

---

## Editorial

---

### Piet Kommers

Faculty of Behavioral Sciences, University of Twente,  
PO Box 217, 7500AE Enschede, The Netherlands  
E-mail: Kommers@edte.utwente.nl

**Biographical notes:** Dr. Piet Kommers is associate professor in Media Technology in the University of Twente in the Netherlands. His research interest is the further specification of media design methodologies for learning and training situations. His leadership of the 1992 NATO Advanced Research Workshop on Cognitive Learning Tools raised the global attention for constructivist elements in complex learning. He was initiator of a large number of international projects on media scenarios for the further development of training and educational institutes. His current research into WWW-based learning communities and the role of virtual reality in the sharing of experiences in complex situations like medical and technological interventions has earned a wide recognition so far. Dr. Kommers is associate editor of the *International Journal for Continuous Engineering Education and Lifelong Learning* and he is an executive editor of the *International Journal for Web Based Communities*.

---

### Introduction

The inaugural issue of this journal has illustrated the essence of WBC (web-based communities) by showing its variety and wide scope. The second issue focused on the process of community building and sustenance from different perspectives. This third issue aims at clarifying its internal mechanisms more and the impact for communities in general. It presents articles that challenge the designing and development of WBC starting from existing traditional communities. It also focuses on the study and analysis of new virtual communities. Its central theme is the user behaviour when making the transition from the traditional face-to-face model towards web-mediated communities. The followed approaches are top down as well as bottom up. Overviews of the state-of-the-art theory are combined with analysis and case studies, profit and non-profit business models.

- Business models: Combination between innovative business venture and academic research to develop a local WBC providing local content on a low-cost advertisement model.
- How to identify its behavioural domain: Interaction between the users and content providers turns out to be collaboration between knowledge workers and knowledge consumers.
- How to structure the basic interactivity and how to define interaction requirements?

Special emphasis is made on the social and economic values of the virtual community. The innovative approach leads towards interaction between user and content, problem owner and problem solver.

The article by Connery and Hasan addresses the social and commercial sustainability of regional web-based communities. Its underlying paradigm is that communities will evolve according to shifting social and economical factors. It examines the characteristics of communities in the era of the internet, followed by the description of three case studies of commercially operated web-based communities.

Nilan and D'Eredita envisage organisations as virtual communities with accent on sense making for uniting knowledge consumers and knowledge workers. They propose virtual communities created around specific problems for organisations and consumers to collaborate and finally solve. It proposes two independent but compatible conceptualisations of sense-making behaviour as theoretical and methodological approaches for the basic interaction in virtual communities where dealing with problems is the primary activity.

Carlén and Jobring articulate that online learning communities (OLC) facilitate the communication between people who share common interests and learn collaboratively, using networked technologies. It is stressed that researchers and designers have to understand social practices in order to explore and develop technological tools for such collaboration and communication. In this article a typology and constituents construct a rationale for examining this empirical phenomenon.

Tornaghi, Vivacqua and De Souza address the question of how to create educational communities. In the Brazilian public school system, teachers have very little time to keep up-to-date. In order to reinvigorate the school system, the government has formulated a continuing education project, with long-distance courses for teachers and the creation of educator communities to provide ongoing support. This article describes strategies pursued to jumpstart the educator community within this continuing education project.

Milrad, Björn and Jackson design networked learning environments (NLEs) for supporting intercultural communication and collaboration in science learning. It describes efforts to foster intercultural communication and collaboration in educational scenarios, using advanced learning technologies to support hands on experimentation and science learning. A special focus is given on the idea that innovative uses of these technologies will enhance the learners' scientific experience.

Cuthell asks himself 'What does it take to be active: teacher participation in online communities?' Web-based communities of practice are seen as a critical component in the development of a knowledge society. This is particularly so in education: the vision of e-learning, empowering learners, supporting creative and innovative teaching, is dependent on teachers being able to access professional forums in which they can construct praxis appropriate to new ways of teaching and learning.

Pathak and Kathpalia present discourse strategies for ensuring involvement in electronic lectures. They claim that research on online education seems to focus on participatory and learner-controlled activities rather than teacher-initiated activities such as e-lectures. Their paper highlights the discourse strategies used in a classroom lecture and an e-lecture was examined. It was found that there are interesting variations in the strategies used in e-lectures to simulate a sense of classroom community.

Still, Isomursu and Väinämö explore the integration of community communication technologies. They explore how an interest-based community integrates various communication technologies, what benefits technology integration brings and what kinds

of effects integration has for community operation, and evaluate the quality of the technology integration by using concepts of adaptation and perceptual experience.

Sillence studies and reports on interest based communities, user need studies, mobile systems; called: beyond the web – integrated digital communities. The paper shows in detail how two case studies explore integration within digital communities. Three types of integration are introduced – information, technological and online–offline integration. These concepts are explored through two online fan communities and through a mobile–web-based system. All types of integration were present and are vital to members' communication and interaction needs.

Secades, Esteban and Aguilar present the social factor as an indispensable issue in the web development process. Their thesis is that internet's appearance in people's lives has led to a significant change that must be faced by the software community. The previous acting forms in software assurance are not enough to guarantee systems quality. This lack of guarantee is presented, mainly, in two facts: the lack of participation in the development process of the community which receives the final software and the credibility of data system, in order to validate the accuracy from the web sources.

Bonanno proposes an interactions-oriented model to integrate assessment of individual cognitive and effective activity with distributed cognition, in an attempt to identify typologies of interactions in web-based communities along three dimensions: domain content, technological competence and social interactions.

These carefully chosen articles reach the conclusions that would stay diffuse in the turbulence of web communities exactly; its scientific approach allows us to try and generalise pragmatic evidences at the moment. May these help you in anchoring your preformed ideas on WBC's momentum and suggest to you the impact of its wider application in the coming years.