1 Setting the scene: the national education system

The education system in Croatia comprises approximately 815,000 children and youth enrolled at all education levels: from kindergarten to higher education. In general, there are four levels of education: pre-primary education, primary education, secondary education and tertiary education.

Pre-primary education (which includes nursery, kindergarten and ‘little school’) starts from the age of one year and lasts up until the entering primary school at the age 6 or 7. The last year of pre-primary education (pre-school education; ‘little school’) comprises a preparatory year for entrance to primary school. Pre-primary education is not obligatory and the number of children attending pre-primary education institutions in 2004/2005 is 88,930, which means that about 39% of pre-school children are enrolled in some form of pre-primary education. There are 290 state-run kindergartens plus 28 primary schools with a pre-school programme, 100 privately-run kindergartens and 49 kindergartens run by various religious organisations. All pre-primary education programmes are verified and approved by the Croatian Ministry of Science, Education and Sports (hereinafter: the Ministry).

Children enrol in primary/elementary education at the age of 6 (7). Primary education is compulsory, lasting for eight years (8 grades). It is divided into two levels: lower primary school (grades one to four) with classroom teachers; and upper primary school (grades five to eight) with subject teachers. There are 391,744 children enrolled in primary schools. The national curriculum for primary education is unique for the whole country.

After finishing elementary education, pupils can continue their education at the secondary level. The total number of pupils enrolled in some form of secondary education is 192,076, which is about 95% of young children between the ages of 15 and 18. There are four main categories of secondary schools, which differ in their educational goals and in the duration of schooling. Comprehensive secondary schools (gymnasiums) last for four years and prepare pupils for further education at the tertiary level (at universities or colleges). 26.62% of the total number of secondary school pupils attends comprehensive secondary schools. There are some

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mild differences between these schools e.g. some give more emphasis to modern or classic languages and social sciences while others give more emphasis to mathematics and natural sciences, and there are others that have a balanced curriculum of these subjects. The vocational secondary school (for polytechnic, economics and business, medical, tourism, applied arts etc.) also last for four years and comprise about 46.5% of the secondary school population. These schools prepare pupils either for work or for further education at the tertiary level. There are also three-year vocational schools (craft schools and industrial schools) which prepare pupils for various handicrafts.

Tertiary education takes place at higher education institutions (six universities, six polytechnics and 12 vocational colleges) and the total number of enrolled student is 126,322. Up until this academic year (2005/2006), the majority of higher education institutions had a four-year study programme while, from this year onwards, through the implementation of the Bologna process at Croatian universities study programmes will have a two-cycle structure: a BA degree (mainly a three- or four-year study programme ending with a diploma) and an MA degree (mainly one or two years after the first cycle). After obtaining an MA degree, students can continue their education at the doctoral level (three years) or at the professional (advanced) master’s level.
**Figure 1.** The Education system in Croatia

<table>
<thead>
<tr>
<th>Grade</th>
<th>Age</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>13</td>
<td>subject</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
<td>teaching</td>
</tr>
<tr>
<td>5</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>Age</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>classroom</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>teaching</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

- **Pre-school education**
  - Pre-school ('little school'): age 6
  - Kindergarten: age 3-6
  - Nursery: age 1-3
2 Teachers at a glance

2.1 Historical overview of the teaching profession

The history of institutionalised teacher training in Croatia can be traced back to the second half of the 18th century (Vizek Vidović, Vlahović-Šteitić, 2003). The first preparatory courses for teachers started in 1775 in the northern Croatian town of Bjelovar and in the next year (1776) the first public school was established in Zagreb, admitting several students to be specially trained for teaching vocation. The first fully specialised institution for teacher education ‘The Teacher’ Training School’ was established in Zagreb in 1849 and had a two-year programme. The subject teachers who taught at the high school level (gymnasium) were educated at the University of Zagreb, Faculty of Philosophy, established in 1874. In the same year new legislation on elementary education was also declared, proclaiming the four-year elementary school as obligatory.

At the beginning of the 20th century teacher education was extended and the teachers’ schools became four-year institutions. By 1920 there were 7 teachers’ secondary schools altogether; four of them enrolling only male students and three only female students. In 1929, the teachers’ school was prolonged from four to five years, while in 1936 teacher education was raised to a higher level when a two-year Teachers’ College was established in Zagreb. This college only admitted teachers who had graduated with an ‘A’ or ‘B’ from the teachers’ secondary schools and had at least three years of teaching practice.

By the end of 1946 there were 17 teachers’ schools in Croatia, but the duration of teacher education was again shortened to four years. In the same year, the seven-grade elementary school was proclaimed as obligatory which resulted in a great shortage of elementary school teachers and, due to that, shortened one-year training for teachers was provided for those who had secondary school diplomas.

In 1952 teachers’ schools were again extended to a five-year programme, while in 1955 the obligatory elementary school was prolonged to eight years. The need for better-educated subject teachers was constantly increasing which led to the widening of the pedagogical group of subjects at the teachers’ colleges, as well as at the faculties for subject teachers at the University of Zagreb (Faculty of Philosophy and Faculty of Natural Sciences and Mathematics). In 1956 a new programme was proposed – a programme that included courses in developmental and educational psychology, general pedagogy with didactics, the sociology of education and special methodologies of two subjects. One-year postgraduate practice under the supervision of a mentor was also introduced and it ended with a state exam and final certification for teaching (Franjković, 1958).

The establishment of the Republic of Croatia as an independent state in 1991 brought about the need for a wide range of legislative changes in all parts of the
social system, including education. During the last decade the main legal documents concerning the education system (from pre-school to higher education) have been adopted. The big change concerning teachers’ pre-service education came in 1992 when teachers’ colleges preparing classroom teachers were incorporated within the system of higher education and this change brought about the extension of studies for future classroom teachers from 2 to 4 years. Another major change is taking place at this moment with the ECTS system being implemented in the Croatian higher education system, which also includes pre-service teacher education.

The last decade has also been characterised by a high level of centralism in the decision-making split between two ministries – the Ministry of Education and Sports (in charge of pre-school, primary and secondary education) and the Ministry of Science and Technology (in charge of higher education). In 2003 these ministries merged into one – the Ministry of Science, Education and Sports.

A recent tendency in the Croatian education system is the enhancement of pluralism through the possibility of establishing acknowledged and accredited private education institutions from kindergarten to higher education. Multiculturalism is also recognised as an important issue and is continuously supported at pre-primary, primary and secondary school levels.

Social discourse, especially with regard to primary and secondary education, still continues with some disagreements concerning the basis for necessary changes. The higher education area, including teacher education, is undergoing major changes in order to improve its quality and accomplish harmonisation with the European higher education area since in 2001 Croatia obliged itself to introduce the Bologna process in its higher education system. The recent law on scientific activity and higher education (Zakon o znanstvenoj djelatnosti i visokom obrazovanju) from July 2003 recognises the need to include Croatian science and education in the European research and higher education area and incorporates the main legal presumptions for a transformation according to the Bologna process. Teachers’ colleges and faculties are faced with a comprehensive transformation of study programmes which implies deep structural and conceptual changes in order to educate competent and reflective professionals. In this area, the emphasis should certainly be on teaching competencies i.e. on appropriate learning outcomes regardless of the structure of the study.
2.2 National regulations on teachers’ qualifications

Teachers in Croatia are employed in public institutions and their qualifications and professional development are regulated by several legislative documents and regulations acquired at the national level. The main legislative acts on teachers’ qualifications and professional requirements are the Primary Education Act (Zakon o osnovnom školstvu, Narodne novine, 2003) and the Secondary Education Act (Zakon o srednjem školstvu, Narodne novine, 2003).

As mentioned, the Croatian system of pre-service teacher education is currently undergoing significant changes (according to the Bologna process). Therefore, we will present a parallel overview of the ‘old’ (pre-Bologna) and new systems since the first generation of ‘Bologna students’ is enrolled in this academic year (2005/2006) and the majority of students currently enrolled in pre-service teacher education institutions are to graduate after having completed a pre-Bologna study programme.

