

Q & A with Ed Tech Leaders

Interview with Morten Flate Paulsen

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Morten Flate Paulsen reviews the ongoing challenges in online education: pedagogy, unpaced learning, social software, and cooperative learning. Paulsen's *Theory of Cooperative Freedom* has offered a solution to online education's diversity in terms of providing flexibility and freedom of individual learning along with group collaboration and social unity. As the leader of various European projects, Paulsen presents an encouraging picture for the future of online education. In this interview, he responds to questions about his work, and elaborates on his ideas and theories.

1. *What are you currently working on?*

At the moment, I'm writing an article celebrating the fact that NKI (Norway Knowledge Institute) has offered online education for twenty years. During these years, the institution has accumulated 60,000 enrollments to its online courses. It gives a rare opportunity to reflect on the impressive development that has taken place since I started working with online education at NKI in 1986.

Today, I am the Director of Development at NKI Distance Education. In this position, I'm involved with several research and development projects related to online education. Among these are the three European funded projects:

- MegaTrends in e-learning provision;
- incorporating mobile learning into mainstream education and training; and

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- E-Learning Quality for Small and Medium sized Enterprises.

I'm also writing a book in Norwegian about cooperative freedom in online education. It elaborates on my *Theory of Cooperative Freedom** and explains how NKI is implementing the theory by introducing innovative tools for individual progress plans, finding learning partners, etc.

2. *What exactly is the Norwegian Knowledge Institute?*

NKI (www.nki.no) is an acronym that generally is translated as Norwegian Knowledge Institute. It is Scandinavia's largest provider of distance education, with 12,000–14,000 students. It is also one of Europe's largest providers of online distance education, since about 60 percent of its students are enrolled in NKI's more than 450 online courses. NKI is an educational foundation that comprises NKI Distance Education, the Norwegian School of Information Technology (NITH), and the NKI Publishing House. In 2005, the NKI Group had 145 full-time and several hundred part-time employees. NKI's headquarters are situated in a suburb of Oslo.

3. *What is DEOS and what is its importance to the distance educator?*

When I received my graduate assistantship at the *American Center for the Study of Distance Education* in 1990, my assignment was to establish an online communication service to support the *American Journal of Distance Education*. After an unsuccessful attempt to establish a discussion forum on Compu-Serve, Professor Peter Cookson recommended me to test the Listserv software for e-mail distribution. It became an immediate success, and I named it

**Theory of Cooperative Freedom* was first introduced in DEOSNEWS 3,2 at www.ed.psu.edu/acsde/deos/deosnews/deosnews3_2.asp. An updated version is available in my book www.studymentor.com.

Morten Flate Paulsen is the Director of Development of the Norwegian Knowledge Institute (NKI). He was the founding editor of DEOSNEWS, first moderator of DEOS-L, and established the NKI (a European online college). Paulsen has presented and written extensively on cooperative learning in online instruction. He is involved in various European projects, including the MegaTrends project (www.netskolen.com/in_english/megatrends/), ELQ-SME (www.nettskolen.com/in_english/elq-sme/), and m-learning (www.ericsson.com/mllearning3).

DEOS—The Distance Education Online Symposium (www.ed.psu.edu/acsde/deos/deos.asp).

In 1991, I became the founding editor of the online journal DEOSNEWS and the founding moderator of the accompanying discussion forum DEOS-L. I was the DEOS editor for the first 52 issues during three extremely interesting years. In February of 1993, DEOSNEWS had 1,400 subscribers in about 50 countries. Several of the subscribers were redistribution lists, so we estimated that DEOSNEWS had about 10,000 readers, which was far more than any of the international print-based journals on distance education.

In 2001, the DEOS home page stated that DEOSNEWS was “Accessed by more than 5,000 subscribers from 80 countries; DEOSNEWS is the most widely referenced online journal in the field.” In 2006, it states that DEOS-L “serves over 3,000 subscribers in 74 countries.”

4. During your years as founding editor of DEOSNEWS, what areas of distance learning were “hot topics” and caused the most debate among your readers?

