

# NKI Distance Education

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## ***Facts about the institution***

Name of institution	NKI Distance Education (a part of NKI AS)
URL of insitution	<a href="http://www.nki.no">www.nki.no</a>
Country	Norway
Number of employees	65 full-time, 400 part-time
Levels in the educational systems	Tertiary, secondary and vocational training

## ***Introduction***

The NKI group is a nongovernmental education institution located in Norway and comprises NKI Distance Education (NKI DE), the Norwegian School of Information Technology (NITH) and the NKI Publishing House. The NKI group as a whole operates on a non-profit basis. Financial surplus is kept within the organisation for future development. NKI DE is recognised by the Ministry of Education and receives government grants covering less than 10% of operating costs. Consequently, NKI DE is largely dependent on student fees for its operations.

This interview focuses on NKI Distance Education (NKI DE). NKI DE provides courses and study programmes at higher education level, upper secondary level and within the vocational training field. In 2005, 470 courses were offered and the number of course enrolments was 12 217. Generally, NKI DE does not employ full-time academic staff for tutoring. Rather, courses are based on part-time employment of academics from other education institutions, research institutions, public administration, business and industry. Therefore, the number of part-time employees (400) is rather high compared with the number of full-time employees (65). Full-time employees are for the most part administrative personnel and academic staff involved in development and research on various aspects of distance education. Thus, at NKI DE competence in the subjects being taught are bought from academics based at other institutions, whereas competence developed in-house is focused on the development, marketing, operation, research and quality assurance of distance education, i.e. how to be an efficient provider of high quality distance education. The research and development focus on distance education at NKI DE is broad and includes pedagogical, administrative and technical issues.

## ***Contextual factors concerning online education in Norway***

Norway has a total population of 4.6 million with a common language. Thus the target group is mainly the Norwegian adult population. NKI reports to have online students in around 35 countries, mainly Norwegians living abroad. Efforts to market courses in English internationally or courses in Norwegian to the other Scandinavian countries (Denmark and Sweden with languages close to Norwegian) have so far not been successful.

Penetration of technology for online learning is high, for instance over 50 percent of people in the main age target group having broadband Internet access at home, 75 percent of homes have PCs, 60 percent Internet access and nearly 60 percent of the population use PC on a daily basis.

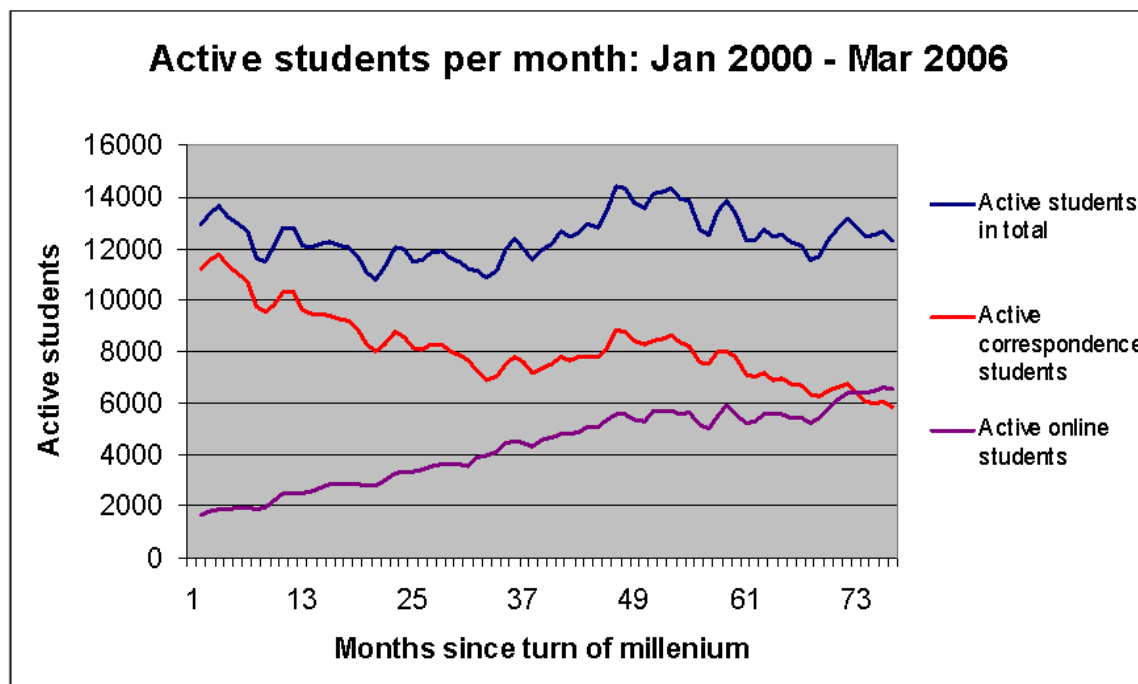
It is assumed that, because of the relatively high level of computer literacy in the population, and not least, governmental support for distance education in general over many decades and for online learning the last 15 years both through legislation and financial support to students and institutions, market acceptance for online learning is high relative to most other European countries.