According to the pre-Bologna system of pre-service teacher education, the qualification required from teachers employed in pre-school education is the Diploma for a pre-primary teacher (after two years of study). Classroom teachers in lower primary school (grades 1-4) must have a Diploma of a primary school classroom teacher, obtained after four years of study. Upper primary and secondary subject teachers (in academic disciplines) are educated at the different faculties depending on their subject area. After completing the study programme, students obtained a graduate diploma with the title Professor of a particular subject and, where educational sciences and teaching methodologies (metodika) were not part of their study programme, they had to obtain additional education and training at a teachers’ college. Teachers at secondary vocational schools (for polytechnic, medical and economic education) were upon their graduation from the respective faculties awarded a BSc diploma and had to obtain additional education in the educational sciences and teaching methodologies in order to become a teacher. The same applied for teachers in a vocational secondary school for industrial subjects and crafts, with the exception that those teachers did not have to hold a higher education degree if such a degree does not exist in their field i.e. they have to hold at least a secondary school certificate from the respective type of school. Special education teachers are educated at the Faculty of Educational and Rehabilitation Sciences and their main orientation is not strict teaching but clinical and rehabilitation work with pupils.

There are no requirements for teachers to continue education at the postgraduate level (for a more detailed analysis, see Chapter 4).

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2 The title Professor is obtained after completing subject teacher education (e.g. Professor of Mathematics, Professor of Biology, Professor of History etc.) and it is not equivalent to the title held by professors at the universities.
Besides the mentioned qualifications (diplomas/degrees), after completing studies all novice teachers are also obliged to undergo a one-year induction period supervised by a teacher-mentor and regulated by the Ministry. This induction period is followed by the evaluation of a beginner teacher and, if the commission’s evaluation is positive, the beginner teacher takes the State Certification Exam before Ministry’s commission in order to become a fully qualified and certified teacher.

After becoming a certified teacher, there are two more advancement levels: teacher-mentor and teacher-counsellor. Requirements for the promotion of teachers are defined at the national level by the Regulatory Act on the Promotion of Teachers in Primary and Secondary Schools (Pravilnik o napredovanju učitelja i nastavnika u osnovnom i srednjem školstvu, 1995) and the elements taken into consideration for advancement are an evaluation of teaching quality and the enhancement of learning displayed by candidates, involvement in extracurricular activities and continuous professional development (for a more detailed analysis of advancement levels, see Chapter 4.2).

The evaluation of teaching quality and a teacher’s as well as a school’s work in general falls within the domain of the School Inspectorate (prosvjetna inspekcija) which is an autonomous unit within the Ministry of Science, Education and Sports regulated by the School Inspectorate Act (Zakon o prosvjetnoj inspekciji). This inspectorate is responsible for monitoring implementation of the laws in preschool institutions, primary schools and secondary schools. The inspection is based on the school’s action plan for the current year. All citizens directly or indirectly involved in the education system are free to submit their complaints to School Inspectorate regarding any irregularities in an individual’s or school’s work. Inspectors are obliged to monitor education work on a regular basis and to promptly react to every complaint. In the context of teachers, inspectors monitor whether they are acting within required educational and professional standards by focusing on the documentation provided by the teacher or school principal.

### 2.3 Main statistical data on teachers

The total number of teachers employed at pre-primary, primary and secondary school levels in 2004/2005 was 82,120. More detailed information is provided in Table 1.
Table 1. Teachers in service by type of school and gender (2002/2003)

<table>
<thead>
<tr>
<th>Types of schools</th>
<th>Women (%)</th>
<th>Men (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school institutions</td>
<td>12,298 (96,3%)</td>
<td>470 (3,7%)</td>
<td>12,768</td>
</tr>
<tr>
<td>Elementary schools</td>
<td>21,897 (77,9%)</td>
<td>6,228 (22,1%)</td>
<td>28,125</td>
</tr>
<tr>
<td>Special elementary schools</td>
<td>597 (82,9%)</td>
<td>123 (17,1%)</td>
<td>720</td>
</tr>
<tr>
<td>Secondary schools</td>
<td>13,041 (64,9%)</td>
<td>7,058 (35,1%)</td>
<td>20,099</td>
</tr>
<tr>
<td>Gymnasium</td>
<td>3,288 (71,5%)</td>
<td>1,312 (28,5%)</td>
<td>4,600</td>
</tr>
<tr>
<td>Vocational (4 years)</td>
<td>5,398 (65,5%)</td>
<td>2,843 (34,5%)</td>
<td>8,241</td>
</tr>
<tr>
<td>Vocational (3 years)</td>
<td>3,490 (58,5%)</td>
<td>2,477 (41,5%)</td>
<td>5,967</td>
</tr>
<tr>
<td>Art schools</td>
<td>865 (67,0%)</td>
<td>426 (33,0%)</td>
<td>1,291</td>
</tr>
<tr>
<td>Special secondary schools</td>
<td>187 (60,5%)</td>
<td>122 (39,5%)</td>
<td>309</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>61,061 (74,4%)</td>
<td>21,059 (25,6%)</td>
<td>82,120</td>
</tr>
</tbody>
</table>


The figures presented in the previous table indicate that women outnumber men in both primary and secondary education i.e. like in all European countries, women account for the majority of teachers in Croatia as well.

The distribution of teachers by age groups in Croatian and European primary and secondary education is provided in Figures 2 and 3.

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3 The source of the EU data is Eurydice. Key Data on Education in Europe. Section II – Teachers. Brussels: Eurydice, 2005. Croatian averages are based on data collected within the research project Development of lifelong education model for teachers sponsored by the Croatian Ministry of Science, Education and Sports and The Open Society Institute – Croatia. The research was conducted in 2003 on a representative sample of 10% of Croatian primary and secondary education teachers.
Primary school teachers in Croatia, compared with their European colleagues, are somewhat older (Figure 2.). The main difference between Croatian and European primary school teachers can be observed in the last two age categories – in most European countries the largest proportion of European primary school teachers (29.2%) fall into the age group ‘40–49’, while the largest proportion of Croatian teachers (39.3%) are in the ‘50 or above’ age group.
On the other side, the situation at the secondary education level is somewhat different (Figure 3.). While in most EU countries secondary school teachers are, on average, older than those in primary schools, in Croatia the opposite applies i.e. the population of secondary school teachers is younger than the population of those working at primary schools. The main difference between Croatian and European teachers is in the age group ‘30-39’, where the average EU proportion is 24.3% whereas the average proportion of Croatian secondary school teachers who fall into the same age group is 30.6%.

Like in most EU countries, the upper age limit for the official retirement of teachers in Croatia is 65 years of age. One can also retire before the age of 65 i.e. after 30 years of service one can retire earlier, and the minimum number of years of service to fulfil the formal requirements for retirement is 15. Having in mind the average age of teachers in primary schools, there is a possibility that in the near future Croatia could be faced with a lack of primary school teachers since a large proportion of them is close to retirement age.

Teachers’ salaries depend upon their experience and status. The lowest salary in education is, on average, EUR 550 for novice teachers while the highest salary, for a teacher-counsellor, is on average EUR 720. It should be noted that the lack of financial resources has led to the very poor material status of schools and teachers, especially experienced ones, which is evident in a comparison with some other groups of employees in other public institutions e.g. professionals in health or justice departments.

Besides the mentioned material issues, there are also some issues regarding the social status of the teaching profession. Namely, the teaching profession used to be very respectable and privileged in the past, but these days it is no longer perceived that way, and it seems that this problem exists in some other European countries as well. Croatian teachers often feel unsatisfied and unprotected and they expect the authorities (especially the Ministry) to make some efforts in order to emphasise the importance of their profession and their role in society since they perceive that there is no balance between their status and the increasing complexity of their relatively demanding profession.

3 National system of pre-service teacher education and training

As mentioned, teacher education in Croatia is undergoing significant changes with the Bologna process being implemented at higher education institutions beginning with this academic year (2005/2006), and at this moment we are in a certain ‘gap’ between the ‘new’ and ‘old’ teacher education systems. Due to that, we will offer a parallel overview of the main characteristics of present and past study programmes for pre-service teacher education, and one should keep in mind that the current teacher population was educated in the ‘old’ (pre-Bologna) teacher education
system. Students enrolled in the first year of study this academic year will be educated according to the new programmes and we can expect the ‘new generation’ of teachers to enter schools in about five years.

The pre-service education of teachers differs with regard to education level (pre-primary, lower and upper primary and secondary), but all institutions for pre-service teacher education have similar admission procedure. It should be noted that the number of first-year students enrolled at all higher education institutions of pre-service teacher education is limited by the Ministry’s quotas. Due to that, students are (after twelve years of schooling) enrolled on the basis of admission scores which are usually composed of entrance exam scores and secondary school grades in relevant subjects.

