

## **Web Communities for Teachers: How Teachers Relate to Digital Interactive Media by Discussing It in Online Forums**

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**Abstract:** In this paper we present a small-scale explorative study on the role of web communities for teachers. The study centers around discourses on digital interactive media by teachers who engage in the largest online discussion forum for teachers in Germany. This community is used as an example to show that teachers not only exchange information and material online, but also look for ways of adapting to the challenges of the ever-accelerating development of digital interactive media.

### **1. Introduction**

This paper is related to an ongoing research and transfer project based on the Kids in Media and Motion (KiMM) initiative at a German university, which focuses on the interrelationship between the usage of digital interactive media in educational contexts and the students' capabilities to perceive, understand and change the intertwinements of digital interactive media, body, movement and space. To evaluate specific projects, we continuously use pre- and post-research questionnaires to elicit information on aspects, such as the handling of technology and social interactions of students, parents and teachers. (Melzer et al., 2005; Winkler et al., 2008). In the beginning of 2008 we launched a new research project aimed at laying out the groundwork for innovative ways of developing and using digital interactive media for educational purposes.

The aim of the small-scale explorative study on web-based communities presented in this paper is a twofold one. Firstly, there is a need to better understand the ways teachers relate to digital interactive media in general so that theoretical as well as practical work can be based on that knowledge. Secondly, we are moving towards providing the teachers who participate in our projects with a wider array of tools for web-based communication. A better understanding of existing web communities for teachers is meant to support this process.

After giving a short background on the relations between the evolvement of web-based communities and the need to adapt to rapid changes within society, such as the ever-accelerating development of digital interactive media, we present our results and discuss their implications for the development of research and transfer projects within the aforementioned initiative.

## 2. Web-Based Communication by Teachers

In Germany an increasing number of teachers is utilizing various ways of synchronous and asynchronous computer mediated communication, ranging from blogs to mailing lists and online forums, to support their work inside and outside the classroom. Thus the online forum largest in scope, *Lehrerforen (Teacher Forums)*, which we chose for this paper, just serves as an example of this emerging pattern.

*Lehrerforen* is a gated nationwide community, which means that a registration requires written proof of the future member being either a teacher or a college student aiming at a teacher's degree. Although there is not a clear way of differentiating between groups and communities, the mere exchange of information does not foster the evolvement of any kind of community. As far as virtual communities are concerned, Misoch identifies the development and enforcement of shared rules and norms, support, identification and the lasting involvement of its members as prerequisites for successful virtual groups (Misoch, 2006). Nonetheless, the relationships forged within virtual groups are *weak ties* and generally require a lower level of emotional attachment than *strong ties*. As they increase flexibility, coherence and the ability to take action, weak ties are indispensable for individuals and social systems being faced with rapid changes and the disintegrations of traditional communities. Granovetter stresses the importance of weak ties with regard to fostering and adapting to progress of any kind (Granovetter, 1998):

*“The macroscopic side of this communications argument is that social systems lacking in weak ties will be fragmented and incoherent. New ideas will spread slowly, scientific endeavors will be handicapped, and subgroups, separated by race, ethnicity, geography, or other characteristics will have difficulty reaching a modus vivendi.”*

It is evident that the ever-accelerating development of digital interactive media and its influence on students and teachers requires them to look for suitable ways of getting information and tackling challenges related to the usage of digital interactive media. Interestingly, well-functioning communities are capable of coming up with information and strategies that are far more likely to be accurate and helpful than the resources provided by each individual. Thus, apart from the mere exchange of information, web-based communities have got two main functions for teachers: maintaining flexibility and coherence in the face of rapid changes and utilizing the “wisdom of crowds” (Surowiecki, 2005).

### 2.1 Attitudes to digital interactive media

The threads analyzed in this study were accessed via the search function offered by *Lehrerforen*. Currently, there are about 5.000 members who have written close to 150.000 postings, averaging 70 postings per day.<sup>1</sup> The search was performed using the word “media” and yielded 353 threads that include some kind of reference to this term. Taking into account the last twelve months, there are nine threads explicitly dealing with the usage of digital interactive media. In a first step, these threads were exported as primary documents into a QDA-Software (ATLAS.ti 5.2) and afterwards analyzed by using word crunching (cf. Table 1). In order to isolate topic-related key words, commonly used words, such as articles, prepositions and conjunctions, were left out.

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<sup>1</sup> July 16, 2008.

Thread	Key words according to frequency of occurrence
1. Looking for e-pals in India to start project	exchange, culture, peers, clichés, language
2. “Warcraft” as a lesson topic?	motifs, violence, laws to protect youth, pluralistic, Counterstrike
3. Exhibition focusing on digital interactive media	digital interactive media , internet, material, recommendable, for free
4. Using instant messaging to connect with students	messenger, talk, configure, molested, experience
5. Media education at primary school 1	recommendable, beyond subjects, internet, media usage, web communication
6. Comment writing: the media	potential for discussions, beyond subjects, experienced, media literacy, violence
7. Media education at primary school 2	didactics, curricular, experience, productions
8. Inappropriate and illegal contents on YouTube	violence, dreadful, clueless, education, activities

**Table 1.** Overall topic of threads and key words according to frequency of occurrence

Apart from the basic exchange of information and material like work sheets, *Lehrerforen* is a community that not only helps its members to solve problems regarding the usage of digital interactive media, but also functions as a means of discussing and rethinking attitudes to the usage of digital interactive media in educational contexts. Especially thread 2 and 8 focus on aspects that could prevent teachers from integrating digital interactive media into their work with students.

In order to understand the inhibitions, challenges and benefits associated with the integration of digital interactive media, it is helpful to differentiate between cognition, coordination and cooperation (Döring, 2003). With regard to cognitive problems, there is a correct solution, which will be found sooner or later. As far as coordination is concerned, the members of a group need to synchronize their behavior in a way that makes things run smoothly; typically the flow of traffic is such a problem. The most difficult challenges occur whenever cooperation is necessary, which means that people have to come together to make something work, sometimes without getting any kind of immediately visible payoff. Paying taxes is an example of a *cooperation problem*. The analyzed threads on interactive digital media show that the participating teachers and college students use web-based communication to engage in discussions on cooperation problems, like media education and laws to protect youth.

## 2.2 Implications

In the course of engaging teachers in the usage of technologies to build networked learning communities, they get access to an active process of jointly constructing knowledge on digital interactive media while actually interacting with it. Undeniably, the teachers participating in *Lehrerforen* have already been successful in utilizing the potential of digital interactive media to build a network that helps them to discuss its usage, among a variety of other topics. The topic-related key words that frequently come up in the analyzed threads underline that the users of *Lehrerforen* try to develop a *community of interpretation* (Breuleux et al., 1998), which helps them to weigh the advantages and disadvantages of the possibilities they get from the usage of digital interactive media. Evidently, there is not a single thread on digital interactive media that completely focuses on positive or negative aspects. There is always a shifting balance of pros and cons that leaves the readers with a more rounded picture of the topic in question.

### 3. Conclusion

Whenever teachers are provided with opportunities to participate in web-based communication on digital interactive media as a part of their professional development, it is important to keep in mind that they do not only look for ways of getting information and contributing to each other's current and future teaching projects, but also build communities that discuss cooperation problems associated with the usage of digital interactive media in general.

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