## History

NKI was established in Norway in 1959. To begin with, and before any online technology was available, distance education was delivered through traditional correspondence courses. Correspondence courses are important still today, but a gradual development that started around 1985 has made online delivery increasingly more important. During the last years the numbers of correspondence students have declined steadily while the numbers of online students have increased (with total number of students being fairly constant, figure 1). In 2006 online students for the first time outnumbered correspondence students. In the future, NKI DE expects to stop providing correspondence courses and base all its activity on online teaching.

The technical system for administration and delivery of online education at NKI DE has to a large extent been developed by NKI DE itself. This has been possible because of a close cooperation with NITH. As described above, NITH is another branch of the NKI group. The institution offers courses and degrees within information technology, and unlike at NKI DE, academic staff is employed in full time positions. Thus, high competence in information technology is available in-house.

This also allowed NKI DE to start with online education early, already around 1985, when internet connection through simple modems became available. In addition, having its own systems has made it possible to let the systems undergo a gradual evolution, because improvements have been based on changing existing systems rather than introducing entirely new ones. This is different from a situation one might have had if systems were bought from commercial developers, in which case one might have to replace systems if a desired improvement could not be provided by the manufacturer.



## **Figure 1. Monthly variation in active NKI students**

Another factor that has characterised the development of distance education at NKI DE, is that courses and other activities have been subject to thorough evaluation since the start in 1959. More thorough research has also been carried out since the NKI DE Research and Development Department as established in the early 70'ies. During the last two decades the research has mainly focussed on online education. This appears to have been important for the build up of high competence in how to organise and deliver online education.

### ***Technical issues***

Courses are generally based on widely used technologies that can be taken into use by students without requiring them to buy additional hardware or software. In principle, NKI DE has a potential for using fairly advanced technology, but has chosen not do so because one wants their courses to be broadly available. For example, materials based on complicated multimedia may exclude students with old computers unable to run them.

Rather, the high competence in information technology at NKI is used to develop and integrate different systems. NKI has a number of self-developed and commercial applications that together make up a system for student support services and administration (figure 2). Integration of the systems is important for the total functionality, efficiency, and quality of student support services.

A central component is the system for administering students, STAS. This has been developed at NKI DE over many years to satisfy a number of needs, including registration of assignments, monitoring student progression, distributing new learning materials and paying tutors. STAS is NKI DE's master system and it is integrated with all other essential systems such as accounting, logistic, prospective and partner systems.

STAS was initially developed for correspondence courses and bar code registration of assignments. Initially it was not suited to serving online students, as there were no connections between the Internet systems and the administrative systems. It was necessary to develop STAS further to handle online students efficiently. The integrated development of STAS and the LMS system for online learning, SESAM (Scalable Educational System for Administration and Maintenance), also self-developed, is taking place continuously. Both systems are designed to handle continuous student enrolment.