### 3.1 Institutions for pre-service teacher education in Croatia

There are two main providers of pre-service teacher education: teachers’ colleges (including Teacher Education Academy at the University of Zagreb, which in January 2006 became a faculty and is currently in the process of changing its name to the Teachers’ Faculty) and various faculties which provide the opportunity to take courses in basic educational sciences and teaching methodologies in order to become a subject teacher (in e.g. chemistry, biology, foreign languages etc.). These faculties are more focused on basic academic disciplines (subject areas) and less attention is devoted to educational sciences compared to teachers’ colleges, and only a minority of these students are prospective teachers.

The Teacher Education Academy and teachers’ colleges educate pre-primary teachers and lower primary school teachers (classroom teachers), while teachers’ faculties educate subject teachers for upper primary and secondary schools, as well as special education teachers. In Croatia there are 9 teachers’ colleges (7 of which are within universities) and teaching staff consists of 162 teachers. Teaching staff members are not required to hold advanced degrees except for full professors, who must hold a Doctorate. The total number of students enrolled in teachers’ colleges in 2004 was 4,038.

The number of faculties for pre-service teacher education at the university level is 13 and it should be noted that these faculties also provide the education of experts in other academic disciplines as well. There are 1,423 members of teaching staff and they are expected to advance in academic degree and to develop as researchers and scientists in their discipline. In 2004, the total number of enrolments in these faculties was 15,647.

The total number of students enrolled at the Teacher Education Academy and teachers’ colleges in the 2004/2005 school year was 4,950 which is 5.7% of all students enrolled in the overall higher education system. It should be noted that this
percentage *only* refers to students enrolled in pre-school teacher education or classroom teacher education (lower primary school). Regarding the number of students-prospective subject teachers (at primary or secondary levels), the situation is somewhat more complicated. Namely, these students are enrolled at one of the faculties which provide education in a basic academic discipline (e.g. sciences, foreign languages, history etc.) as well as basic teacher education (a more detailed description is provided in Chapters 3.4. and 3.5.). Further, each student can decide for themselves whether they are going to take courses in basic teacher education or only courses in their academic discipline which makes any attempt to estimate the number of enrolled prospective subject teachers very difficult (and practically impossible). In order to avoid any incorrect estimates, in the next table we will only provide statistical data for students enrolled at the Teacher Education Academy and teachers’ colleges i.e. for pre-service and classroom teacher education.

**Table 2.** Total number of enrolled and graduated students at the Teacher Education Academy and teachers’ colleges by gender (2004/2005 school year)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Total enrolment of students</th>
<th></th>
<th>Graduated students (<em>Diploma</em>)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Women (%)</td>
<td>Men (%)</td>
<td>Total</td>
</tr>
<tr>
<td>Teachers’ Academy</td>
<td>1,582</td>
<td>1,490 (94,2%)</td>
<td>92 (5,8%)</td>
<td>520</td>
</tr>
<tr>
<td>Teachers colleges</td>
<td>3,368</td>
<td>3,139 (93,2%)</td>
<td>229 (6,8%)</td>
<td>836</td>
</tr>
<tr>
<td>Total</td>
<td>4,950</td>
<td>4,629 (93,5%)</td>
<td>321 (6,5%)</td>
<td>1,356</td>
</tr>
</tbody>
</table>


### 3.2 Pre-primary teacher education

The education of pre-primary teachers is organised at the Teacher Education Academy (Teachers’ Faculty) and teachers’ colleges within a separate department and lasts for two years. Academic disciplines are represented in the curriculum by a 25% share, educational sciences by 30%, teaching methodology (*metodika*) by 30% and teaching practice by 10%. There are also some optional classes. Teaching practice is performed in didactics classes as a practicum at college premises and in weekly block practice in kindergartens (observation and microteaching). The main types of students’ assessment are written and oral exams in academic disciplines and educational sciences, while in the subject methodology a student is required to
plan and perform a classroom lesson followed by an oral exam. After completing all exams (ten to twelve per year) students write a final thesis and obtain the certificate *Diploma for a Pre-primary Teacher*.

Starting this academic year (2005/2006) studies for pre-primary teachers are becoming a three-year study ending with a BA degree (the number of ECTS accumulated is 180). Special emphasis in the new curriculum is placed on a more student-oriented approach to teaching and project work. The proportion of specific disciplines in the syllabus for pre-primary teachers is shown in the following table.

**Table 3.** Number of hours and proportion of specific groups of courses in the syllabus for pre-primary teachers (three-year study programme)

<table>
<thead>
<tr>
<th>Group of courses</th>
<th>hours</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic disciplines</td>
<td>660</td>
<td>28%</td>
</tr>
<tr>
<td>Educational sciences</td>
<td>630</td>
<td>27%</td>
</tr>
<tr>
<td>Subject methodology</td>
<td>750</td>
<td>32%</td>
</tr>
<tr>
<td>Optional courses</td>
<td>300</td>
<td>13%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,340</td>
<td>100%</td>
</tr>
</tbody>
</table>

Unlike before, pre-primary teachers will also have the opportunity to continue their education if they wish to teach in lower primary schools. Students can also enrol in an additional education in several modules (e.g. teaching foreign languages at pre-primary level).

### 3.3 Classroom teacher education – lower primary school

Pre-service education and training of lower primary teachers (classroom teachers grades 1 to 4) takes place at the Teacher Education Academy and teachers’ colleges (most of which are within the universities). Until recently, education for classroom teachers lasted 4 years and, beginning with this academic year (2005/2006), most institutions have acquired 4+1 or are considering implementing a 5+0 model with special emphasis on the research component of teacher education and partnerships between universities and schools where students have teaching practice. According to an integrative approach in the lower primary school, students are taught in six main teaching disciplines: language and literature, mathematics, the social and natural sciences, music, arts and physical education. Their proportion in the overall syllabus for classroom teachers is shown in the following table.
Table 4. Number of hours and proportion of specific courses groups in the syllabus for classroom teachers (five-year study programme)

<table>
<thead>
<tr>
<th>Group of courses</th>
<th>hours</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic disciplines</td>
<td>1,050</td>
<td>30%</td>
</tr>
<tr>
<td>Educational sciences</td>
<td>615</td>
<td>18%</td>
</tr>
<tr>
<td>Subject methodology</td>
<td>825</td>
<td>23%</td>
</tr>
<tr>
<td>School practice</td>
<td>252</td>
<td>7%</td>
</tr>
<tr>
<td>Optional courses</td>
<td>780</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,522</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

After fulfilling the course requirements and passing all exams, students have a final exam (written thesis and an oral examination) and receive a Diploma of a Primary School Teacher. Students who accumulate 240 ECTS and write a thesis can become a BA (undergraduate level) and can work as assistants in education. Students who accumulate 300 ECTS and write a thesis (graduate level) receive an MA in primary education.

The importance of lifelong learning and professional development of teachers is also recognised and, accordingly, the postgraduate education of teachers will also play an important role. The new study curriculum for classroom teachers defines teaching goals in terms of students’ competencies and much more emphasis is placed on educational subjects (e.g. work with gifted children and with children with learning and behavioural difficulties, communication skills, research methods in education).

It should be noted that up until the previous academic year classroom teachers did not have the opportunity to continue their education at the postgraduate level within their institutions. They could only enrol in postgraduate studies (MA and PhD degrees) at the Department of Pedagogy of the Faculty of Philosophy in Zagreb, but they had no opportunity to continue postgraduate education at the institutions of their basic pre-service teacher education. In the 2004/2005 academic year, the Teacher Education Academy introduced postgraduate studies (Towards the Modern School) and the number of interested applicants was much greater than the number of places available, implying there is substantial interest among teachers for further education at the postgraduate level.
3.4 Subject teacher education – upper primary and secondary schools (in academic disciplines)

Subject teachers at both levels (upper primary and secondary level) are educated at different university faculties depending on their subject area (e.g. subject teachers in mathematics or physics are educated at several science faculties, history teachers are educated at several faculties of philosophy etc.).

Up until this academic year pre-service education for subject teachers lasted four years and the study programme was usually a combination of two academic subjects (‘two majors’). The percentage of study time devoted to academic disciplines is 70-80%, while 3-7% is devoted to educational sciences. For each academic discipline (subject) the curriculum includes subject didactics and teaching practice (7-12%). Students could enrol in the higher year of study if they had fulfilled all courses requirements and passed all required exams (ten to twelve per year).

