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## Report 2

### *Theories, reforms and outcomes in the European educational systems*

<b>INTRODUCTION</b> .....	<b>4</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>8</b>
<b>1. SUCCESS FOR ALL BY OVERCOMING EARLY TRACKING</b> .....	<b>11</b>
1.1. <i>Early tracking, later inequalities</i> .....	11
1.2. <i>Overcoming early tracking, gaining equality</i> .....	14
<b>2. MIXTURE, STREAMING AND INCLUSION</b> .....	<b>16</b>
2.1. <i>What we already know about streaming</i> .....	16
2.1.1. <i>Streaming and its consequences: evidences from the literature</i> .....	16
2.1.2. <i>Overview of streaming in Europe</i> .....	19
2.1.3. <i>Connections between streaming and performance as found in the educational systems</i> .....	21
2.2. <i>What we already know about heterogeneous groups</i> .....	23
2.2.1. <i>Inclusionary practices to overcome streaming</i> .....	23
2.2.2. <i>Inclusionary practices in European educational systems</i> .....	26
2.3. <i>The need to clarify the differences between mixture, streaming and inclusion</i> .....	29
2.4. <i>Orientations for further analysis on streaming</i> .....	30
2.5. <i>Orientations for further analysis on inclusion</i> .....	37
<b>3. EDUCATION AND PARTICIPATION OF SOCIAL AGENTS</b> .....	<b>41</b>
3.1. <i>Raising family educational background as an inclusionary strategy</i> .....	41
3.2. <i>Teachers' training</i> .....	43
3.3. <i>Research based training for all social agents: teachers and families</i> .....	44
3.4. <i>Community participation in schools: From outsiders to insiders</i> .....	45
<b>4. EQUALITY OF DIFFERENCES: ACHIEVING EDUCATIONAL SUCCESS FROM THE RECOGNITION OF DIVERSITY</b> .....	<b>50</b>
4.1. <i>GENDER. Transforming interactions and community participation for overcoming gender inequalities</i> .....	51
4.2. <i>YOUTH: Educating Youth for long-term social inclusion</i> .....	54
4.3. <i>MIGRANTS AND CULTURAL MINORITIES</i> .....	55
- <i>Overcoming Racism In School And In Society</i> .....	55
- <i>Learning both the language of instruction and the mother tongue</i> .....	60
4.4. <i>PEOPLE WITH DISABILITIES. The Right To Be Included Into The Mainstream And The Opportunity To Be Known By The Others</i> .....	64
<b>5. CONCLUSIONS</b> .....	<b>69</b>
<b>6. SOME FINDINGS</b> .....	<b>72</b>
<b>REFERENCES</b> .....	<b>73</b>
<b>INDEX OF FIGURES AND TABLES</b> .....	<b>86</b>

## INTRODUCTION

The effects of educational theories, reforms and outcomes in the European context have intrigued researchers, policy makers, educators and citizens. The development of high quality education systems is a key factor in order to help guarantee full social inclusion for everyone, as well as the development of a competitive and dynamic knowledge-based economy, and greater social cohesion in Europe. Educational success, understood as a decrease in dropout rates, the completion of upper secondary education and participation in tertiary education (European Commission, 2001) is related to social inclusion and access to several social areas such as employment, housing, health, and political participation, access to resources, the use of public institutions, and the availability of personal networks (Avramov, 2002).

Authors representing theories of reproduction have supported the connections between low socio-economic backgrounds and low educational attainment. That is, education understood as a system reproduces existing inequalities and social stratification (Althusser, 1970; Bourdieu & Passeron, 1970; Baudelot & Establet, 1971; Bowles & Gintis, 1976;), therefore supporting exclusionary theories and practices. Authors challenging this view have more recently developed theories indicating that accounting for both systems and agents recognize the capacity of the latter to transform their situation (Touraine, 1997; Willis, 1981; Giroux, 1988; Freire, 1998; Bernstein, 1990). According to them, education would be a system, which could transform inequalities, therefore introducing inclusive theories and practices. The data provided, as well as the literature on theory and research, strengthens the idea that a high quality education – which makes it possible for all students to achieve good results– is a tool to overcome inequalities and their reproduction, making the individual background to have less influence on future opportunities. In addition, education can have an important attenuating influence on disadvantaged contexts, and facilitate the social mobility of students, making it possible for people to move upward between social classes (Hannan & Smyth, 1999; Bondi & Matthews, 1988).

The extensive body of literature shows that higher educational outcomes are related to better opportunities for labour inclusion. The relationship between higher academic achievement and increased job opportunities demonstrates that education has an influence on social inclusion and greater social opportunities. The results of the research suggest that education contributes to the development of key competences and skills,

and this fact is especially important for those who are more disadvantaged (European Commission, 2006c).

Findings of the research support the hypothesis that the educational interventions and policies cannot address educational disadvantage by themselves. Education has to be considered in connection with other social factors related to exclusion (employment, economy, social inclusion, youth, healthcare, justice, housing and social services), and therefore educational policies have to be implemented by taking these connections into account (European Commission, 2006a). The European Commission set out (European Commission, 2005) the promotion of social cohesion along with the improvement of quality of employment and equal opportunities in its Social Agenda (2005-2010), and education is very much a part of it. To reduce elements related to social exclusion, such as poverty rates, which affect 16% of the European population (Schuman Foundation, 2007), it is necessary to implement policies from different areas such as the economy, but also from education, with a special focus on the most vulnerable groups.

The *INCLUD-ED. Strategies for inclusion and social cohesion in Europe from education*<sup>1</sup> project purpose is to analyse the educational practices, programmes and policies which contribute towards social cohesion and the educational strategies which lead to social exclusion, providing key elements and lines of action to help improve educational and social policies. The present report has been developed based on the results of *Project 1*, which aims to analyse the characteristics of school systems and the educational reforms which are generating low rates of educational and social exclusion and those which are generating high rates across the EU-25. This report integrates the results obtained from the previous analyses in order to provide a roadmap of the European educational systems as they relate to educational and social inclusion. In order to do that, efforts were dedicated to analyse the connections between educational theories, the different educational reforms and the outcomes of EU educational systems in terms of school achievement.

Three different areas were examined. First, the literature on the educational reforms, theories and policy developments in Europe. The analysis were carried out with a special focus on vulnerable groups (cultural minorities, migrants, youth, women and people with disabilities), the main areas of knowledge (maths and science, reading and ICT) and different levels of education (pre-primary, primary, secondary) and programmes

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<sup>1</sup> Integrated project (IP), FP6, priority 7 (Humanities and Economic, Social, Political and Educational Sciences), European Commission.

(vocational training and special education). This analysis was based on the criteria of interdisciplinarity, and drawing from major standard and specialised comprehensive bibliographical sources<sup>2</sup> and empirical and theoretical research. Secondly, the educational reforms in the EU-25 were analysed, on the basis of issues such as the orientation of the reforms, the general structure, the curriculum and special attention to vulnerable groups. And thirdly, the educational outcomes in Europe were analysed, taking into account school dropout, school failure and school performance, and defining corresponding indicators for each concept.

The present report identifies the most relevant aspects which connect education with social exclusion and inclusion: what elements and practices contribute towards reducing educational opportunities and results and should therefore be overcome, and how the educational and social inclusion of all students should be promoted as well as which elements of educational systems and practices contribute towards better educational attainment. Our objective, then, is not to carry out an exhaustive description of the existing practices in the different European countries, but to gather together those strategies that help us to identify exclusionary or inclusive processes in European educational systems, especially focusing on the strategies that lead to inclusion.

This report has six sections, presenting the connection between theories, reforms and outcomes from an exclusionary to a transformative perspective on five relevant topics in education. The differentiation between practices of mixture, streaming and inclusion is one of the main focus of this report. Two options arise when a teacher is not able to respond to the diversity (mixture) of his or her classroom: streaming or inclusion. Special attention is paid to the differentiation between the three practices and the use of resources related to each one. The other sections of the report analyse the following topics: tracking, education of the social agents, community participation, and equality of differences. The section "equality of differences" has four subsections presenting specific explanations of how the effects of these key aspects affect the following vulnerable groups: women, youth, migrants, cultural minorities and people with disabilities. Finally, a conclusion section gathers the main contents of the report, and provides connections between relevant contributions of theories, reforms and outcomes from European educational systems as well as the need for further research on selected areas of this subject matter. The report ends with a section where some relevant findings are highlighted. The information provided by the state of the art for each topic is described,

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<sup>2</sup> e.g. ERIC, EURYDICE, SOCIOLOGICAL ABSTRACTS, journals with high impact factor, as ranked in the ISI Journal Citation Reports.

as well as the achievements reached during the first year of the project, and the work that still has to be done to advance in the process of creation of knowledge.

## EXECUTIVE SUMMARY

The “Includ-ed. Strategies for inclusion and social cohesion in Europe” project first year report focuses on integrating the results obtained in previous analysis and data gathering, identifying the strategies and elements contributing towards success in school from the theories, reforms and outcomes in European educational systems. This report gathers first, a state of the art of the education in Europe based on an extensive literature review which includes the main theories provided by the international scientific community (workpackage 1); second, an analysis of the educational reforms of the EU-25 and Romania (workpackage 2); and third, a secondary analysis of the educational outcomes from existing datasets (workpackage 3).

The most significant difficulty for European education practices is the overcoming of segregation and exclusory educational practices as well as to face the challenge of promoting inclusionary and transformative educational practices. On the one hand, practices such as early tracking, streaming, segregation and stigmatization of cultural minorities and migrants take place in Europe producing social exclusion and the reproduction of inequalities among individuals. On the other hand, practices of comprehensive educational systems, inclusive in-class organizational practices with additional resources provide elements for social cohesion and inclusion besides higher quality of education.

The main segregation practices founded in the European educational systems are early tracking, streaming, the little provision (or lack) of family education, the limited teacher's training provided, and the small opportunity for community participation in the school, and finally the specific segregation practices that vulnerable groups have to face for their particular characteristics.

Tracking is a widespread practice in Europe, which consist in the separation of students in different centres affecting their academic career. In some European countries tracking starts as early as at 10 years of age, deeply affecting the academic achievements of the students: the earliest tracking starts, the worse academic results students reach. A plethora of evidences demonstrates that correlation. Comprehensive school systems provide an answer to this early segregation.

Streaming is another exclusionary common practice in Europe. Research on the topic stated an existing relationship between this practice and students academic performance.



Schools with only one teacher per classroom have been demonstrated that is not enough to cover the high component of diversity among students. Streaming becomes the most common practice to face this kind of situations. However, streaming does not accelerate the learning of at-risk students, but their failure, their poor school-achievements and their lack of opportunities.

This practice takes different forms across Europe. "Streaming"<sup>3</sup> consists of "tailoring the curriculum to different groups of children based on ability within one school" (European Commission, 2006a: 19)<sup>4</sup>. International studies such as PISA, TIMSS and PIRLS are not coordinated on the definition of what does it mean streaming. Therefore, there is a need for clarification on the definition of this concept, as well as on data regarding this area. This report provides a classification of different types of streaming, drawing on evidences from the research domain.