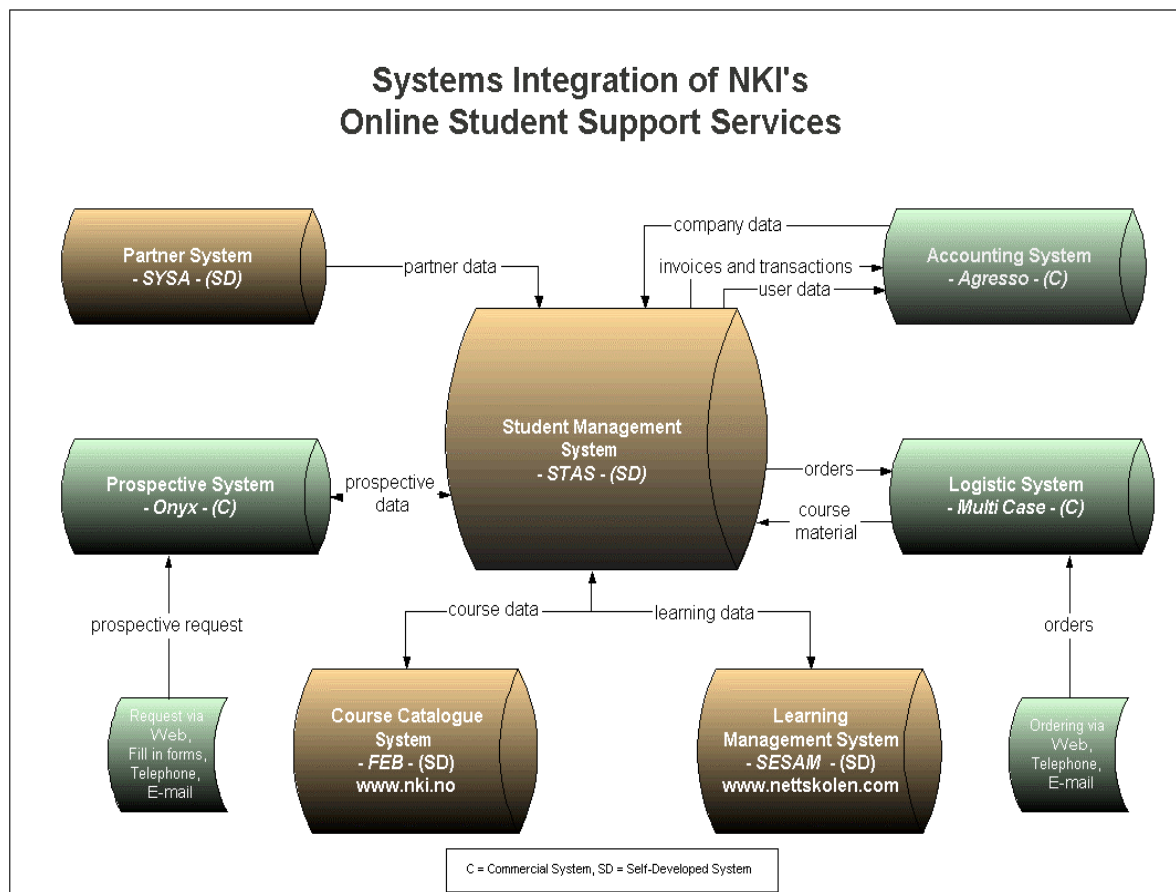


Figure 3. NKI's integrated systems for online student support

Agresso ([www.agresso.com](http://www.agresso.com)) is a commercial accounting system that handles tuition fees, invoices, wages, etc. SYSA is a system for presentation of information about local partners that organize face-to-face classes as support for NKI DE's courses. Onyx and Multi-Case are commercial purchased systems. Onyx handles marketing activities and requests from prospective students, while Multi-Case is a commercial logistics system for administration and shipments of textbooks and miscellaneous physical learning materials. When course enrolments are registered in STAS, Multi-Case automatically initiates shipment of the corresponding physical course materials. FEB is a self-developed business portal where all courses and programmes offered by NKI are presented. Prospective students may register or apply to courses directly via FEB. In addition to course information, FEB also includes a comprehensive database of articles with news, frequently asked questions, and more general information on distance and online education.

## Courses

The courses provided by NKI DE covers a range of subjects. For example, among the ten most sold courses, one finds interior design, psychology (a one year unit) and accounting. The courses can be classified into three categories, higher education (mainly introductory (1<sup>st</sup> year) courses), at higher education level, upper secondary level and vocational training. Because academic competence in the subjects being taught are not kept in-house but bought from academics at other institutions, NKI DE can be more flexible in choice of subjects than can traditional education institutions.

Market considerations determine whether a course is developed or not. Courses may be 100% online or based on blended learning. Because blended learning makes courses more expensive

for students (because they have to travel and also pay for face-to-face classes), it requires more from a market to develop such courses. Consequently, there is a tendency for developing courses within subjects that can be fitted easily to an online format. Still, a considerable number of the courses are based on blended learning.