The simultaneous model of study has now been replaced by a successive model, according to the 3+2 scheme. At undergraduate level, students have to accumulate 180 ECTS (BA) and at graduate level 120 (M.Ed. in a respective subject). At undergraduate level students are only educated in an academic discipline, and subjects in educational sciences and subject didactics form part of graduate studies i.e. they are introduced in the seventh semester (a minimum 60 ECTS are obtained for contents in educational sciences and methodologies). The organisation of courses and teaching methods are more flexible, there are more optional courses and project work and teaching goals are defined in terms of student competencies.

3. 5 Vocational secondary schools for polytechnic, medical and economics education

Pre-service education for teachers in vocational courses takes place at the respective faculties. Studies in a professional discipline lasted four years while the future study programme is organised according to the 3+2 scheme. Initial education at these faculties does not include courses in educational sciences and didactics since they are responsible for the education of professionals in other fields. Upon obtaining a BSc degree, candidates can be admitted to further educational studies at teachers’ colleges if they wish to apply for teachers’ positions. The additional educational studies include courses in educational sciences (educational psychology, pedagogy, didactics) and teaching methodologies. In the future, these courses will also be included in the ECTS system and will be taken after the MA level.
3.6 Vocational secondary schools for industrial subjects and crafts

Vocational school teachers for industrial subjects and crafts, unlike other teachers, do not have to hold a higher education degree if no higher form of education exists in their field. In that case, they have to hold at least a secondary school certificate from the respective type of secondary school. Upon completing the required secondary (or higher) education, they have to obtain additional education, the same as for vocational teachers for polytechnic, medical and economics education (see Chapter 3.4).

3.7 Special education teachers

Teachers working with children with difficulties are educated at the Faculty of Education and Rehabilitation Sciences. According to the old scheme (four years) as well as the new one (3+2), first-year students can choose between three professional profiles: logopaedics, behavioural disorders and rehabilitation. Students from other social or humanistic faculties can also continue their education at graduate level (after completing the required additional exams) in order to become special education teachers.

3.8 Partnerships with schools

Partnerships of pre-service teacher education institutions and schools (and kindergartens) are regulated on the basis of formal agreements and aim to provide teaching practice for prospective teachers. There are two types of partnership: partnership at the pre-service education level, and partnership at the in-service education level.

During pre-service education, students spend the required number of hours in teaching practice (usually represented by 7-12% of a total study programme) and each partner-school has mentors assigned to students.

After graduation (in-service education), each novice teacher also has a mentor who monitors their development during a one-year induction period. With regard to co-operation between schools and universities it should be noted that these partnerships are now being strengthened through co-operation with a larger number of schools in order to provide better quality and more mentors for students since the current mentors-students ratio seems to be insufficient i.e. there are too many students assigned to one mentor which certainly affects the quality of the induction period.
Another important issue should also be taken into consideration, namely the quality of teachers who are assigned to be mentors. It is very important that they are motivated for this responsible role and, besides that, they should also have the opportunity to obtain additional education i.e. special training in order to improve their mentoring skills.

All institutions of pre-service teacher education who participated in the research project ‘Enhancing Professional Development of Education Practitioners and Teaching/Learning Practices in CEE Countries’ (10 institutions) have established formal co-operation with schools based on agreements, which is as expected since the institutions for pre-service teacher education are obliged to provide a base for the practical placement of their students during their initial education. According to the majority of institutions (7), that co-operation is mainly intended to achieve two main goals. One is to provide opportunities for the school-based teaching of their students and another reason is to provide opportunities for the practical placement of students. Two institutions mentioned opportunities for the employment of their graduates, while two other institutions pointed out the importance of attracting school teachers to enrol in various in-service courses and programmes.

3.9 Teachers’ and institutions’ opinions on pre-service teacher education – reflections on the questionnaire results

The sample of teachers who filled in the questionnaire within this research comprised 205 teachers from pre-primary, primary and secondary education. For 84.4% of surveyed teachers, pre-service education included initial teacher education parallel to an academic discipline. On a more specific level, initial teacher education was included in a study programme for 85.7% of pre-primary teachers, 93.7% of classroom teachers, 89.4% of upper primary subject teachers and 97.5% of gymnasium teachers. As expected, 73.3% of secondary school teachers in vocational subjects did not have initial teacher education during their pre-service education and they thus had to attend additional courses in educational sciences and teaching methodology to become certified teachers.

Regarding teachers’ general opinions about the system of pre-service education and training in Croatia, 35.3% of teachers see it as not so bad but they think that the study programmes should put more emphasis on specialised education competencies (e.g. teaching, learning and assessment methods and communication skills). 27.5% of teachers think that the study programmes should focus more on practical experiences in relation to theoretical contents and 26.5% of teachers think that the Croatian system of pre-service education should be radically reformed in order to provide all key competencies for teachers. Only 5.4% of the surveyed teachers think that the emphasis should be on subject contents, while 3.4% of the surveyed teachers think that no major changes are needed.
Teachers’ perceptions of pre-service teacher education in the context of acquired knowledge, skills and competencies at the beginning of their professional career indicates that the majority of teachers (59%) considers that their pre-service education was adequate, but they needed lots of practical experience at the beginning. 21.5% of teachers perceive their pre-service teacher education as adequate in terms of the demands of their profession, while 16.6% of surveyed teachers think that their education was inadequate in the context of professional demands.

Regarding the existing system of pre-service teacher education in Croatia, five out of ten institutions of pre-service teacher education say that they continuously improve their study programmes but there is still a need to make them more comparable and compatible with European trends. Three institutions believe their study programmes have proven themselves in quality and efficiency terms, but it is time for a gradual comprehensive curricular reform to achieve compatibility with European trends. Only one institution states there is no need for radical reform while, in the opinion of one institution, the existing study programmes are obsolete and there is an urgent need for a radical reform. As the main obstacles to reforming and modernising pre-service teacher education the majority of institutions mention the lack of financial support, in particular for equipment and facilities, and the obsolete or inadequate national regulations. Some ‘practical’ problems such as a lack of facilities and academic staff have become an everyday issue in Croatian public discourse since the new study programmes also demand the new organisation of courses and more individual work with students in smaller groups. Due to this, the Ministry has approved finances for new teaching staff at higher education institutions. But the problem with equipment and facilities still needs to be resolved in order to provide the required quality of higher education. More detailed analysis of these results is provided in Chapter 5 which discusses recent developments and plans in teacher education and training.

In conclusion we may say that the participants in this study are quite aware of the importance of continuous changes to pre-service teacher education and training. It should also be noted that all surveyed teachers had obtained their pre-service education according to the ‘old’ study programmes and their objections about the lack of training in specific competencies, besides the subject contents, relate to these old study programmes. The new programmes include many more courses in educational sciences as well as in specific topics covering all aspects of the teaching profession, but the effect of changes on students’ competencies will be seen in several years’ time.
4 National system of in-service teacher education and training

4.1 Institutions of in-service teacher education and training

In-service teacher education in Croatia is mainly organised and structured by the Institute for Education, a state-run institution which functioned within the Ministry of Science, Education and Sports until January 2005 when it became an autonomous institution. At the beginning of each school year the Institute for Education offers teachers a catalogue of thematic courses usually defined through co-operation between the Institute’s counsellors and field experts from the universities. The main themes included in the catalogue programmes relate to academic disciplines and educational sciences.

Higher education institutions for pre-service teacher education also organise in-service teacher education and training and that is the case for 6 of the 10 institutions surveyed within this research project.

Besides the Institute for Education which is state-run and the higher education institutions, several non-governmental organisations (NGOs) provide various forms of in-service teacher training e.g. Forum for Freedom in Education (Forum za slobodu odgoja), Step by step (Korak po korak), Society for Psychological Assistance (Društvo za psihološku pomoć) and others covering different aspects of in-service teacher education and training.

The Forum for Freedom in Education is an NGO that has been active since 1992 and its members are teachers, education experts, parents and students. The main goal of the Forum is to improve the quality of education in Croatia and to make it compatible with the education standards of modern democratic societies. One of the Forum’s most prominent projects for teachers is certainly Reading and Writing for Critical Thinking developed in collaboration with the International Reading Association (IRA). This project aims to introduce new, student-centred teaching methods in order to encourage students’ active learning, classroom interactions and critical thinking. These methods are applicable at all education levels.

Step by Step is an NGO that has been active since 2000 and is a member of the International Step by Step Association. Its main activity is to promote quality in the education system through the in-service training of teachers at pre-primary and primary levels with a special emphasis on partnerships between schools and parents/families. On a regular basis Step by Step publishes two journals: ‘Child, kindergarten, family’ intended for educators and other experts in pre-primary education, and ‘Child, school, family’ intended for educators and other experts in lower primary education.

