

## Chapter 11

# HIGHER EDUCATION IN CROATIA AND REQUIREMENTS OF THE EUROPEAN UNION

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## ABSTRACT

The objective of this paper is to draw attention to the conditions that Croatia needs to meet in the area of higher education on the route towards European Union (EU) accession. Although higher education is not one of the priority sectors Croatia should work upon in order to meet the provisions of the Stabilization and Association Agreement (SAA), it is very clear that the harmonisation of Croatian legislation with European standards in the area of higher education will be one of the mainstays of social development and then of genuine accession to the EU.

The main means for the unification and reform of tertiary education in Europe is the Bologna Process. Just recently, through the nominal accession to the Bologna Process, Croatia has started to become aware of the imperatives that the EU has set all accession countries and potential accession countries. However, Croatia also has additional problems, inherited from the tradition, which should be settled before it begins to address those related to joining the European higher education area.

We shall first give a brief account of the situation in Europe and outline the requirements of the Bologna Declaration. Then we shall compare the situation in Croatia and the accession countries with respect to the parameters that are tracked in the integration process, and hig-

highlight just a few problems that derive from the tradition and that take on increasing salience in the process of harmonisation with the Bologna Declaration. Lastly, we shall put forward some recommendations.

**Key words:**

European Union accession requirements, Croatian higher education, Bologna declaration, Trends I, Trends II, Trends III

## INTRODUCTION

Today, Europe has over 530 universities with about one million students in forty-one countries, and is accordingly the world's greatest knowledge centre (EURIDICE/EUROSTAT, 2002). Only recently has it begun to be realised that this is a vast social capital of which Europe has not hitherto made common use. Language barriers and the enclosure of the educational systems within national borders have been the main reason that Europe has not exploited all its competitive potentials on the world market of knowledge. This is the reason why many of the documents of the *acquis* in the area of tertiary education stress the idea of mobility of students and faculty and the idea of international collaboration at all levels. At the Ministerial Conference on the creation of a European Higher Education Area in Prague in 2001 and at the Rectors Conference on trends in higher education in Salamanca in 2001 the Declaration on the shaping of the European Research Area was adopted, encouraging efforts related to the unification of social resources in the area of science and further education.<sup>i</sup> The main documents that preceded this Declaration were the Sorbonne Declaration on Harmonisation of 1998 and the Bologna Declaration of 1999. Behind these declarations was the realisation that only by the unification of its resources would Europe be able to compete with the very strong positions of the USA, Australia and Asia in the area of science and education. But the way from declaration to realisation can be very long. Looking at the past four years, in spite of the initiatives of the signatory countries of the Bologna Declaration (BD), it is clear that the idea of the necessity of international collaboration and mobility did not come from either the universities or the national governments, rather from the top, from the EU. This fact indicates that there may be problems: the resistance of the member countries, or of individual institutions, to the changes required by integration.

In parallel with this trend towards unification and mobility, other, opposed trends have been noticed. One such trend is the increasing enrolment quotas, that is, the increasing number of students enrolled in tertiary education in almost all countries. During the 1990s, the average number of students enrolled in Europe rose by more than 20% (OECD, 2000).

But there is an opposite tendency: that of the decline in state investment in the area of higher education, that is, an increasing pragmatism on the part of the state with respect to the institutions of higher education. This trend is not always manifested in lower budgetary resources, but in the new imperatives the state puts before the academies. Instead of the traditional idea of the Humboldt type of university, which stressed the education of the individual and the autonomy of personal knowledge, the need surfaces for increasingly greater accountability on the part of the actors in the educational process to the sources of financing, i.e., towards public needs and the taxpayer. In order to encourage such financial accountability, some governments have decided on the liberalisation of the domestic universities, and created a framework for the foundation of new institutions, branches of international universities or local private universities. In order to be able to cut budgets, sometimes there is an endeavour to introduce tuition fees that will transfer an increasing amount of the financing to the actual users of these public services.

At the end of 2003, the position of EU countries, or their representatives in the area of public education, is still vague with respect to the negotiations that are being held within the framework of the WTO, i.e., GATS, the General Agreement on Trade in Services.<sup>ii</sup>

Increasing requirements for accountability to sources of financing, i.e. to the public, knowledge that on the world market competition is increasingly knowledge-based, and finding solutions for the problems of unemployment create the need to make knowledge serve the public and the economy. This trend is manifested in a number of ways: through attempts to abbreviate courses, by the ever-increasing stress on the technical skills of students, and the creation of life-long education programmes, and by the need for the retraining of personnel that have already qualified. The inertia and rigidity of traditional institutions of higher education lead them to resist such governmental attempts. For these institutions, such new imperatives entail numerous technical difficulties: How can one recognise the value of other qualifications? In which way can the values of individual courses or subjects be compared?

How can a curriculum that is theory-based be quickly made pragmatic? How can curricula be shortened and pragmatized without consequences for the employment structure?

All these trends indicate that there is a very dynamic reform process in higher education in Europe, and that in spite of all declarations, because of the opposed interests of local stakeholders, the outcome of these reforms is far from clear. In some countries there is resistance to the shortening of graduate studies. In others, there is fear that the introduction of some uniform quality assessment will threaten the national culture and language. For this reason, declarations of the EU give governments the means to start off reforms at the domestic level. The name for such a reform process for all the structures of higher education in Europe, according to the declaration by which the EHEA imperatives were set up, is called the Bologna Process. The reform process should be completed by 2010.

## **THE BOLOGNA DECLARATION AND THE BOLOGNA PROCESS**

The BD, documents connected with the Bologna Process, with the so-called Lisbon Convention on the mutual recognition of degrees, are almost the only and certainly the main instruments with which the EU countries and the accession countries and potential accession countries are attempting to realise common aims in the area of higher education. The BD was signed by 29 European countries on June 19, 1999.<sup>iii</sup>

The BD states that the area of higher education is a social area that can create a “more perfect and influential Europe”, particularly through the building up and reinforcement of common democratic, cultural, social, scientific and technological dimensions. The aims of it are:

- Acceptance of a system of easily identifiable and comparable academic and professional qualifications, and the introduction of diploma supplements, for the sake of more rapid and easier employment, and the international competitiveness of the EHEA.
- Acceptance of a uniform system of two study cycles for undergraduate and graduate degrees. A three-year course is a necessary qualification on the European labour market, and the second cycle leads to a master's or doctor's degree.