When I recently revisited the first volume of DEOSNEWS articles published in 1991 (available via http://www.ed.psu.edu/acsde/deos/deosnews/deos_archives.asp), I realized that many of the topics still are very relevant today. The articles had titles such as:

- When Academia Goes Online
- Internet: The Discoveries of a Distance Educator
- The Electronic University: Computer Conferencing in Mass Education
- Moderating Educational Computer Conferencing
- Computer Networks for Teaching and Research
- Innovative Computer Conferencing Courses
- CMC and Distance Education Around the World

We have experienced tremendous technical developments in online education since 1991. The bandwidth I have at home has, for example, increased from three hundred to three million bits per second. Still, it is interesting to observe that written communication, maybe the most important part of online teaching and learning, has not changed much. Most communication still consists of plain text. It is also timely to point out that development of online pedagogy has made relatively little progress. We still tend to apply traditional pedagogy in a new environment, and we have barely started to investigate the potential of social software and cooperative learning in online environments. In my opinion, meaningful group communication is still the greatest pedagogical challenge in unpaced learning, just as it was twenty years ago.

5. What are your opinions about instructors using learning management systems, such as WebCT or Blackboard, to deliver distance learning courses?

Today, Learning Management Systems (LMSs) that facilitate online education are omnipresent in Nordic higher, further, and continuing education. Higher education institutions are implementing online education services to all their students. LMSs are common in secondary schools, and many primary schools offer online services to pupils, teachers, and parents. As a father with children in three different schools, I had to relate to two different LMS systems and numerous school-related e-mails every week. Online education has suddenly become mainstream education, and therefore instructors and teachers need to handle these systems properly. To do this, it is important that the school management provides the necessary resources, support, and organization to help instructors use LMS systems effectively in their teaching.

6. What happens to the instructor’s presence and input in teaching if online courses are only textbook reading material with assignments? Are we doing students a service by designing courses this way?

There is a lot of emphasis on digital learning material nowadays. But I used to say that even though text and video can be presented online, paper is often a better medium for text, and television is better for presenting video. Still there is a tendency among online educators to substitute excellent textbooks with mediocre Web material, and superb video programs with a tiny, degenerated PC-version of the video. In my opinion, communication between people is crucial for online education. Therefore, it is important to provide flexible online communication tools.

7. Flexibility in online education has its limitations and benefits. How flexible should a program be to fit the needs of students and instructors?

In the book I’m now writing, *Online Learning in Cooperative Freedom*, I argue that adult students seek individual flexibility and freedom. At the same time, many need or prefer group collaboration and social unity. These aims are difficult to combine. There is a tension between the urge for individual independence and the necessity to contribute in a collective learning community. One may say that one student’s freedom ends where another’s begins.

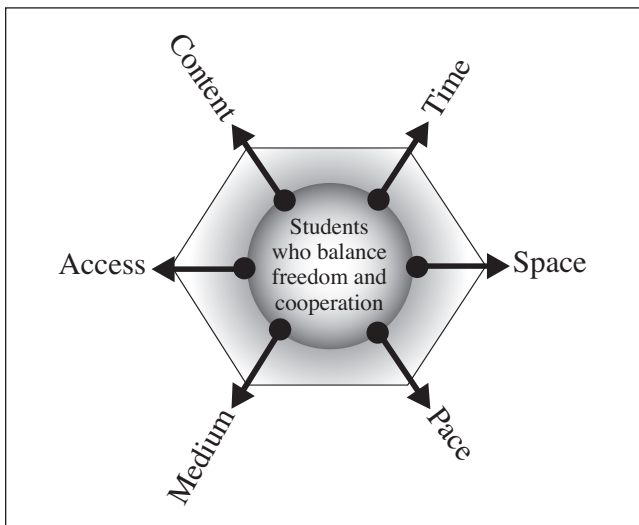
This diversity is addressed in NKI’s learning philosophy for online students, in which learning community and individual freedom are keywords, stated as follows: “NKI Distance Education facilitates individual freedom within a learning community in which online students serve as mutual resources without being dependent on each other. We build on

adult education principles and seek to foster benefits from both individual freedom and cooperation in our online learning community.”

Flexibility, however, is not easy to provide. Individual flexibility tends to add costs, administrative difficulties, and pedagogical challenges. But it is noteworthy to realize that institutions that provide flexible online courses and programs will reach a larger potential market. For example, NKI reaches a larger market than traditional colleges, since NKI allows students to start 365 days a year. That is 364 days more per year than traditional colleges. If bookstores and car dealers behaved like traditional colleges, they would only sell their product one day per year.

One of the most strategic decisions that providers of online courses need to make is whether the students’ progress plans should be individual or collective. This is a decisive dilemma and a challenge for cooperative learning, because individual flexibility favors individual progress plans, while collective progress plans make cooperation easier.

