

# Quality Assurance in E-learning — Warsaw University Approach

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## Abstract

Quality assurance became one of the key issues within the framework of the European Higher Education Area, especially in case of new teaching and learning paradigms. One should, however, take into account the national differences in the higher education systems and legislations. In this paper we will first present some relevant information about the current state of affairs in Poland as far as the higher education system is concerned, and then describe our experience at Warsaw University with respect to e-learning. In particular, the Quality Assurance issues will be addressed and our e-learning model will be briefly described.

**Keywords:** quality assurance, e-learning, blended learning, higher education systems.

## 1. Introduction

The quality of education has always been a “hot” issue. It became especially important when European countries decided to build a common European Higher Education Area within the Bologna Process. It is nowadays obvious that the notion of the Quality Assurance (in short: QA) is no longer a domestic matter – it requires an international cooperation and agreements [5].

New technology, and in particular ICT, made it possible to add new dimensions to education. There is no doubt about it that the answer to the question being the subject of EUNIS 2006: “IS INFORMATION TECHNOLOGY SHAPING THE FUTURE OF HIGHER EDUCATION?” is positive. But the impact of ICT is especially important in the off-campus education.

The term “E-learning” is usually understood in a broad sense, covering certain old and new forms of the off-campus education, known in particular as “distance education”, “distributed education”, “on-line learning”, “Virtual University”. In all these cases the issue of quality assurance raises problems [2]. Some argue that e-learning decreases the quality and level of education, some have the opposite opinion. What is, however certain, there is simpler (than in traditional case) to evaluate the performance of both teachers and students since everything is recorded and can be inspected. There is also a heated discussion about the costs of e-learning due to both the technology needed and the effort necessary to prepare the content and to conduct the teaching.

At Warsaw University we have been experimenting with e-learning for several years within the interfaculty unit

COME (Centre of Open and Multimedia Education) which evolved from the Open Education Study in 1999. In this paper we would like to present the resulting educational model which we have developed after many attempts and trials both with the technology and the approaches to e-education [3]. We claim that our current approach, being a sort of blended learning based on an open-source software guarantees high quality education with minimal costs. Some details about our experience and in particular on the role of top management university authorities is presented in the accompanying papers [1, 4].

In our opinion we are still far away from a common and generally accepted model of e-learning and its QA, not only internationally but also nationally. Hence we hope that our experience and observations will contribute to the development of such a model.

## 2. The system of higher education in Poland

Though the decision to join the Bologna Process has already been taken by many countries one should realize that there are significant differences among them as far as the education systems are concerned. To be able to look for common solutions of important issues such as the QA in general, or its role in e-learning, one has to take into account these differences and the constraints existing due to the national regulations. In this section we will give some information about the current situation in Poland [6, 7].

### 2.1. Some general facts

Poland has a population of over 38 million (some 61.5% of whom lives in 886 towns and urban areas) and covers 312 685 square kilometres. The country is divided into 16 provinces, 379 districts and 2478 local government communes (as of 30 June 2004).

The main role in initiating and exercising control over current and long-term education policy is played by the Minister of Education and – since the recent change – by the Minister of Science and Higher Education (previously there was just one ministry). However, there is a lot of responsibilities distributed to the local authorities.

Since 1991, schools on all levels can be either public (state), which offer free education, or non-public (civic, church or private) financed by fees.

At present there are over 425 HEIs in Poland (where only about 25% of them are public ones), educating almost 2 million students.

## 2.2. Tertiary education

There are two types of schools available for the graduates from upper secondary schools (possessing the *Matura* certificate):

- Schools of higher vocational education,
- University-type schools of higher education.

The latter cover a wide range of specific Higher Education Institutions (in short: HEIs) such as universities, technical universities, agriculture schools, schools of economics, pedagogical academies, medical academies, academies of physical education, schools of arts, schools of theology, and mixtures of some of them.

The Constitution of the Republic of Poland guarantees that higher education is free of charge in public sector institutions, full-time day courses. However, there is a possibility to charge fee in certain cases, e.g. for extra-mural or full-time evening classes. This option has been heavily used by all public HEIs and some 50% of students of these schools pay tuition.