- Introduction of a credits system (ECTS); credits may be accumulated even outside the formal system, through the lifelong learning programmes (LLL).
- Promotion of mobility and surmounting barriers to free movement for students and faculty.
- Promotion of European cooperation in quality assurance.
- Promotion of the European dimension in the area of higher education.<sup>iv</sup>

However, the Bologna Process has not yet set up either the key principles to make the EHEA more attractive or the principles of mobility. For example, will courses for foreign students be free, will mobility still rest on special tenders and programmes for the mobility of students and faculty, or will the market criterion be introduced – willingness to pay fees. Considering the resistance to reforms of some important countries, like Germany, which does not have a uniform, country-wide educational policy, but has a two tier system and a very firmly established four-year course; or France, where there are fears concerning the establishment of common criteria for the evaluation of the quality of the HE institutions, the question arises as to whether the proposal for a uniform timetable of 3+2+3 will be upheld. There is also an idea about the codification of doctoral studies, which have in many countries been structured exclusively through the relationship of student and tutor.

From all these concerns it should be concluded that the Bologna Process is indeed just a process of democratic negotiations concerning the generally desirable means and objectives of integration. It has sketched out the space, in which many ideas however are not completely articulated. Still, the objectives mentioned above are strong points of reference. Progress in their realisation is tracked by the European Commission in bi-yearly reports.

## **EUROPEAN HIGHER EDUCATION AREA OBJECTIVES REALISATION**

Coordination of measures and the foreseen objectives of the Declaration is done by the European Commission, that is, by the General Directorate for Education and Culture. While reports are being written, contacts are made with the European University Association

(EUA), European Associations in Higher Education (ERUASHE), the National Unions of Students in Europe and the Council of Europe. To date, three reports have been published.<sup>v</sup> The European Commission and its members finance special seminars on topics dealing with the BD. The reports include analyses of the structures of higher education, analyses of legislation and ongoing reforms, and analyses of other aspects of higher education, particularly those related to the objectives of the Bologna Process.

Reports of the European Commission, Trends I, II and III, follow the abovementioned main parameters in the unification of the European HE system as set out in the BD.

Trends I concluded that HE systems showed a great deal of complexity and diversity, and that there was no significant convergence on the 3-5-8 (or 3-2-3) degree timetable. Similarly, separation into the so-called binary system (university – higher education professional teaching) is not universal; a comparison of countries that have it shows a great variety. Trends I claims that the need for unification of systems is ever greater considering international competition, and also that in the area of labour and the market there is an increasing need for study courses to be shortened. For this reason this report recommended adoption of the abovementioned objectives, which were then adopted by the signing of the BD.

The objective of Trends II was to compare the parameters that should, according to the BD, lead to a common system. As for unification, in the 1999-2001 period, when Trends II was written, there were several institutional and real reform advances, and the aims of the BD were built into the strategic plans of most signatory countries.

The first institutional and legislative advance was the foundation of the European Network of Quality Assessment Agencies (ENQA) in April 2000. The point of the network was the establishment of a single unified system for assessing the quality of teaching. Although the BD is a constant source of debates, the ENQA has not had any very great success in building up a uniform system for quality assessment. The reason for this is the double concern that a uniform quality system will benefit the best, along with the fear that it will set standards that weaker countries will not be able to meet. Many countries, in particular France, also show concerns that derive from the knowledge that the greatest importers in the knowledge market (i.e., of students), and potentially the main winners in the race for students, are Britain and Ireland, i.e., countries in which the curriculum is delivered in English.

The situation with the ENIC/NARIC network is very different.<sup>vi</sup> In order to fulfil the first objective, the European Commission, pursuant to the Lisbon Convention, together with UNESCO and CEPES created a separate network, the co-called ENIC/NARIC, which tracks the creation of information networks about higher education systems and institutions to make the recognition of degrees easier. In consequence of the founding of the ENIC/NARIC network, citizens of states that do not have a developed system of information about qualifications, degrees and programmes will be faced with greater difficulties in getting their qualifications recognised in other countries. Although nominally Croatia has created a national (ENIC/NARIC) group for the recognition of degrees, as far back as 2000, it was until quite recently very inactive, on the international as well as the domestic level.<sup>vii</sup>

According to claims from Trends II, the objective of student and faculty mobility has the greatest support among European countries. The EU has set up a number of programmes with considerable financial resources earmarked for the realisation of this objective (Socrates, Erasmus, PHARE), and also the effectuation of international collaboration – the S. C. Framework programmes. Croatia joined the programme only in 2001, and hence is severely lagging behind in faculty and student mobility.

According to Trends II, *employment* is a very controversial objective of the BD, because many EU members think that it menaces national plans for resolving unemployment problems. However, Trends II concludes that the BD “pays attention to the pan-European dimension of topics related to employment” and that it is an increasingly evident trend to the foundation of new, international and ad hoc programmes for the employment of citizens of other countries.

The topic of *competition* is particularly to the fore in Britain, Ireland, Norway, Flanders and Switzerland, and least visible in the countries of SE Europe. France has expressed concern for the ever decreasing attractiveness of European tertiary education, manifested in the declining number of European students from non-member countries (Trends II:22). Some less developed states express the need to increase competitiveness at the national level to diminish the brain drain. Some countries, like Sweden, Germany and Britain, have created programmes for the active promotion of their own higher education in the world, and the topic of advertising is of increasing importance. Some countries are motivated by non-financial, and some, like Britain, almost exclusively by financial motives. The chaotic, rigorous and discrimina-

tory policy of visa allocation, however, runs to some extent counter to this trend.

