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# Perspectives on the educational market: universities between virtual campus and education brokers

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#### **Introduction and Context**

Nowadays information and communication technologies are affecting many aspects of our daily life. Sitting at our home computer we can order products, book flights, transfer money, buy and sell stocks and take online classes of educational institutions at the other end of the world. Maybe one day we will be able to pick any graduate business course at any institution that we like and combine credits of several online universities. Major changes are happening on the educational market. How will the educational market look like in 10 or 20 years? Which path will the traditional universities go from now on and where will they end? And: what are the factors that influence this shift? These are the questions which are addressed in this paper. Some of the analysis presented in this paper is based on papers published by the German Bertelsmann Stiftung and the Heinz Nixdorf Stiftung (Encarnação/Leidhold/Reuter 2000) and on some English authors (i.e. Daniel 1998) and it summarizes some of their ideas.

## What is happening?

Some of the major changes in the educational market can be identified as:

• Higher Education (HE) is not a rare phenomena anymore. In developed countries HE is open to nearly everyone (Davies 1998). As it became a mass product in certain disciplines, more students started to pursue academic programs than universities could bare. As most University teachers know and have experienced themselves: In some disciplines the German university system had major problems to react appropriately and flexible enough to an increasing numbers of students. Although the newest data show a decreasing demand for academic study programs in Germany within the last 10 years (Durrer/Heine)

2000), many of these problems still persist in some disciplines.

- Universities are not the only players in the field: Corporate universities, edu-cational institutions such as graduate business schools with MBA programs and other institutions which are offering special programs share the market.
- The typical professional biography, as we used to known them just ten, twenty years ago, have changed. Now people can have several different pro-fessions within their lifetime. They might acquire new qualifications accord-ing to their actual professional needs. And they are willing to invest into their own qualifications, not asking companies to pay for their training. With more professionals being self-employed and more flexible working conditions, the demand for "just-in-time" and modular training and education will increase.
- In developed countries, knowledge becomes a more and more important factor in the process of economic production. Davies states: "Knowledge workers have emerged as the crucial players in economic performance and wellbeing" (Davies 1998). What does that mean for the educational market? Besides training of skills, the acquisition of knowledge becomes more important. Courses will be less directed towards training simple skills and be more targeted at the acquisition of knowledge and training of capabilities such as problem solving, knowledge structuring, team working and management. Davies also states that the typical "graduate job" will disappear and more and more positions will be filled by people with a very high level of qualification.
- The typical educational biography, spread between school, academic study or vocational training and professional life, will disappear. In Germany students often go through a vocational training before they study. Additionally more and more students work part-time during their graduate studies. But still: German universities do not sufficiently support part-time studies and make it quite difficult to complete a graduate degree this way. Here more flexibility on behalf of the universities is needed. Universities have to acknowledge that they have the opportunity to offer courses to part-time students and profes-sionals who want to qualify themselves during their professional life.
- Local boundaries, regional concerns, local job positions and economic activities get less important. Knowledge acquisition and the progress of research will have international impact. Information is rotated around the world in much faster speed. Globalization means, we can hire people and buy products is the most distant parts of the world. "A common culture of knowledge will emerge" (Davies, 1998).

#### What are the effects on universities within the educational market?

Positive as well as negative effects can be observed. It is up to the universities how they use these above described tendencies and opportunities. While it can be a chance for those which "behave themselves innovative" and look at the changes and analyze how to react, other will "close their eyes" and try to wait until the storm is over. Does that work? Yes and no. It might work for those disciplines which cover their niche, which are specialized in certain areas and which profit from their institutional profile of being advanced in research, applying special methods or practices or which are very well know in the field.

But the above described development can be painful for those disciplines and institutions which are positioned in highly competitive and financial re-warding fields such as master programs in business administration, computer sciences, engineering, law and so on. New institutions will enter this market segment - as they already did and do - and will try to make profit. Up to now, regional boundaries and immobility of students have protected traditional institutions. Also academic titles such as bachelor, master, or PhD acquired at a traditional institution still gained a higher recognition. But things will change: Along with international efforts to install transfer systems and proof of equiva-lence for credits and courses, these protective boundaries will start to diminish.

