Student support services in distance learning systems

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Abstract—This paper is about student support services in distance learning systems. At first a traditional view on the topic of education is given. Then mass education and their specific problems are discussed. The difference between the traditional and the mass education under the view of student support and distance learning is described and discussed. In the main part of this paper two e-learning systems (moodle, NKI) are described, and their student support is discussed. The main differences are shown in a list. At the end of this paper a small conclusion discussing the two systems and the situation in e-learning platforms today in general.

Index Terms—student, support, systems, distance, learning, e-learning, mass education, moodle, NKI, student support, distance learning, tuwel, STAS

1 INTRODUCTION

In the early days of higher education the number of students was manageable and the professors could teach all of them in one class. With the growing number of students and new technical developing the situation changed. The way of traditional education became expanded to manage more and more students. To do so, distance learning was developed and in time, more and more improved, by using new technologies. In this paper the way to distance education from the past till today and their student support services are presented. Then two very common learning platforms are described and compared. The first one is “moodle” [8] an online system which is very popular, because it is under the General Public License, and therefore free for all. For example, the Vienna University of Technology using it under the name “tuwel” [11], “NKI” [10] the second system, which is commercial, is a system used on an online-college which offers just distance learning courses via their NKI – website.

2 TRADITIONAL EDUCATION

Now we take a look at the beginning of distance learning systems. Let us start with the traditional Higher Education. Here the teacher (or tutor) was responsible for just a small group of students. In that typical frame it was possible for the teacher, to take care, about all learning issues from their students. The relationship between students and the teacher was usually very personal and very individually. The professor took care about the support of the students with them together and personal.

2.1 Growing numbers of students

The growing number of students in the last decades brought a change in the field of education. The teachers and tutors became responsible of more and more students and the question, how to teach such a large number of students, became more and more important. In this mass education the face to face relationship changed to a de-

personalization process. The dialog became a monologue, and the professor was active and the audience wholly passive. So the students had no longer a very close relationship with a tutor or teacher and hence with the institution. They saw themselves, and were seen, as similar if not identical parts on a production line. (Seward D. 1993). But the wish of the students for support was already there.

2.2 Student support

To provide the students with lecture-material and other educational stuff, the traditional way in higher education was very bureaucratic. It was necessary to go to the ‘support area’, which was for example, the institute, the library or the lecture-room. There the students could satisfy their educational needs. But in the last two decades a lot of things changed. The usage of new technologies like computers and the internet, to manage the student support, generates a whole new field of education.

2.3 Distance learning

With the medial preparation of the learning content, it was possible to give the lecture material (paper, video-cassettes, television, etc.) to the students. Now the student was free to learn at their own place and convenience while being away from their university. At the beginning of distance education the material was given to the student personally or sent via the post, radio or sometimes via television. But all this was just a one-way communication between teacher and student. Nowadays the common way to make distance learning is computer-based, combined with the internet. The benefit of the new technologies (email, chat, weblogs, etc) provides again, like in the traditional times, the two-way communication. It is clear that this has more benefits than the one-way communication. But now the question was which internet-technology is the best for distance learning. A lot of systems were developed (universities, companies) to solve
the new tasks in distance education.

3 STUDENT SUPPORT SERVICES IN DISTANCE LEARNING SYSTEMS

The main topic was now to allocate support for the students and create a good learning method, or better a good learning platform. On the way of good solutions a lot of mistakes happened, because the most developer forgot one of the main points here. It was important to focus also on the didactic aspects of education. This means, a software developer has a different view on creating software than a teacher, which wants to present their lecture-content in a didactical and educational way [9]. The systems here described had their times of didactical mistakes but today they are working well.