In addition, mixed practices are also identified in this report. "Mixture" is the traditional organisation of the classroom, which consists in teaching together diverse students with one class teacher. Data illustrates that some European countries apply mixed practices rather than streaming strategies (such as ability grouping).

Instead streaming or mixed practices, other initiatives are implemented to provide the necessary support while maintaining the shared learning environment and contents material, which is referred to here as *inclusionary practices*. Transformative strategies propose to overcome the practice of streaming by rearranging differently the resources allocated in schools. That is, inclusionary practices are not just to stop streaming within a class or a group. These practices focus on how to provide more resources for the classroom or for the group in order to reach a quality education for all students. A list of different types of inclusionary practices is provided by this report.

Much attention has been paid to the connection between teachers' training and students' academic achievement, as well as the relation between academic and cultural background of family members and children's academic performance. Family training improves children' academic performance, transforming first the personal environment of

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<sup>3</sup> Other words are used to refer to this practice. In the American context, often the word "tracking" is used. Similarly, in the UK "setting" is used to refer to a form of what here is called "streaming".

<sup>4</sup> According to the European Commission, "streaming" differs from "early tracking" because the latter "refers to the segregation of children into separate schools based on ability before the age of 13. Whilst this need not necessarily involve a division into academic/general and vocational tracks, in practice this tends to be the case. This definition does not include streaming, which involves tailoring the curriculum to different groups of children based on ability, but within the same school." (European Commission, 2006a: 19)

the adult and translating this transformation into the family environment. However little evidence exists on this issue in Europe. Considering together the education of both groups of educational agents would improve the learning opportunities for all children.

In addition, family and community participation in the educational centres in terms of in-class participation, as well as active participation in decision-making processes, appears as an uncommon good practice in the European context, that contributes to the creation of opportunities for different communities and groups to interact among them, which is a key issue to provoke more learning.

Vulnerable groups (women, youth, cultural minorities, migrants, and people with disabilities) are affected by exclusionary practices. These social and cultural groups often receive educational practices oriented towards exclusion and failure in school. Specific European transformative practices propose the development of culturally sensitive curriculum, quota systems or the family (and members of cultural minorities) involvement in educational practices to overcome exclusionary situations suffered by these groups.

In conclusion, exclusionary and inclusionary theories, reforms and practices are presented in this report to have indications on how to achieve a higher inclusive education and social cohesion in Europe.

## 1. SUCCESS FOR ALL BY OVERCOMING EARLY TRACKING

In Europe, tracking refers to separating students in differing-ability schools. In other contexts such as the United States tracking is used to refer what in Europe is known as streaming. In the European context, Brunello and Checchi (2007) explain that tracking refers to “the presence of differentiated curricula, usually with an academic and a vocational emphasis, and students are assigned or self-sort into schools that specialize in each curriculum” (p.787). Hanushek and Wößmann (2005) explain that “some countries track students into differing-ability schools as early as at age 10 (e.g., Austria, Germany, Hungary, and the Slovak Republic). By contrast, others including Canada, Japan, Norway, Sweden, the United Kingdom, and the United States essentially keep their entire lower secondary school system comprehensive” (p.1). Early tracking is taken to mean the separation of children into different schools based on ability before the age of 13. Particularly, the Communication for the Commission to the Council and to the European Parliament on Efficiency and Equity in European education and training systems (European Commission, 2006a) stated that “early tracking, at ages ten to twelve is common in several European school systems but has an especially negative effect on children from families with low socio-economic status (for evidence, see Hanushek and Wößmann 2006; Schütz et al. 2005; Ammermüller 2005; Bauer and Riphahn 2006; Dustmann 2004) (p.19).”

Therefore, early tracking tend to produce social exclusion, by means of offering lower levels of education to certain students and directing some individuals to educational dead end situations with limited options for retraining and reintegration into the educational system. Education systems with early “tracking” of students exacerbate differences in educational attainment due to social background, and thereby lead to even more inequitable outcomes in student and school performance that end up being inefficient in the long run (European Commission, 2006a).

### ***1.1. Early tracking, later inequalities***

Hanushek and Wößmann (2005) compared the standard deviations of test scores from the study on reading literacy PIRLS (Progress in International Reading Literacy Study), administered by the IEA (International Association for the Evaluation of Educational Achievement) to 9 year olds, with the section on reading performance of PISA (Programme for International Student Assessment), administered by the OECD to 15

year olds. The results show how in almost all countries with a tracked school system before the age of 16, differences among students' performance increase whereas these differences reduce in most of the countries that maintain a comprehensive education until 16.

Through this comparison, these authors show that tracking before 16 is associated with an increased inequality between students' achievement. Thus, it is concluded that as earlier students are tracked, greater inequalities later are found. Through increasing inequalities, tracking before 16 ends up being opposed to the goal of major efficiency, on the contrary, according to Hanushek and Wößmann (2005), it means to make our educational systems less efficient.

PISA 2006 provides data that allow us to analyse this relation between tracking and inequalities in the EU countries. Next, a table is presented that has been created with this data.

Table 1: Age of selection and performance variance in the science, reading and mathematics scale

Countries	First age of tracking	Total variance in school performance expressed as a percentage of the average variance in student performance <sup>1</sup> across OECD countries (the higher the number is, the higher are the inequalities among students or schools <sup>2</sup> in this country in comparison with the inequalities among students or schools in all OECD countries)					
		Science		Reading		Mathematics	
		Students	Schools	Students	Schools	Students	Schools
Austria	10	106,5	60,7	120,1	70,3	115,7	69,5
Germany	10	110,4	66,2	126,1	100,5	116,2	74
Czech Republic	11	108	62,4	127	75	127,5	77,1
Hungary	11	86,1	60,5	91,1	74	99	74
Slovak Republic	11	96,4	40,9	113,3	57	107,3	54,5
Belgium	12	109,1	57	122	66,9	133,4	69,4
Netherlands	12	101,2	59,6	95,2	57,3	93,7	58,5
Luxembourg	13	104,3	30,5	103,1	28,9	104,5	33,2
Italy	14	100,8	52,6	120,3	63,5	109	59,1
Romania	14	73,4	35,5	86,7	47,9	84,6	43,4
Slovenia	14	107,3	64,8	79,6	68,4	95,5	55,5
Estonia	15	77,9	16	73,5	22,7	77,8	19,2
Greece	15	93,9	48,5	107,6	56,2	101,9	46,5
Ireland	15	98,9	16,9	86,7	20,1	80,4	15,5
Lithuania	15	90,1	25,5	93,5	27,3	96,7	32
Portugal	15	87,2	27,8	100,2	35,4	98,7	33,1
Denmark	16	95,6	14,8	80,8	15,8	85,5	14,9
Finland	16	81,4	4,7	67,7	6,5	78,2	5,8
Latvia	16	78,7	14,5	84,1	22,3	82,1	18,4
Poland	16	89,7	12,2	102,8	16,2	89,8	13,3
Spain	16	90,8	12,7	80,6	13	94,6	14,8
Sweden	16	96,3	11,5	96,4	17	95,1	14,1
United Kingdom	16	124,4	23,5	103,7	21,9	93,6	20,1

1. The variance of educational achievement has been calculated based on the average variance in students' performance. This variance has been calculated across the OECD countries and between schools.

2. In some countries, sub-units within schools were sampled instead of schools and this may affect the estimation of the between-school variance components

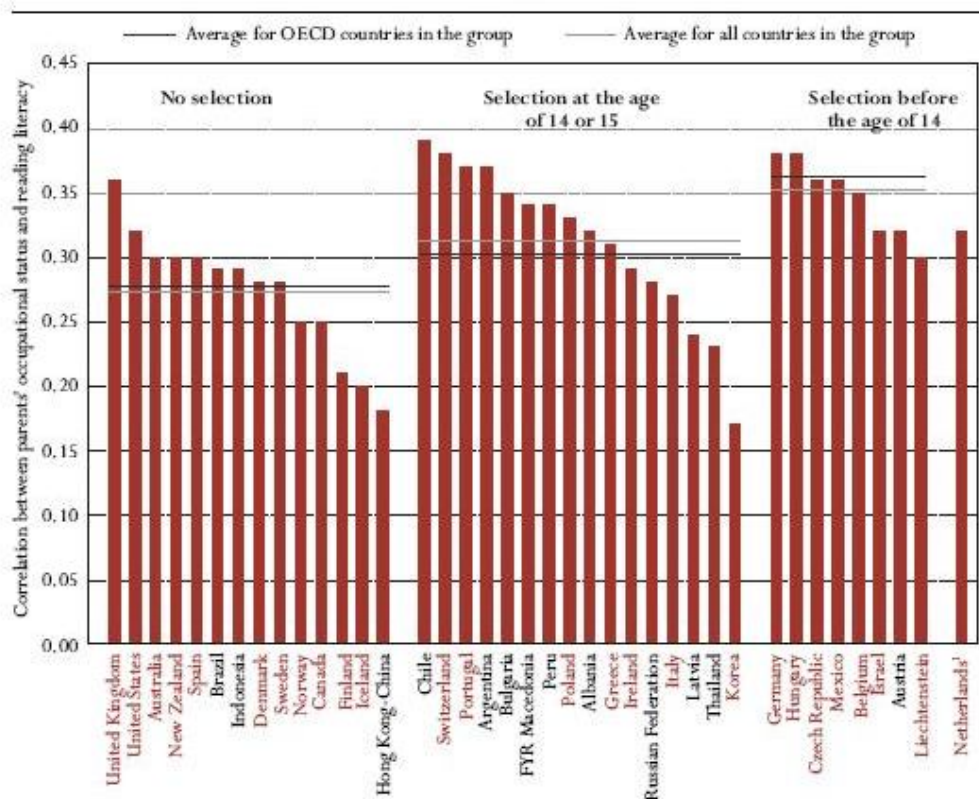
Source: Own presentation with data from PISA 2006 (OECD, 2007)

As observed in the above table, the inequalities between schools in what refers to sciences, reading and mathematics performance reduces as the tracking age is postponed. Although with less clarity, this tendency can also be observed in the inequalities between students' performance across OECD countries.

Furthermore, tracking has not only an effect on the between-school variance, but it has also a clear effect in the relation existing between socio-economic status and school performance. While PISA 2000 data (OECD, 2005a) already showed that the earlier a

country starts tracking, the more differences there are between students belonging to different socio-economic backgrounds (See figure 1 for further clarification), PISA 2006 (OECD, 2007) also shows a strong relationship between institutional tracking and impact of the socio-economic background in science performance. Along these lines, “for each additional year that students are stratified into different institutions before the age of 15 – when they were tested by PISA – the impact which one unit of the school’s average PISA index of economic, social and cultural status has on student performance increases by 6.6 score points” (OECD, 2007: 228). Thus, the earlier the tracking starts, the more the socio-economic status affects school performance in science.