The BD motivated signatory countries to discuss linkages within the binary system. In an increasing number of countries the Diploma Supplements according to the BD are being introduced, as well as a credits system more or less compatible with the ECTS.

While Trends II concentrated on the beginning of *legislative* trends, particularly in SE Europe, and on processes strengthening the common features of the integration processes, Trends III, because of the time span since the signing of BD, was able to make a more thorough analysis of the points of agreement and of resistance. In spite of the fact that the process was initiated from on top, the process through which European HE institutions under the aegis of the EU were only just attempting to create a framework for common legislation, Trends III covered analyses of views of heads of institutions of higher education, ministers and officials in the area of tertiary studies, and from these statistically processed views, some conclusions could be drawn. At the moment it is impossible to give any official interpretation of these views and analyses; they will be put forward by the end of September 2003 at a conference in Berlin.

Trends III, like the previous reports, follows European indicators related to the objectives of the Bologna Process, that is, mobility, structure of qualifications, introduction of ECTS and programmes for LLL, as well as internal and external systems of quality control. According to this report, the mobility of students and faculty has essentially increased, but the trend of imports is on the side of those countries that have programmes in English (apart from Britain and Ireland, Holland, Denmark and Sweden are mentioned, while France is an importer from non-European areas). Only 30% of respondents from European HE institutions claim that in their countries and their institutions there is any targeted marketing for student recruitment. Countries that do systematically carry out such marketing aimed at the student population are at once the greatest importers and greatest beneficiaries.

Trends III also mentions an increasing number of countries that have or are introducing two tier studies – undergraduate degrees and master's degrees – as well as a binary system (university and polytechnic courses), which is important for attainment of unanimity about the value of a given degree.

By tracking the number of programmes with joint qualifications of universities from different countries, it has been shown that the num-



ber is very small. In most countries there is no legal basis for awarding joint (international) university degrees.

The status of the Lisbon Convention is an essential indicator of the degree to which the European higher education area is united. Unification is still in a relatively rudimentary state. In spite of the fact that many countries have signed this convention, in reality it does not mean that institutions to monitor the qualifications structure actually function, or that national institutions such as the ENIC/NARIC groups are consulted at all. According to Trends III, only 20% of higher education institutions work with the national ENIC/NARIC commission, 25% do not collaborate, and 28% do not know what it is or that there is an ENIC/NARIC commission. The recognition of diplomas is very unstructured, and this often depends on a given university or department at which the student wishes to study, or even an institution that considers itself qualified to evaluate a certificate for the purpose of employment on the domestic market. This is expressly against the tendency of the BD.

Two thirds of HE institutions in Europe, according to the report, use ECTS as a system of credit points, and the others use some other system. However, the authors added that this number of users of the credits system is very high, and needs further investigation, since it does not seem to correspond to the real state of affairs.

Irrespective of the conditions prevailing in Croatia, it should be said that ECTS is just the first step towards the establishment of a uniform system. The ECTS assumes that the workload of a course per term is the main criterion for the possibility of evaluating a qualification, and hence most courses or subjects have the same number of points, and in some countries, in which studies last longer, a student can theoretically collect more ECTS points, which does not mean that his qualification is better. The recognition of certificates can follow only after an analysis of the Diploma Supplement, which according to the BD has become obligatory.

In the conclusion to this short review of the situation in Europe, we have to point out that in the Bologna Process there are still a number of uncertainties. For example, will there really be universal recognition of certificates? Will a uniform curriculum be established? Will the shortening of studies create the quality necessary for a knowledge-based society? Will the rejection of diversity and national traditions come about? Can all the envisaged reforms be effectuated by 2010? At the national or regional level, it is still an unsettled question whether the shortening of studies will lead to unemployment in the higher education

sector, especially in those countries where the need for social capital is most pressing. Will the ECTS be the only source of evaluation of quality of courses?

Since most EU countries have to coordinate their own national and European imperatives, and since no single country represents a pattern or canon according to which we can evaluate the degree to which we lag behind the EU (which is why we talk of the *Bologna Process*), a comparison of statistical criteria will not give us a real image of the domestic state of affairs or the extent of the gap. What is more, in this context it is interesting to mention that countries like Croatia and others in the area of SE Europe, which are de facto considered second rank countries, that is, countries that show a resolute intention to join the EU and in which there is almost complete agreement with the aims of European reforms, are used as instruments to exert pressure on larger countries where because of the tradition it is even harder to carry out the intended reforms (Trends II:5). Awareness that this is so gives the opportunity for an active promotion of these objectives and a more active international role for Croatia.

Unlike other areas of harmonisation with the EU, the area of higher education in Europe is still relatively unstructured, which for Croatia as a country that aims at EU accession is attended with certain advantages: it can take an active part in the preparation of the legal frameworks with which it will later have to comply, hence the claim concerning "lagging behind Europe" is less appropriate in the higher education field than elsewhere.

## **CROATIA, ACCESSION COUNTRIES AND COUNTRIES IN THE REGION**

For us the most important part of Trends II relates to the special report about the accession countries and the countries of SE Europe. From the last part of the report a comparison of Croatia and other countries in the region as well as the candidate countries can be seen. An abridged part of this large comparative table is later given in Annex 2.

The report has two parts: the first relates to the legislation of the candidates and the countries of SE Europe. It was created by a special working group, LRP, of the European Commission. This group actually started working in Croatia only in 2000, when the LRP programme was already at an end. The axiom of this working group was that

without an integrated university there was no progress. The LRP insisted that the Czech Republic and Hungary give up on reforms leading to fragmentation of the universities (on the model of the system of the former Yugoslavia). In this context, Croatia, along with the countries of SE Europe, was referred to as a country in which it was impossible to expect development in tertiary education without university integration.