3.1 Main concept

The main aim of distance education and support systems for students was, to promote self study or independent study among distance learners in the absence of regular face-to-face teaching. To achieve this, every distance learning system extends support to their learners, which comprises of a cluster of facilities and activities that are intended to make the teaching - learning process easier and more interesting for the learners. All these activities beyond the production and delivery of course material assist in the progress of students in terms of learning, interacting and effective communication (Simpson, 2000) and, therefore, the support system may range from study centre counseling/tutorial support to administrative problem solving (Rumble, 1992).

The success or failure of a student support system can be judged on a number of performance indicators [9].

- Develop under respect of didactic manners
- Make sure to make the Human Computer Interface easy to understand (usability)
- Every person which has to, or want to use the system must have the technical requirements to do so
- Motivation of the students is very important to complete online courses

Also two major sub-systems can be generally identified to make distance learning more effective and ensure the desired level of quality.

- Course Production
- Student Support Services

When we speak from Course Production, it’s important to say, that the distance education tools on the market can manage a big amount of courses. Where everyone has its own space or “virtual room” in the system. To fill these rooms with content is the main point of course production.

Student Support Systems means the interaction and communication with the tutor of a course and the support the students can get from the possibilities which are offered.

To make such systems work it’s necessary to give different roles with different responsibilities to manage all the courses, content, students and so on. Three roles minimum can be indentified [8]

- Administrator
- Tutor (courses)
- Students

The administrator is the person which is responsible for the technical aspects of the system. To install it and make sure, that all works, like it should. Also the administrator is able to create tutors for courses.

The tutor (teacher) manages courses and fills the space (room), which is provided from the system with their own content for learning and teaching. In good systems the tutor can manage a lot of things, like which students can see (enter, login or access) the course-material, or manage organizational things.

The students are the consumer of the content. Important here is, that the content has a good quality. This is one of the key-points of a successful e-learning platform.

3.2 moodle

“moodle” is the abbreviation for “modular object oriented dynamic learning environment” and basically a course management system. It was developed 2001-2003 under the Copyright © of Martin Dougiamas [8]. It was licensed under the GPL (General Public Licence) which makes it very cost-saving and useful for universities. “moodle” is organised as a software-package with a lot of services. The most important feature is the support of online-learning without a directive, how the content has to look like. It depends just on the teacher, how he prepares the lecture-material and how much he wants to use from the modules.

![Figure 1: platform "moodle", learner view (Screenshot of www.moodle.org: demo-course)](https://www.moodle.org)
Moodle Student Support Services

Moodle offers a lot of support services which depends on the role of the user. The Administrator for example has all rights, can generate courses, and create tutors. Teachers or tutors can generate and manage their courses and can add learner to them. There they are able to choose between different security-levels, like protection with password, or an unlock-key, for the course. Also they are able to include some modules to support different didactical and educational methods.

These methods are represented in modules. The list below show which modules are possible in moodle.

- Work - module
- Chat - module
- Voting - module
- Forum - module
- Journal - module
- Test - module
- Working material - module
- Poll - module

With these modules the student can afford an amount of student support. Depending on the module there are different possibilities for the student. For example a multiple – choice-test can created and during the test automatically a feedback to each (wrong or right) answer can be generated. The tutor, who creates the course, is responsible for that. They are able to gets all information about the doing of their students and can communicate with them via different ways (forum, chat, email). It depends on the tutor, how good the support for the student is, because there are enough ways to communicate. Also the student is able to question via this ways, whenever he or she like. Generally, one of the most important things in such courses is, to supervise them and help the students where it’s necessary.

3.3 NKI

“NKI” is one of the first Internet Colleges, and located in Norway. It can be found under the web-address www.nki.no. They started the development of Internet based distance education in 1986 and had a lot of experience with that. To offer their content to the student they use their own online-platform for e-learning and present all their courses there via the internet. Also all course material can be found there. For the students, there are just a few technical requirements to join in this college. The students must be able to communicate with each other and with the teacher via the internet. For their platform, which is also called “NKI”, they choose a philosophy for the development of Internet based education as follows: Flexible and individual distance teaching with the student, based on groups with social and academic support for learning. [5] “NKI” offers today nearly 400 courses and over 60 study programmes on the Internet and register 8,000 course enrolments every year. The students can enroll any course or program or a combination of courses at any day of the year and progress at their own place.