Figure 1: Correlation between parents' occupational status (HISEI) and student performance in reading literacy for education systems grouped by age of selection



1. Response rate too low to ensure comparability.  
Source: OECD PISA database, Tables 4.2, 4.6a and 4.6b.

Source: OECD (2005). School Factors Related to Quality and Equity.

### 1.2. Overcoming early tracking, gaining equality

The case of Poland illustrates the changes produced by delaying the age of tracking. According to the OECD (2004b), “the move towards a more integrated education system

since 1999 – as a consequence of which institutional differentiation now occurs mainly after the age of 15 – may have contributed to the observed dramatic reduction in the between-school variation in performance of 15-year-olds between schools” (p.164). Furthermore, the integrated education system of Poland showed the second largest increase in average reading performance among OECD countries (it increased between PISA 2000 and PISA 2003 and there was a further increase of score points between PISA 2003 and PISA 2006). In addition, there is no evidence that supports the hypothesis that more integrated school system is disadvantageous for the better performers (OECD 2006). On the contrary, Hanushek and Wößmann (2005) concluded that not only lower tracks obtained better performance but also the students in higher tracks had better, or at least not worse, performances in integrated schools.

Another piece of evidence of the positive effects of the integrated education are the educational reforms such as the ones in Sweden (1950s) and Finland (1980s), which proposed delaying the students’ tracking age up to 16, unifying the curriculum and therefore obtaining greater educational achievements (Brunello and Checchi 2007). In this case, it has been showed that the delaying of the tracking age reduced the impact of parental background on educational attainment. Moreover, OECD (2005) claims that “students in integrated education systems perform, on average, better than those in selective education systems, and that their educational performance is less dependent on their background.” OECD (2005: 89).

## 2. MIXTURE, STREAMING AND INCLUSION

### 2.1. *What we already know about streaming*

#### 2.1.1. Streaming and its consequences: evidences from the literature

According to the European Commission (2006a), streaming<sup>5</sup> consists of “tailoring the curriculum to different groups of children based on ability within one school” (p.19)<sup>6</sup>. It can be performed through placing students in groups that are more or less homogeneous with regards to academic performance, assignment to groups within classrooms that can be more or less permanent, and also through practices such as retention in grade, differences in teacher expectations, curriculum coverage and even misassignment to special education (Braddock & Slavin, 1992).

If tracking has negative effects, as it has been shown in the previous section, this situation can be aggravated by the presence of streaming practices in educational systems. Modifying curricula according to students’ abilities shape further learning opportunities. A study conducted by Chorzempa and Graham (2006) based on within-ability grouping reading strategies show that segregation has harmful consequences, especially for at-risk students; the lower ability groups within these schools tend to spend more time on non-instructional activities, have less opportunities to choose reading materials, and are less encouraged to think critically, as they are asked less critical comprehension questions. The consequence is that these practices do not accelerate the learning of at-risk students, but in fact decelerate it, and perpetuate the inequalities which exist between students.

In a multi-year study on ability grouping, Braddock and Slavin (1992) also found evidences about the effects of streaming on the opportunity to learn: in streamed environments, students in low ability groups are exposed to substantially less material, to lower quality instruction, and to more low-level basic skills than students in middle or high ability groups. Also, the pace of instruction is slower in low reading groups and in low track classes. On the other hand, when comparing streamed and non-streamed

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<sup>5</sup> Other words are used to refer to this practice. In the American context, often the word “tracking” is used. Similarly, in the UK “setting” is used to refer to a form of what here is called “streaming”.

<sup>6</sup> According to the European Commission, “streaming” differs from “early tracking” because the latter “refers to the segregation of children into separate schools based on ability before the age of 13. Whilst this need not necessarily involve a division into academic/general and vocational tracks, in practice this tends to be the case. This definition does not include streaming, which involves tailoring the curriculum to different groups of children based on ability, but within the same school.” (European Commission, 2006a: 19)



schools, low achievers in streamed schools are exposed to less content and to lower level content than similarly low achieving students are in mixed-ability classes. Besides, the level and pace of instruction in heterogeneous middle school classes is similar to that provided in the top stream in streamed schools. Therefore, the presence of low achievers in heterogeneous classes did not cause teachers to slow down their curriculum, but rather it appeared to allow low achievers to benefit from the same richer and more fast-paced curriculum offered to the top stream.

Regarding the effects on achievement, Braddock and Slavin conclude from their review of different studies that there are no overall positive effects of ability grouping on achievement: while some of them found significantly negative effects of ability grouping for low achievers with no corresponding advantage for high achievers, others found that ability grouping had a limited positive effect on high achievers and a negative effect on low achievers. Zimmer (2003), when examining the peer effect ("spillover effect" high-ability students have on low-ability students) in cases in which streaming is involved, concludes that streaming diminishes the impact peers have on student achievement for low and average-ability students, while the peer effect is unaffected by streaming for high-ability students. Moreover, effects on academic self-esteem, feelings of inferiority, shame, anger and an external locus of control have been reported regarding students in the lower streams as compared to the low achievers in mixed-ability classes, as well as a higher likelihood of dropping out and becoming a delinquent (Braddock & Slavin, 1992).

Another element related to streaming is mobility. Though it has been argued that there can be considerable mobility between ability groups, as Hallinan (1996) states referring to 30% of students who change their English stream during high school, the same author refers to some characteristics of students that are linked to the probability to move to a higher or a lower stream. Stream changes and dropping out are affected by characteristics such as gender and income; "Being female, older, and having a low income appear to place students at risk for changing to lower tracks<sup>7</sup> and dropping out of tracked subjects. Again, Hallinan (1996) considers that tracking can be seen as a mechanism through which fewer opportunities for learning are channelled to these students" (p. 999). Youdell (2003) and De Haan & Elbers (2004) also state that students' ethnic background is related to assignment to low-achieving groups, and problems arise for these groups: first, the fact that ability groups tend to make the mobility of students

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<sup>7</sup> In this quote, "tracking" is used to what in this report is called "streaming".

between groups difficult; second, the fact that teachers tend to provide less instruction and less effective instruction for children in lower-ability groups.

The above mentioned assertions regarding the effects of streaming on high achievers would undermine positions which defend streaming based on arguments of effectiveness. Moreover, the conclusions regarding learning opportunities of low achievers in streamed classes point out that the consequences of ability grouping go beyond equity and democracy understood as being the right to be educated in a non-segregated environment, but also involves the right to achieve equity in learning opportunities in order to be socially included in the future. The fact that an academic certificate that has been obtained with adaptations made to the curriculum will not provide the same opportunities to access other educational institutions or the labour market is an example of the inequalities which exist. According to Braddock and Slavin, ability grouping must end because: "Ability grouping is ineffective. It is harmful to many students. It inhibits development of interracial respect, understanding, and friendship. It undermines democratic values and contributes to a stratified society" (1992: 14). Therefore, overcoming streaming is necessary in order to provide all students with the opportunity to learn the relevant material in their education and the competences which are required in order to be socially included. From the previous research, the effects of streaming can be synthesized in the following points:

Table 2: Effects of streaming according to the reviewed literature

	<b>Learning</b>	<b>Other relevant aspects</b>
<b>Lower achievers</b>	<p><i>Streaming</i> diminishes students' learning opportunities by reducing:</p> <ul style="list-style-type: none"> <li>▪ the time spent in instructional activities, the materials, and the contents</li> <li>▪ the expectations towards lower ability groups</li> <li>▪ the pace of instruction</li> <li>▪ the peer effect</li> </ul> <p><i>Heterogeneous classes</i> facilitate:</p> <ul style="list-style-type: none"> <li>▪ low achievers benefiting from the pace of instruction of high ability groups</li> </ul>	<p><i>Streaming</i> contributes to a:</p> <ul style="list-style-type: none"> <li>▪ reduction of academic self-esteem and feelings of competence</li> <li>▪ higher likelihood of further dropping out</li> <li>▪ vulnerable groups are more likely to be assigned to low-achieving groups</li> </ul>
<b>Higher achievers</b>	<p>In <i>heterogeneous classes</i>:</p> <ul style="list-style-type: none"> <li>▪ Low achievers do not negatively affect the learning opportunities of high achievers.</li> </ul>	

Source: own creation

2.1.2. Overview of streaming in Europe

Streaming is a common practice in Europe. An analysis of educational systems demonstrates that it is prohibited in only one country (Finland<sup>8</sup>) out of the 26 countries analysed. In the rest of the countries streaming is allowed although not explicitly (as it is not prohibited) and in some cases it is also regulated by law (Austria, Denmark, Latvia, Lithuania, Malta, and Spain). In the following table, a classification of four different types of streaming:

Table 3: Types of streaming

<b>TYPES OF STREAMING</b>
<i>1. Organization of classroom activities according to ability levels</i>
1.a. groups in different classrooms
1.b. groups in the same classroom
<i>2. Remedial groups and support segregated from the regular classroom</i>
<i>3. Exclusionary Individualised curriculum</i>
<i>4. Exclusionary Choice</i>

Source: INCLUD-ED CREA- University of Barcelona

The analysis of educational reforms has allowed identifying four main types of streaming; these are described below.

*1. Organization of classroom activities according to ability levels*

This type of streaming is found in Austria, Belgium, Cyprus, Denmark, Estonia, Greece, Ireland, Poland, Portugal, Slovenia, Spain, and the United Kingdom. Schools that adopt it do so based on the argument of adapting teaching to the different needs and paces of the students, which creates groups of more and less able students.

This type of streaming especially occurs in secondary education and is likely to lead to different tracks later. The practice of streaming is often an issue decided by each school or teacher. It is also worth highlighting that ability groups are usually implemented in compulsory instrumental subjects, those which are most closely related to educational success and social inclusion. Moreover, this practice is also applied for recently arrived

<sup>8</sup> In Finland, the prohibition refers to level courses, which were removed by the comprehensive school reform in the 1980's to ensure quality (law 132/1984).

migrant students, according to their language level and also for special education students.

### *2. Remedial groups and support segregated from the regular classroom*

Remedial groups outside the regular class during school hours to support children with difficulties are carried out in Austria, Belgium, Finland, France, Latvia, Netherlands, and Spain. In several countries it is a practice which consists of educational provisions created for children with particular needs or those at risk of social exclusion segregating them from the regular classroom, especially, students assigned to special education, migrant students, cultural minorities, or for language reasons.

### *3. Exclusionary individualised curriculum*

Individualised curriculum can be use in an exclusionary way in an inclusionary way. The exclusionary one is the individualised curriculum adapted to the level of a particular student which results in lowering down the official curriculum. Moreover, in some countries this is used for specific groups of students such as those assigned to special education, migrant students or in relation to language issues. The exclusionary individualisation of the curriculum is performed in Belgium, Denmark, Estonia, Finland, France, Lithuania, Netherlands, Romania and Spain. Denmark, Estonia and Finland make an inclusionary use of individualized curriculum. Although the exclusionary use of the individualised curriculum is very common, there is not data enough to clarify to what extent the other countries use it in an exclusionary way and in an inclusionary way.