The Society for Psychological Assistance is an NGO that has been active since March 1993. It is specialised in issues regarding mental health and the training of
professional and non-professional mental health care providers. Some of their seminars include the training of teachers (at all education levels) with an emphasis on the role of the school context in preventing behavioural disorders and providing support and consultation for teachers and schools concerning students’ psychosocial competencies and well-being.

In-service teacher education and training also takes place at so-called ‘teachers’ activity groups’ which are organised by teachers from within the same educational field, e.g. the activity group of science teachers, foreign language teachers, classroom teachers etc. At these seminars and meetings teachers have the opportunity to co-operate and exchange experiences and examples of good practice in their work with students.

The quality of various types of in-service teacher education and training (especially those prescribed as obligatory) is often criticised by teachers. Namely, teachers frequently complain that these lectures and seminars do not meet their needs and are too theoretical. Teachers also complain that there is too much curriculum and subject-oriented in-service training, instead of which they would rather have more seminars on issues regarding some other aspects of their complex profession, e.g. working with children with learning and behavioural difficulties, working with gifted children, classroom management, communication skills and the use of new technologies.

Another problem concerning in-service education and training is the lack of financial resources since the school budget cannot provide enough resources for all in-service courses that teachers are interested in. Most of the school budget assigned to in-service teacher education is provided through local community resources i.e. by the local government education department, while the teachers’ activity groups are sponsored by the Ministry. There are many teachers who have the desire to continuously work on their professional development but they are often limited by the lack of finances. There are only a few teachers who can afford to pay for additional in-service education by themselves and the head teachers also complain that the school budget limits the professional development of teaching staff since there is not enough money to pay fees for all interested teachers.

Regarding postgraduate teacher education as a form of in-service education, there is still no real opportunity for Croatian teachers to obtain postgraduate education in educational sciences since there is no such postgraduate programme for all teachers (as already mentioned in Chapter 3.3).

Pre-primary teachers who graduated after two years of study cannot enrol in postgraduate studies but in the future these students will have the opportunity to continue their education at the graduate and postgraduate levels at the Teacher Education Academy.
Lower primary school teachers (classroom teachers) who graduated from the Teacher Education Academy and teachers’ colleges could (up until last year) only enrol in postgraduate education at the Department of Pedagogy of the Faculty of Philosophy at the University of Zagreb. Starting with the previous academic year (2004/2005), classroom teachers as well as subject teachers have the opportunity to continue their education at the postgraduate level at the Teacher Education Academy (University of Zagreb).

Upper primary and secondary school teachers may continue postgraduate education in their academic disciplines (MA and PhD) which does not include any educational sciences, and there is also no opportunity for them to obtain postgraduate education in that field (with some exceptions in the case of foreign language teachers whose postgraduate studies at the Faculty of Philosophy, University of Zagreb, include teaching aspects of their subject).

4.2 Professional promotion of teachers through their continuous in-service education

Teachers are obliged to attend continuous professional education (in academic discipline, teaching methods and pedagogical skills), while the requirements regarding the programmes and organisation of in-service education and training for each educational level are regulated by the Ministry.

The teachers’ advancement system is regulated and defined by the Ministry’s *Regulatory Act on the Promotion of Teachers in Primary and Secondary Schools*. After becoming a certified teacher, one can advance to two more levels: teacher-mentor and teacher-counsellor. Teachers’ advancement is based on an evaluation of their performance in three areas:

− work with students, e.g. creativity in teaching methods, accomplished educational goals, the promotion of human rights and co-operation with other teachers, as well as other participants directly or indirectly involved in the school context;

− extracurricular professional activities – e.g. active participation in professional seminars and conferences, organisation of students’ extracurricular activities, mentorship for novice-teachers and participation in educational research; and

− continuous in-service education and training in programmes prescribed by the Ministry and organised by the Institute for Education, as well as by other providers.

The promotion procedure requires that teachers collect all required written documentation (e.g. certification of attendance at in-service education and training programmes or conferences, published articles etc.) and their work is evaluated by
the teachers’ council and the school’s head teacher, as well as a supervisor from the Ministry.

In order to apply to become a teacher-mentor, besides fulfilling the requirements described above, one has to have a minimum of 6 years of teaching experience, while in order to apply to become a teacher-counsellor, one has to have a minimum of 11 years of teaching experience.

4.3 Reflection on the questionnaire results

As expected (and already mentioned in the previous chapter), most of the surveyed teachers (59%) consider that their pre-service education was adequate to start working at school but, at least at the beginning, they needed a lot of practical teaching experience and in-service education and training. 21.5% of teachers regard their pre-service education as quite satisfactory and adequate to meet the demands of their working position, whereas 16.6% of them consider their education as inadequate.

More than 82% of teachers who responded to the questionnaire had participated in at least three different forms of in-service education and training during the last year, which is no surprise since in-service teacher education in Croatia is obligatory. More specifically, most of them had participated in three to five seminars (39.2%) and 28.4% of teachers had attended six to ten seminars. The proportion of teachers who had attended more than ten seminars is the same as the proportion of teachers who had attended only one or two seminars (15.2%). Only 2% of teachers had not attended any form of in-service teacher education during the last year.

Regarding teachers’ motivation to attend various forms of in-service teacher education and training, most of them (81.3%) said they think it is very important for their professional development. 9.6% of them were motivated by a possible promotion, and 6.1% of them stated that it is relatively boring but obligatory.

Different in-service education and training programmes were in most cases organised by the Ministry of Education and the Institute for Education (59%) and schools themselves (31.8%). Other providers of in-service education and training are less frequently mentioned (non-governmental institutions – 16.7%, higher education institutions – 13.5%, specialised private institutions – 3.2% and specialised organisations in other countries – 0.8%).

Regarding the contribution of in-service education and training courses to their professional development, 50.5% of teachers consider that they partly contributed to their knowledge and skills. 28.7% of participants estimated the contribution of in-service seminars as significant, while 15.8% of teachers say that the knowledge acquired at these seminars cannot be transferred into the classroom. Only 3.5% of
teachers state that in-service seminars have not contributed to their professional development at all.

More than 60% of teachers find it most important or important to participate in school networks (teachers’ activity groups), specialised conferences and courses organised by the Ministry and the Institute for Education, non-governmental organisations and schools. The individual study of professional literature is considered by 81.3% of teachers as being very important or important.

The importance of the topics offered by the in-service education and training programmes is shown in Figure 4.

![Figure 4](chart.png)

**Figure 4.** Percentage of teachers who rated particular topics as very important and important.

We could say that the teachers who participated in this research consider all of the abovementioned topics as relatively important. As Figure 4 indicates, most teachers consider topics covering teaching, learning and assessment methods as very important or important for their professional development. Working with children with special needs, the use of ICT, co-operation with parents and the development of communication skills are also highly rated by the teachers. These results reflect the mentioned need of Croatian teachers to learn more about some other aspects of their profession besides issues regarding their subject area. In this context, we could say that although the sample in this research was quite small, these results certainly reflect the opinion of the majority of Croatian teachers since the same
results were found within the already mentioned research project Development of lifelong education model for teachers which included a representative sample of 10% of primary and secondary school teachers in Croatia.

On the other side, more than half the participants (53.9%) say that the topics they are interested in are only sometimes or rarely offered by in-service education and training programmes. 38.7% of teachers often find programmes to be adequate. There are only 1.5% of teachers who say that they are always offered programmes they are interested in. It seems that the in-service education and training programmes on offer do not meet the needs of a considerable number of teachers and that there should be many more in-service courses covering all aspects of the teaching profession.

It seems that Croatian teachers are very aware of the importance of continuous professional development since only 10.4% of surveyed teachers are quite satisfied with their current education. 35.6% of teachers would prefer to have more in-service education and training courses instead of a higher degree. Although there is no formal opportunity in the Croatian school system for teachers’ promotion after obtaining a degree at the postgraduate level, 21.3% of Croatian teachers would like to enrol in postgraduate MA education in educational sciences and 9.9% of them would like to attend doctoral studies in educational sciences. 11.9% of them would continue their postgraduate education outside of teaching to broaden their employment opportunities.

The majority of surveyed teachers (57.1%) are willing to be mentors for students-prospective teachers during their teaching practice because they consider that teaching practice is an important part of initial teacher education and they find it important to transfer their experience to their younger colleagues. 16.7% of surveyed teachers would be mentors for students if it gave them possibilities for promotion at work or if it is paid and 11.3% of teachers would only do so if the school leadership demanded that they be mentors.