Traditional institutions will have to take a decision as where to position themselves between the new market players which do exist due to...

- increasing competition
- increasing demand for higher education
- distribution of courses through information and communication technology

## How can information and communication technologies change education?

Some of the above described changes such as the entry of corporate universities into the educational market do and would happen anyway - even without the usage of information and communication technologies. But some developments are directly contributed to the distribution of courses though the internet.

First we have a look at how the technological features of the internet can be used within education itself before we take a look at a broader level and see how they affect the educational market itself (the aspects listed below are drawn from several articles, i.e. Hesse/Mandl 2000 and Bremer 1998):

- The internet can be used to improve the efficiency of course delivery to the students. It can help to provide scripts and additional information supplemen-tary to traditional offline (face-to-face) courses. Also it offers the new oppor-tunity to deliver the whole material of an online course to remote students
- The internet can help to facilitate student administration. Students can regis-ter and apply for online and offline courses through the net. On webpages they can get personalized and actual information about courses, facilities, and registration. Information can be updated just in time and send to the students.
- Access to information can be administered and be made available to certain target groups and individuals. Access can be limited and tracked as usage of certain pages or whole information packages can be analyzed using log files.
- Students can access information, online courses, discussion boards and emails according to their own time preferences. In the perception of some educators, online studying is often correlated with total flexibility across time and space. But as the experience shows: There is a limit! Total flexibility can reduce students' motivation to get engaged in interactive and communicative processes. If students work on online materials totally flexible, little interac-tion among student groups and between student and teacher is possible. Here a certain degree of pacing has been proved to be appropriate (Bremer 2000).
- Material can be processed according to the students' own needs. Along with approaches of students centered learning and teaching, software tools are un-der development, which will help students to structure, organize and process the online material on their own computer according to their own preferences. They can even work cooperatively on the same material with other students across the internet. Shared application and data management systems allow students to share their study material in a learning environment with others.
- Also on the teachers' side the internet offers opportunities and will have some major effects on the organization of workflows within institutions. Since online courses are not delivered within one room, where students and teach-ers are present at the same time at the same location, new workflows will emerge for the provision of courses and material. Teachers can support stu-dents from their home, check their emails, post statements in discussion boards, give feedback to exercises, and provide new material onto the web. The provision of courses and course material can be spread between informa-tion providers, who prepare the content of the course, those who support the students and "give" the course, and those who provide the technical platform. Even the task of supporting the students can be divided among tutors, teach-

ers, other students, and even external experts. The role of teachers changes totally. He/she will have to select the appropriate material which will be used in the course and will pick the staff who will support the course. The tasks will be spread among a team of professionals who take their role according to their specific qualification. John Daniel states that courses will be taught by teaching teams instead of individuals and that these courses will be superior to the ones which are taught by just one single person (Daniel 1996).

• This effect can also be transferred onto an institutional level: universities will offer those courses which correspond with their own strengths. They will pro-vide those tasks which belong to their "core business". Other tasks will be outsourced and provided by external companies, other educational institu-tions or by companies which are outsourced by the university itself. We can imagine that universities start their own businesses, outsourced by their com-puter centers, in order to attract new customers. This way they can build upon their own capacities and develop their own competences in the market. Vir-tual universities or traditional universities which offer online courses can learn from the organizational structure of virtual enterprises. They could cre-ate their own structures accordingly. In order to survive in the highly com-petitive market, they have to focus on their own strengths and find appropri-ate partners for the other tasks.