As shown in the accompanying figure, my *Theory of Cooperative Freedom* suggests that the facets of flexibility that are of special importance are time, space, pace, medium, access, and content.



8. Much has been said about offering students collaborative, cooperative, and individual types of learning, but what about instructors or disciplines that are more suited towards one type of presentation modes? What about the instructor whose teaching style that may not “fit” each of those types of venues?

First of all, I oppose the notion that we should develop learning to suit instructors and their teaching styles. Our focus of attention should be the students and their preferences. Learning can be individual, collaborative, or cooperative, and online education technology can support each of the three categories.

Individual learning provides superior individual flexibility, but very limited affinity to a learning community. It has a strong position in online education delivered by institutions with a tradition in distance education.

Collaborative learning requires participation in a learning community, but limits individual flexibility. One may say that collaborative learning requires that students sink or swim together. Collaborative learning is common in online education offered by traditional face-to-face institutions.

Cooperative learning focuses on opportunities to encourage both individual flexibility and affinity to a learning community. Cooperative learning seeks to foster some benefits from individual freedom and other benefits from cooperation in online learning communities. It thrives in virtual learning environments that emphasize individual freedom within online learning communities.

I do realize, however, that new technology and adaptation to individual types of learning are major challenges for many teachers and institutions.

NKI’s research and evaluations maintain that swift response time is essential for student satisfaction and perception of a tutor’s work. In cooperative learning environments with individual progress plans and many courses, it could be wise but difficult to continually supervise response times for all teachers. This is, of course, a controversial issue, since some teachers may resist the idea of being supervised this way.

NKI has handled this by integrating a tool in the LMS system that records the time it takes from when a student submits an assignment to when the teacher has registered the corresponding grade. The Web pages present statistics about a teacher’s response time and compare it to other teachers’ performance. This system was introduced in May of 2004, and it resulted in much discussion in the teachers’ online forum. A few teachers voiced strong criticism, doubts, and reservations. Others identified shortcomings that needed to be resolved.

9. There are students in a cooperative or collaborative online course setting who are interested in accumulating credit hours, but not in true learning of the subject. What does their presence do to the building of community online learners?

We should urge students to take part in and build a learning community. But we should also respect students’ preferences and choices, if they prefer to study alone. Therefore, a cornerstone in cooperative learning is that cooperation should be voluntary, but also attractive, appealing, and alluring. It should be offered as an omnipresent opportunity to those who seek cooperation. The challenge is therefore primarily to help those who are interested in cooperation to find

suitable learning partners and cooperative services. In addition, it is necessary to persuade the rest to contribute to the learning community. This means that students should not be allowed to completely withdraw from the learning community. Total seclusion should not be regarded as appropriate behavior. Students should at least be visible as potential partners and resources for others. The dilemma is that students who do not contribute to the community cannot be perceived as learning resources for others. The potential of the learning community will then be diluted. So, one may argue that a successful cooperative learning community may depend on a contract or mutual understanding that all members have an obligation or commitment to serve as resources for the learning community.

10. How do students compete in a global environment which increasingly requires the ability to work with good communication skills and cooperative groups, if they completed their degree online through an individual plan, such as a correspondence course?

I believe the answer is related to educational social software. Terry Anderson defines it as networked tools that support and encourage individuals together, while retaining individual control over their time, space, presence, activity, identity, and relationship.

Social software has been used to develop excellent cooperative applications, such as Wikipedia, MySpace, and Flickr. Similar software could be used to develop cooperative educational networks in the future. The crucial success factor with these services is that the users both produce and refine the content. The challenge for educational networks is to include services that allow students to produce and refine content that contributes to learning and sharing of knowledge. One mind-boggling chain of thought is to give all students online access to all notebooks, assignment works, papers, and exams produced by every individual student in the network. Imagine that they could search and sort this content, not only by the teachers' grades, but also by other students' evaluation and improvement of the work.

