BASIS FOR INNOVATIVE TRANSFORMATION OF POLISH UNIVERSITIES – BACKGROUND AND SELECTED SOLUTIONS

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Abstract

The article presents the background of the current pro-innovation and pro-quality transformation suggested in Polish universities. The first part contains a concise description of Polish higher education system. In the second part, an example of an internal quality assurance system was presented, which was implemented in the Gdańsk University of Technology. The summary indicates recommendations resulting from previous negative experiences related to the implementation of such solutions.

Key words: quality management, higher education.

1. Introduction

The need to introduce pro-quality approach to management in higher education system arising from the latest legal regulations entails the necessity to radically reconstruct the archaic practices applied at the Polish universities so far. An evidence confirming this tendency may be found for example in:

— the system of the European and National Qualification Frameworks,
— accreditation model applied by Polish Accreditation Committee (PAC) introducing the obligation to implement the Quality of Education Assurance System coherent with the guidelines of ENQA.

It is worth indicating that ministers from signatory countries of the Bologna Process requested the European Association for Quality Assurance in Higher

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Education (ENQA) and appropriate structures of EU to properly apply expert knowledge owned by associations and networks engaged in the quality assurance. As a consequence a number of documents have been created concerning the system quality assurance, adopted by European assemblies engaged in higher education. These include among others:

1. Standards and Guidelines for Quality Assurance in the European Higher Education Area (ENQA, 2015).
2. Recommendation of the European Parliament and of the Council on further European cooperation in quality assurance in higher education (15.02.2006).
3. Recommendation of the European Parliament and of the Council on the establishment of the European Qualification Framework for lifelong learning (23.04.2008).

The public interest in systematic mechanisms of quality management in higher institutions in Poland is still represented on a rather unsatisfactory level, although it must be admitted that the situation systematically improves (Grudowski, 2011). Unfortunately, theory and practice fail to follow the growing needs of national universities regarding the adaptation of solutions relating to pro-quality systems.

Few national initiatives on implementation of system models of quality management at universities completed with formal certification are valuable, but have not resulted in broader popularization of the system attitude to quality management.

In-depth study is still lacking, as well as coherent methodology allowing for effective quality management of key processes, particularly those that take into consideration specific character of large universities.

Regardless of motivating signals Polish universities very reluctantly adjust their organizational systems even to not so demanding general guidelines of ENQA describing internal quality of education assurance systems. The important factor is the understanding that quality in higher education includes not only the quality of processes and functions, but most of all also the quality of all the staff, both academic and administrative, involved in the process of quality improvement (Grudowski, Wiśniewska 2015).

While describing the key research problem regarding the pro-quality reorientation of the national higher education development strategy, the following question needs to be asked – in what way should the system quality management be introduced at universities, assuming the quality of education as its main pillar, being the main criterion of evaluating the university work, according to the legal regulations planned by the Polish Ministry of Science and Higher Education?

2. Polish HEIs' system

Poland is considered one of the 'big' European Union (EU) member states, with the population more than 38,5 million of citizens [Central Statistical Office of

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Poland, 2014], which is less than 8% of EU population of more than 500 million. According to the European Commission (EC) EU has around 4 000 higher education institutions (HEIs), with over 19 million students and 1.5 million staff. This means that Polish HEIs are around 10% of EU institutions and less than 10% students receive their higher education in Poland. This is a considerable potential which needs to be properly used to strengthen both Poland's and EU's development of knowledge based economy.

The system of higher education is undergoing heightened evaluation and reform in a number of advanced industrial nations (Bleiklie, Powell, 2005) and the same situation has taken place in Poland. Polish HEIs system has undergone a vast and deep transformation since 1990. The most important changes which were introduced was granting the HEI's autonomy, which was later guaranteed in Art. 70 of Constitution of the Republic of Poland. Other significant changes were:

— allowing to fund private HEIs,
— rapid growth of the number of students,
— introducing PhD studies,
— participation of Poland in the Bologna Process,
— quality changes of HEI's after the year 2000.

The fall of communism in Poland in 1989 started a series of political and economic reforms which aimed at introducing free market rules to Polish economy. This process also caused vast changes in HEIs system in Poland. In 1990 Polish parliament introduced a new higher education act which was the basis for the new law concerning universities. The most important change was bringing back the autonomy of the HEIs – before 1989 they had been depended on state authorities. The act of 1990 also allowed to fund non-public (also called 'private') HEIs and allowed public (called 'state') HEIs to operate profitable actions. The act of 1990, with amendments, remained in force until 2005, when brand new Law on higher education was enacted.