Regarding teachers’ willingness to co-operate with researchers from higher education institutions, 36.9% of those who answered this question say they would participate in research projects because it could enhance co-operation between higher education institutions and schools and strengthen innovation in education. 27.1% of teachers would do so because it could enhance their professional development and 16.3% of teachers are interested in such form of co-operation if it would provide them with opportunities for career promotion or if it is paid. 12.8% of teachers would co-operate with researchers only if the school leadership would demand that they do so. Most of the surveyed institutions also consider that (whenever possible) school teachers should be included in the research and development projects of university professors. The main reasons for this are the enhancement of co-operation between higher education institutions and schools and strengthening innovation in education.
Finally, we can say that there is certainly a need for an improvement to the in-service teacher education and training system. Only 1.5% of the surveyed teachers are satisfied with the current system. 25% of teachers consider that the offer should be expanded. According to 43.1% of teachers, the range and quality of in-service education and training should be substantially increased and supported with public sources. 28.4% of the surveyed teachers are even more critical and consider that there is no effective system of in-service teacher education and training in Croatia and that one should be established as soon as possible in order to provide real opportunities for the professional development of every teacher.

The surveyed institutions of pre-service and in-service education mainly agree with the teachers. Most of them consider that the offer and quality of in-service teacher education should be substantially increased and supported much better with public sources. Some of them think there is no effective system of in-service education and training and it is most urgent to establish one. Higher education institutions that also provide in-service teacher education were also very critical of their own in-service teacher training programmes since they consider them to be quite obsolete. They also express the need to develop an overall lifelong learning strategy.

One of the main aims of the reform agenda in the area of in-service teacher education for most institutions is modernisation of the existing provision accompanied by modern approaches to teaching, learning and assessment. Learning outcomes from in-service education and training will be credited and recognised as parts of degree study programmes where a learner decides to continue their studies. The improved in-service education and training programmes should, according to the surveyed institutions, aim at enhancing the practical competencies of teachers, renewing their educational knowledge and supporting them to implement new curricula and use new teaching methods. Only four institutions consult teachers about their needs in in-service education and training which certainly can lead to some problems i.e. the offer does not always meet the needs. The involvement of teachers could significantly contribute to the improvement of in-service training programmes and all providers of such programmes should consider the possibility of consulting teachers on a regular basis.

As the main obstacles to reforming and modernising in-service teacher education and training, most surveyed institutions mention the lack of financial support (in particular equipment and facilities), obsolete and inadequate national regulations and the shortfall of human resources (lack of adequate skills and motivation within academic and non-academic staff).
5 Recent developments and plans in teacher education and training

As already described, the system of pre-service teacher education is currently undergoing significant changes, some of which have already been implemented while others are in the implementation process. Quality assurance in higher education is also recognised as an important issue and is regulated on the national level by the Law on Scientific Activity and Higher Education (2003) through the establishment of the Agency for Science and Higher Education responsible for evaluating research and educational activities at all higher education institutions. Some of the institutions also have internal mechanisms for monitoring the quality of education, which is the case for half of the institutions which participated in this research as well. Some forms of quality assessment include students’ evaluation (usually a questionnaire for students) and students are invited to formally express their opinions through student organisations.

In Croatia there is a wider agenda aimed at implementation of the Bologna process in all areas of higher education at the national level set up by the Ministry and by the universities. Therefore, at the moment one of the most important steps in the reform of higher education system in Croatia is implementation of the ECTS system whose wider implementation at Croatian universities started this academic year (2005/2006). A two-cycle system of BA and MA is being introduced in pre-service teacher education study programmes.

According to the recent developments, we could say that there is a trend of universitisation at the Teacher Education Academy and the teachers’ colleges i.e. vocational programmes for classroom teachers are transforming into academic study programmes, leaving the study programme for pre-school teachers as the only vocational programme. That also implies that teaching staff at the teachers’ colleges have to be adequately trained in the field of scientific research.

As mentioned, the new pre-service teacher education curriculum is turning towards a competence-based curriculum with much more emphasis placed on a student-oriented approach to teaching and learning. Courses are more problem-based and the curriculum includes more research methods in educational sciences as well as the use of ICT, which could still be enhanced. The basis of the recent developments concerning the competencies and qualifications of teachers also involves the European Commission’s Common European Principles for Teacher Competencies and Qualifications which stresses the importance of teachers in every educational reform, as well as in society in general. Therefore, the reform of teacher education should provide teachers with the opportunity to become competent professionals in the following main areas: a) working with information, technology and knowledge; b) working with people – students, trainees, adults, colleagues and other partners included in the education system; and c) working with and within society on local,
regional, national, European and global levels. The discourse of the main stakeholders in educational policy also includes the following common European principles:

a) teachers have to hold an appropriate higher education degree which includes an interdisciplinary approach to teacher education;

b) teacher education and continuous professional development should be placed within the context of lifelong learning (including in-service teacher education as well as their postgraduate education);

c) the teaching profession should provide mobility (within the different educational levels as well as within different European countries); and

d) the teaching profession should be based on partnerships between schools, higher education institutions and institutions for in-service teacher training.

Educational experts and policy-makers in Croatia realise the importance of the mentioned European principles at least on a declarative basis, but one can hardly avoid the impression that the changes necessary for accomplishing these principles are moving very slowly and that there is a need for a more powerful initiative regarding lifelong teacher education and the teaching profession in general.

Regarding recent developments, we should also mention that the University of Zagreb, Croatia has also been from 2005 a member of the team gathered around the project Tuning Educational Structures in Europe (that started in 2000), whose main aim is to contribute significantly to the elaboration of a framework of comparable and compatible qualifications in each of the (potential) signatory countries of the Bologna process. One of the subject areas that Tuning has been working with is education, and the key goal within this curriculum area is to provide a description of qualifications in terms of workload, level, learning outcomes, competencies and profiles for specific areas of the educational sciences.

Another recent development includes negotiations on the establishment of a centre within the university which is planned to be an interdisciplinary lifelong learning centre for providing teacher education at several levels:

a) pre-service teacher education in basic educational sciences and teaching methodologies;

b) additional education in basic educational sciences and teaching methodologies for vocational subject teachers and those who did not have educational sciences as an integral part of their studies;

c) special courses for trainees as well as for university assistants at the beginning of their teaching careers;

d) in-service teacher education programmes at the university level;

e) programmes at the postgraduate level which would allow candidates to obtain a doctoral degree in educational sciences and teaching methodologies as well as different specialisations (e.g. school management, curriculum development); and
f) educational research.

Related to the above, on a more general level future plans in the area of education also include the introduction of a new scientific field – educational sciences as an interdisciplinary scientific field which would provide the integration of educational research from different social sciences (e.g. educational psychology, educational sociology, didactics, pedagogy, educational rehabilitation). Such interdisciplinary integration is also important from the formal aspect. Namely, it gives researchers the opportunity for formal advancement in the field of educational sciences. So far, their advancement can only be realised within their basic discipline which can lead to some difficulties regarding the evaluation of interdisciplinary-based research.

5.1 Reflection on the questionnaire results on recent developments and plans in teacher education and training

Regarding the existing pre-service teacher education and training study programmes, most (5) of the surveyed higher education institutions say that they are improving their programme constantly, but there is a need to make those programmes more comparable and compatible with European and international trends. Three institutions consider that their programmes have been proven as to quality and efficiency, but still it is time to prepare a comprehensive but gradual curricular reform in order to modernise the national education system and make it compatible with European and international trends. Only one surveyed institution stated that its existing study programme is relatively modern, good quality and related to social needs while, on the other side, one institution considers its programme to be obsolete and calls for an urgent, radical curricular reform. In general terms, we may conclude that most of the institutions recognised the need for the continuous improvement of the existing pre-service teacher education and training study programmes.

Eight of the ten institutions surveyed consider themselves as being very aware with regard to the Bologna process while two institutions state that they are reasonably aware. When it comes to a comparison with other higher education institutions, 7 of them think they are equally aware as most other higher education institutions in Croatia, while two institutions consider themselves to be significantly better informed. For 6 of the surveyed institutions the main elements of their reform agenda involve the implementation of new learning structures and tools (a two-tier system, ECTS, diploma supplement and the recognition of previous learning) accompanied with a comprehensive modernisation of approaches to teaching, learning and assessment. Four institutions will primarily focus on the implementation of new learning structures and tools without profound changes in approaches to teaching, learning and assessment. The involvement of other professionals (e.g. representatives of the Ministry, head teachers and professional
associations of teachers) in the designing and restructuring of the curricula is relatively rare.