### *4. Exclusionary choice*

The choice between different subjects can be use in an exclusionary way or in an inclusionary way. The exclusionary one is the choice between different subjects in the curriculum which leads to unequal academic and social future pathways. In those cases, the subjects or "streams" chosen are often strongly influenced by the family and teacher's expectations. The unequal options are chosen depending of the social and academic status and ethnic identities of the families. In some countries (Belgium, Cyprus, Estonia, Finland, Romania, Slovenia, Spain, the United Kingdom), students can choose between some subjects in the curriculum. Further data are needed in order to clarify to what extent this choice is used in an exclusionary or inclusionary way.

### 2.1.3. Connections between streaming and performance as found in the educational systems

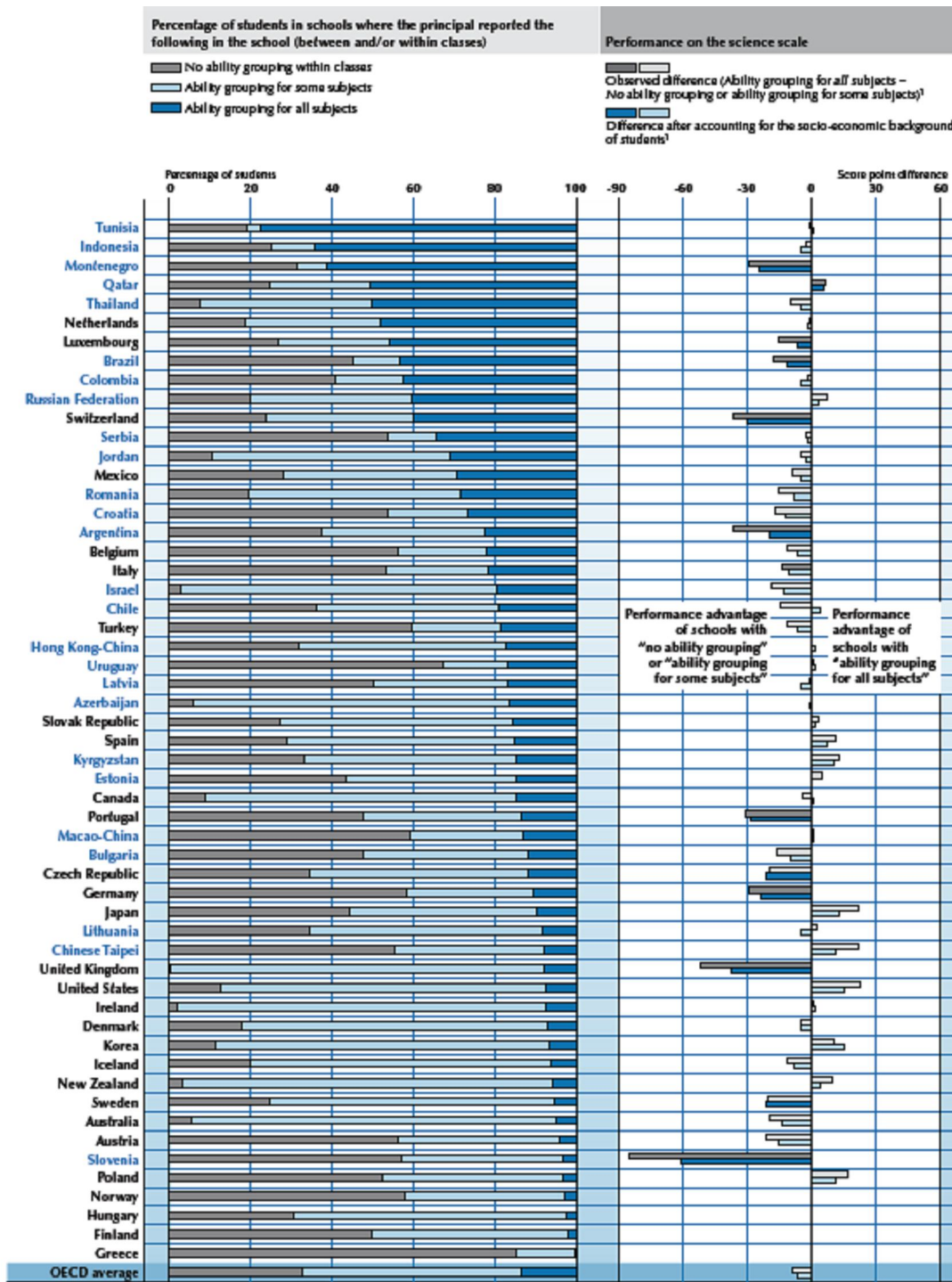
Based on measurements of the amount of within-school ability grouping outlined by PISA 2003, the OECD concluded that: "On average across OECD countries, avoiding ability grouping in mathematics classes has an overall positive effect on student performance that is equivalent to 9 score points, but this is reduced to 5 score points after accounting for the impact of socio-economic background" (OECD, 2004b: 258). Similarly, Carey and Ernst (2006) carried out a multivariate regression analysis in order to see how different factors affect students' performance. Ability grouping was one of these factors. Only 6 out of the 28 countries analysed (Belgium, Hungary, Iceland, Korea, Sweden and Turkey; and Hungary, Iceland and Sweden which had very marginal coefficients) have a positive coefficient for ability grouping and students' performance. The other countries demonstrate the reverse pattern that is grouping ability leading to negative effects on overall performance. Thus, the tendency that can be observed suggests the avoidance of ability grouping.

More recently, PISA 2006<sup>9</sup> (OECD, 2007) has offered more evidence to this assertion, as it is showed in the following figure:

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<sup>9</sup> Based on the Schools Questionnaire answered by the principals in the participant schools, on the one hand, the percentage of schools which, for each question related to streaming (*Grouping by ability into different classes, and Grouping by ability within their classes*), answered "For all subjects", "For some subjects" or "Not for any subject" were looked at. On the other hand, mean performance in science for schools which, in each country, answered each of the different options, were also looked at. With this data, for example, it is possible to compare the average performance in science for schools in Austria which reported the use of *Ability grouping for all subjects* with the average performance of schools which reported *No ability grouping* or *Ability grouping for some subjects*.

Figure 2: Ability grouping within schools and students performance in science



Source: OECD. (2007). PISA 2006: Science Competencies for Tomorrow's World, Vol.1

The table shows a comparison of the science performance between schools that conduct different levels of streaming in different ranges of streaming, from all subjects to none. As is stated in the report, "In six OECD countries and four partner countries the science

performance in schools that reported ability grouping for all subjects is lower; only in the partner country Qatar is it slightly higher than in schools without ability grouping or ability grouping only for some subjects". The same comparison is also performed taking into account the students' home backgrounds. In this case, "students in schools that practise no ability grouping or ability grouping only for some subjects outperform those with ability grouping for all subjects in the United Kingdom, Switzerland, Portugal, Germany, the Czech Republic, Sweden and Luxembourg, as well as in the partner countries Slovenia, Montenegro, Argentina and Brazil, with the differences ranging between 7 and 61 score points" (OECD, 2007: 225). To sum up, these comparisons show that streaming tends to reduce the performance of schools where it is implemented.

## ***2.2. What we already know about heterogeneous groups***

### ***2.2.1. Inclusionary practices to overcome streaming***

Instead of adapting (reducing) activities and material for lower achievers, other initiatives are implemented to provide the necessary support while maintaining the shared learning environment and material, which is referred to here as inclusionary practices. Braddock and Slavin (1992) refer to alternative approaches to ability grouping which are possible to implement in order to avoid segregation and the effects mentioned. First, the authors state that overcoming streaming should be a part of an overall improvement in instructional practices for all students, which would provide methods and materials which are better for all students, and would make the "top track" curriculum accessible to a broader range of students, without watering it down. Second, low achievers should be provided with assistance which is closely linked to their classroom curriculum; peer tutors, voluntary tutors or special education teachers can provide this assistance. Third, there is the possibility of extending the learning time for low achievers and provide pre-teaching or remedial classes linked to regular classroom work that can help them to meet the requirements of the curriculum. Expectations are also an aspect that has to be taken into account; according to the authors, expectations of students' performance in untracked schools should be similar to the characteristics in the top track.

Cooperative learning (Braddock & Slavin, 1992; Johnson, Johnson, & Holubec, 1994; Slavin, 1991; Stevens & Slavin, 1995) is an alternative to ability grouping which has demonstrated a positive impact on learning achievement, self-esteem, acceptance of mainstreamed academically handicapped students and inter-group (cultural group)

relations. This consists of involving students working in heterogeneous learning groups maintaining both group goals and individual accountability.

Regarding achievement, research reviews show that there is significantly greater achievement in cooperative classes. And this is true not only for the most disadvantaged students but also for high achievers: "Cooperative learning methods generally work equally well for all types of students. While occasional studies find particular advantages for high or low achievers, boys or girls, and so on, the great majority find equal benefits for all types of students. Sometimes teachers or parents worry that cooperative learning will hold back high achievers. The research provides no support for this claim; high achievers gain from cooperative learning (relative to high achievers in traditional classes) just as much as do low and average achievers" (Slavin, 1991: 77).

Results suggest that even gifted students in heterogeneous cooperative learning classes reach higher levels of achievement than their peers who do not experience cooperative learning: "Gifted students in this study who worked in heterogeneous cooperative groups in a variety of content areas had much higher achievement than similar students in the comparison schools who received enrichment programs twice a week and did not participate in cooperative learning" (Stevens & Slavin, 1995: 345).

After the second year of cooperative learning in elementary school, higher achievement in reading vocabulary, reading comprehension, language expression and mathematical computations can be noticed, in comparison to peers in traditional schools. The structure facilitated by cooperative learning, which is based on positive interdependence within a group of students, helps to organise the classroom in such a way that students become a resource in the classroom so that students who need help can rely on support and feedback from their peers, facilitating the accommodation of students with diverse abilities (Stevens & Slavin, 1995).

On the other hand, cooperative learning increases students' self-esteem and contributes to the creation of positive peer relationships between students, which is especially important when diversity is present in the classroom, for example in terms of different ethnic backgrounds (Slavin, 1991). Working together to achieve a common goal helps to produce more meaningful interactions between students and a sense of positive interdependence, which contributes to better peer relations (Stevens & Slavin, 1995). Cooperative learning is also related to the development of feelings of individual control over the student's own fate in school, cooperativeness and altruism. Also better



attendance, lesser contact with the police, and better behaviour ratings have been associated with lower socioeconomic status students at risk of becoming delinquents, when they work in cooperative groups (Braddock & Slavin, 1992).