11. Who has influenced you and how have they influenced you?

Above all, my mentor and supervisor, Torstein Rekkedal, has for many years been a tremendous support with regard to professional advice and inspiration. He is NKI's Director of Research and Development, and he has also been created Honorary Doctor of the Open University in the UK. Michael G. Moore urged me to start my doctoral studies at Penn State and engaged me as a graduate assistant at the American Center for the Study of Distance Education. Gary E. Miller was a very positive and encouraging advisor when I finished my doctoral thesis at Penn

State. I have found inspiration and resources for my research in several European projects with Desmond Keegan, who many will know from his definition of distance education. The two distinguished Canadian distance educators, Tony Bates and Terry Anderson, are also among my favorite scholars in the field. Finally, I recall with great pleasure the opportunities I have had to meet and communicate with the distance education paragons Börje Holmberg and Otto Peters.

Much of my initial inspiration in the late 90s was taken from the Virtual Classroom Project at the New Jersey Institute of Technology in Newark. I would still recommend the project's book, *Computer-Mediated Communication Systems*, that was published in 1982 by Elaine B. Kerr and Starr Roxanne Hiltz. Two more books that defined the field of online education and meant much to me were *Mindweave: Communication, Computers, and Distance Education*, edited in 1989 by Robin Mason and Anthony Kaye, and *Online Education: Perspectives on a New Environment*, edited in 1990 by Linda M. Harasim. These people and their classic books have been my foundation for online education.

12. Could you tell our readers about your book *Online Education and Learning Management Systems*?

It is a major work about online education, which is available both in print and as an electronic PDF file. It includes comprehensive discussions, but also numerous anecdotes and pointed statements. Much of the content is available, with related audio and video material, at the book's Website at www.studymentor.com. Among the most visited articles is my Glossary of Online Education Terms, and many readers also find my lists of strategic and practical recommendations to be useful.

The book has received excellent international reviews and recommendations. I was, for example, really pleased when Dr. Erwin Wagner, former President of the European Distance Education Network, stated: "The book is interesting, important, innovative, international, and impressive."

The book is intended for an international audience with an interest in education and the Internet. It should be of special value to students, teachers, course designers, administrators, decision-makers and educational officers in public and private sectors. The book discusses major developments in online education, and provides illustrative examples from my Scandinavian and international research. It includes articles outlining my theory of online education, teaching techniques, learning management systems, recommendations for decision-makers, and terminology.

13. For many online instructors, teaching online is a major, time-consuming commitment. The instructor

may be available twenty-four hours a day, seven days a week, and depending upon how many courses they are teaching, could be working 365 days a year! Does not this lead to burnout? Won't other aspects of their professional lives suffer?

Yes, online education will never become a large-scale success until we are able to limit the teacher workload. Therefore, it is extremely important to consider the workload, especially during development of course assignments. Online education offers students excellent opportunities for individual communication with their tutors. They can be contacted via e-mail 24 hours a day, 365 days a year. Few learning environments provide such opportunities for individual access to teachers. It is obvious that online students appreciate always having a personal tutor available. It is the students' dream, but it could soon become a nightmare for the tutors. I have often used this figure to illustrate the online teacher workload:



In my doctoral thesis, *Teaching Techniques for Computer-mediated Communication*, I did an international survey of 150 teachers regarding their experiences with online teaching. Their general perception was that the teacher workload was indeed high.

14. You have published in Portuguese, Spanish, Italian, German, and Danish. You have also presented in various parts of the world. How do you find the time to do all this?

For twenty years now, I have concentrated my work on online education. The results are due to many hours of hard work and ample support from my employer and family. Since the dawn of the Internet, I have made most of my articles and presentations available online. This means that my work has always been very visible on the Internet. I have also developed a large international network of contacts through online activities and European research projects. These contacts have invited me to give many presentations at international conferences and also initiated translations of my work into several languages.

15. What is the MegaTrends project? How did you get involved, and what is the status of that project now?

Megatrends in online education is the transition from small-scale experimental courses to large-scale, mainstream operations. Prior to the year 2000, universities typically piloted a few online courses attracting some pioneering students. Today, many higher education institutions are implementing online education services to all their students.

The MegaTrends project (http://www.nettskolen.com/in_english/megatrends/index.html) is a European project funded by the Leonardo da Vinci program. It aims to enhance public knowledge on sustainable and cost-effective, large-scale e-learning by analyzing the trends and contributions to large-scale success and to identify laws and recommendations for success and failure in e-learning.

So far, the Megatrends project has identified about 25 European megaproviders of online distance education. These institutions have more than 5000 enrollments or more than 100 online courses. Among them are, for example, the UK Open University, NKI Distance Education, and Universitat Oberta de Catalunya.