“A degree system based on **three main cycles** has existed in Poland since 1990 when it became possible for university-type HEIs to offer three or four-year higher vocational studies leading to a **Bachelor’s degree** (*licencjat, inżynier*), which could be followed by a **Master’s degree** (*magister* and its equivalents). [...] **Doctoral studies**, provided by all types of HEIs as well as units of the Polish Academy of Sciences and research-and-development establishments, constitute the third cycle in this degree system. [...] **The European Credit Transfer System (ECTS)**, is gradually being introduced” [7].

## 2.3. Quality assurance

At present the following institutions are involved in the process of QA in higher education:

1. The State Accreditation Commission.
2. The General Council for Higher Education.
3. The Conference of Rectors of the Academic Higher Education Schools.

**Ad 1.** This Commission, established in 2002, is the legal higher education body appointed by the Minister of Higher Education. Its activities are related to both vocational and university-type HEIs. It presents opinions to the Minister related to the:

- creation of HEIs, granting a right to open studies in a given area and at the given level of study,
- assessment of teaching quality in a given study area (including the training of teachers).

**Ad 2.** The Council is (the highest) elective body of the higher education system. It consists of 33 representatives from different groups of Polish academic community, including students. It co-operates with the Minister of Higher Education and with other bodies in establishing the state educational policy in the area of higher education. In particular the Council “shall put forward proposals for names of fields of study and *degree programme*

*requirements* to be defined on the basis of ...” [6, p.19]. The latter is especially important for our discussion, cf. Section 2.4.

**Ad 3.** The Conference (called in Polish KRASP) is in charge of the so called “Peer accreditation” in Poland. This is a voluntary accreditation system, created over 5 years ago and carried out by 8 different accreditation commissions established by rectors of different types of HEIs. Accreditation granted by KRASP commissions is a sort of a marker of a high quality education in a given institution or faculty.

## 2.4. New law on higher education

After long and difficult negotiations a new law on higher education was eventually approved last year by the Parliament. This Act of 27 July 2005 called “Law on Higher Education” [6] forms a framework within which one should address, in particular, new off-campus forms of education and the associated issues. Let us quote some related definitions.

“**Article 2** The terms used in this Act shall mean:

12) *full-time programmes*: a *form of study* in which the curriculum comprises courses requiring direct participation of academic staff and students, with the course load defined in the *degree programme requirements* for this *form of study*, and which is specified by the senate of a higher education institution in accordance with Article 169, section 2;

13) *part-time programmes*: a *form of study* other than *full-time programmes* complying with the *degree programme requirements* defined for this *form of study*, and specified by the senate of a higher education institution in accordance with Article 169, section 2;

17) *form of study*: a mode of study and organisation of study;

18) *degree programme requirements*: a set of regulations for degree programmes provided in various forms within fields of study, macro-fields of study or as interdisciplinary programmes;” [6].

According to these definitions e-learning is to be treated as the part-time programmes form of study with:

- degree programme requirements proposed for each field of study by the General Council for Higher Education,
- details specified by the senates of HEIs.

This leaves, in fact, a lot of freedom to HEIs and causes difficulties in establishing some national common criteria also for QA of e-learning.

Right now, senates are modifying constitutions of HEIs to make them compatible to the new legislation, the General Council for Higher Education is preparing a position on different “open” issues (including e-learning), and the Ministry of Higher Education is working on many needed implementing orders.

### 3. Warsaw University approach to e-learning

E-learning activities at Warsaw University are organized, synchronized and supervised by the Centre of Open and Multimedia Education (in short: COME), an interfaculty unit, directly reporting to the Rector. In particular, all technical aspects are due to COME. However, many other units – mostly different faculties – are also involved, preparing and conducting e-courses and/or e-studies.

#### 2.1. Centre of Open and Multimedia Education

The current state of affairs evolved since 1999. One can recognize several development stages which are described in more detail in [4]. At the very beginning we were experimenting with videoconferences and open summer courses (1999). Shortly afterwards we developed our own e-learning platform and designed our first Internet course, *Grading in education*, offered to teachers from the outside of our University.

The next few years were devoted mostly to popularisation of e-learning within the University, encouraging different units to become involved in this process, and – what had a significant impact – making the University authorities aware that this extremely important form of education requires proper “high-level” decisions and support.

We were also experimenting with new platforms, deciding eventually in 2004 to use exclusively *Moodle*. There were many courses offered for both our students and staff, and for the external participants. We have also started to run (in cooperation with some other units) special postgraduate studies. What is worth mentioning, we gained additional valuable experience organizing courses with international partners being involved, as well.