#### How will these internet technologies affect the educational market?

In a next step we can look at the effects of information and communication technologies not just on single course delivery but on the educational market:

- The whole range of online course and institutions will be more transparent than ever before. Along with credit systems and accreditation methods, courses and institutions will be clearly positioned within the market. Univer-sities will not only offer courses on their own webpages but also market them on platforms which combine the functionality of information brokers and ac-creditation centers. 'New Promise' is one example for such an education bro-ker (Ritter 2000): Students can choose among several courses offered in one discipline and select the one most appropriate for his/her needs depending on cost, time, and credits. Institutions will have to promote their own profile in order to attract new students and might specialize and focus in certain fields.
- More and more courses will be targeted at professionals or part-time students which qualify themselves along their professional careers.
   Since their have a sufficient financial income, student tuition will be applied for these groups and become politically acceptable. New financial models will apply for online courses, which differ from the ones

for traditional university courses. As the development of online courses is cost intensive, universities will try to finance their courses through participation fees. If traditional universities want to enter this market segment, they will have to offer courses for profes-sional part time students which differ from the ones for full time students.

- Experts, teachers and tutors might work as independent freelancers in the educational sector and get involved in certain courses according to their spe-cific qualification. They will also try to develop a certain profile in order to position themselves. A currently offered variety of online courses for teletu-toring supports this tendency. Besides traditional professional careers in uni-versities, new positions will develop around the provision of online courses.
- Technical companies will specialize on the provision and support of online education. They will be booked by educational institutions in order to provide the technical platform for online courses. They will offer certain services as the provision of webboards, chats and videoconferences and provide special tools for the construction of online text books, tests, and questionnaires, etc..

## What are the key players in this field?

Universities are not the only players in this field. Who are the others? As mentioned above, new educational institutions will enter the market. Along with the existing institutions, they can be structured in the following categories:

- Education broker
- International consortium
- Corporate universities
- University networks
- Virtual universities
- Traditional Universities with online courses

This structure is published by Encarnação/Leidhold/Reuter (2000). Daniel adds so-called mega-universities to these categories. They are distant learning instituions which have very large numbers of students (over 100.000). He identifies 11 institutions worldwide that meet the criteria of a certain size, of distant teaching and of several degree-level courses in higher education (Daniel 1998).

A look at each category helps to understand their specific characteristics:

Education brokers can be companies which do not offer online course themselves but do provide platforms where other institutions place their courses. Some brokers apply accreditation methods in order list only courses or institutions which meet certain criteria. Others are more open and allow any course provider to place the curriculum into their catalogue. Some brokers are limited to certain institutions such as universities. Just recently a German platform has opened its online portal, listing online courses offered by universities only. How do they survive? Public platforms as the German example are financed by public funding. Others might take fees from the students who look for courses or from the institutions which offer their courses. Nearly all commercial education brokers have an additional income through advertisement. In future, education brokers might extent their services and offer student consultation in order to help them to find the courses appropriate for their needs. They might help student to assess their capabilities and consult them which courses to select.

International consortiums are joint ventures or other forms of corporation between software and telecommunication companies, publishing houses, TV and radio stations, and other "media companies" which will try to place - along with big companies - profitable courses into the online education market. They will target at the most profitable areas such as business courses and professional training for corporate customers. Additionally they might cooperate with well-known traditional universities in order to get the necessary reputation needed for a good positioning in the market. These consortiums should not be ignored since they have extreme economic power and might have hidden agendas besides entering the educational market. Gaining market power in other areas such as the software market might also be of their main objectives. But they do not necessarily be a threat for universities: They might as well serve a special target group and offer courses for self-organized, highly motivated professional adults who look for just-in-time training in certain business areas.

Corporate universities do not just enter the market just due to the arrival of new technologies. They are already in place all over the world. Corporate universities are institutions run by big companies who want to train their own employees and offer a study program to their young trainees. While studying in combination with a full time or part time job within their company, the students are involved within the company's value system and culture and are trained according to the company's very

specific needs (Encarnação/Leidhold/Reuter 2000).

University networks are a phenomena which can be observed in Germany increasingly within academic online education. Partly this can be explained as a result of governmental funding for online courses: Governmental funds started to require cooperation between institutions as a crucial criteria for financial support. But cooperation is also a result of pure economic calculation. Since it is often too expensive for one single university to finance all the tasks and processes needed to offer online courses, universities cooperate in order to fulfill this objective. Nowadays many publicly financed projects are pursued in conglomerates of state or regional university networks. While regional aspects can play one role, disciplines play another one. Most often a combination can be observed: several departments for engineering or computer science or business try to offer cooperatively several courses or even an online study program within their discipline. Typical examples are the "Virtuelle Universität Bayern" (www.vhb.org) and the "Virtuelle Fachhochschule" (www.oncampus.de und www.vfh.de). In Bavaria full time students can pick online courses to complement the traditionally offered curriculum. One advantage of university net-works lies in the internal agreement upon transfer of credits and accreditation.