Most courses have flexible start-up and progression. As a part of this model, students are asked to make a plan for study progress. Students register their plan in a standardised format in the LMS. The LMS automatically gives teachers information on progress of each student, and they can thus use this to stimulate progress if it fails. Courses must be finished within 2 years of start up. Courses based on blended learning typically have fixed progression.

Teaching is largely based on asynchronous communication. Because progression is flexible, synchronous communication between students would be hard to arrange. Therefore, video and telephone conferences are not used. Chat is available in some courses for communication between students, but participation in this is strictly voluntary.

### ***Management, strategy and attitudes***

The management of NKI DE is clearly supportive towards online education. Although parts of organisation can be described as still living in the era of correspondence teaching, the leadership has clearly stated that the future of NKI DE will be based on online teaching. This is also stated in the strategy of NKI DE for the years 2005-2007. NKI DE has developed the following philosophy for online students:

*NKI DE shall provide opportunities for students to reach their learning goals through optimal individual flexibility in a community of learners where students are resources for each other without being dependent on each other.*

Employees are generally loyal to the strategy and decisions taken by the leadership, also those employees with strong ties to the fading correspondence model. This is different from an ordinary university or college, where academic staff members typically have a high degree of autonomy and where resistance to change is often strong.

Quality assurance is followed up through a handbook where routines for this are described. In addition, a part of the integrated computer systems registers the time from a student submits an assignment till it is returned with comments from the teacher. If this response time gets long, students easily get dissatisfied. Keeping turn-around time for assignments short is therefore important. To stimulate teachers to handle assignments quickly, the system gives continuous information on his/her response time, how it has developed recently and how he/she is doing compared with other teachers. NKI DE also performs regular evaluation surveys among students based on web questionnaires connected with the course materials. About 10% of the students take part in these surveys.

At NKI DE, staff members typically have highly specialised tasks, meaning that there is a clear division of labour. With a high number of courses, this is viewed by the organisation as a key factor for success as mega provider.

Teachers are paid for the number of student assignments they receive. Workload per student can therefore be predicted, because number of assignments is given from the study plan. If number of students increases markedly on a course, additional teachers can normally be hired easily to deal with the increased workload. Consequently, teachers generally feel that they

have both predictable and manageable workloads. Teachers are not paid to participate in discussion group, because this may generate unpredictable costs and work loads for the institution.

NKI DE collaborates with a number of institutions. For example, all courses within higher education are formally offered in collaboration with a university or university college as academically responsible. Here NKI DE is responsible for and runs everything related to distance education itself whereas the curricula are developed at the cooperating institution that also arranges exams. In addition, NKI DE cooperates with providers of education outside higher education, in particular concerning the arrangement of local face-to-face classes or seminars in courses based on blended learning.

The institution describes its credibility with government and public administration as satisfactory. The interviewed person underlines that it is especially important for a non-governmental institution to answer correctly to legislations and public regulations. Otherwise one might easily get a negative reputation.

### ***Economy***

Around 95 percent of the revenue of NKI DE comes from student fees. This means that the institution has to be run with a high degree of cost-efficiency. It is therefore important to develop courses with a high potential for income. In addition, the fact that teachers are paid per student rather than per course means that expenses to a large extent are balanced against incomes. With continuous intake, changes in the market may also be detected early, allowing swift adjustments in activities. This ability of the NKI DE to adapt to a changing market (which is possible because of flexible employment) is seen as vital for the institution's ability to survive as a mega provider. A main challenge to the economy is public regulations. For example, vocational training programmes are now required to be approved by public authorities. This process may take up to two years per programme and drains considerable resources from NKI DE.

### ***Conclusions***

These factors are seen as vital for NKI DE's success and survival as a mega provider of online education:

- Flexible employment which makes it possible to adapt to a changing market – NKI DE is not tied to providing courses within specific subjects, because academic competence is not kept in house but is bought on an open and flexible market from academics elsewhere
- Flexible employment which balances expenses with incomes – that teachers are paid per student rather than per course or hours ensures this
- Highly specialised staff for different functions within the organisation – this contributes to cost effectiveness
- A large number of courses/programmes – gives stability over time as market interest changes between course and programme areas
- Highly integrated computer systems that provides effective flow of and easy access to information