The changes brought by the act of 1990 resulted in a roughly 30% increase in the number of public HEIs and the creation of a large number of private, not-for-profit institutions. On average, however, the private HEIs are much smaller in size: in 2003/2004 the public institutions enrolled approximately 70% of all students and the private 30% (Fulton, et. al., 2007). However, it is worth noting, that since 2010 the number of universities in Poland begun to decrease. Figure 1 shows the number of public and private HEI's in Poland in the years 1992–2014.

The rapid growth of the number of HEIs in post-communist Poland was accompanied by the increasing number of students. This was caused by the various factors. Firstly, Poland suffered the lack of highly qualified staff after the communist era. Authorities were aware of the hard situation on the labor market (according to Central Statistical Office of Poland (CSO) registered unemployment rate was around 15%) due to ongoing economic transformation and decided to allow more young people to enter the universities simply to avoid applying for the job. The demograph-

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ic factor is also important: in the decade of 1990s citizens, who had been born during the baby-boom of 1970–1980s, achieved maturity. The economic reasons were also important: it became possible for public HEIs to enroll students, on a fee-paying basis, on so-called 'extra-mural' or evening courses using the same curriculum and leading to the same awards as the fee-free 'regular' students (Fulton, et. al., 2007). Figure 2 presents the number of the students in Poland between 1990 and 2015.

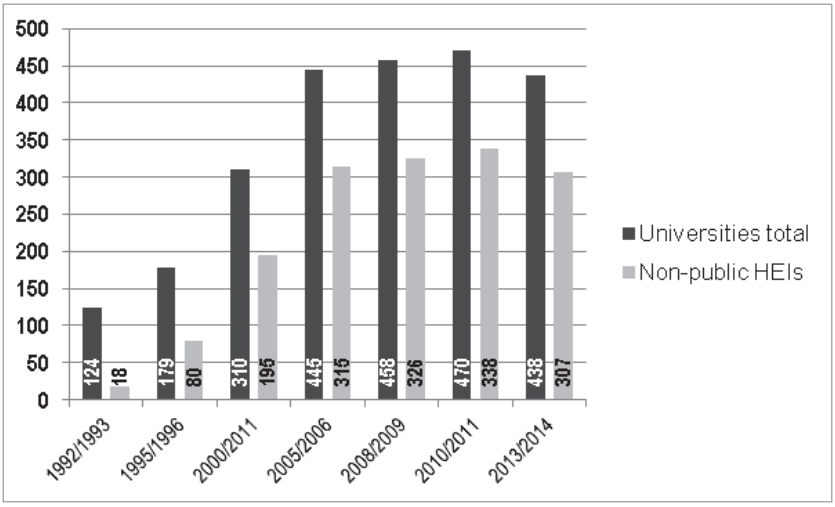

Fig. 1. Number of universities and non-public HEIs in Poland 1992–2014
Source: Polish MSHE

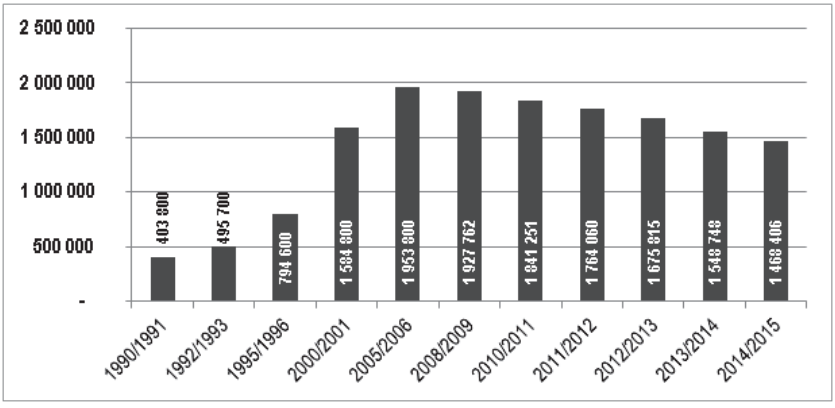

Fig. 2. Number of students in Poland in 1990–2015
Source: CSO

It is worth adding, that this rapid growth of the number of the students was focused mainly on the humanistic, social and economic sciences. Running the courses in these areas require neither laboratories nor other investments, contrary to techni-

