

Dennis Gabor College

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Facts about the institution

Name of the institution	Dennis Gabor College
URL of the institution	http://www.gdf.hu
Country	Hungary
Number of courses	76
Number of enrollments	4860

History

The Dennis Gabor College, a private school that's financial management is based on commercial income, has been founded in 1992, therefore it is one of the oldest institutions in the field of distance education in Hungary. As many other institutions' that provide education on-line, the roots of the Dennis Gabor College also reach back to paper-based distance education, distributed by mail correspondence.

E-learning has been introduced to the DE practice of the college relatively recently (2004) to broaden the portfolio of the offerings. The transition is gradual, therefore the college staff has time to adapt to the new practices. The course designing activities of the teachers is assisted by technical professionals. The administrative tasks are carried out fluently, however somewhat more technical assistance in software and course development would improve the courses and help teachers' work.

The transition is a gradual, on-going procedure. The management intends to provide most of the courses electronically as well, while also keeping the original, paper-based versions. NB, the importance of online materials is continuously growing. The most sudden step in the progress was the introduction of the electronic administration system (ETR) and the learning management systems (LMS), called ILIAS. Every student and teacher has access to these integrated systems, but to what extent the users exploit their functions, is their free choice.

To improve the quality of the e-learning courses and their delivery, the results of continuous internal evaluations, carried out within the institution by surveys, questionnaires and discussions at evaluation fora are fed back into the operation. For the same reasons, the experiences of working with the electronic systems is introduced and discussed periodically at the ILIAS conferences – organised by the programme developers –, where the responsible staff of the College becomes up to date with advancements of the LMS, and can improve the system and its use based on what they learnt at these conferences. The pedagogical experiences are shared at e-learning focused international conferences (such as the EDEN Annual Conferences), that also provide useful feedback for improvements.

Technical issues

The academic staff still needs time to get used to the use of ICTs. At the moment, still considerable reservation can be observed from their sides, however, they are strongly encouraged to master these new competencies. Would they need assistance, there is

competent technological staff to answer questions and help with implementation of online courses. Tangible statistics (such as hours spent online in the LMS) prove that with time the teachers/tutors become more and more advanced and comfortable with the use of ICTs.

Since the academic year 2006-2007, ILIAS is fully operational. The system comprises all courses and modules, including all electronically accessible materials, i.e. course descriptions and supporting documents, such as SCORM compatible e-learning modules, lecture ppt-s, self assessment tests and manuals. Most of the softwares used in the College's online education are widely used ones. In certain specific courses (such as "Basics of programming") special softwares are introduced, but even in these cases instructions are given about how to download and install these programmes. In case of large video files, where not the software itself but the speed of students' Internet connection may cause difficulties in viewing, the College provides a collection of these files on CDs for the students' convenience.

The administration system (ETR) is compatible with the LMS (ILIAS), however they are not single sign-on systems. Where necessary, the system administrator/project leader helps teachers transform data from one system to the other. Both systems have been translated to Hungarian, that ensures their accessibility for all students and staff. It is important to highlight the significant raise in the number of online users in the past 6-12 months, due to which phenomenon the LMS is working increasingly as a soft skills administrative and communicational platform as well, in addition to ETR.

Both the administrative system and the LMS are very user-friendly. Their weakness originates from the human weakness of asking questions first before reading instructions or the help menu. This, in case of so many users, means that considerable attention is required from the tutors and technical administrators, but it is not really a technical problem.

The only real challenge is the technical motivation of the staff at the educational department, whose responsibility is the administration. They are confident in the use of ETR, but they are not yet fully aware of the use of ILIAS that is gradually also providing platform for administrative questions, therefore should be attended by the educational department personnel too.

Courses

The College's main educational focus is informatics and economics. All of the courses are provided online, but they are also available through ordinary, paper-based DE materials.