Virtual universities in the pure sense of the word can only rarely be found in Germany. In a very radical meaning of the word they would not have any institutionalized "physi-cal" body such as an university campus or a permanent administrative department. In the pure meaning of the word they should resemble virtual organizations which consist of a network of companies and freelancers, all contributing their core business competences. Virtual universities which meet this extreme definition do not exist here. What exists are universities which have mainly focussed themselves on offering online classes. But online course delivery is only one portion of the whole scale of services provided. Virtual universities need to offer the whole scope of activities and services available on a traditional campus. But online! They have a virtual cafeteria, online student admission and registration, virtual library, bookshops, and other services such as student consultation, etc.. Instead of just offering courses in one or two disciplines they need to supply a whole range of study programs and online degrees such as masters and bachelors. Students are supported by teletutors and interact in online group sessions or tasks. Besides teachers and content providers the tutors play a major role is these programs and are especially skilled and trained for online tutoring and support.

Traditional Universities already start to offer online courses to

their full time students. But mainly they still apply internet technologies to support students who study on-campus. Accordingly we have to differentiate two developments: multimedia support of traditional on-campus teaching and the application of multimedia to delivery courses off-campus. In the first case, multimedia is mainly used to enhance lectures and seminars along with traditional teaching techniques. Often students can access additional material on the web supplementing face-to-face courses. In the second case, universities start to use the technologies in order to offer more flexibility to their students. Seminars are offered online so students can access them from their homes. Often courses are offered to new target groups. In international online seminars students are brought together from all parts of the world or across different disciplines. Up to now, full-time students mainly attend courses which mix face-to-face with online phases. As long as traditional universities stay with their target group (the oncampus full time student), they will rarely intervene with the other key players described above. But once they start to focus at new target groups such as full time professionals, they compete with other institutions. In order to start this proc-ess, they need to identify their specific competitive advantages and position themselves in the online education market (Porter 1995; Davis 1999).

Distant universities and mega-universities are described together since in most cases the latter are distant education institutions with a very large number of students. One major characteristics and advantage these institutions is their experience with distant course delivery. They already have a very advanced division of labor for the administration, production and delivery of distant courses (Daniel 1998). The new challenge which they also have to face is the application of the new technologies. While on one hand we expect them to be pioneers in the provision of online courses and assume that they are advanced in the use of technology, it is often overseen that they also have to go through a major organizational shift. The production of online courses and course material is more expensive and time consuming than the production of printed text books. Additionally teaching with multimedia can fundamentally change the way distant teaching is produced. While traditionally we find a low level of student - teacher interaction and students rarely founded study groups, now the internet offers new oppor-tunities. Students can contact their teachers easily via email. They can discuss with other students and learn cooperatively in discussion groups. What has changed dramatically for distant education is the formula applied for the cost calculation of one single course. While in the past, more students in one class lowered the cost per students, the formula does not work that well when stu-dents want interactive support,

online tutoring, personal feedback and so on. Within a more competitive market these institutions will need to find a way to be attractive for students. Cost efficiency is one way, customer orientation another. Distant education institutions will need to find a way between these poles of offering affordable education or of communicative.