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cal, medical or life sciences. Hence supply of the humanistic, social and economic courses grew. It must be also said, that demand was also large. Due to cancelling mathematics on high school final examination young people tended to avoid studies, which required formal science skills which were regarded as 'harder'. CSO data seem to confirm this. In the academic year 2011/2102 the largest share of students chose economic, administrative or social studies – 37,6%, humanistic or art – 8,3%, whilst technical or engineering – 16%, medical – 7,6%, IT – 4.9%, public services – 3.7%, law – 3.1% and environmental protection– 1.4%. The "other" studies were chosen by 14,6% of students in Poland.

Doctoral studies (PhD studies) were introduced by the Higher Education Act of 1990. This has narrowed the possibilities to obtain PhD title. Before 1990 the only chance to become a PhD was through taking a job as an assistance lecturer or in the university/research institution. The numbers confirm the growth of the popularity of doctoral studies. According to Kraśniewski, who cites CSO data, between 1990 and 2006 the number of PhD students multiplied by 12 (Kraśniewski, 2008). However, this tendency continues and in the year 2013/2014 there were 17 times more PhD students than in 1990/1991. The growth of the number of doctorate students in Poland is shown in the figure 3.

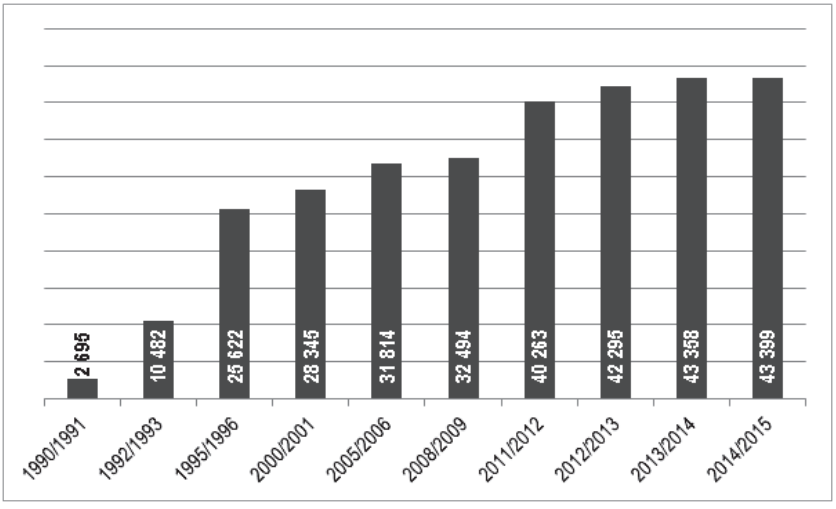

Fig. 3. The number of doctorate students in Poland 1990/1991 to 2014/2015
Source: CSO

Önnerfors claims that there are several reasons why PhD studies have grown in popularity in recent years: with the increase of higher education demand the MA/MSc degree becomes increasingly popular, while only the PhD degree guarantees a certain level of knowledge. For many years (up to 2001) there was an algorithm of the budget sharing — grant-in-aid for HEIs. It rewarded PhD education (the number

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of PhD students was multiplied by 5), and 'punished' assistant lecturers (number of assistant lecturers was multiplied by 0) (Önnefors, 2007).

Most of Polish PhD students choose to obtain the degree in humanistic, economic or social science, which is the consequence of the popularity of those studies on master's degree. This is confirmed by the CSO statistical data concerning number of PhD students according to the kind of HEI which run the doctoral studies. These data show the domination of the universities. The exact data as for the academic year 2014/2015 is placed in a table 1.

Table 1. Number of PhD students according to the kind of the HEI

Kind of the HEI	Number of students	Percentage
Universities	20 908	48,18%
Technical universities	8 052	18,55%
Economical academies	2 405	5,54%
Medical academies	3 013	6,94%
Research institutes	2 824	6,51%
Agricultural universities	1 565	3,61%
Academies of the Ministry of National Defence	831	1,91%
Theological academies	761	1,75%
Maritime academies	83	0,19%
Physical (sport) academies	721	1,66%
Higher teacher education schools	1 277	2,94%
Fine art academies	613	1,41%
Other HEIs	346	0,80%

Source: CSO.