The seminal project idea emerged when I wrote the anecdote, *Online Education Obituaries* (<http://www.studymmentor.com/studymmentor/Obituaries.pdf>). There, I wrote that: "Successful online education should be sustainable. It is therefore of great concern that much of the online education that has been offered so far has been transient, unsuccessful, and far from sustainable. A lot of it has been supported by external funding and ended when the external funding stopped."

16. Should universities offer both synchronous and asynchronous sections to students?

Asynchronous communication offers much individual flexibility in time, while synchronous communication makes students dependent on each other. E-mail and discussion forums are examples of asynchronous communication. Chat, videoconferences, telephone conferences, and face-to-face classes are examples of synchronous communication.

Synchronous communication is spontaneous, while asynchronous communication is more reflective. Hence they could be used for different purposes and learning scenarios. They can be combined and used separately. However, including more communication channels tend to increase cost and to break up focus, structure, and cohesion.

Because of its flexibility in time, I have always argued that asynchronous communication should be the preferred form of communication in a cooperative learning environment. Synchronous communication could however contribute to students' sense of

belonging to a learning community. And, obviously, the younger generations are getting used to chatting as a social communication tool. Therefore, synchronous communication should be a voluntary option, but probably not an obligatory part of the course work.

17. What is your opinion of distance education classes conducted through video conferencing?

Video conferencing is based on inflexible synchronous communication. It is still relatively expensive and based on technology that is not common among students. Many of my experiences with videoconferences have included technical difficulties. Therefore, I only recommend videoconferencing when it has obvious pedagogical advantages.

18. You have produced more than six teaching programs for Cable TV. How is this medium different than Web learning or online classes?

Quality video programs are expensive and time-consuming to produce, compared with traditional online learning material. So you cannot really justify the cost of quality video programs, unless you want to address a large number of students, or the video format is really superior in addressing your aims or learning objects.

One of the technological developments that I didn't foresee when I produced the programs was that they later would be available on the Internet. Now, you may, for example, see an interview I did with Bill Gates in 1989 via www.nettskolen.com/multimedia/bill.wmv.

19. Do you have a Website where our readers can get more information about you, your books, and your work?

I have maintained my homepage for more than ten years. If you do a Google search on Paulsen, it should be easy to find. If not, you could access it via <http://home.nettskolen.com/~morten/>. I'm not especially proud of the design, but it's continuously updated and I know that many online educators have found it useful. Much of my book, *Online Education and Learning Management Systems: Global E-learning in a Scandinavian Perspective*, is available via www.studymentor.com. You may find more information about NKI at www.nki.no and its online education at www.nettskolen.com. The European projects I'm involved with at the moment have the following Websites:

- Megatrends: www.nettskolen.com/in_english/megatrends/
- ELQ-SME: www.nettskolen.com/in_english/elq-sme
- m-learning: www.ericsson.com/mlearning3

20. What question have we neglected to ask? "Can you tell something about the other European projects you are involved with?"

At the moment, NKI is involved with our third European project on mobile learning. The project, which is headed by Ericsson, is titled "Incorporating mobile learning into mainstream education and training." The aim of the project is to develop mobile learning course content and services that will enter into the mainstream and take mobile learning from a project-based structure and into mainstream education and training.

In the ELQ-SME project, we focus on e-learning quality in small- and medium-sized enterprises. So far, e-learning has primarily been used when there are many learners involved. The reason may be quite simple; the up-front investments related to e-learning are relatively high. Therefore, it is necessary to distribute the e-learning investments among a relatively large number of learners. The consequence is that e-learning, first and foremost, has been used by individuals who enroll in generic courses in a large, open market and by large enterprises with so many employees that they can afford to develop specialized e-learning internally. Since SMEs have relatively few employees, few SMEs have much experience with e-learning. Some e-learning is, however, getting to be less expensive, and some e-learning models are more suited for small-scale training than others.

The first analyses indicate that the small enterprises have so few employees that they are most likely to enroll individual students in generic, commercial online courses. The medium-sized enterprises may also benefit from more specialized courses offered through a branch association or in cooperation with suppliers or chains. Larger enterprises may have enough resources to develop e-learning courses internally. They often have some external help with development of graphics, and video and Web adaptation, but the internal employees are the content experts, since the course topics focus on expert knowledge related to the companies' core products and services. The e-learning platform is not a part of the companies' core business, so the companies buy these services from external hosts that provide LMS services. □

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