In principle, informatics and economics courses are equally well suitable for "onlinability". The fortunate constellation of the nature of the courses provided and the DE background of the College enabled smooth transition of these courses from DE to online provision. The only minor obstacle in designing perfect content is the teachers' relatively limited (but growing) IT competence. To overcome this handicap, there are SCORM and LRN compatible template sheets provided for the teachers with a definition of structural and formal elements of e-learning documents, with respect to correct data linking, image and multimedia references.

The online courses are partly flexible. Students start courses when the semester starts, but progress according to their own pace and finish as it suits them.

The institution puts more focus on asynchronous than synchronous communication. The students have facilities to discuss amongst themselves in real-time as well, but only the

asynchronous forum discussion are followed and moderated by the college staff. Regarding the latter, tutors have a 24 hours response obligation that keeps the forums active and lively.

Management, strategy and attitudes

The long history of the institution can prove the success and sustainability of the college's practice. The Dennis Gabor College is a credible, prestigious and rewarded institution. 15 years ago, at the beginning of its practice, the college has gained a questionable reputation by mass-producing degrees, however by the last half decade it has gained back its credit and reputation.

Handling such a large number of online courses and students is difficult but managed well. The project management is excellent, and is paying very much attention to details. The administration system and its every-day use is becoming a natural instrument / practice in the institution's life, and the management is trying to involve and motivate all of its staff from course administrators though teachers to the ICT professionals.

The leadership is disciplinarily supportive and is actively promoting the use of ILIAS. Since the LMS has become so popular and increasingly used, the institution's leadership has integrated the system into the everyday work schedule of the college and has drafted serious strategic changes that assign significant role to e-learning.

As mentioned above, the teachers are quite resistant towards the use of ICTs, but have basic skills to properly facilitate the learning of their students. In the past two years, however, the changes in the staff's attitude caused by the transition from DE to online education are noticeable and remarkable. All teachers are required to enrol a course on the use of ILIAS and the basics of course design. They receive a DVD as well, where the video recorded during the course is available for future reference. The teachers' online presence is also recorded (just like their students'). This gives the chance to the management to review the activities of the teaching staff and motivates teachers to remain active.

The institution's e-learning strategy has been agreed fairly recently (end of 2006), the printed document is brand new and is only available for internal use. What the greater public may know in general, is that the use of e-learning is considered to be a successful path in the future of the College, and that the top management will strongly require its staff to actively use ICTs in their everyday teaching practice.

The success of online education depends on quality in many respects. When selecting the LMS, for instance, the College set the following basic requirements:

1. Capability to deal with the school's technical components;
2. Easy and efficient data exchange with the electronic administrative system (ETR);
3. Conformity with major international standards in field of e-learning (SCORM, LRN);
4. Easy content development tools;
5. High reliability for moderate price.

To evaluate the success of the LMS before its official introduction, the examination success rate (carried out with the same conditions as those of the students participating in normal courses) is monitored and compared to the face-to-face rates annually. The overall success rate has constantly been increasing since the introduction of e-learning, and now is 87%. The success rate of the traditional students is generally about 10% higher. This difference could be explained with the dropping out of those online students, who cannot pay the tuition fees. The

higher success rate amongst ordinary students can well be attributed to the financial governmental support, many of the face-to-face students can enjoy.

An online students-feedback sheet, elaborated by an independent expert company, is also available in the LMS. The evaluation of students' opinion is permanent. On the basis of students' (anonymously given) observations conclusions are drawn in respect of quality of content and quality of tutoring too. The survey results are fed back to operation immediately. It was found through internal evaluation exercises that even students enrolled in normal undergraduate courses often prefer electronic teaching objects to traditional documents.

Compared to the old, traditional system, the online administration routines are considerably more effective, although somewhat more cooperation would be necessary between the different frameworks. The workload of the teachers are, although uneven, but both predictable and manageable, the only problem is that the staff is not very motivated to take special efforts in addition to their regular teaching practice. The other problem is that teachers are rewarded by the hours taught, that does not include time spent on research activities.