All of the departments within the surveyed institutions, except one, have recently initiated a reform of the curricula related to the Bologna process which is shown by the new study programmes (with more or less successfully) introduced this academic year. The main aim with the new first-cycle degrees (BA) for most institutions is to provide broad qualifications which lead to employment and/or further study, whereas a smaller number of institutions aims to provide new basic teacher qualifications. Regarding the new second cycle (MA), most institutions aim at providing an advanced qualification for all interested teachers and some of them plan to attract graduate students from other suitable study fields. Half of the surveyed institutions consider that the majority of students will continue education at the second-cycle level following the first-cycle degree.

Regarding the two-cycle degree structure, three of the surveyed institutions are still considering the two options (3+2 or 4+1). The same number of institutions answered that they plan to follow an integral 5+0 model (with one of them starting to implement that model in 2010). Two institutions plan to follow the 3+2 model, while one institution will follow the 4+1 model.

Most (8) of the surveyed institutions with the new first-cycle degrees aim at providing broad qualifications which lead to labour and/or further study. One institution aims to provide new basic teacher qualifications.

The main aims regarding the new second-cycle degrees for five surveyed institutions are to provide an advanced qualification for all teachers who want that. Two institutions aim at providing research qualifications for teachers and/or to train the teachers of teachers, while two other institutions the second cycle is included in a regular study programme since they follow the 5+0 integral model. One institution stated it aims to attract first-cycle graduates from other appropriate study fields. Regarding expectations related to the continuation of education in the second cycle, five of the surveyed institutions consider that the majority of first-cycle graduates will continue their education at the second level (at the same or a different institution), while two institutions consider that some of them will get a job while others will continue their studies. One institution said that they cannot answer this question yet.

The employability of graduates is important for six of the surveyed institutions, for two of them it is very important, while two other institutions consider it as not very important. There is a possibility that some higher education institutions consider the issue of employability as something that is beyond their reach and influence i.e. it is a problem in the domain of other institutions and the government. Further, four of the institutional respondents do not (or very rarely) involve employers and/or professional associations in the designing and restructuring of their curricula. Six institutions stated they involve one or more partners in the designing process
Considering the structure of the new curricula, most of the institutions say that their new curricula will be competence-based and defined in terms of students’ learning outcomes. The frequently mentioned learning outcomes in terms of general competencies are basic knowledge of the teaching profession and a capacity for applying knowledge in practice. Subject-specific competencies are mainly defined through knowledge of the subject to be taught and awareness of the different contexts in which learning takes place. The allocation of ECTS credits to courses is based on the student’s overall workload (one ECTS credit approximately represents 25 working hours). Regarding the forms of student assessment, traditional tests (written and oral exams) and seminar papers and essays are the dominant forms of students’ evaluation, followed by project work. Practical assignments, portfolios and research papers are represented less.

As mentioned, the main obstacles to reforming and modernising pre-service teacher education according to the majority of institutions are the lack of financial support, in particular equipment and facilities, as well as the obsolete or inadequate national regulations.

6 International co-operation in teacher education and training

International co-operation is one of the important aspects of pre-service and in-service teacher education and training and plays a significant role in exchanging examples of good practice and introducing new ideas in the area of teacher education (and education in general). According to the questionnaire’s respondents, the international mobility of students and teaching staff within pre-service teacher education system has only slightly increased during the last three years and most institutions consider it important but not the decisive factor for enhancing pre-service teacher education. We could say that, in the case of Croatia, activities based on international co-operation in pre-service teacher education are in the process of developing and strengthening.

International co-operation is established within all areas of higher education and since 1995 Croatia has been a member of the CEEPUS (the Central European Exchange Programme for University Studies) international network. The Croatian Ministry of Education, Science and Sports promotes bilateral and multilateral formal agreements. In view of globalisation processes the practice of making contracts at the government level is being abandoned in favour of the direct cooperation of the higher education institutions.

Croatia, together with 47 signatory states of the European Cultural Convention, is a member of the In-service Training Programme for Education Professionals
established within the Council of Europe that is aimed at sharing information, ideas and experiences with colleagues from other countries.

As mentioned in Chapter 5, in 2005 the University of Zagreb became a member of the work group for educational sciences of the international Tuning project within the EU’s SOCRATES programme.

As far as pre-service teacher education is concerned, it should be noted that the main actors in this area are the Teacher Education Academy and the teachers’ colleges since the education and training of teachers is their exclusive activity i.e. they do not train other profiles. Namely, teachers’ faculties also train other profiles and their international co-operation programmes are mainly based on the academic discipline and usually do not include the teaching aspects of the subject.

The Teacher Education Academy at the University of Zagreb has established international co-operation through formal bilateral agreements with Slovenia, Macedonia and Germany. Their co-operation is based on the exchange of students and teachers, joint TEMPUS projects, the organisation of summer schools for students and international conferences. Last year students from Hungary, France and Belgium visited the Teacher Education Academy and several primary schools and kindergartens. The Teacher Education Academy also regularly publishes two journals with an international editorial board (Metodika and Zbornik radova Učiteljske akademije u Zagrebu) and the Academy’s teaching staff is also participating in the Council of Europe. In co-operation with the University of Münster, the Teacher Education Academy plans to introduce a postgraduate programme for teachers.

The Teachers’ College in Osijek is also active in the area of international co-operation. Together with partner institutions from France and Great Britain it participates in the TEMPUS project (Foreign languages at primary level: training of teachers). Students can also participate in exchange programmes: last year students visited the Pädagogische Akademie in Graz, Austria (where they attended lectures on children’s literature) and the Faculty of Education in Székszard (University of Pécs, Hungary) where they attended courses on arts education at the primary school level.

At the Teachers’ College in Split formal international co-operation has been established with the University of Maribor (Slovenia), University Paris-Nord (France), the European Institute for the Development of All Children’s Potential (IEDPE) in Paris (France) and the Society for the Development and Creative Occupation of Children (SEDCE) in Athens (Greece).

International co-operation among subject teachers education is well established for foreign language teachers. They participate in the Council of Europe programmes (Language Learning for European Citizenship, workshops on teaching young learners and on the initial training of modern language teachers). International co-
operation of English (as a foreign language) teachers is often sponsored by the British Council. During the last few years the British Council has sponsored several exchanges among university teachers in the field of pre-service teacher education (visits to Poland, visits of Hungarian novice teachers to the University of Zagreb and several primary schools). Several foreign language departments at the Faculty of Philosophy, University of Zagreb, have also made formal international agreements with the University of Pécs (Hungary), Lock Haven University (USA), Hope University Liverpool (Great Britain) and Postdam Universität (Germany). This co-operation is based on the exchange of students, teachers and the joint TEMPUS project (*Early foreign language learning: teacher education*). The international co-operation of foreign language teacher educators is also sponsored by the Open Society Institute (international mentoring courses). Language teacher educators regularly attend international conferences on teacher education in the field of teaching foreign languages.

International co-operation in teacher education and training is well developed at the level of in-service education and training. Namely, non-governmental organisations which are active in this area have been implemented as part of international programmes e.g. Step by Step Croatia and the Forum for Freedom in Education (described in Chapter 4.1.).

Step by Step Croatia is part of the International Step by Step Association and the regional office in Croatia offers internationally approved in-service training programmes. Teachers who attend these programmes obtain the internationally acknowledged ISSA Certificate of Excellence based on international pedagogical standards.

The Forum for Freedom in Education is also part of an international organisation – the European Forum for Freedom in Education. Some of the Forum’s projects are based on international and regional co-operation – e.g. the seminar for teachers *Reading and Writing for Critical Thinking* is successfully presented in more than 30 countries and, within that project, Active Learning and Critical Thinking in Higher Education, an international project aimed at university teachers, is also being developed. The Forum also actively participates in the international project of a secondary school exchange programme for students (in the USA and the UK).

Participation in international projects is also established at the primary and secondary school levels. In 1998 the Ministry for Education joined the ‘Ecological school’ programme (established in 1981 by the Foundation for Environmental Education in Europe) and 150 primary and secondary schools in Croatia are already certified as an Ecological School. The international co-operation of schools is also established within the area of citizenship education, ICT, human rights and school management. It should be noted that study visits are a rare practice among Croatian school teachers primarily due to the lack of resources and, according to
the results obtained within this project, 89% of surveyed teachers are interested in co-operation with teachers from other countries all over the world.