Information society is generating new understandings of learning that take into account the key changes that are found (Castells et al., 1999). Dialogic learning takes from cooperative learning the cooperation among students in heterogeneous groups within the classroom and, besides, develops the promotion of learning through the dialogue among all the agents who interact with students (Elboj et al., 2002; Freire, 1998; Wells, 1999). In the present information society, the learning is a result of all students' interactions (among them, with their teachers, families and so on) and not only of those among students and teachers inside the classrooms. For instance, it has been already showed that parents' cultural capital has a clear influence on the students' learning. Nevertheless, most schools are still depending on conceptions of learning elaborated during the industrial societies which focus almost only on the relations among students and one teacher within the classrooms. Dialogic learning goes further including communicative actions like the participation of diverse types of professionals, volunteers and families within the classrooms, resulting in the increase of instrumental learning of all students in all subjects and in a betterment of the living together among students and families from different cultures. Besides, dialogic learning includes also other actions with the same objectives: family education, open doors to the community, tutorial libraries, among others. This type of organisation in schools helps to create spaces for dialogue which promote an increase in learning-related interaction. Moreover, the diversity (e.g. cultural backgrounds) of the adults involved in the classrooms provides new experiences, new knowledge and exposures, all aspects that enriches the children's learning.

Dialogic learning contributes to overcome streaming and educational failure, and it is being carried out in schools in order to promote learning in instrumental areas (such as languages and maths), with the objective of avoiding future lower tracks, and thus promoting greater inclusion for children from vulnerable groups. Different students are gathered into heterogeneous groups (reflecting the diversity of the students in the classroom in terms of culture, language, achievement, gender, etc.) within the same classroom. Professionals and volunteers from the community enter the classrooms in order to promote group interaction which facilitates learning through mutual help and cooperation. There is a wide body of literature focused on the impact of interaction on knowledge construction and learning (Vygotsky, 1978). This type of organisation in schools helps to create spaces for dialogue which promote an increase in learning-related

interaction. Moreover, the diversity (e.g. cultural) of the adults involved in the classrooms provides new knowledge, a fact which enriches the children’s learning.

2.2.2. Inclusionary practices in European educational systems

The review of practices in different countries has allowed the identification of a number of educational strategies which, in contrast to segregation, attempt to resolve educational inequalities and seek greater inclusion. A classification of five main types of inclusionary practices has been developed:

Table 4: Types of inclusionary practices

<b>TYPES OF INCLUSIONARY PRACTICES</b>
<i>1. Heterogeneous ability classrooms with additional resources</i>
<i>2. Inclusive split classes</i>
<i>3. Extending the learning time</i>
<i>4. Inclusive Individualised curriculum</i>
<i>5. Inclusionary Choice between</i>

Source: INCLUD-ED CREA- University of Barcelona

*1. Heterogeneous ability classrooms with additional resources*

In several countries, the existence of diverse students in the regular classroom is accompanied by additional support in the classroom. This is recorded in Cyprus, Belgium, Denmark, Finland, France, Ireland, Italy, Latvia, Malta, Poland, Portugal, Finland, Slovakia, Slovenia, Spain, and the United Kingdom. The support consists of the inclusion of extra teaching staff, and sometimes also other people such as family members and members of the community. In most of these countries the additional support is linked to specific groups of students, such as students considered requiring special education, and this enables these students to remain in the mainstream classroom. This also happens with migrant students, minority students, or can occur due to language reasons.

*2. Inclusive split classes*

In some occasions, an additional teacher is provided for specific subjects, usually in the subjects considered instrumental learning like language and mathematics. This action opens up the possibility of different ways to organize the class and reduce the student per student ratio. For instance, if one teacher has 24 students and another comes to help her or him, to conduct streaming represents to divide the students in homogeneous

groups of 12 depending on their level of ability in this subject. Dialogic class means to have both teachers in the same classroom with the 24 students and, if it is necessary, with the help of other professionals and/or volunteers and/or families. Inclusive split classes means to organise two heterogeneous groups of 12 students each. In this practice, different teachers are in charge of different groups of students, similarly to streaming. The difference is that in the streaming case grouping of students are created along homogeneity in ability, while in the inclusive split class they are not. Therefore they tend to be heterogeneous ability groups.

### 3. *Extending the learning time*

The extension of the learning time or the provision of extra activities is offered in some countries. This can be seen in Cyprus, Denmark, Finland, France, Greece, Latvia, Lithuania, Luxembourg, The Netherlands, Portugal, Finland, and Slovenia. Moreover, in some countries it is aimed at specific groups of students, such as migrants or 'gifted and talented' students.

Amongst these different practices the example of *all day schools* can be found (in Greece, Cyprus and Denmark) and an *open school system* (in France), which students with learning difficulties can benefit from. These are programmes that provide extra education to the most disadvantaged students, in order to address current and future inequalities in learning achievement.

- *All day Schools.* The existence of *all day schools* (UNESCO, 2004) in Greece and Cyprus has increased school hours and enables students from underprivileged groups to remain in school longer. In this way they are able to catch up with their classmates who have a higher socioeconomic background and may receive additional help through family support or private lessons. Denmark is currently testing all day school projects in different municipalities which have a high percentage of bilingual pupils who have asked to participate in this project. In Denmark the *all day schools* project (*heldagsskoler*) is generally adopted by those counties or regions with high percentages of immigrant bilingual students. Through this project regular school hours are extended from 6 to 8 hours, in which language learning support can be increased and students can become integrated into classrooms containing their own age group.

- *Open school system.* Another example is the *open school system* (Ministry of National Education, 2006), in France, which makes it possible for lower and upper secondary schools to receive young people (including pupils in primary education) during

the holiday periods and on Wednesdays and Saturdays throughout the school year. The project was particularly designed for young people who live in socially disadvantaged areas or who have difficult cultural or economic backgrounds and it offers educational support amongst others activities.

Regarding extra-curricular activities, the *First results from PISA 2003* report (OECD, 2004b: 241) states that the various forms of learning outside formal classroom settings increase the students' opportunity to spend time learning, which should have a positive effect on learning outcomes. As the same report points out, students' socioeconomic background has an influence on after-school learning activities (e.g. homework), as students from wealthier or better educated families can benefit from better learning conditions at home. The PISA 2003 analysis demonstrates that providing activities promoting students engagement with mathematics has a positive impact: "Each additional such activity that is offered by schools is associated with an average performance advantage of 7 score points. However, once socio-economic factors are accounted for, only 2 points remain, signalling that schools' offerings of activities to promote the engagement with mathematics depend highly on their socio-economic characteristics" (OECD, 2004b: 259). Therefore, the extension of the learning time results in an improvement of students' performance as well as in a reduction of the effects of the students' cultural or economic backgrounds.

#### 4. *Inclusive individualised curriculum*

Inclusive individualised curriculum is not oriented to reduce the contents that a student has to learn but to adapting the teaching methods to facilitate the student' learning. As it has already mentioned, several countries use individualised curriculum and some of them (Denmark, Estonia and Finland) do it mostly in an inclusionary way.

#### 5. *Inclusionary choice*

It refers to students' choice of subjects, when they do not lead to the subsequent differentiation between pathways or a reduction of the later educational and social opportunities. This type is characterized by the fact that choice is not based in different abilities but on the students' preferences. Thus, the equality of opportunities is ensured after this choice, this practice does not equal to streaming. As it was said above, there is no enough data to clarify to what extent countries using choice (Belgium, Cyprus, Estonia, Finland, Romania, Slovenia, Spain, and the United Kingdom) do it in an exclusionary or inclusionary way.

### ***2.3. The need to clarify the differences between mixture, streaming and inclusion***

The confusion between inclusion and mixture represent one the main challenges in identifying inclusionary practices. The diversity found in the schools students' body poses new challenges to teachers in order to respond to the students' different needs. Traditional classrooms, which comprise same-age students with only one teacher per class has demonstrated not being enough to respond to the diversity of characteristics, levels of achievement and learning paces that usually exist in the classroom. For instance, if one teacher has difficulty to deal with her or his twenty five students, three different grouping options are found to be possible:

1) Mixture. It consists in maintaining the class group of 25 students and one teacher for them. This class may be organized as a heterogeneous group.

2) Streaming. It represents to maintain the 18 better students within the regular classroom and organize the other 7 in other classroom with other teacher.

3) Inclusion. It consists in maintaining the 25 students in the regular classroom with the 2 teachers (and sometimes with additional support by other persons). Other forms are also possible like the already explained inclusive split classrooms, but we select only one as an example.

When teaching becomes difficult, the 7 students with lower levels of abilities can suffer exclusion through streaming in a separate classroom, with lower expectations posed towards their future. But they also can suffer exclusion in a mixture class where the unique teacher cannot deal with the 25 students. The comparison should not be made between the streaming (18 students with 1 teacher and 7 also with 1 teacher) and mixture (25 students and 1 teacher), but between streaming and inclusion (25 teachers and 2 teachers). In other words, the problem is what is the best option to organize 25 students with 2 teachers, with streaming or with inclusion.

Studies and statistics, such as PISA, compare streaming with both, mixture and inclusion, as being the same. In front of the question whether teachers do ability grouping into different classes, they respond affirmative, when they do is streaming. The same question is responded negatively by those teachers who actually do mixture or

inclusion options. This shows that in order to analyse the effects of streaming and inclusion it is necessary to separate inclusion from mixture, as they lead to very different educational situations and effects on the students.

Table 5: Mixture, streaming and inclusion

	<b>MIXTURE</b>	<b>STREAMING</b>	<b>INCLUSION</b>	
<b>Based on...</b>	Equal opportunity	Difference	Equality of results Equality of differences	
<b>Homogeneous or heterogeneous groups?</b>	Heterogeneous	Homogeneous	Heterogeneous	
<b>How many human resources are used?</b>	1 teacher	More than 1 teacher	More than 1 teacher	
<b>All together or separated?</b>	Together	Separated	Together	Separated
	<b>1) Mixed ability classrooms</b>	<b>1) Organization of classroom activities according to ability levels</b> a. ability groups in different classrooms b. ability groups in the same classroom  <b>2) Remedial groups and support segregated from the regular classroom</b>	<b>1) Heterogeneous ability classrooms with additional resources</b>	<b>2) Inclusive split classes with mixed ability students</b>

Source: own creation

#### **2.4. Orientations for further analysis on streaming**

Streaming has been one of the solutions implemented to respond to the challenges posed by students' in traditional classroom settings (*mixture*). Some difficulties have been identified in the analysis of the different varieties of streaming that exist:

- *Limitations for the study of streaming*

Despite the data provided on streaming and performance (section 2.1.3.), there are some contradictions in the measurements of streaming provided by different international assessments. Regarding the first type of streaming mentioned in section 2.1.2 (*Organization of classroom activities according to ability levels*), the PISA<sup>10</sup>,

<sup>10</sup> PISA 2003 aims to evaluate 15 year-old students in Mathematics, Reading, Science and Problem-solving. The PISA 2003 Database offers the answers to the school's questionnaires, by country. The schools were asked whether different mathematics classes study similar content, but at different levels of difficulty (Streaming by level); different classes study different content or sets of mathematics topics that have different levels of

TIMSS<sup>11</sup> and PIRLS<sup>12</sup> evaluations describe three different types of streaming: *streaming by content* (different classes study different material), *streaming by level* (different classes study similar material but with different levels of difficulty) and *streaming within classes* (students are grouped by ability within classes).