In the second part of the special report of Trends II comparative data are given according to several parameters. Table 1 presents a comparison of the systems and the structure of degrees in countries similar to Croatia. According to this table, there is great unanimity in the two-tier degree system (first degree/master's), and in the one tier doctoral studies in the universities (with the exception of Hungary), but a great variety with respect to the division and duration of the actual universities and colleges. The second table, which puts forward a comparison of the kinds of qualifications that are offered in the educational systems of these countries, shows the vast diversity that reigns in the accreditation of university degrees.

In outline, we can interpret the data in the following way. First, Croatia has a binary system (universities and colleges) and a two-tier system (first degree-master's) of the kind that is foreseen by the Bologna Process. A unitary system (only the universities), as possessed in 2001 by Albania, Bosnia and Herzegovina, Czech Republic, FYR Macedonia, Romania, Slovakia, Serbia and Montenegro, Kosovo and Hungary, has a one-tier system (direct master's degree). A doctoral course can also be two-tier (doctorate/*habilitation*); only Lithuania has this system, although some faculties and some professions here also imitate the system in Germany. The system of dual enrolment (state-sponsored students, fee-paying students), according to Table 6, exists in many other countries of Eastern Europe. In comparison with the countries of Western Europe, a large number of East European countries have a system in which fees have to be paid. It is interesting to mention that in some countries, like Malta, the *numerus clausus* has been completely abandoned, while in others it is sometimes determined by the state, or the region, or the university alone. Croatia thus is not unique in having an unequal enrolment system and hence of the financing of university courses. Since the BP does not say anything about the system of *numerus clausus*, and does not express the importance of the baccalaureate, the data on enrolment will be essential only perhaps in some later stage of the integration.

While in most countries the master's degree can be acquired after five years, in Croatia, Bosnia and Herzegovina, Albania, Lithuania, Serbia and Montenegro and FYR Macedonia, a master's can be attained only after 6 or more years of studies. Table 2 therefore explains why studies are longer in Croatia than elsewhere. Interesting is the similarity of all the national systems seen in Table 3 where it can be seen that almost all the systems have the *numerus clausus*, at least when state sponsored students are concerned. For others, with additional fees, university autonomy holds good.

Most of the candidate countries and the countries in the region have a relatively similar way of student financing. This consists of a quota of state-sponsored students, along with free enrolment of students who meet their own tuition costs according to the criteria of the higher education institutions. Some countries are considering a universal fee system, according to which all students would pay for their studies. Such systems are at odds with the standards of the countries of Western Europe, particularly of the Scandinavian countries, where there are no private higher education institutions, nor is there any system of fee payment for "personal needs" studies.

There are also similarities in the vertical mobility system. In most of the countries similar to Croatia, enrolment into a vocational college does not enable advancement into the system of several-year-long academic education, which is at odds with the intentions of the BD.

In the summary of the comparison we can say that in almost all the formal parameters that Trends II considers Croatia does not stand out from either the accession countries or the countries in the region. However, as we shall see below, the introduction of a binary system in Croatia in 1998 created a great number of problems that are today eroding the whole tertiary education system. Similarly, we are still not able to judge what the real consequences will be of the nominal introduction of the BP criteria into the new Croatian HE Law, because the mere formal introduction of new institutions so as to "converge on Europe" cannot in itself be adequate.

## **HARMONISATION WITH THE EUROPEAN SYSTEM AND THE BOLOGNA DECLARATION**

Acceptance of the objectives of the BD via domestic legislation is only the first step on the long road to real reform. Croatia in the re-

cently passed law nominally accepted all the principles deriving from the BP. In the item about university autonomy in the new Science and Higher Education Law of July 2003 it surmounted the stumbling block because of which the EU did not previously accept Croatia as a full member or signatory of the Bologna Process. In 2002 we signed and ratified the Lisbon Convention, by which we (without any real awareness of the implications) leapfrogged the legal state of other larger countries that had only signed but not ratified the Convention. Looking at the legal framework for accession, it would seem that there are no very great problems for acceding to the EU.<sup>viii</sup> The new law cannot and will not necessarily and really achieve via the mere existence of good intentions what is meant to be achieved by the reform processes in Europe. In spite of this, it should be said that it is the legal framework that is of primary interest to the EU.

According to certain realistic indicators, Croatia does not essentially lag behind the other candidate countries and countries in the region. It has at the moment five universities and is hence up to the European average (one university to eight hundred thousand to one million inhabitants). The level of investment in the area of tertiary education ranges around 1% of GDP, and according to some figures expenditure in the area is higher than the European mean (Bajo, 2003). Croatia does not stand out either in the matter of number of students, teachers and number of universities and colleges (according to demographic criteria), or in terms of investment. There are also trends noted in the most developed systems, like the increasing number of women enrolled, and we also follow the trend towards the increasing overall enrolment of the students in the generation, and an increasing pragmatization of studies, if we measure this parameter by the ever greater number of students enrolled in vocational courses.

Croatia, however, has a very small graduate population (7%) and this is one more motive for the introduction of polytechnics and the foundation of Zadar University in 2002. However, instead of founding new institutions, it would seem to be much more important to inaugurate a programme of LLL, because the situation with the older generations is much worse. Regional distribution of knowledge is also very poor. More than 50% of scientific production and a still greater percentage of the science and higher education budget is concentrated in Zagreb. These two facts indicate greater problems for regional development. Apart from the brain drain to other countries, there is a much greater problem in Croatia, that of the brain drain from local communities to Zagreb.

## Structural problems of higher education

Nevertheless, there are many other and more important problems. The main institutional problems that weigh down the process of integration with the EHEA are: realisation of the autonomy of the universities, poor government administration, the financial and legal position of the HE institutions, the lack of mobility of faculty and other things (Polšek, 2003).

*University autonomy.* Although 2005 will see a start to the system of financing via the universities and not via the faculties, as has been the case so far, which should provide greater influence for the universities in the creation of programmes and mobility, the question arises as to whether the faculties, which were previously autonomous, will be ready to accept others' programmes and students, as foreseen in the BD.