During all this activities we put a lot of attention to QA and were experimenting with different strategies and approaches. All this helped to develop the model presented below [3].

#### 2.2. COME educational model

There is no doubt about it that the new technology allows us to offer off-campus education accessible to those who are not able to attend regular classes due to various reasons. Hence, we can break different type of barriers: the *geographical barriers* — both the teachers and the students can be in any place where there is an access to Internet; *social barriers* — handicapped people, mothers with small children, and all others who might have difficulties in taking traditional classes can benefit; *time barriers* — e-learning is asynchronous and hence we can pick the best time for us to learn.

However, to assure a good quality of e-education we should follow certain rules and procedures. Since there are practically no generally accepted standards related to QA in e-learning, we have formulated our thoughts and recommendations in the form of the following “ten commented commandments”.

1. *Be blended.*
2. *Transform your virtual classes into social groups.*
3. *Work in teams: teachers and integrators.*
4. *Focus on the interaction with students.*
5. *Grade tests automatically.*
6. *Set-up strict deadlines for students.*
7. *Personalize the course requirements.*
8. *Separate the teaching process from the knowledge certification.*
9. *Use the transparency of the teaching process for the evaluation of courses.*
10. *Be involved and flexible.*

**Ad 1.** According to our experience the best results are achieved when the on- and off-campus education is combined. Majority of study is carried out via Internet but the students get together from time to time in reality and also meet with their teachers. In particular, it is very important to have an introductory meeting with all participants and to conduct the final examination on-campus.

We have also observed that students are often bored and tired if the process of education is limited to e-reading and e-writing — they like to listen, talk and watch, too. This can partly be achieved by a multimedia-type of courses but the direct contacts with teachers are of great value.

**Ad 2, 3, 4.** Students should not feel anonymous and left alone. “Virtual classes” of some 25 participants should form small communities with its members interacting on regular basis. Social environment is the most stimulating agent in the process of education!

The task of transforming a virtual class into a social group is an additional “burden” for a teacher because she/he has to concentrate on the teaching process. Hence we should designate another person to help, called “the integrator”. The teachers are responsible for the subject matter while the integrators’ role is to help socialize and to advise in case of problems of organisational and/or technical nature.

One should also remember not to overuse the technology. It is much more important to spend time on the interaction with students than on preparing an electronic version of the material (which is later on often converted back by a student to a paper version). Hence we recommend to use existing paper textbooks as much as possible.

**Ad 5, 6, 7, 8.** Even in the blended approach students spend a lot of time learning alone at home. They should be given any possible help to motivate themselves.

First of all, the more tests on line (with an immediate feedback) are available, the better. Hence we need an automatic grading system to allow students to test themselves more than once to correct their answers after the feedback they received. The teacher has to prepare the tests but the evaluation of students’ answers should be

done by the system without requiring an additional effort from the teacher.

Secondly, the freedom which is the inherent feature of e-learning should be limited by setting strict deadlines and protect that way students from possible distractions. In our courses we would usually set tasks for each week.

Thirdly, course requirements should fit to students' capabilities. In e-education we can relatively easily make the content and tests variants in such a way that a student can follow the path which is the best for her/him (e.g. introductory, intermediate or advanced level). In other words we can personalize the process of education in the same virtual class and thus the less advanced students can observe work performed by the more advanced ones.

One should also remember that the certification of the knowledge is to be clearly separated from the process of teaching. Computer assisted testing is intended to help students during the learning phase while the final examinations (or any other means of certification of the knowledge) should be organized in a similar way as we do this in case of the traditional education.

**Ad 9.** During the teaching process all relevant events and facts (on the both sides!) are recorded and hence are available for an analysis and interpretation. This transparency of the whole teaching process is a very powerful tool which could and should be cleverly used for the benefit of QA.

**Ad 10.** A teacher should carefully and continually observe the performance of his/her students and quickly respond to any warning signs. In particular, one should be very sensitive to a behavior of the whole group – any suspicion that e.g. the pace of the course is not adequate should trigger a proper and fast action on the teacher's side. A real involvement of the teacher in the process of education is one of the main sources for the motivation for students. They value this, and they appreciate this.

#### 4. Conclusions

Our model was developed in a long and painful process but the real evaluation and assessment of it is formulated in the best way by the most important group of their users — the students being educated. Some very positive and informative opinions can be found in the related papers [1, 3, 4]. We can also observe the increasing interest in our education, both within Warsaw University and outside it.

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