Many contradictions arise between the different measurements of streaming in TIMSS and PISA evaluations, although they are based on similar questions. For example, regarding *streaming within classes*, Hungary and the Netherlands have high rates in PISA 2003 and comparatively high percentages in TIMSS 1999, although around or below 50%. Finland shows near zero percentages of streaming within classes in the TIMSS 1999 evaluation, but around 45% in PISA 2003. Latvia demonstrates medium degrees of this type of streaming in TIMSS 1999 (40% in mathematics and 27% in science) but a high percentage in PISA 2003 (76, 78%).

Regarding *streaming by content* Latvia and UK have contradictory results, with high percentages of this type of streaming in PISA 2003, but close to zero rates in the TIMSS 1999 evaluation (with regards to the UK, TIMSS 1999 refers only to England). Italy also provides contradictory results, with more than 50% of schools reporting streaming by content in PISA 2003, but 0% in TIMSS 1999, both in mathematics and in science. The Slovak Republic, Hungary and the Czech Republic have percentages between 30% and 40% for this type of streaming in PISA 2003 (comparatively low percentages) and very low percentages of it in TIMSS 1999 (10% or below). On the other hand, PIRLS 2001 and

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difficulty (Streaming by content); students are grouped by ability within their mathematics classes (Streaming within classes); or whether in mathematics classes, teachers use pedagogy which is suitable for students with heterogeneous abilities (Alternative to grouping). The PISA 2003 database shows the percentage of schools reporting using these methods for all of the classes, for some of the classes or not for any classes. We have used the percentage of "not for any classes" as an indicator that they do not use streaming (or do not use alternatives to it in the last case).

<sup>11</sup> TIMSS 2003 aims to evaluate the science and mathematics performance of fourth graders (students enrolled in the highest of two adjacent grades which contained the largest proportion of 9-year-olds) and eighth graders (which contains the largest-proportion of 13 year-olds), and has specific questions related to streaming by level, by content and within classes in the school questionnaires. However, data on these items do not appear in the international reports of TIMSS 2003, but this is only available as raw data by country, separated by school. What appears in the international reports (Mullis et al. 2004, exhibits 5.4 and 5.5; Martin et al., 2004; exhibits 5.4 and 5.5) is a yes/no answer from the national coordinators of TIMSS about whether there are different levels of difficulty within the same curriculum or within different curricula. We have not used these measurements, as they do not seem to grasp the different degrees of streaming which exist in each country. Instead, we have used data on streaming from the TIMSS 1999 evaluation, evaluating only eighth-grade students. Exhibit R2.2 from Martin et al. (2000) and Mullis et al. (2000) show the percentages of schools answering yes to whether all their mathematics/science classes study similar content, but at different levels of difficulty (Streaming by levels); whether students are grouped by ability within their mathematics/science classes (Streaming within class) or whether different classes study different content or sets of mathematics/science topics (Streaming by content).

<sup>12</sup> PIRLS 2001 (Mullis et al., 2003) and PIRLS 2006 (Mullis et al., 2007), which aim to evaluate the reading performance of fourth-graders, in the teacher's questionnaire asked whether they use same-ability groups (Streaming) or mixed-ability groups (which could be considered to be an alternative to streaming) in their reading classes. Teachers could report doing so "Always or almost always", "often", "sometimes" or "never". Exhibit 5.19 of Mullis et al. (2003) and exhibit 5.15 of Mullis et al. (2007) show, for each country, the percentages of students whose teachers report using some of these grouping types "Always or almost always".

PIRLS 2006 seem to show that streaming in reading classes is not a common practice in all countries apart from the UK (Scotland and England).

Taking this into account, only some general conclusions can be drawn, such as the fact that there are high rates of streaming by level. Also the fact that there are smaller but still high rates of streaming within classes and that, with regards to streaming by content, the PISA 2003 data demonstrates high rates of streaming, but the TIMSS 1999 data only indicates that there are two countries with these high rates. The Netherlands, Belgium and the UK consistently show high rates of streaming (except for Belgium with regards to streaming within class, which there are comparatively low rates of in TIMSS 1999 and PISA 2003). Clear and conclusive connections between streaming (and its characteristics and components) and academic performance need first of all an agreement on what is considered streaming.

The difficulties of researching the effects of grouping on students' achievement have already been noted (Betts & Shkolnik, 2000). The authors point out six key difficulties. Two of them refer to 'the imperfect measure of ability in the group placement' and the lack of clearness of 'what either the range of ability or the mean ability will be in "heterogeneous" classes'. These two issues are difficult to establish, as they depend on the class setting. Other difficulties are:

- survey instruments typically fail to differentiate between ability grouping and tracking (a)
- the literature neglects the possibility that within a classroom teachers group students by ability (b)
- schools that do not use ability grouping officially may group students informally (c)
- we need to know much more about how tracked (streamed) schools allocate resources; it seems to be more likely that students in lower-ability classes have smaller class sizes and less educated and experienced teachers (d)

These difficulties demonstrate: problems with the definition of *streaming*, which needs to be clarified, both regarding the range of practices that it includes (b) and its differentiation from other practices (a); problems with the data collection so that it reflects the reality (c); and issues regarding the use of resources with streamed students (d) which will be referred to next.



A categorization of types of streaming with clear criteria that defines each type would facilitate the comparison between the results from different studies. Thus, this would also provide the possibility to reach clear conclusions on the effects that streaming has on the students performance and therefore on their educational and social inclusion.

- *Defining criteria for the analysis of streaming.*

A proposal for the categorisation of streaming and a definition of its different types is presented below. This categorisation has been created based on the practices found in educational systems in the different countries analysed, as well as the categories of streaming used in international assessments (PISA, TIMSS, PIRLS).

Table 6: Streaming: Definition, criteria and variable characteristics

<b>1. Organization of classroom activities according to ability levels</b>
<p><u>Definition</u></p> <p>The ordinary classroom activities are organized according to the different levels of performance of the students, grouping them into groups of homogeneous abilities.</p>
<b>1.a. Groups in different classrooms<sup>13</sup></b>
<p><u>Definition</u></p> <p>Different ability groups are distributed into various classrooms.</p> <p><u>Criteria</u></p> <ul style="list-style-type: none"> <li>- Students are assigned to a classroom based on their level of achievement, seeking homogenous performance within the classroom</li> <li>- This involves teaching specific material or at a specific level of difficulty which is different from the other classrooms</li> <li>- The distribution can be permanent (for all subjects and classes) or temporary (for some subjects or classes)</li> <li>- Different learning objectives are assigned to each classroom; learning objectives are reduced for low-achievement classrooms and are comparatively higher for high-achievement classrooms</li> </ul> <p>Mobility between classrooms can be considered, although low-achievers are more likely to continue in low-achievement classrooms</p>

<sup>13</sup> Different classrooms may be allocated in the same school or even in different schools.

Variable characteristics

- Is this distribution permanent (for all subjects and classes) or temporary (for some classes or subjects)?
- If it is implemented for some subjects, what subjects? Is it implemented for instrumental subjects?
- If it is implemented in some classes, what type of classes are they (classes in which the students do exercises, or in which exam revision is carried out, or in which subjects are taught)?
- If it is implemented in some classes, how is the activity organized when all students are together in the classroom? Do the students with more difficulties receive any support?
- Who decides on the assignment of the students to classrooms (teachers, students, family members, other members of the school staff)?
- Which criteria are used to assign teachers to classrooms? Are specific characteristics required for teachers in low-achievement classrooms? Which characteristics? Are specific characteristics required for teachers in high-achievement classrooms? Which characteristics?
- Do classrooms containing low-achievement students have extra support?
- Is movement to high-achievement classrooms promoted? How? What is the average number of students who move up between classrooms?
- Is achievement of the general objectives for all the classrooms ensured? How?

**1.b. Groups in the same classroom**Definition

The distribution of ability groups is carried out within the classroom.

Criteria

- Students are assigned to a group based on their level of achievement, seeking homogenous performance within the group
- This assignment involves teaching specific material or at a specific level of difficulty which is different to the other groups
- The distribution can be permanent (for all subjects and classes) or temporary (for some subjects or classes)
- Different learning objectives are assigned to each group; learning objectives are reduced for low-achievement groups and are comparatively higher for high-achievement groups
- Mobility between groups can be considered, although low-achievers are more likely to continue in low-achievement groups

Variable characteristics

- Is this distribution permanent (for all subjects and classes) or temporary (for some classes or subjects)?
- If it is implemented in some subjects, in what subjects? Is it implemented in instrumental subjects?
- If it is implemented in some classes, what kind of classes are they (classes in which the students do exercises, or in which exam revision is carried out, or in which subjects are taught)?
- Who decides on the assignment of students to groups (the class teacher, student, family member, other members of the school staff)?
- What are the criteria for assigning teachers to groups? Are specific characteristics required for teachers in low-achievement groups? Which ones? Are specific characteristics required for teachers in high-achievement groups? Which ones?
- When implementing ability grouping within classroom, is extra support included in the classroom?
- Is mobility to high-achievement groups promoted? How? What is the average number of students who move up between groups?
- Is achievement of the general objectives for all the groups ensured? How?

**2. Remedial groups and support segregated from the regular classroom**

Definition

Specific teaching is provided for students who find it difficult to cope with the curriculum requirements, individually or in groups, apart from the regular classroom activity.

Criteria

- Remedial teaching can be performed individually or in small groups containing students with similar difficulties
- The support is provided outside the regular classroom
- The support is provided in regular school times, while classmates are in the regular classroom working on other material or at a different (higher) level

Variable characteristics

- Is this distribution permanent (for all subjects and classes) or temporary (for some classes or subjects)?
- If it is implemented in some subjects, in what subjects? Is it implemented in instrumental subjects?
- Who decides on the provision of segregated support for a particular student (the class teacher, student, family member, other members of the school staff)?
- Which activities are the students in the regular classroom carrying out when other students are receiving this support (which activities/material are they missing out on)?
- Segregated support occurs when the class is working on instrumental areas?
- Is extra support in the classroom provided for children who receive teaching in remedial groups or segregated support?