#### How and where will institutions compete?

Many aspects of potential future competition have been mentioned above. Some of the overlapping interests are interesting enough to be looked at in detail. Disciplines such as business, economic and law, often areas of mass study programs, are interesting for professional training as well as for full time study programs. Here most educational institutions will compete due to a financially attractive market segment. But at the same time demand in this field will increase due to a growing need for life long learning, professional training and academic education. Traditional universities will have to find the appropriate strategic partners in order to enter this online education sector. Most of them will not be able to offer traditional study programs as well as a full range of online courses. A major influence might be executed by education brokers. If they become powerful enough to cover a sufficient market share with online course catalogues, they might (ab)use their accreditation power in order to influence course design and content. Here traditional public universities need to react early enough in order not to give educational policy out of their hands. National and international accreditation agencies, where several interest groups are represented in the boards, should ensure a development which serves the public, the tax payers and the potential students. Commercial consortiums and corporate universities need to find their place in the whole spectrum of possible courses, contents and target groups. They will follow market trends and allo-cate themselves in the most profitable areas. Public universities will have the task to offer courses and conduct research in areas which are less profitable for commercial organizations. They also have to ensure that higher education stays open to everybody including those students who are not willing or able to learn online and pay for their courses. In this context, one major aspect should be paid attention to: online and distant learning demands a high degree of self organization and motivation on behalf of the student. Therefore not everybody 'is ready for the net'. At the same time, campus universities still serve as a place of social interaction. This type of academic communities cannot be trans-ferred one-to-one into the virtual world. But what will hopefully change: teach-ing and learning will move towards more learner-centred, less teacher-centred methods. Even in traditional face-to-face courses actual pedagogical research, partly driven by the application of multimedia in learning, cannot be ignored anymore. Through the back door of the discussion about online learning even traditional teaching methods might become reformed. Problem solving, action learning, situated learning and new insights about cognitive modelling and constructivist approaches will be applied. This leaves one question open: which institutions will adapt and use

# What makes the difference? Or: Who will join the club and who won't?

This aspect will be addressed only shortly because up to research is just starting to analyse the way how organizations such as universities change and develop in regard to online learning. Bremer/Ritter/Buraschi (1999) have tried to identify some factors through international comparison. We identified several potential factors such as openness to innovation and individual incentives for teachers and tutors. Schädler (1998) discussed in her doctoral thesis the process of how and why universities implement innovation in teaching. The results of both analysis showed that educators employed by universities need personal incentives in order to push the innovation in an institution. The innovation must not be too complex and must be applicable by the people who supposed to use it. The cost linked to it must either be covered by public funding or by future perspectives of rewarding gains. Incentives and gains can be either financial ones or - as in the academic community most common - reputation. Reputation results in further funding and better career opportunities. On the institutional level, innovations must either improve the position of the institution (better profile, better marketing, etc.) or pay off by more efficient processes. If delivery of courses can be made more cost effective through the usage of the internet, it is interesting for distant education institutions as well as for commercial providers. Last not least two major factors influence the transmis-sion of an innovation into the "daily business": The newness must diminish and the innovation must spread across the institution, not limited to one single pioneer or stakeholder. The outcomes of the innovation must be communicated to a larger community and accepted by the key players. The continuity must be ensured, if the person who invented it, leaves the organization. It must be estab-lish and supported as a process on several levels of the organization. Policy makers have recognized these problems and explicitly started to promote pro-jects which deal with the transfer of temporary into permanent processes. The general acknowledgement of the problem expresses itself by a number of pres-entations on the major conferences in the field of online learning and teaching.

#### Closing remarks: A closer look at the hype of online learning

This analysis can be concluded with a remark that should not be ignored when reflecting upon these developments: Along with all the modularisation of education, packed in small single units which can be shipped through the internet and delivered to students, it should not be forgotten what university studying is about. It is also about learning in the academic community, personal development and being exposed to a variety of courses and academic disci-

plines which sometimes might lead to a very unpredictable path of professional activity. In universities, personal development takes place along with the transmission of values (Mingle 1995). And it should not be ignored that quite a number of learners are not capable of sufficient self-organization in order to select the courses which are appropriate for them. Not all of them can assess their own capabilities properly and motivate themselves continuously in order to conduct an online study program. This leads to the final conclusion that in the long run online courses offered by virtual universities will be one option among many others educational programs on the future educational market.

The last aspect is left open to political discussion: should universities react to these tendencies at all, should they participate in the competition for students in the most attractive market segments or should they rather use this trend as an opportunity to withdraw from mass education and to focus on a more research driven academic teaching? This would be an alternative option for universities!

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