NKI offers e-learning courses and programmers at different levels and subjects, i.e. secondary school, with natural science, or a higher school with management economy. Also different organizational solutions likee individual flexible studies with free start dates and progression schedules, or group study with fixed start and group progression can be generated. It can be used not just for school; it makes also sense maybe for firms or business associations as well to use it for their problems.

NKI Student Support Services

Like we mentioned before, information about the programmes or courses is offered by “NKI” on the Internet. On the front page of “NKI” the so called “information web site” they offer a lot of services for the student. They can use the efficient search engine to find their courses (for course registration), or can create special pages for individuals or employers, when a person just want to visit one course just because of interest. Through the information pages there is easy access to guidance and counselling via telephone or e-mail if necessary. The web pages also present general information about research and other relevant news to prospective students.

NKI has an integrated system of modules which can be used in the courses. These modules are a number of self-
developed (on the college) and commercial applications which makes together comprehensive system for student support services. The integration of the systems is extremely important for the total functionality, and quality of the student support services. To manage all the services they generated and run “STAS”.

STAS is NKI’s system for administration of distance students and it is developed by NKI. STAS holds all relevant data about our students, teachers, courses and study programs. One of the largest advantages with STAS is that it is developed to handle students with free starting time and progression. This system also contains very good tools for generating various reports and statistics.

STAS is to consider as NKI master system and is tightly integrating other essential systems such as accounting, logistic, prospective and partner systems. STAS is also the master system for NKI’s Learning Management System SESAM, (see www.nettskolen.com)

SESAM provides a number of services for students, which are listed below.

- Access control
- Personalized user-interfaces
- Access to course content and assignments
- Discussion forums
- Class lists
- Student presentations
- Information about grades

Some of these services are used for support as well, like in moodle. They provide communication with the tutor, and make interaction possible

The role of the teachers has access to additional services such as:

- Online registration of grades
- Tutor support services
- Wage and payment data

Furthermore NKI can produce a print catalogue from its content, which is revised once a year. The NKI versions since spring 2003 are able to create the catalogue from the web site (that is continuously updated). The print catalogue is distributed to potential students and to individuals on their request. NKI also produces brochures with more extensive information for all major learning programmes. NKI advertises courses and programmes in newspapers, weekly and monthly magazines and professional journals.

3.4 NKI vs. moodle

Both systems are very good for distance education and e-learning. Both of them cover the most important issues of communication and student support. Now a short comparison about some weaknesses or advantages of the two systems is given below.

- both systems support communication with the teacher in both directions
- both systems can integrate different modules, for the individual courses
- moodle is smaller and easier to handle (when its already installed) for students and teacher
- the administration of moodle is easier
- moodle is cheaper (GPL)
- NKI can handle more courses
- NKI support online-payment systems for courses
- NKI is just available on the NKI online-college
- NKI supports a self-developed business portal called FEB

We can see that the difference between a commercial system and an open system is little. Both systems provide student support, nearly in the same way. The main difference is that the commercial systems have a lot more mechanisms to integrate payment-systems and publishing-systems. This is a reason why the core of the NKI-System is interesting for firms and companies. For example an online-learning-support to train personal or a catalogue from online-courses can be created.

4 CONCLUSION

The field of online-platforms for e-learning is very big and nearly unmanageable. Because of this fact, this paper can’t give some advice, what services are good or bad, or which system is better. It always depends on the usage of the system. But what it can show is the fact, that well proven and successful systems (like moodle and NKI) need a student support service to function. Important is that the students became not the feeling, to be just a number in a row, doing work like a robot and succeed or fail and then that’s it. Learning is more than just work. It’s also an important social process.

REFERENCES


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