

## Foreword

Dear Reader. May I have your attention for a moment? Why did you buy this book? Was it intellectual hunger? Pure curiosity? Or even irritation on the continuing bombardment of education with new metaphors? I think for many of us, it is a mix. If you share with me the passion to check if and how education in the western world is going to evolve from an institutionalized- back into a more existential- and, if you like, into a more pedagogical process, then I think buying this book is an excellent choice.

What is happening to education? And will the notion of the networked society be a vital one for education in the years the come?

Going back in my own years as an arriving pupil in the first grade elementary school it is a mild fragrant of memory that pops up: the large crowds of students, the immense number of pages in a book, and the decisiveness of the teachers to make us climb this tower of conventions. Most importantly: they only way to escape from this place was to succeed the tests.

Now, if we quickly scan the innovative paradigms since my first school day in august 1957 you might agree that there are typically four phases: Making schools more

1. democratic (60-70ties),
2. systematic/Instructional (80ties),
3. constructivist/individualized (90ties) and
4. attempts to broaden the concept of what learning actually is. (this decade)

In fact the pure consequence of accepting that learning is endemic to life anyway is that we question the overall contract: Can society afford institutional schooling that *consolidates* rather than *developing* new understanding mainly?

And here we arrive at the point: what actually means “learning in a networked society?” As long as solid hierarchies in reputation and strict disciplines rule the authority, there only a small reason to innovate education; it is just to provide learners with the suggestion that they have the right to take a preferably-small detour in the from ignorance to the arrival at common understanding. As soon as we face the gap between knowing and thinking, or between thinking and problem solving, we admit that education only touches the “tip of the iceberg”.

Most important is the scope of this book: Its underlying question is: 1. Is education going to adopt the full impact of the network society in culture and etiquette? Or: 2. Will education just accept the cosmetic features of the networked society?

Of course given the scope and the mission of this book we hope to acknowledge the first option. However, clearly the correct answer is the second one; Education has the job to precede societal impact of ICT; Its stakeholders are *architects* rather than its *inhabitants*. In having that ambition this book took the challenge to make a panoramic tour along the major roads in teacher education, learning communities and in life-long learning. Its goal is to make you courageous for joining and anticipate to the evolution to come in 3 or 4 years from now.

The first notion is that learners need to become owners of their learning ambitions and process. This leads to revisited teacher training programs where learning “consciousness” is at stake. As a consequence we see the trend to improve team learning like now vital when parts of face-to-face teaching is supplanted by e-learning and blended learning. The underlying fundamental question is whether e-learning is becoming a goal rather than a provocative method; It can well be that e-learning works out as a trigger for restructuring the essence of learning in higher education. Traditionally “learning” was apprehended as incorporating what “others already mastered before”.

This book comes down to the fact that effective learning implies that the learner chases new; (not yet uncovered) perspectives. In this case we face the job to educate teachers and learners nowadays to have the courage to jump to rather unexplored areas and excavate authentic approaches via inquiry learning, communities of practice and finally knowledge societies. Identity is an important aspect that highlights the learner to start from existential rather than from career incentives. Higher education indeed has (over-)articulated the relevance of employment perspectives. By “Identity” we reschedule the notion that students need to build their attitude and mental predisposition as well.

This book offers new framework for the new professionalism in teacher training and in teacher team building like the networks and web-based communities. The book exemplifies that the new media landscape offers a rich repertoire of cooperation modalities: Best practices by video, animations, simulations and eventually collaborative student projects across institutions even. The awareness of quality assurance and summative quality output is inherent to professionalism. So far the labeling of a student as “customer in the future” (alumni) has propagated quite wide. We see now an ever more competitive struggle between universities to attract the “best” students. International students have become part of this game as well. We may expect that universities make consortia like under the Erasmus Mundi formula that even exceeds the European countries quite soon.

As Epitomes of the new ICT-supported teacher-/learner communities we meet the aspects of mobile, virtual and the gaming presence. It implies the more essential questions like: Can teacher practices be “shared”? Or do we face a high level of idiosyncrasy as it comes to improving the personal touch in pedagogy? Yes games and virtual presence have potential as it comes to flexibility and the copying with a lack of time all over. As main dimensions are listed: Pedagogy, community, domain knowledge, reflective-, clinic- and ethical issues. The challenge for this book is to sketch a roadmap to be expected in few years time.

Finally: Education is not a world in itself any more. In terms of culture and communication it gets more and more compliances to societal trends and processes. Internet plays a crucial liason here; we may expect youngsters to link to many more sources of expertise and social cohesion. Education now faces the challenge to catch up in the conceptual and in the ideological sense. There is the risk that we narrow our goal to “How can education incorporate the “Network Society”? This book shows the ambition to rephrase and ask ourselves: “How can education co-design the society of tomorrow”. ICT

in this respect has an obligatory, however not a satisfactory role. Most important is that both teachers and students are aware that they are both the architects and the inhabitants; there is no reason to accept a less crucial role, even if ICT seems to play an autonomous and transformative role in cultural and societal evolutions today.

*Piet Kommers*

*University of Twente, The Netherlands*

*February 24, 2009*

*Piet Kommers is associate professor at the University of Twente. His prime field of expertise is media for education. He specialized in the various roles and modalities of conceptual representations. In the early nineties he pioneered in the new-coming domain of cognitive learning tools. As instructional approaches got more and more sophisticated in terms of student modeling and adaptive strategies, his attempt was to introduce and evaluate metacognitive awareness at the learner. Piet Kommers initiated the NATO Advanced Research Workshop on the learning support environments like concept mapping, micro worlds, modeling and simulations in 1989. In 1991 his PhD thesis "Hypertext and the Acquisition of Knowledge" found slight indications that non serialistic students benefitted more from conceptual schemes, while in fact the students with a holistic cognitive style were more inclined to make schematic representations. This led to the hypothesis that the non-serial learning style rested upon a weaker short term memory. His research together with Dr. Heling Huai revealed that indeed the serialistic students rely more on literal rehearsal while the holistic students "survived" by elaborating their long term semantic repertoire. As also it proved that students with a holistic style were superior in meaningful retrieval in the range of years, and much more flexible problem solvers, the theory started to fit together. Piet Kommers was involved in projects on educational technology around the world. His UNESCO chair position in the Kiev International Research and Training Centre and his honorary professorship by the Capital Normal University in Beijing allowed him to dedicate more to explore the ICT effects on cultural and societal processes. His recent work is on the growing potential of web-based communities for learning and social awareness. He initiated the International Journal for Web-based Communities (IJWBC) and the yearly conference Web-based Communities by IADIS. His web page: <http://users.edte.utwente.nl/kommers/>*