*Application of the ECTS points system and the recognition of diplomas.* Universities will have to make possible internal mobility within larger institutions, which has not been the case to date, or even the mobility of students at the national level. The ECTS rests on the idea of work load (30 points per semester) and is designed primarily as a system of getting individual subjects recognised abroad, i.e., in the case of foreign students.

*Recognition of diplomas.* The withdrawal of the government from the area of diploma recognition (in spite of the existence of the ENIC/NARIC agency) shows that the universities could still create real problems for students who might want to study in Croatia, or those who have spent part of their study time at some other university, abroad. Experience to date shows that there will be enormous difficulties in getting these studies recognised. Judging from practice at the moment, the already poor mobility of domestic students will stay where it is, irrespective of the introduction of a new system of credit points. Hence, the problem of university autonomy will soon primarily become the problem of recognising courses taken at other faculties or universities. A variant of the same problem might arise if the universities in their internal statutes state that they are the competent authorities for recognition, which would frustrate any attempts to boost mobility and the employment of foreigners through the ENIC/NARIC groups.

*Student and faculty mobility and employment problems.* As for employment, it would seem that Croatia is not extremely attractive, and for this reason there is no need to pay particular attention to foreign students or employees. However, when real problems do arise, in both mo-

bility situations, it seems that the government will have to intervene. If we assume that the intention of the BD is the creation of a 3+2+2 system (concerning which very provisional judgements are being made pursuant to the BD), then a new problem will arise: how is the current system of studies to be revised so that courses that now last four years are turned into three year courses? Will there be a labour surplus? Will teachers then become reoriented towards more important and attractive subjects?

A number of problems are related to horizontal and vertical mobility of faculty and students. Programmes through which obtaining professional qualifications was linked to remaining in regional universities did not work. The question of the international competitiveness of teaching staff so far has not come up because the barriers to the employment of foreigners have been anyway quite insurmountable, and the curriculum is delivered exclusively in Croatian, while our academic area is not all that attractive. We have often thought of mobility of highly educated people in the sense of the brain drain. If there had been a political will, this drain might have been made up with an inflow from other countries, as is the case with our neighbours in Slovenia. Croatia has not been included in the PHARE and Socrates programmes for student and faculty exchange, and this has been a great barrier to integration. Students and teachers had few chances to work with their fellows at foreign universities. Most of such mobility programmes no longer exist, and Croatia will have to finance such an ostensibly simple task – the attainment of real integration into the European higher education area – from domestic budgetary sources. We will find it hard to make up for this lost step.

Many experts believe that Croatia has highly qualified personnel who can easily compete in Europe and the world, and that at least some institutions have a high reputation of the kind they once had, in the time of the cold war. However, the competition of experts from other parts of Europe has become such that highly educated personnel from Croatia have become practically invisible in Europe. Our broad-spectrum education was good as a qualification in third wave conditions – in conditions of industrialisation, but it is insufficiently specialised in conditions of the knowledge industry or information technology. This does not mean that we do not have good information scientists, rather that other specialists make too little use of informatic technology. However, the EU has understood that the brain drain is actually weakening the social and cultural capital of those countries that need

them most, and so mobility programmes expressly state the necessity of the return of experts to their native countries.

*Financial irrationality.* In a system of disintegrated universities great problems arise in the irrational spending of money, or the waste of academic resources. This is visible from the fact that every faculty has its own teaching staff for any given subject. For some this problem is only nominal, since a large number of students anyway have to be catered for with a larger faculty. However, the irrationality is then seen in the accumulation of administrative staff and the absence of inter-faculty and interdisciplinary programmes (Polšek, 2003; Bajo, 2003).

*Poor government administration.* The administration responsible for the area of higher education is in a very poor state, and according to its own structure of qualifications cannot satisfy the most elementary requirements for the running of a higher education policy. It does not keep elementary statistics, nor are there any means to force the institutions to keep the relevant statistics. The small number of employees in the Higher Education Administration of the Ministry of Science and Technology are deployed as logistics to the para-institutions of the system such as the National Higher Education Council. According to the new Law of 2003, the situation is going to deteriorate if a number of similar agencies are introduced. However, for the functions that should exist according to the Bologna Process (for ENIC/NARIC for example, or for the recognition of diplomas) there are no offices with specially qualified personnel.

*The problems of the dual system.* A number of problems were introduced with the binary or dual system of 1998, that is, the separation of professional/vocational and scientific/scholarly courses and institutions. At Croatian universities there are four-year courses that are rather vocational than scientific or scholarly, and students are offered the same courses, with the same teachers, in professional and vocational as well as in academic studies. Most of these professional/vocational courses of study are done at the universities, with a different institutional name. In reality, institutional separation never occurred. In almost all cases where it did there are unsettled matters of assets and property, even court cases at the expense of the taxpayer. According to data from 2001, at three Croatian polytechnics not a single person was actually employed, not even dean or rector. For the 19,529 students, a number which is much larger today, teaching is carried out by 91 lecturers, of whom only 25 have the rank of academic teacher (for all data see Polšek, 2002). Teaching is mainly done by teachers from the uni-



versities, but this outsourcing reduces the quality of teaching at the universities. The small costs, the short time the courses last, and the large number of students who pay for their professional course (63%) make such courses economically extremely attractive. But the profitability of such courses does not translate into quality: what is more, in a large number of cases these vocational or professional studies are a smokescreen for the provision of additional sources of income for the universities or, of course, for completely private interests. Although in itself beneficial, the entrepreneurial mentality of the polytechnics is eroding the scientific and scholarly and professional core of instruction. The fact that it is the same teachers working at both kinds of institutions and in both kinds of courses aggravates the already large problem of the lack of pragmatism in the courses, i.e., the separation of academic content and real life. In spite of the fact that a number of European countries have a dual system and that it is one of the aims of the BP, *our* particular dual system is not settled in an ideal way, and its introduction in 1998 jeopardised the whole system of higher education in various ways.