<b>3. Exclusionary Individualised curriculum</b>
<p><u>Definition</u></p> <p>The objectives of and/or activities in the curriculum are modified for a particular student in comparison to the group as a whole.</p> <p><u>Criteria</u></p> <ul style="list-style-type: none"> <li>- Reduction or suppression of learning objectives, especially in instrumental areas</li> <li>- Adaptations can be made in one or several subjects</li> <li>- In order to be considered to be exclusionary, these can be either based on student's difficulties which are not due to a disability or particular limitations, or to adapt to the particular pace or abilities of a student</li> <li>- Curriculum adaptations are not considered to be exclusionary in specific cases of students having a disability which hinders them from studying the regular curriculum (provided that a connection between the adapted curriculum and the regular class activity exists)</li> <li>- Curriculum adaptations are not considered to be exclusionary when they do not consist in reducing or suppressing objectives, but consist in adapting the way that they are taught to better help the students to achieve these learning objectives</li> </ul> <p><u>Variable characteristics</u></p> <ul style="list-style-type: none"> <li>- Who decides on the curriculum adaptations (the class teacher, student, family member, other members of the school staff)?</li> <li>- Who implement the curriculum adaptations (the class teacher, a specialist, etc.)?</li> <li>- Is this individualisation implemented for all subjects or for some subjects?</li> <li>- When it is implemented in some subjects, in what subjects? Is it implemented in instrumental subjects?</li> <li>- It is planned as a permanent or temporary adaptation? It is usually a permanent or temporary adaptation?</li> <li>- Is extra support in the classroom provided for children with individualised curriculum?</li> </ul>
<b>4. Exclusionary Choice</b>
<p><u>Definition</u></p> <p>Students are asked to choose between optional subjects in the curriculum, which has an influence in subsequent academic opportunities.</p> <p><u>Criteria</u></p> <ul style="list-style-type: none"> <li>- The choice of subjects affect relevant areas of the curriculum</li> <li>- The choice of subjects is based on the students' ability in the different subjects</li> <li>- The choice of subjects can influence the subsequent choice of educational tracks</li> </ul> <p><u>Variable characteristics</u></p> <ul style="list-style-type: none"> <li>- Who decides on the subjects chosen (the class teacher, student, family member, and other members of the school staff)? How is this decided?</li> <li>- Is there any guidance provided by the school? What is this guidance based on?</li> <li>- Which optional subjects can be chosen from?</li> <li>- How does the choice of particular subjects influence choices in subsequent courses?</li> </ul>

Source: own creation

### ***2.5. Orientations for further analysis on inclusion***

Inclusion has been the second alternative to the difficulties arisen from teaching a diverse body of students in the same classroom. It is characterized by the inclusion of the necessary resources to respond to all the diverse needs existing in the regular class. In what follows, different orientations for further analysis are discussed.

- *Clarifying the role and use of the resources.*

As it has been previously seen, simply educating students with different abilities together does not guarantee an efficient response to the diversity of students. The practices of streaming are characterized by allocating extra resources (e.g. support teachers) to help students with more difficulties, but this is accompanied by groupings or different placements. On the contrary, inclusionary practices consist of educating all the different students together but introducing the same resources that are used in segregated educational practices aimed at students with more difficulties into the regular classroom.

The availability of resources does not represent a gain in educational performance, as countries with similar investment levels in education have divergent educational results (OECD, 2004b). It is necessary to conduct more in depth analysis that clarifies the relationship between the use of the resources and students' performance. In other words, this analysis should be conducted to compare the results when the resources are provided through *streaming* and when they are included in the regular environment (*inclusion*). Therefore, when educational practices in the European educational systems are analysed regarding grouping of students and their incidence in a better or a worse performance, not only the placement of students depending on their ability should be taken into account but also how the resources are distributed.

- *Defining criteria for the analysis of inclusion.*

Next, a proposal for the categorization and definition of inclusionary practices is presented. It has been created based on revised authors' contributions, the practices found in the different countries, and the criteria that should be fulfilled in order to avoid segregation and contribute to success for all students.

Table 7: Inclusion: Definition, criteria and variable characteristics

<p><b>1. <i>Heterogeneous ability classrooms with additional resources</i></b></p>
<p><u>Definition</u></p> <p>Classrooms within one school year which are not organized by level but include different ability levels in each classroom. Additional support for students with learning difficulties is included into the regular classroom.</p> <p><u>Criteria</u></p> <ul style="list-style-type: none"> <li>- Either students are not assigned to a classroom based on their level of achievement, or this assignment intends to achieve heterogeneous performance levels within the classroom</li> <li>- The same learning objectives are set for each classroom</li> <li>- Students with particular difficulties such as students with disabilities or newcomers are included into the regular classroom</li> <li>- The classroom activity is organized in a way which supports low-achievers and leads to high performance for everyone</li> <li>- Additional support is not provided in segregated placements or groups for students with more difficulties, but is included into the regular classroom activities in order to provide support in the regular environment</li> <li>- This support is aimed at helping all students to achieve the same objectives</li> <li>- This support can consist of teachers, professionals or other people from the community</li> </ul> <p><u>Variable characteristics</u></p> <ul style="list-style-type: none"> <li>- What are the criteria used to assign students to classrooms?</li> <li>- Is this distribution permanent or temporary?</li> <li>- If it is temporary, what subjects is it implemented in?</li> <li>- Are instrumental subjects taught in mixed ability classes?</li> <li>- Are students with disabilities included in the classroom activities? Are students with other specific difficulties included in classroom activities?</li> <li>- How is learning achievement ensured for all students?</li> <li>- Is the support permanent or temporary?</li> <li>- If it is temporary, what subjects is it provided for?</li> <li>- How is it organized within the classroom?</li> <li>- Who provides this support?</li> <li>- What is the targeted group? To whom it is addressed?</li> <li>- Is it provided for instrumental subjects?</li> <li>- Is the support provided for students with disabilities included into the regular classroom? Is the support provided for other students with specific difficulties also included into the regular classroom?</li> <li>- How is the class activity organised? Is teamwork or help between peers promoted?</li> </ul>
<p><b>2. <i>Inclusive split classes</i></b></p>

Definition

Classrooms within one school year are divided into smaller heterogeneous groups. One teacher is assigned to each group.

Criteria

- Students are not assigned to a group based on their level of achievement, on the contrary, this assignment intends to achieve heterogeneous performance levels within the group
- The same learning objectives are set for both groups
- Students with particular difficulties such as students with disabilities or newcomers are integrated in the regular groups, not in a specific one
- The groups activity is organized in a way which supports low-achievers and leads to high performance for everyone
- Additional support is included, to provide one teacher per group
- This support is aimed at helping all students to achieve the same objectives

Variable characteristics

- What are the criteria used to assign students to groups?
- Is this distribution permanent or temporary?
- If it is temporary, what subjects is it implemented in?
- Are instrumental subjects taught in mixed ability groups?
- Are students with disabilities distributed between the groups? Are students with other specific difficulties distributed between the groups?
- How is learning achievement ensured for all students?
- Who provides this support?
- Which is the targeted group?

**3. *Extending the learning time***

Definition

Opportunities are offered for students to extend their learning time.

Criteria

- Activities to promote the acquisition of the additional learning objectives apart from the regular class activities, are provided after school
- These activities include remedial teaching for low achievers and students with learning difficulties (including language teaching for immigrant students and learning support for students with disabilities)
- Attending these sessions therefore does not involve missing regular classes to receive the required support
- Students attending to these activities should not have an homogeneous performance; heterogeneity should be promoted

Variable characteristics

- What kind of activity does it consist of?
- Who attend these extra activities?
- Who decides on who attends these activities?
- Who decides on and organises the activities?

<p><b>4. <i>Inclusive individualised curriculum</i></b></p>
<p><u>Definition</u></p> <p>The teaching is modified for a particular student in comparison to the group as a whole to facilitate student's learning.</p> <p><u>Criteria</u></p> <ul style="list-style-type: none"> <li>- There is no reduction or suppression of learning objectives, especially in instrumental areas</li> <li>- Teaching adaptations can be made in one or several subjects</li> <li>- It is not based on student's difficulties which are not due to a disability or particular limitations, nor to adapt to the particular pace or abilities of a student</li> <li>- Supervision of the student's learning process is provided</li> <li>- Individualisation of the curriculum is considered exclusionary when it does not consist in adapting the teaching to better help the students to achieve the learning objectives, but consists in reducing or suppressing learning objectives</li> </ul>
<p><u>Variable characteristics</u></p> <ul style="list-style-type: none"> <li>- Who decides on the teaching adaptations (the class teacher, student, family member, other members of the school staff)?</li> <li>- Is this individualisation implemented for all subjects or for some subjects?</li> <li>- When it is implemented in some subjects, in what subjects? Is it implemented in instrumental subjects?</li> <li>- It is planned as a permanent or temporary adaptation? It is usually a permanent or temporary adaptation?</li> </ul>
<p><b>5. <i>Inclusive choice between different subjects in the curriculum</i></b></p>
<p><u>Definition</u></p> <p>Students choose between optional subjects in the curriculum, which has not an influence in subsequent academic opportunities.</p> <p><u>Criteria</u></p> <ul style="list-style-type: none"> <li>- The choice of subjects is based on students' preferences</li> <li>- The choice of subjects is not based on the students' ability in the different subjects</li> <li>- The choice of subjects do not influence the subsequent choice of educational tracks</li> </ul>
<p><u>Variable characteristics</u></p> <ul style="list-style-type: none"> <li>- Who decides on the subjects chosen (the class teacher, student, family member, other members of the school staff)? How is this decided?</li> <li>- Is there any guidance provided by the school? What is this guidance based on?</li> <li>- Which optional subjects can be chosen from?</li> <li>- How is equality of opportunities in subsequent courses ensured?</li> </ul>
<p><b>6. <i>Others</i></b></p>
<p>There are other inclusionary practices which may be implemented that are different to those described above.</p>

Source: INCLUD-ED CREA-University of Barcelona



### 3. EDUCATION AND PARTICIPATION OF SOCIAL AGENTS

Students' performance and learning is influenced by the interactions the students receive from all the social agents (teachers, families, community members, peers and others) involved in their education. Therefore, students' performance will increase by increasing the educational level of all the social agents in the students' environment. In our review of theories, research, educational reforms and outcomes different trends have been observed. On the one hand, important efforts have been dedicated to study the connection between teachers' training and students' achievement, and between families' academic and cultural background and children's academic performance. However, it is also observed that little attention has been paid to family education programs which can contribute to enriching the children's environment by raising the level of education of students' families, and to the possibility of connecting education of teachers, families and other community members.

#### ***3.1. Raising family educational background as an inclusionary strategy***

A relationship between academic and cultural background of family members and the students' school performance is widely found in the sources reviewed. However, this connection is not translated into the definition of strategies to address family education. The information collected regarding family education is often limited into describing the resources families provide to their children or oriented towards supporting families in the educating process. For instance, the PIRLS 2001 test includes an item on this matter. When testing reading, the 4<sup>th</sup> graders are asked "Are any of the following programs and services available at your school site for the children and families in your school?"<sup>14</sup> This question offers two subcategories among others in relation to family education, these are adult literacy programs and parent education programs (e.g. classes on child development, education on being a parent). In the PIRLS survey, family education is understood as parent education programs such as classes on child development, education on being a parent, education of how to take care of a child with disabilities or sex education rather than continuous adult education or lifelong learning. That is, training programs for parents are not usually understood as raising the level of education of families. Collecting the information on the number of books at home or the hours of reading are indexes that indicate the resources available to students. However, there is a

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<sup>14</sup> The data collected for this question gathers information only from 15 out of the 25 countries under study for the INCLUD-ED project, the data presented is from Cyprus, Czech Republic, France, Germany, Greece, Hungary, Italy, Latvia, Lithuania, Netherlands, Romania, Slovak Republic, Slovenia, Sweden and England.

need to seek for strategies that really respond to the need of raising the level of education of students' families.