The college is conducting research in the field of distance education and e-learning, and is a member of professional associations (such as EDEN), that facilitate their

- keeping in touch with colleagues from other European countries as well as
- being updated with research results of other institutions with similar profile.



The College is also always represented at the annually organised ILIAS conferences.

The excellence of the College has been awarded by many means. Amongst others, it has received Socrates and Comenius prizes, and in the recent past a Dennis Gabor plaque was inaugurated in London for the honour of the scientist.

The College has also received the Hungarian Quality Award in the e-learning category.

Economy

At the Dennis Gabor College, in the beginning, it was thought that the introduction of online teaching would reduce teaching costs, but later it turned out that the production and maintenance of e-learning objects needs highly qualified permanent personnel with related overheads. Still, it is expected that in the long run e-learning will prove to be a cost-effective educational solution. The system, however, plays a major role in geographical areas where running of a local education centre with part time personnel would be more costly.

Until nowadays, as it is a private institution, education at the Dennis Gabor College has been considered expensive, however by now, as other higher education institutions generally also charge their students, their prices can be seen as standard. An important characteristic of the College is that its tuition fees include the price of the course materials as well, that often contain quite expensive printed books.

There are a few hundred regular students (out of the 5000) whose education is financed by the government, but the others are all paying tuition fees. The College (since it is a private institution) has to have reliable financial forecasts. The institution's income is predictable, however, due to the decreasing number of enrolled students, it is declining.

The College tries not only to adapt to the market changes, but also tries to meet EU requirements, by employing young and talented ICT-literate teachers, or – if necessary – even replacing staff that does not meet the internal requirements. The employees continue their professional education by attending trainings organised specifically for them, or working for their PhDs and receive support whenever they need. To be able to adapt to market changes and to be flexible are vital characteristics in higher education. The College is doing its very best to adjust its operation according to these changes, so far successfully.

Conclusions

Overall the most important observation within the institution is that the introduction of e-learning was a significant step in the life of the College and that it shall remain the main driver for success in the future as well. The College's marketing aims, in case of those students who study beside work or family or live in the countryside, therefore can utilize the online/distance learning facilities of the College.

Since ILIAS has become fully operational, although it will take a couple of years to draw firmer conclusions from its use, the lessons learnt are that (1) the LMS comprises all courses and modules, including all electronically accessible material, i.e. course descriptions and supporting documents, such as SCORM compatible e-learning modules, lecture ppt-s, self assessment tests and manuals; (2) even in ILIAS, that is only supposed to be a learning management platform, 50% of the administrative tasks are being dealt with and (3) the college staff can swiftly adapt to the use of the LMS. The change management is not a simple task, but slowly and surely the situation is consolidating. What is also contributing to the success of the College's e-learning practice is that most of the softwares used in online education are widely used ones, and that both the administrative system and the LMS are very user-friendly.

There are some important **driving** and **breaking** forces that are worth highlighting from the above analysis of the Dennis Gabor College.

Based on the DE nature and long history of the College, the management has always been supporting innovation, that was encouraging the increasing use of ICTs and transform traditional DE into online education. ? At the same time the college teachers still show considerable resistance towards the use of these technologies.

The College, since it is a private institution, has predictable financial income from tuition fees. In addition, it is gradually reducing the course content creation and delivery costs by the introduction of e-learning. ? On the other hand, although the ratio of online vs. ordinary students has improved in the past few years, there is a general demographic phenomenon, that is the decline in childbirth, especially in the 70s and 80s.

The administrative tasks are carried out fluently, ? however somewhat more technical assistance in software and course development would improve the courses and help teachers' work.

E-learning plays a major role in geographical areas where running of a local education centre with part time personnel would be more costly. ? Still, the production and maintenance of e-learning objects needs highly qualified permanent personnel with related overheads, although it is expected that in the long run e-learning will prove to be a cost-effective educational solution.