*Quality control and employment.* All external, or international, evaluations of the quality of our tertiary institutions (Salzburg Seminar 2000, CRE 2000) highlight the problem of employment in the area of higher education and science. The faculty is relatively old and immobile. In spite of certain statutory prerogatives for the renewal of teaching staff, these provisions are not actually used. The programmes for hiring research fellows are very welcome, but they will not settle any problems until systems for the elimination of incompetence are introduced. In fact, in the system of lifetime employment, taking on research fellows will create a bottleneck and frustrate the further hiring of young people. This is a problem of almost all European countries. However, academic productivity statistics (Jovičić et al. 1999; Sorokin et al. 2002) show that employment sclerosis has direct scientific consequences. In spite of the so-called Matthew Effect in science – unto those that have shall be given – the number of science references falls off with age of teaching and scientific staff.<sup>ix</sup>

*Lifelong learning.* Programmes for lifelong learning are on the whole considered an extension of the fifth or sixth grade (as supplement to secondary or even elementary school) in spite of the fact that some “open universities” provide certificates that are like those of higher education. However, although professional/vocational (polytechnic) courses of studies are burgeoning, many elementary vocations and trades are crying out for labour. Because of the awareness that Croatia will

soon have the need for a highly specialised labour force, the European Commission in collaboration with the Education Ministry has set up a special non-governmental organisation in order to kick-start reform of vocational education. However, because of the increasingly strong competition in the world market, the narrow specialisation needs to be supplemented with lifelong education because of the need for retraining. There are exceptionally few such programmes in our country.

*Poor collaboration between business and higher education.* Collaboration between business and public higher education establishments is merely symbolic. The Chamber of Commerce and some important Croatian industries have often stated that the qualifications handed out at the universities are not good enough to warrant employment in their companies. On the other hand, it is almost impossible for business to exert any influence on the curriculum. For several reasons, the universities always look at such proposals for curricular reform with suspicion; first they think that scientific or scholarly education is more fundamental than pragmatic needs and that pragmatism leads to cutting standards; secondly, the pragmatism of such requirements should be concerned with vocational and not university studies; thirdly, among the teachers there is a justified fear that such programmes would introduce quality criteria that they themselves would not be able to satisfy. Finally, there is the legislation that does not make possible or rather essentially hampers the transfer of expertise from business into HE without the necessary academic degrees for teaching.

*Higher education marketing.* Although there are *university days* when the activities of the higher education institutions are highlighted, no systematic marketing of Croatian education exists. Entrepreneurship has been a double-edged sword in the Croatian HE market: the increase in the number of students did not accompany an analogous increase in investment, but led to the reduction of the quality of teaching. There is a very real danger that the institutions that are most ambitious with respect to marketing will with the new law on university autonomy experience the entry quotas as disincentives and be brought down to the level of the unambitious.

All these facts demonstrate that in the area of higher education we are keeping the older model of other branches: we adhere to the law, as expected from us, and yet the rules are only a first step, and mostly not crucial for real integration and enhanced competitiveness. One should not forget, however, that the many problems stated are also problems of a wider context: the model of welfare state on which today's

European universities repose has undergone a crisis, and can not resist the challenge of the highly privatised and enterprising universities in the US, Japan and Australia; the Humboldt university – broad general education of the individual – is in essence dead; the ways of circumventing the levelling of wages by moonlighting cannot be maintained in parallel with quality requirements; this simply confirms the already powerful sclerosis that exists in employment. But this is a poor consolation for those who just want to join a system that is only intending to become competitive (the Bologna Process of integration).

## CONCLUSION

With the Science and Higher Education Law of July 2003 and ratification of the Lisbon Convention (2002) almost all the legal barriers for Croatian HE to join Europe have been removed. Unlike other areas, it would seem that in the area of higher education there will not be any problems with the actual laws. This is good news. However, one should draw attention to a few facts. First, joining Europe in the area of higher education is not an end in itself, a situation that can be "put in order" by only cosmetic attention in laws. But even the task of following European trends can be a problem if the government administration and university administration are not strengthened. It is completely possible and realistic that we will join Europe in terms of law, but that we will become increasingly distant from it if law reform is not accompanied by real changes in the area; that increasing numbers of students will study abroad and that the rate of the brain drain will increase and more and more teachers will consider other countries and universities more attractive. The consequences of this voluntary accession will then be disastrous. The primary aims of the BD are not to force member countries or signatories to work in some direction they do not themselves want, but to encourage consideration about what contributes to the general attractiveness of some education system, and work along these lines. For this reason then it is a good idea to be prepared for harsh competition among universities and other tertiary level institutions, by the introduction, for instance, of new and attractive curricula with highly qualified personnel capable of transmitting their knowledge not only in their own but also in some widely-used language. It is necessary to organise international programmes with international certificates. It is necessary to prepare for sharp competition among the teachers and stu-

dents by supplying attractive and technologically demanding programmes. Only by improving the real quality of teaching and research shall we be able to become genuine partners in a united Europe.

Consoling, however, is the fact that in this newly opened market for ideas and students, our problems are not ours alone. Most of the countries in Europe at the moment have a negative balance sheet of that social capital we call students. But from this we should not conclude that moves forward are therefore not necessary, because without mobility, with some new form of fencing, we shall not achieve the quality necessary in this market. Since language (English) is today the main criterion for the creation of such a balance sheet, then we should see a chance for Croatia in this, for our starting position is according to this criterion nothing worse than those of many countries, particularly those with a great cultural tradition, that are still endeavouring to retain only the domestic market. If we make use of it, we shall thus become an equal partner in the world market for knowledge and ideas.

