

UNIVERSITY AND ITS STUDENTS

INTERNATIONAL SYMPOSIUM
OF STUDENTS AND PROFESSORS

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The influence of information technologies on society

A. Fábián, Hungary

The virtual university

The knowledge society places universities in a key position and confronts them with a great challenge. Their responsibility is extended from traditional degree-oriented education to lifelong learning for all. The information society on the other hand provides new tools to take on this challenge: information and communication technologies (ICT). Whether the academic world will succeed in realizing the potential of these tools will not depend on technological conditions: technology is available and access to it is growing spectacularly. Key success factors are: the development of effective pedagogical scenarios and platforms for integrated utilization of technology tools in mainstream education, and effective networking on a local as well as a European and world scale. The goal should be optimal integration of new educational tools with traditional methods, finely tuned to the needs of the learner.

- **Giving a definition for the virtual university**

The Virtual University (VU) is the 21st century version of higher education, in which not only the education, the lesson happen on the Internet, but the consultation and the exams as well. The VU is not the only way the normal university can or must develop, only one alternative possibility. The VU can provide a higher education to even more people.

- **Attitudes of different institutions**

- *Attitudes of smaller institutions*

The major fear among private colleges is the fact that their present enrolment in part-time degree programs might be lulled away by VU programs that are cheaper and more convenient. There is also the threat that these VU programs would pull students away with the promise of a degree from better-known universities. Many of these smaller schools do not have a large funding and are greatly dependent on tuition income from their students. Private colleges have certain advantages, such as being in a particular market for years. A small institution, however, cannot compete with the wide variety of courses and convenient times that state funded universities provide.

Other small schools, while agreeing that VU should be looked into, do not see it as a major threat. They point out that enrolment of continuing education

programs has continued to grow, despite an increase of competition from VU programs. They say that instead of competing with VU head on, smaller schools should promote their strengths, such as small classes and face-to-face interaction with instructors. An other fact is that most of the small universities can't even think of starting a virtual university course, because they don't have the money, the technical background and the number of teachers to lead the courses.

- *Attitudes of larger institutions*

Large schools abroad have already begun to milk the Internet learning by setting up programs in their schools, but in Hungary even the biggest universities have mostly problems with the number of instructors and the technical background for a virtual library. The large universities argue that they have no desire to replicate established programs of small, private schools in the form of VU. They also argue that a university's reputation has nothing to do with the success of distance learning enrolment.

• **How the system of the virtual university works**

Advantages of the virtual university

There are two kinds of seminars:

- Synchronic seminars
- Asynchronic seminars

During the synchronic communication teachers and students are present on the Net at the same time so they can have a dialogue.

During the asynchronic communication parties can be in contact by e-mail.

Both communication forms need parties being present so it is a mistake that the Internet-based University can make teachers redundant. Teachers can make videoconferences so there is the opportunity of a personal contact between students and teachers.

There has been quite a lot of electronic libraries launched e.g. at the Oxford, Michigan or Harvard University. The Hungarian form's name is: Hungarian Electric Library.

Anyone can have easy access to the material of virtual universities.

Most of the Internet users live in developed western countries usually in towns, at places where also traditional education can be reached. If the Net could be launched also in not so developed countries extra charges of studying far away from home could be eliminated. Students could learn around work commitments so this kind of education could be reached by a lot of people. A lot more students could take part in famous lecturers' courses. The main point is that virtual libraries can never be short of the actual book.

The pitfalls of the virtual university

The Internet access in Hungary is exorbitant for students and for their teachers living on a modest salary today.

The threat is right:

- Does a virtual university give the same degree as a "stone-university"?
- Having the suitable infrastructure background will students go over to this educational form?

The advantages and disadvantages of the system mostly depend on the parties' ingenuity, adaptability and motivation like in the real world.

- The UNIWORLD

Uniworld is building a virtual network in which Hungarian, European and American institutions of higher education cooperate. The planned courses and subjects to be offered, typically, both in Hungarian and English will be jointly taught to enrolled students of the participating institutions. It is expected that the partner institutions will move towards mutually recognizing the credits issued in connection with the joint undertakings. In the long term, Uniworld plans to offer direct enrolment possibilities and degrees. In addition Uniworld is in the process of extending its activities also to the Hungarian national teacher-training program and to specialized professional training.

The virtual university is the 21st century version of distance education, eliminating, however rather than bridging distance. Though personal encounters between faculty and students should and could not be completely eliminated, the vehicle of instruction through Uniworld is networked communication. Uniworld preserves or even recreates the personal community of scholar and student, the living atmosphere of lectures and seminars. In this sense it continues the legacy of the traditional university. It is different from the traditional university and distance education, so far as it makes the most world of multimedia. It radically surpasses the realm of the linear text, the culture of the book. The curriculum transcends disciplinary boundaries making extensive use of the rich variety of the audiovisual tools and interactive teaching methods. This elevates the building of virtual university into a task of philosophical dimensions by an effort to go beyond the text-centred thinking of modern European culture.

The Uniworld project is, first and foremost, a research program in social theory and the theory of knowledge; an avant-garde practice out of the experience of which a new theory of the new modes of organisation of ideas and people – of the symbolic and social-physical – can be constructed.