The large share of humanistic and social science PhD students is confirmed also by the data concerning the obtained PhD diplomas. In the year 2013 diplomas obtained in social, economic and humanistic sciences are ca. 1/3 of all 6 093 diplomas. In the same academic year only 15% of the new PhDs received their diploma in technical sciences.

Analyzing the situation of the PhD students it is worth noting that PhD is on the borderline between original researches and organized academic training, which could be why it is more difficult to formalize its content comparing to undergraduate

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studies. Ambitions and measures to stimulate the development of European Higher Education Area (EHEA) and European Research Area (ERA) overlap in the case of doctoral training (Önnerfors, 2007).

3. Internal Quality of Education Assurance System (IQEAS) – an example

The Faculty of Management and Economics (FME) of Gdańsk University of Technology (GUT) is the leading unit as far as complex initiatives that support creation of quality culture in academic environment are concerned. In many areas the Faculty plays the leading role in promotion of quality innovations in other GUT units.

In order to support effective realization of objectives concerning process of education the FME adopted the structure of IQEAS based on the ENQA guidelines in the following seven areas:

1. Policy and procedures for quality assurance.
2. Approval, monitoring and periodic review of programmes and awards.
3. Assessment of students.
4. Quality assurance of teaching staff.
5. Learning resources and student support.
6. Information systems.
7. Public information on programmes and effects of education.

Examples of solutions functioning in FME related to above mentioned 7 areas are as follows:

Quality Policy and procedures of quality assurance

The mission of FME emphasizes the role of quality of education. Many initiatives support quality oriented strategy of the faculty. Some of them are:

— Assignment of Dean's Representative for the Quality of Education;
— Regular monthly internet chats with deans;
— Regular meetings with well-known personalities of business world and politicians;
— The most comprehensive in GUT offer of post-diploma studies – more than 30 different courses;
— Participation of the large group of academics of the faculty in university–wide quality initiatives and Senate committees;

Promotion of innovative quality of education solutions in other GUT units (e.g. anti-plagiarism IT system of diploma theses verification – "Plagiat", corrective actions following each round of quality of education assessment).

Among key procedures concerning quality of education in FME one can enumerate:

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— Students' (domestic and foreign) assessment of classes quality procedure; results obtained by the individual teachers are analyzed by Deans in cooperation with Heads of Chairs and result in corrective action plans – short and long term; effectiveness of the corrective actions is presented and evaluated by the Faculty Council;
— Class inspection procedure resulting in the elaboration of the individual corrective action plans aiming at the improvement of didactic skills, classes profile etc., as the consequence of the discussion between the Faculty authorities and a teacher;
— Diploma thesis selection and preparation procedure;
— Curricula approval and verification procedure including cooperation with employers organizations;
— Students' training practice realization and documentation procedure;
— The Faculty teachers motivation system (e.g. scholarships, leaves) promoting achievement of scientific degrees and realization/coordination of significant scientific teaching projects or programs.

Teaching programmes approval, monitoring and periodic review

The general review of the FME curricula is conducted every semester with the participation of the Faculty Curricula Committee and Heads of Chair. Changes are approved by the Faculty Council and Vice-Rector of GUT.

The faculty promotes cooperation with alumni and employers organizations in order to optimize curricula and achieve expected teaching effects. Good example confirming that tendency is one of the richest offers of post-diploma studies in the Pomeranian region.

The faculty develops the most comprehensive at GUT offer of programmes and courses in English both for domestic and foreign students. FME has the largest and constantly growing number of foreign students among all departments of GUT and probably units of other universities in Pomeranian region.

All teaching programmes details realized at GUT are presented (in Polish and in English) in the same format using ECTS Information Package System which is accessed by potential domestic and foreign candidates.

Assessment of students

All regulations concerning assessment of students are clearly presented in „Course charts" within internet platform of ECTS Label Information Package (http://ects.pg.gda.pl) (there are ~7000 of such charts in the system!). All teachers are obliged to inform the students about conditions of receiving credit for particular classes within first 10 days of a semester.

In the academic year 2010/2011 GUT introduces new IT system "e-Dean Office" that will substitute a traditional, paper method of students achievements re-

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cording. This should radically improve the effectiveness of many administrational processes at GUT.