## RECOMMENDATIONS

If we assume that the purely legislative barriers to accession have been resolved (about university integration, for example), then some rather important recommendations still remain:

- Croatia needs to resolve the various forms of illegality in the work of the existing HE institutions. What is the sense of strengthening newly created institutions of vocational education until the unsettled questions of faculty and property are addressed?
- Reform of the state administration in the area of higher education is required so as to keep up with and settle tasks of an increasingly vigorous transfer of people and knowledge. This refers in particular to team building in human resources and to stepping up collaboration between the higher education administrations and the international collaboration department of the Ministry.
- Agencies for the question of the mutual recognition of certificates deriving from the Lisbon Convention and provision of information according to the requirements of ENIC/NARIC groups need to have personnel teams developed and to be provided with financial resources.
- The visibility of Croatian higher education at the academic and diplomatic level needs to be enhanced, by participation in activities of va-

rious student, teaching, professional, chancellors' and other academic organisations, so as to surmount the integration step that in other countries have been pursued through programmes like PHARE and Socrates.

- Teachers should become familiar with big international projects and with the priorities of the Sixth Framework. One has to surmount the difficulties in setting up contacts between teachers and scientists with foreign institutions in order to obtain international projects, because the half-heartedness that has taken a hold of domestic teachers has become a self-fulfilling prophecy; if we think that there is no point in such participation, it is not likely that some other country is going to do it for us.
- External quality control should be strengthened. According to members of the LRP, quality control agencies like our National Council for Higher Education should consist of over 50% of foreign scientific personnel in order to prevent the conflicts of interest that arise when such agencies evaluate the work or have to give grants for work in institutions that are competitive with their own.
- It would also be a good idea to make state financing dependent on such evaluations. International quality control will start to make sense only when jobs depend on the quality of the individual teachers.
- Quality control may make the marketing of exceptional institutions feasible. For the moment, however, the formation of centres of excellence (foreseen by the 2003 Law) can be a double-edged sword: the EU bureaucracy has noticed a sudden burgeoning of new centres of excellence (often for internal political reasons) and considers it a kind of Ostap Benderism typical of CE Europe.
- Instead of founding centres of excellence, with a strong quality control, it is necessary to distribute quality of institution, curriculum and teaching staff more equally among the regions. Otherwise the demand for a more equal division of employment and investment will be superfluous.
- It is necessary to open up the domestic market to foreign universities, so that our students are able themselves to make comparisons.<sup>x</sup> Universities should join as soon as possible the so far rare international study programmes – inter-university degrees. It is also necessary to create as many courses as possible in English in order to become more competitive.
- One of the main imperatives (and justifications of university integration) is to shatter professional strongholds and the feudal mentality

concerning the inheritance of academic positions. The point of such university integration is to form new interdisciplinary programmes as fast as possible to correspond to the new and changing requirements of domestic and foreign business, and the increasing specific needs of the clients, that is, the students.

- Trends III mentions the possibility of setting up international commissions for granting doctorates, or the foundation of international doctoral courses, so as to avoid the tutorial work that prevails in most European countries.
- It is necessary to activate the work of the existing Croatian Science, Education and Technology Foundation as soon as possible. One of the priorities of this foundation should be the foundation of a popular science magazine to inform the public about contemporary interdisciplinary trends.

#### Annex 1 Comparisons among the candidate countries

*Table 1 Higher education systems and degrees (abbreviated)*

Country	HE system		Degree structure at universities		Doctoral studies structure	
	unitary	binary	single	double (BA – MA)	single	double
Bulgaria		x		x	x	
Croatia		x		x	x	
Czech Republic	x			x	x	
Hungary		x	x		x	
Poland		x		x	x	
Romania	x			x	x	
Slovakia	x			x	x	
Slovenia		x		x	x	

*Source: Trends II (Full Report) p. 71*

Table 2 Higher Education qualifications

Country, kind of institution	Qualifications before doctoral courses according to number of years in HE						Doctoral degree	
	+ 1-2 years	+ 3 years	+ 4 years	+ 5 years	+ 6/7 years	Intermediate	Doctoral	Doctoral
Bulgaria/Universities		Specialist	Bachelor	Master				Doctor
Bulgaria/Poly								
Croatia/University			University degree	Medical degree	MSc			DSc
Croatia/Poly		Eng (vocational degree)		Post grad professional degree				
Czech/University and non university		Bachelor		Master				Doctor
Hungary/University	Certificate of higher vocational education			Master	Medical Degree			PhD/DLA
Hungary/Colleges	Certificate of higher vocational education	Diploma						
Poland/Universities		Bachelor	Engineer	Master	Vocational qualification			Doctor
Poland/Vocational		Licence	Engineer					
Romania/Universities		Diploma de absolvire /Bachelor	Diploma for architect or engineer	Magistar DEA				Doctor
Romania/Profesional Studies		Diploma de absolvire						
Slovakia/Universities		Bachelor	Bachelor or Master	Meng	Vocational qualification			Doctor
Slovenia/Universities		Vocational diploma	University degree	Specialisation degree	Master, vocational qualification			Doctor
Slovenia/Vocational colleges		Vocational certificate						

Source: Trends II (Full Report) pp. 72-5

Table 3 Access to Higher Education (*numerus clausus*)

Country	Enrolments into higher education institutions	Limited enrolment
Bulgaria	General requirements (secondary school leaving certificate) and special conditions (entrance exam) organised by the given institute.	No information.
Croatia	General condition leaving certificate from secondary school and entrance exam set by the higher education institute.	Enrolment quotas for regular studies determined by the Ministry of Science, for "personal use" by the higher education institutes.
Czech Republic	General requirements (recognised secondary school leaving certificate) and special conditions (entrance exam) organised by the institutions.	No. Enrolment policy is decentralised.
Hungary	General requirements (recognised certificate of secondary school) and special conditions (entrance exam) organised by the institution in two subjects according to choice of course.	Quota for enrolees financed by the state. The institutions can enrol extra fee paying students.
Poland	General requirement (secondary school leaving certificate) and special conditions (entrance exam) organised by the institution.	Not yet, a new law provides for the possibility of introduction in some disciplines.
Romania	General requirement (secondary school leaving certificate) and special conditions (entrance exam) according to criteria of Min of Education.	Set by state, but each establishment can enrol extra fee paying students.
Slovakia	General requirement (secondary school leaving certificate) and special conditions (entrance exam) organised by the institution of the ministry or both.	No, Establishments can introduce a local quota.
Slovenia	Condition for access to curricula in 3 levels is completion of secondary school and baccalaureate as well as an exam from an extra subject. Condition for access to vocational curricula is also the baccalaureate.	No, an institution can introduce local restrictions with state authorisation (in medicine, law, economics).

