# The experiences with the new higher educational system and the Bologna Process in Hungary

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ABSTRACT: Today, the European Higher Education Area spans the whole of Europe and indeed, it spreads far beyond it. A more and more harmonised knowledge market has started to take shape, and the Bologna Process is the core issue in this transformation. The introduction of the Bologna Process in the Hungarian higher education system has resulted in several changes in the engineering education programme. The establishment of the BSc and MSc programmes and the elaboration on the output qualification requirements and the impact of the process are presented and discussed in this paper.

#### INTRODUCTION

The Bologna Process related objectives that were set forth in 1999 and confirmed by the Ministerial meetings held since then, are as follows:

- formation of an easily available and comparable basic training system, the achievement of European adaptability;
- a training system based on two main cycles (BSc and MSc) in which the grade given after the first cycle finished successfully offers skills for positioning in the labour market, and ensures preparation for the entry into the second cycle;
- formation and the acceptance of a uniform credit system, and the introduction of the system of diploma supplements;
- promotion of a wide range of mobility for professors, researchers and students;
- formation of cooperation in European Quality Assurance (ENQA), and within its frameworks, the formation of quality standards and mutual confidence in the national quality assurance system;
- support for the dimensions of European higher education, forming of European-level educational modules, courses and curricula.

#### EVALUATION

Following the Berlin Meeting in 2003, Hungary also undertook the realisation of a multi-cycle training system as one of its objectives. The implementation and the regulation of the new educational system were defined in the Hungarian Universities Programme, which contains the overall development programme of higher education. Law CXXXIX of 2005 on Higher Education, the new educational system and the conditions of launching programmes and its procedure came into effect on 1 September 2006.

Therefore, the implementation of the Bologna Process, in consideration of the emphasised significance of joining the European Higher Education Area, was essential to the future of Hungarian Higher Education and to Hungary's social and economic development.

In Hungary a two-cycle, linear educational system (BSc and MSc) came into existence that was implemented simultaneously, while the conventional university-college dual training system was closed down. The basic academic specialisations and the training system took shape in consensus.

In the case of some information technology (IT) programmes, a multi-cycle training system had already been introduced experimentally in September 2004, even before the acceptance of the Law. According to the model's curriculum,

students entering basic training then, completed their studies by 2009. Starting from 2005, as the result of the tight accreditation procedures, basic training started in different fields according to the restructured academic specialisation system.

The Hungarian Higher Educational System is still strongly knowledge-oriented and less skill-centred, and does not put enough emphasis on the assessment and the development of learning outcomes. Therefore, the communicational, managing and lingual preparation of students often lags behind the optimal measure. On the one hand, the mass education, conforming pedagogic-methodological education culture, has not taken shape; on the other hand, *quality* training is not efficiently organised. It can be concluded that the MSc and PhD training serve as the determining base of quality type training.

Unfortunately, higher vocational training has not earned the desired social reputation and acceptance, and at the level of content, it has been slowly integrating into the higher educational system.

Financing also faces many problems. It is normative only in name; essentially, it is base financed. There is no real cost/benefit analysis, which would serve the basis for normative financing.

Several aspects of higher education and the labour market should be analysed. These include:

- the structure of the basic educational system,
- the efficiency of the output regulation,
- the specific domestic problems of the transformation of the academic specialisation system and their management (the opportunities for academic specialisation, fields of study, entry to master training programme),
- certain issues of content development (development of content and method of training, new educational methods to be implemented into the new educational system),
- upgrading and development of educational equipment and infrastructure,
- the organisational fulfilment of different competences,
- foreign language knowledge, and
- IT knowledge, etc.

With the implementation of multi-level engineering training several problems have arisen. Finding solutions for these problems cannot be postponed, and claim immediate intervention and action because the assurance of a well-trained supply of engineers has a long-term effect on the country's development and future. One of the basic problems is the quality of input into engineering educational programmes (admission to the higher education institutions).

To stop the existing adverse state of engineering training, the factors affecting the standards should be considered. It is necessary to find possible solutions for the correction and the increase of the standard of training. Several deficiencies can be seen in the field of engineering training. One of them is the introduction of normative financing. The introduction of a credit system is inadequate for the valuation of students' achievements.

Because of the introduction of excessive specialisation according to the field of study, students do not have sufficient general engineering knowledge. Instead, they have knowledge of a relatively narrow area of the selected engineering science. It is disadvantageous for graduates, because it means a limit that debases the chances of their career a lot.

The continuous higher educational reforms resulted in a significant decrease in the number of classes and the proportion of theoretical and practical classes changed.

The Bologna Process has resulted in further changes in the level of engineering training. This is because the development of the curricula was accomplished for the whole training process for both the first cycle (BSc) and for the second cycle (MSc). In the case of BSc training, the period of training is seven semesters. The period of the MSc training is four semesters.

Higher education institutions considered the views of professional bodies (the Chamber of Engineers, etc), and their opinion was taken into consideration during the curriculum development. Unfortunately, the number of academic specialisations is too high. Therefore, training of specialists instead of general engineers is the current practice and that is also disadvantageous for society.

The industry demands specialists with a wide theoretical and practical knowledge, who are able to acquire and utilise specialised knowledge and skills within a short period of time. This kind of professional training can be assured only by high level of theoretical and practical knowledge combined.

In the case of MSc training, the development of curriculum faces a variety of difficulties, since it does not allow complete acquisition of the engineering knowledge that is demanded by the industry. It is necessary in certain cases to re-teach certain theoretical subjects - such as mathematics, physics, statistics and mechanics. Also, at present, the number of academic specialisations is too high.

The Masters programmes place special emphasis on the differentiated engineering courses in accordance with the requirements and needs of the *end-users*, and in harmony with the output qualification requirements set forth by governmental decrees, elaborated jointly with the Hungarian Accreditation Board.

### CONCLUSIONS

The Bologna Process has led to the restructuring of conventional engineering education programmes in Hungary. The core elements of the engineering curricula should be refined and further harmonisation is needed.

#### REFERENCES

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