effect can be bases on manifold reasons.

- the learning goals
- the duration of the tasks
- the description of the tasks
- the deadline for finishing the tasks
- a list of materials which could be used to solve the tasks.

From our point of view this information is not only necessary from a gender perspective but important for all e-learning courses. We are also of the opinion that there is a strong relation between this aspect and the sixth rule for gender-sensitive learning modules.

Rule 6: A gender-sensitive learning module provides information about the temporal amount for each unit

A gender-sensitive learning environment is also supposed to give detailed information about each single unit's duration. In our case we published an overview with all relevant terms on our institute's website so that this information could be accessed by the participants even before the training program started. Within moodle there was also a description of the duration for each task and thematic block. We also added a calendar and the category "ongoing tasks/ events". Each assignment during the training had a concrete deadline to submit the results too.

As the rule above we consider this aspect to be important not only with regard to the aspect of gender-sensitivity but for all participants regardless their gender.

Rule 7: A gender-sensitive learning module features a gender-sensitive instructional design

From an instructional designer's point of view it is important to refer to the differences in learning styles between men and women we already discussed in the first section of this paper. Thus, we offered our participants a wide range of different types of tasks and various ways in which information was presented. We offered different media formats (e.g. texts, podcasts or videos) and the participants had the possibility to choose on their own which tools they liked to use for solving the assignments. There was also a mixture of exercises which had to be solved in groups and those participants had to solve on their own.

As mentioned above women tend to prefer learning in groups and in a cooperative and communicative way whereas men prefer working alone. From our point of view a great variety of assignments and in the presented material is not only important from a gender aspect but also with regard to other aspects of diversity as e.g. cultural or social background.

Rule 8: A gender-sensitive learning module implies miscellaneous, flexible, interactive and naturalistic components

The claim for an interactive and naturalistic design of the tasks is strongly connected with the aspect referred to above. We implemented this requirement into our concept by designing tasks which were very likely to what our participants were expected to do in their projects as e-tutors. E.g. they were asked to design a learning environment according to a given setting, formulate tasks on their own or discuss a specific topic in a role play with one of them taking the role of the moderator and the others being the debaters. In addition to those tasks being mandatory for the course there was also a lot of information and literature offering a deeper insight into specific topics participants could chose to deal with voluntarily.

The way we designed the assignments achieved great popularity by our participants. The fact that we did not tell them which tools they had to use for fulfillment of the tasks gave them the opportunity to develop and establish a set of preferred tools on their own which they will also be able to use during their projects as e-tutors.

Rule 9: A gender-sensitive learning module offers manifold interactive proposals for communication

Gender-sensitive learning-environments also require a wide range of interactive ways for communication. We offered different tools embedded in moodle e.g. chats, wikis, a moderated bulletin board etc. Participants additionally had the possibility to choose other tools on their own for the solution of certain tasks. For the whole duration of the training they were also asked to arrange their own rules of communication for the training which were binding during its whole duration.

Besides the use of moodle and its implemented possibilities for communication our participants preferred the use of tools such as Skype when just wanting to talk to each other or Connect a virtual classroom tool, allowing not only talking to each other but also to share applications and record the meetings.

Rule 10: A gender-sensitive learning module awards a certificate for the successful participants

The last aspect of importance is the award of a certificate for participants who attended the training successfully. In our case there is a certificate for e-tutors which is given away to those who participated actively in both semesters. The conditions which must be fulfilled for the certificate (i.e. constant and active participation in both parts of the training) were presented during the kick-off meeting and were also part of the FAQ in moodle so that they were transparent the whole time.

From our point of view this last rule is also one which is not only important for gender-sensitive learning modules only but for all e-learning courses. Certificates seem especially necessary for those participants who need to be motivated extrinsically.

CONCLUSIONS

At the time this article is written all participants are working on their projects as e-tutors. All have chosen a university course on their own and prepared an e-learning environment for it. Interestingly all have decided to work with moodle as they did in the training's first part although

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it would have been possible to choose different tools as well.

Prospectively all projects will be finished by the end of February 2009. There will be one meeting in the middle of February when all participants will present their projects to the others. In this context we will also discuss problems that occurred during the projects and how they were or could be solved. In a final step we will arrange a qualitative group interview to receive systematical information about their experiences during the whole training program. We will use them for the further improvement of the e-tutor training's conception.

It is obvious that the aspect of gender-sensitivity will remain an essential part of our e-tutor trainings in the future. Our main goal is to create a concept for e-tutorial support which will not only account for gender-sensitivity but for all differences in access and appliance to computer and the new media based on the more extensive concept of diversity and thus also implementing aspects as e.g. social and ethnical background, physical or mental handicaps. E-tutors in our understanding are experts not only in instructional design but also with regard to the impact of all aspects of the participant's diversity in learning environments.

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