Quality assurance of teaching staff

Authorities of FME allocate relevant resources for recruitment and development of teaching staff. Deans award most promising young scientists with individual grants despite other forms of support for teachers aiming at scientific degrees.

Teachers whose appraisal marks are well below the Faculty's average, have to develop with the acceptance of their superiors individual program of improvement. The effectiveness of the programmes is verified during class inspection and next turn of semester quality of education evaluation action. If the problems persists the FME authorities undertake relevant financial decisions.

One of the Vice-Deans as the professional psychologist specializing in recruitment process is the member of recruitment committees assigned to employ both new teaching personnel and administration staff.

Learning resources and student support

The Faculty ensures satisfying material resources supporting teaching/learning process. Each teaching room is equipped with multimedia projector, computer and Internet access. The Faculty library offers wide range of scientific journals, monographs and manuals. Administration and supporting services organized by the Faculty are periodically evaluated both by students and staff. The results of the action are communicated to the Faculty members.

Information systems

Authorities of FME together with the Faculty Council continuously analyze the effectiveness of education quality assurance and improvement activities. Results of the analyses are published in the Faculty web page and distributed using profiled mailing lists.

The follow-up actions are directed at changing curricula, specifying expected profiles of teaching staff, improvements in teaching infrastructure and reorganization of didactic process.

Results of improvements actions are communicated during the Faculty Council sessions and Heads of units are responsible for communicating the decisions to all employees.

Public information on programmes and effects of education

The educational offer of the FME is presented clearly and publicly available. The big emphasis is placed on the promotion of the Faculty among potential candidates during "open days of FME". As it was mentioned before the Faculty develops and monitors the quality of relationships with local social and economic environ-

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ment. The Dean of the Faculty assigned Public Relations representative, responsible for external contacts.

FME organizes each year many conferences and seminars with the participation of practitioners from Polish and foreign organizations. As the leader of studies internationalization the Faculty as the only at GUT has the position of Vice-Dean for international affairs.

It can be concluded that IQEAS of the Management and Economics Faculty reflects quite natural and typical structure of quality system for contemporary university. The seven elements create stable, solid foundation for other, more sophisticated and effective quality oriented initiatives in the university.

4. Conclusions and recommendations

In the recent years there has been much done to increase the quality of studying on both MA/MSc studies, as well as PhD studies in Poland. The actions has been taken on three levels:

— EU level: creating EHEA and ERA along with vast support of Polish HEIs with structural funds,
— State level: reforms of higher education and science, coordination of EU-supported programs,
— Regional level: creating regional innovation strategies, coordination of EU-supported programs.

Internal quality of education assurance systems and normative management systems based on the quality criterion create good foundation for implementation of effective methods of an university institutions management. It is worth adding that introducing an IQEAS on Polish universities is nowadays a formal requirement imposed by PAC, however it may also be a significant step in the modernization of the management model in higher education in Poland (Grudowski, 2015).

Further activities related to improving the quality of Polish higher education should be targeted, among others, on:

— significant reduction in bureaucratic solutions, reducing efficiency and raising the cost of the institution (eg. the useless formalism of Country (National) Qualification Frameworks);
— realignment of efficiency of the management of public universities by reducing the impact of “independent kingdoms” – departments of Universities to their final results;
— the key suggestion is to elect by the rector-elect candidates to the deans of all departments of an university;
— real motivation for the most active persons in universities through the creation of criteria for assessment of conformity with the strategy, not just apparent solutions;

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— desire to adapt to the ESG proposals to the "classic" quality management solutions – eg. TQM and the CAF model.

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PODSTAWY PROINNOWACYJNEJ TRANSFORMACJI POLSKICH UNIWERSYTETÓW – TŁO I WYBRANE ROZWIĄZANIA

Streszczenie

W artykule zaprezentowano tło aktualnej proinnowacyjnej i projakościowej transformacji sugerowanej w polskich uczelniach. W pierwszej części zawarto syntetyczny opis polskiego systemu szkolnictwa wyższego. W części drugiej zaprezentowano przykład wewnętrznego systemu zapewnienia jakości kształcenia, który wdrożono w Politechnice Gdańskiej. W podsumowaniu wskazano rekomendacje wynikające z dotychczasowych negatywnych doświadczeń związanych z wprowadzaniem tego typu rozwiązań.

Słowa kluczowe: zarządzanie jakością, szkolnictwo wyższe.

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