Although international co-operation in the field of higher education is generally well developed, at the moment there is certainly a need to strengthen international co-operation, especially within the area of the subject teachers’ education. There is some progress in the field of foreign languages teacher education but most international co-operation programmes within particular academic disciplines are primarily academic-oriented and lack teaching-oriented contents in these disciplines.

7 Conclusions and recommendations

After the brief overview of the system of pre-service and in-service teacher education in Croatia and our analysis of the results obtained from this project, we will try to provide a compiled summary of the current situation with an emphasis on recommendations for the further development of teacher education in Croatia.

The education system in Croatia consists of four levels – pre-primary education, primary education (which is also compulsory), secondary education and tertiary education. Teachers are educated according to these education levels. There are two main providers of pre-service teacher education: teachers’ colleges (together with the Teachers’ Faculty, up until recently known as the Teacher Education Academy) which educate teachers for pre-primary and lower primary levels, and teachers’ faculties which educate subject teachers in academic disciplines. After graduating, all Croatian teachers have to pass a one-year induction period under the supervision of a mentor and after taking a state exam they become certified teachers.

At the moment, there are enough teaching staff at all school levels but in the near future Croatia could experience a lack of teachers since many teachers are close to retirement age, especially primary school teachers.

The teaching profession in Croatia is often mentioned in the context of its low material and social status in society compared with other employees in public institutions and teachers feel they have to constantly ‘prove’ the relevance of their profession to the public as well as to the authorities in order to be recognised as one of the main stakeholders of the education system, especially in the context of the current discussions on the importance of the teaching profession within the Common European Principles for Teacher Competencies and Qualifications.

With regard to pre-service teacher education, Croatian teachers generally believe that the study programmes should be improved and more focused on specific teaching competencies and practical experiences in order to provide all key competencies for prospective teachers. The institutions of pre-service teacher
education agree with the teachers and they continuously improve their study programmes, but they also realise that there is still a lot to be done in order to make these programmes comparable and compatible with the European higher education area. We could certainly say that there have been some improvements in the field of pre-service teacher education. The institutions of pre-service teacher education, as mentioned, have started to implement new study programmes designed according to the Bologna process. The majority of elements that teachers have often complained about have been recognised in the preparation of the new study programmes, which is clearly encouraging. On the other hand, there are some practical issues regarding the transformation of pre-service teacher education, primarily related to the lack of material resources which leads to some everyday practical problems, e.g. the lack of teaching staff and facilities in order to accomplish the teaching and learning goals proposed by the Bologna Declaration.

Regarding pre-service teacher education, one education expert included in the discussion expressed the need for the urgent establishment of a national strategy for developing the teacher education system. According to this participant, all attempts to establish such a strategy at the national level have so far failed, primarily due to the inconsistency caused by the fact that every new ministry (formed after each election) begins practically ‘from scratch’ without having any real insight into what has been done so far and by rejecting most of the previous ideas for being unacceptable.

Another topic which arose in the discussion about pre-service teacher education is the need for a partnership of the various higher education institutions included in teacher education. Namely, educational experts included in this discussion emphasised the need to establish partnerships within these institutions, mainly based on the importance of an interdisciplinary approach to teacher education and on the awareness that each institution has its strengths and weaknesses. Due to that, they consider that each institution can offer its expertise in some educational area, whereby this partnership is considered to be especially important in the field of basic educational sciences and in the area of educational research. In addition, the establishment of partnerships between higher education institutions, in-service teacher education institutions and research institutions plays an important role in linking educational research and practice. Experts in the field of education also consider that equal attention should be paid to the education of pre-school teachers as well since it seems that the discourse on their education and study curricula is still overshadowed by issues regarding the education of school teachers. The importance of an interdisciplinary approach also implies the need to establish educational sciences as an academic field involving all basic educational sciences and methodologies.

Regarding partnerships of the institutions included in teacher education, the participants also express the need to strengthen partnerships between higher education universities and schools, especially during pre-service teacher education
when students have obligatory school practice. To expand on this, a few participants also pointed out that special attention should be given to teacher-mentors who work with novice teachers during their induction period. This mainly refers to the establishment of in-service education for teacher-mentors based on the principles of lifelong learning.

Another important issue regarding pre-service and in-service teacher education involves the efforts to establish a university centre, that is planned to be an interdisciplinary lifelong learning centre for providing teacher education at several levels. Participants in the discussion on this issue recognise the need for such a centre, whereby as the main reason they state the need to provide ‘services’ for various faculties that educate subject teachers i.e. faculties would provide education in a basic academic discipline, and the centre would provide education in basic educational sciences and teaching methodologies. Some participants consider that this centre would provide education on a more general basis i.e. general issues in educational psychology, pedagogy and didactics, while subject teaching methodologies should be taught within the faculties. The discussion also revealed there is a need that this centre should also provide different courses and programmes for in-service teacher education which is, in accordance with some university professors’ opinions that higher education institutions should be the most important creators and providers of programmes for in-service teacher education.

Both the institutions and individuals surveyed within this research emphasise that the curricula should be competence-based and defined in terms of students’ learning outcomes (general as well as subject-specific). Some participants also point out the development of psychosocial and communication skills and another important issue which should also be taken into consideration is the motivation to teach, especially in the subject teaching area. Regarding recent developments initiated by the Bologna process, we could say that a prospective subject teacher’s motivation to teach is partially taken into consideration by the new two-tier system where courses in educational sciences and teaching methodologies are part of the second cycle i.e. the main presumption is that only those students who are motivated to teach will in the second cycle decide to take these courses in order to become subject teachers.

The surveyed teachers as well as educational experts who participated in the discussion agree on the importance of some specific topics in pre-service teacher education – e.g. teaching, learning and assessment methods, work with children with special needs and communication skills, while the interviewed university professors from various faculties consider these topics to be underrepresented in the pre-Bologna teacher education study programme.

In the field of in-service teacher education and training, some efforts should also be made in order to improve its quality which also includes changes in legislative
regulations of in-service teacher education. Teachers as well as the institutions of pre-service and in-service education and training agree on the need for a substantially increased offer and the quality of in-service teacher training with a special emphasis on broadening the offer with some contents which are underrepresented or not represented at all at the moment. In the focus of teachers’ interest are topics regarding teaching learning and assessment methods, work with children with special needs, ICT, co-operation with parents, communication skills and classroom management. It is worth noting that most of these topics will already be available at the initial education level since the new study programmes for teachers offer (or plan to offer) optional courses in the mentioned areas of teachers’ interest. Participants in this research also point out that greater effort should certainly be invested in resolving the problem of financing in-service teacher education, which requires the co-operation of government and local authorities. One participant concluded that the biggest problem regarding financing education in general is a distorted perception – financing education is often seen as an expenditure instead as an investment in the future. Further, all institutions included in in-service teacher education should be better co-ordinated, whereby their co-ordination and the quality assurance of programmes and courses offered should be one of the main roles undertaken by the Ministry of Science, Education and Sports.

Another important issue concerning the continuous professional development of teachers includes the opportunity to obtain postgraduate education in educational sciences (e.g. doctoral studies and specialisations in different educational areas). This is also emphasised by the interviewed university professors who propose that school teachers could specialise in certain areas of their interest i.e. in educational psychology, pedagogy, rehabilitation and social work.

Institutions of pre-service and in-service teacher education should also be encouraged to join international co-operation and establish partnerships with similar institutions in other countries with a special emphasis on the exchange of good practices. The interviewed participants are very much aware that examples of good practices can be very useful when planning curricula for pre-service teacher education as well as in-service education programmes, while they also pointed out there must be an ability to recognise which examples can and which cannot function within the specific Croatian context.

At the moment, we are at a turning point in the Croatian higher education system since the students who enrolled in the first year of their study this academic year have new study programmes according to the ECTS system. In order to follow the right direction, the effects of the changes implemented in the system of teacher education and training should be under constant supervision with an emphasis on internal and external quality assurance mechanisms. Universities should become involved more directly in the lifelong learning strategy by offering courses and specialisations as well as advanced master’s and doctoral programmes in education.
Finally, we could say that the current reform of the teacher education system seems to be going in the right direction (or at least it is trying to) since the majority of previous problems have been recognised and taken into consideration. The questions that remain are whether these changes will be realised as planned and how they will influence the teaching competencies and professional development of teachers. It is therefore crucial to provide adequate financial and other resources for implementation of the planned changes as well as to establish effective quality assurance system to monitor whether the planned reform objectives are being achieved and which improvements are needed.

Bibliography