Uniworld encompasses the whole vertical integration of education from the basic skills of writing and reading to postgraduate training; our hypothesis is that the borders between elementary, secondary and tertiary education are becoming fluid. Uniworld is interested both in liberal education and professional training; our hypothesis being that the walls between abstract and concrete knowledge, between theoretical knowledge and practical skills are crumbling away.

The project aims at a general improvement of the efficiency of Hungarian tertiary education with special awareness, however of the needs of rural Hungary. The chances to enrol at a university are today for young Hungarians living in small villages ten to twenty times worse than those living in bigger towns. Hungary has large diasporas both in neighbouring countries of Romania, Slovakia and

Yugoslavia as well as in the U.S and globally. For small nations, ethnic groups and isolated language areas all over the world Uniworld could become a model for specific uses of electronic communication in higher education. Uniworld is envisaged to work in Close partnership with community networking movements both inside and outside Hungary.

- **Bases**

- *Internet connection, hardware supply*

- Of course the first step to the learning at the VU is to have a proper multimedia computer and Internet access to be able to use all possibilities of teaching and learning. The best would be if the state could provide these to everyone who is accepted at a VU, but at the moment because of the economic situation of Hungary this is not possible.

- *Library*

- The most important bases of the VU are the virtual libraries, providing fast, fresh and reliable information at any time students or teachers need it. This is also a problem, since there is nobody to digitalize the literature of different faculties. Universities don't have the free manpower for it and they don't have the money for the wage labour

- *Teachers*

- In the VU teachers are as important as in the real university, if not even more important. The role of teachers will decrease in connection with lectures, students will turn more to the written literature on the Net, but they will need the help of the teachers doing their homework and papers than ever before, because they have the "know-how".

- *Possibilities for identification*

- The most difficult problem in connection with the VU is the identification at the exams. If students are only from one country or neighboured countries this isn't a big problem, because it can be solved with travelling to the place of the exam. The problem comes forward as soon as students are from different countries, since they won't be able to travel long distances to absolve the exams. Of course students could give down the papers electronically, but this brings on if the student wrote the paper himself or somebody else did it for him. Perhaps this question occurs in the case of the real home-works too. The examination could also happen in a videoconference by web-cams, so student and teachers could see each other, but there would be still a great variation of outer helps.

The effect of the Internet

- **On society**

- The Internet is changing human society, just as railways, cars and telephones changed it in eras gone by. It's also changing it very quickly. The effects of the Internet will be felt within a single generation – even a single decade.

- Without doubt the most powerful influence of the Internet is on information flow.

Suddenly all kinds of information can be digitised and passed on to millions of people in a few seconds. This has already led to a trivialisation of newspapers and the TV. A few newspapers and some magazines have recognised they can't battle the Internet on immediacy but can compete on depth, so they've taken the analytical route. But only a few. The majority have turned trivial.

The exact nature of this change isn't easy to predict. Probably the mainstream entertainment will continue pretty much as before, but art with less commercial value will boom, creating a vibrant leading edge of culture from individuals outside the control of corporations: artist to audience direct, just like things used to be in centuries gone by, but now with mass distribution. It's a significant change in the way society deals with the arts, and in turn the arts are a prime mover in altering the way we view the world. Freed from corporate restraint, they'll move it faster.

The Internet is already having an impact on day-to-day commerce, especially on the nature and distribution of work. Most of this influence is in the business-to-business arena, not business to consumer.

But there's a social downside too. In the cities of the West we can already see deep poverty despite all the big money floating around, and the Internet is likely to segment society even further. People without computer skills and access to the Internet are falling behind. And since only around seven percent of the world's population currently has access to the Internet, there's a lot of falling behind going on.

- **The effects on the teacher–student relationship**

The VU would entirely change the teacher–student relationship. If you think of the university the 1st thing that comes into your mind is the authority, dependency, while the Internet is the world of liberty, co-ordination and the eternal dialogue of peer people. The change of the IT has wound up dependence between teachers and students.

- *Personal communication or virtual communication*

The communicational environment has a direct effect on education. The traditional educational environment means personal communication in the classroom, reading books and writing essays at home.

In the virtual environment personal communication is partly or entirely followed by virtual seminars. There are documents on the screen instead of books and paper notes. It is a big problem that different personalities can cope differently with the virtual university. It is proved that the face-to-face communication cannot be replaced effectively.

Summary

The education via Internet is still improving, developing; the participants have to lay down the bases of the new system. Teachers and students have to learn from their own failures and successes, but the development is necessary. Every new science needs

pioneers. The fact that Hungary which is not a Great Power in computer technology, has stepped in the first row to the area of Internet education, proves that we are worthy of carrying on the reputation of John Neumann.

The Internet is going to develop in many areas in the coming years; the education has to take up the competition with other actors of the Net. Students will have the possibility to choose the most attractive program from the palette of schools so the information will become everyone's. But we will need coordinators and they will be teachers of the future. And where could be something best taught, if not in its own environment. Since the Internet exists materials on it and the education via it have a place in our world.