Source: Trends II (Full Report) pp. 75-8



*Table 4 Credit points transfer system*

Country	Credits system
Bulgaria	No national credits system. So far, has been used by two universities. General introduction under debate as medium term project.
Croatia	No national system of credit points. ECTS being introduced from July 2003.
Czech Republic	No national credits system. General trend to introduced ECTS on the basis of the Socrates and Erasmus programmes, which would be brought in for domestic and not only foreign students.
Hungary	Introduced by 1998 law, obligatory for all establishments, to be applied from September 2002; to be supervised by National Accreditation Council. Will be compatible with ECTS. Institutions to have certain degree of operational autonomy.
Poland	No national credits system. Some institutions have started to introduce ECTS in some disciplines.
Romania	1998 a decentralised credits transfer system introduced on voluntary basis. Compatible with ECTS.
Slovakia	No national credits system. Individual institutions experimenting with ECTS. In future, ECTS to be introduced to all institutions.
Slovenia	No national system. Both universities introducing credits system and using ECTS for student exchange in framework of Socrates/Erasmus, but not on basis of student load, rather hours of teaching.

*Source: Trends II (full report), pp. 78-80*

*Table 5 Fees and grants for studying abroad*

Country	Fees for regular courses	National system of grants for studies abroad
Bulgaria	Fees introduced in 1999. Amount depends on kind of study, set by state. Foreign students also pay fees.	No national grants system; some scholarships offered by foreign institutions as part of bilateral programmes.
Croatia	Most enrolments financed by state, other enrollees pay fees to institutions. Foreign students pay fees. Discussion concerning general system of fee paying.	Government provides scholarships for MS and PhD programmes abroad. Foreign governments give grants according to bilateral agreements.
Czech Republic	At national institutions for full time courses, during the regular period plus one year, no fees. Students that stay longer, pay fees. Foreign students pay for subjects taught in a foreign language. 24 private institutions (non-U) charge fees.	No national grants system; scholarships can be given by depts, institutions, and the ministry, as part of international collaboration.
Hungary	General fee system introduced 1996, but abolished 1998. Large number of places financed by state, for others, institutions charge fees (400 to 2,400 euros per term).	Very limited number of scholarships for study abroad; common as part of bilateral agreements.
Poland	Usual courses, no fees, but evening course, studies outside the main institution and re-taking attract fees. These fees, set by the Ministry, have no connection with student nationality.	No national grants system, but such a system is being introduced for all kinds of study.
Romania	In state institutions, large number of places financed by state, for others, fees are charged (1,500 euros a year). Private institutions charge similarly. Foreign students pay about 400 euros a month, irrespective of ownership of institution.	No grants system, but scholarships may be given by foreign governments as part of collaboration agreements.
Slovakia	No fees for full time courses for Slovak students (only some charges are made for certain services, partial studies, LLL and so on). Fees can be charged to foreigners.	No national grants system for study abroad. Such studies are financed by the students, with assistance from foreign governments via bilateral agreements.
Slovenia	No fees for first-degree course in state universities. All post grads and also first-degree students in private institutions pay fees. Foreign students annually pay between 1,500 and 2,000 euros, for BA, and 2,250 to 3,000 euros for post grad courses.	No national grants system, some scholarships are given according to bilateral agreements.

Source: *Trends II (full report)*, pp. 83-86

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- i For attempts to unify European tertiary education in Europe before the BD, see Zidarić (1996).
  - ii *TRENDS III*, p. 11. According to some unofficial sources, the EU does not intend to include education in the negotiating package of services subject to liberalisation.
  - iii Croatia was not among them, because it was not invited to the ministerial meeting in Bologna. Only at the ministerial conference in Prague in 2001 did Croatia, with the Prague Declaration ([www.eua.uni-graz.at](http://www.eua.uni-graz.at)), the only country in the region to do so, accede to the Bologna Process.
  - iv For the new action plan of the European Commission in the area of uniting higher education, see the European Commission, 2003. It includes the expansion of the "European dimension of education" to other continents.
  - v Haug and Kirsten (1999); Haug and Tauch (2001); Reichert and Tauch (2003). All documents are available online: e.g., [www.bologna-berlin.de](http://www.bologna-berlin.de) or [www.eua.uni-graz.at](http://www.eua.uni-graz.at).
  - vi More about ENIC/NARIC at [www.enic-naric.net](http://www.enic-naric.net).
  - vii Recognition of degrees was *de facto* within the jurisdiction of the individual faculties, not the state. Thus in reality special problems were created: first, that the faculty did not recognise the diplomas of very reputable institutions, especially those with a three year course, especially British institutions, such as the LSE, with the excuse that the courses are not identical; secondly, that a student whose diploma is not recognised by one university simply goes to another with the same application.
  - viii In fact, it was the alleged demand of Europe that was the main motive for the new law to be passed without any very great public discussion, while previous attempts at passing a law, without the stamp of the EU, met with enormous resistance from the science and tertiary level institutions.
  - ix "On average (for all scientific areas) there are almost 18% of scientists who have published nothing, i.e., 1,160 doctors of science who have published nothing in six years. Among employees, there are the most non-productive doctors of science between 54 and 62 years of age" (Jovičić [et al.], 1999:520-522). See also in Andreis (1998) and Klaić (1998).
  - x According to unofficial reports, some such existing programmes at the level of post-graduate studies – like the course in European law that is held in collaboration with Paris Sorbonne III and the Law Faculty in Zagreb – have shown that the students are better pleased with domestic teachers, and this is a kind of gain, if of an abstract nature.

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