Research on this topic emphasizes the need to redefine terms and to rethink the research tools in order to promote family education. Existing research on parent involvement in homework (Hoover-Dempsey, Battiato, Walker, Reed, DeJong & Jones, 2001) goes in this direction. However, family education research should go beyond the identification of those parents' actions in getting involved in school activities.

Family education has been a research area not very extended until the moment in Europe, while in other parts of the world, such as the U.S. or Australia, there are a great number of studies that provide evidence about the positive effect on students' performance when there is a support from the family to study (Barnett, Young & Schweinhart, 1998; Bennett, Weigel & Martin, 2002; Brooks-Gunn, Berlin, & Fuligni, 2000; Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002). Research states that early attention and the educational programs that include families as one of their components stimulates the school success of children, both in the short and the long term (Boethel, 2004; Campbell, Helms, Sparling, & Ramey, 1998; Christian, Morrison, & Bryant, 1998; Jordan, Snow, & Porche, 2000). Moreover there are practices that demonstrate the association between family education and children's performance, for instance School Development Program<sup>15</sup>, the Accelerated Schools<sup>16</sup>, the Success for All<sup>17</sup> programs and the Learning Communities<sup>18</sup>. Other authors, like Amartya Sen (1999), show the importance of providing education to the mothers because they are the ones involved in monitoring and modelling their children education.

Similarly, successful educational projects point out the importance of family participation and family education in order to improve children academic achievement. For instance, the above mentioned programmes indicate that it is possible to overcome societal existing inequalities by favouring basic education for families. Family education provides a transformation of the family environment. For example, in dialogic literary circles (Soler, 2004), family members reading classics from the universal literature, share comments of the books at home creating new educational expectations that have a direct influence in the family learning environment. These studies indicate that the participation of non-academic families in literacy processes create new reading practices, cultural roles

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<sup>15</sup> <http://info.med.yale.edu/comer/>

<sup>16</sup> <http://www.acceleratedschools.net/>

<sup>17</sup> <http://www.successforall.net/>

<sup>18</sup> [www.comunidadesdeaprendizaje.net/](http://www.comunidadesdeaprendizaje.net/)

and new interaction models, in non-academic environments for children that indirectly influence children's learning and consequently children's academic performance. In addition they suggest the creation of centres of family and community education in which everyone interested can take part of learning processes. Besides offering family education, the Learning Communities also provide education for families. Education for families is the space for families to learn together such as the computer room or the library with tutors. These spaces are used for students' education and family education as they learn together. The spaces for family education are requested by the family members themselves, deciding on scheduling and contents that they want to learn, actively participating in the management of their own education.

This is also found in other educational projects around Europe. An example is found in Malta, where the Lifelong Learning Centres have been a catalyst to setting up lifelong learning centres within primary schools and in collaboration with other local community organisations. These LLL centres offer non-formal learning to adults within the community. Specific initiatives are found within these centres, this is the case of the programmes by the Foundation for Educational Services (FES, 2007) which help to raise the literacy levels by working with parents. Other European practices take place in Cyprus where, in order to include the immigrant children's parents in their children's education, the Ministry offers oral evening classes in Greek or in other foreign languages (Eurydice, 2004). These are attempts to assist them in learning Greek and improving their communication skills. These practices have also been introduced in Italy where "Italian-language classes have been introduced for the families of immigrant pupils with support from the Ministry of Education and in cooperation with local organisations" (Eurydice, 2004, p.52).

### ***3.2. Teachers' training***

Teachers are key agents for a change (European Commission, 2007). There is considerable research on the relationships between teacher experience and student learning but little research on in-service teacher training and students' academic performance. Jacob and Lefgren (2002) reported that moderate increases in teacher training have no statistically or academically significant effect on either students' reading or math achievement. The reviewed studies indicate that there is an unresolved debate regarding this association. Kennedy (1998) reported to find few positive effects of staff development on students' learning, while Corcoran (1995) and Little (1993) indicate that staff development usually lacks continuity and accountability.

While teacher preparation is recognized in the literature review to be an important element to study in relation to students' academic achievement, the data presented in international studies such as PISA, TIMSS and PIRLS on the topic is not precise and consistent enough to establish concluding remarks. First, PISA 2003 does not provide direct information on in-service teacher training; second, PIRLS (PIRLS database, 2001) informs on particular questions requesting the amount of hours spent in training, number of hours dedicated to read books related to teaching or how often teachers meet to discuss and plan the curriculum; finally TIMSS (TIMSS Database, 2003) centres the questions of training on types of interactions with other teachers, and the topics of the training they receive.

Surprisingly, despite the recognised importance found on teachers' preparation on the literature review, only eleven out of the twenty six countries studied in this project have compulsory in-service training in primary, general lower and upper secondary education<sup>19</sup>. The mandatory training differs from one country to another not only in terms of being compulsory or not but also in the advantages and rewards that go with them. An additional idea that has been raised in different discussions around INCLUD-ED is the differences between primary teachers training and the one required by secondary teachers.

### ***3.3. Research based training for all social agents: teachers and families***

The improvement of the educational level of all social agents can positively support students learning. Teachers have been traditionally the sector receiving most of the training in educational environments. Apple and Beane (1995) analysed and described the grounds and operation of what they call democratic schools in the USA, pointing out their potential to become sites for overcoming social inequalities, being teachers agents for social change. Moreover, Giroux (1988) argued that education needs to recognise the role of teachers as intellectuals, as catalysts for change, in the same way that Freire (1998) expressed the need for educators to commit to dialogue with others and adopt civic courage to change unjust situations in schools.

Two main remarks arose from the reviewed works. The first one consists in improving the education that social agents received by orienting it towards research-based evidence. This is the case of Finland, where initial and in-service teachers' training is based on relevant scientific research, combining significant theory and practise of the

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<sup>19</sup> In-service training is obligatory in Belgium, Germany, Estonia, Latvia, Lithuania, Hungary, Malta, Austria, Finland, United Kingdom and Romania (Eurydice, 2005).

scientific community at international, European and national level. Our literature review indicates the need to study in depth teachers' training based on scientific research.

The second remark consists in promoting shared education and decisions about the education that has to be provided to the educational agents. In the Learning Communities it is assumed that to improve students' learning it is necessary teachers' training, but also education of families, other school staff, volunteers and other individuals that interact with students; in this project school working commissions (composed of teachers, family members, community members, organisations and other professionals) request the necessary training depending on the agreements and planned priorities for the school. Moreover, teachers' training in the Learning Communities explores theories and practices by means of reading the relevant scientific literature on education in which their practices are based such as Habermas, Freire, Austin or Vigotsky among others. This allows the educators, family and community members to reflect together on their school and how to transform their practices reducing school failure and improving school coexistence.

#### ***3.4. Community participation in schools: From outsiders to insiders***

Besides the education of teachers and families, community involvement in schools has been proved to enhance students' achievement (Epstein, 1983; Grolnick, Kurowski & Gurland, 1999; Harvard Research Family Project, 2007; Henderson et al., 2002; Hill & Taylor, 2004; Hoover-Dempsey et al., 2001; Pomerantz et al., 2005; Weiss, 2005). The longitudinal research project conducted by Dearing, Kreider, Simkins and Weiss (2006) provides evidence about the connection between families, schools and children's academic achievement. These authors found that the increased involvement of families in schools improves children's literacy levels. Moreover, even in those cases that family involvement levels were low there was a gap between the literacy performances of children with either more or less educated parents, when the family involvement was high this gap disappeared. Along similar lines, the HILTI programme in Malta, a Primary Prevention Family literacy programme involving the participation of parents, children and teachers has been developed in order to promote literacy and fight against social exclusion (FES, 2007). Research shows that when family involvement can be strengthened with positive results for children and their school success (Harvard Family Research Project, 2007). In the case of minority cultures, the benefits of family and community members' involvement in schools are even greater, as it contributes to a better coordination between the home and the school, and reduces the negative effects resulted from the association of school with the hegemonic culture (Boscardin &

Jacobson, 1996; Beckman et al., 1998). Hess, Molina & Kozleski (2006) found similar effects in the case of students with special needs. Likewise, different ways and levels of community involvement have also been considered an important aspect to support the connection between the home and the learning occurred at school (Delgado-Gaitan, 2001; García, 2002).

For our purpose of social inclusion, the participation of families and community members becomes a relevant potential resource for the enhancement of educational and social inclusion. Taking into consideration these evidences, in the present review about European educational systems, it has been identified that community participation in schools takes different approaches, degrees and opportunities that need to be further explored. The European Commission (2000) mentioned different forms of parental participation that are found in Europe “statutory advisory and decision-making bodies (e.g. school boards), evaluation of their schools, voluntary associations (e.g. parent associations), voluntary involvement in after-school activities and clubs, voluntary involvement in classroom activities (e.g. paired reading), communications with the school and support of their children’s learning and progress” (p.45). Throughout our analysis, and taking into consideration the above mentioned classification, five types of community participation are identified that range **from less participation to greater levels of participation:**

Table 8: Types of community participation

1. INFORMATIONAL
2. CONSULTATIVE
3. PART IN THE SCHOOL DECISION MAKING AND ACCOUNTABILITY PROCESSES
4. ASSISTING STUDENT’S EVALUATION
5. INTERVENING IN Students’ learning activities (regular school activities and after-school activities)

Source: own creation.

*a) Informational*

The relationship between school and community consists basically in the transmission of information, through the attendance to meetings organized by the school or other school activities. Parents are requested to attend one or more parent/teacher gathering during the school year. At these meetings, community members can follow up the developing and functioning of the school without having a real say to them. They represent clients or outsiders who are informed about the school main activities and decisions but not

allowed to participate in them. Decisions are informed once they have been taken by the experts, families are outsiders to them.

*b) Consultative*

Community members are part of the statutory bodies of the school. The review of the European educational systems shows that in the majority of European educational systems, families' participation in school bodies follow this model, which is basically consultative and has generally little input in the decision-making processes. Although the European countries usually have one or more central bodies which include families among other actors, their participation is basically limited to a consultative role and have limited possibilities to take part in the main decisions about the students learning issues.

*c) Part of the Decision-making processes and accountability systems*

Community members can participate in the decision-making processes. In this type of participation, families are represented in the existing decision-making bodies or new ones are created where families, community members and teachers decide together the main aspects of the school. The areas where communities can decide vary among EU member states. In PISA 2003 (OCDE, 2004b), data is provided in this regard, for instance, parents tend to decide more about areas of instructional content and assessment practices and less in the school budget or personnel policy. Thus, the same survey indicates that parents' influence varies from one national context to the other, for instance, it is pointed out that "in Poland, Slovak Republic and Sweden between a quarter and two thirds of 15-year-olds are enrolled in schools whose principals reported that parents have a direct influence on instructional content, and this figure reaches 84% and 86% in Finland and Latvia, respectively (...) in Finland, 42% of 15-year-olds are enrolled in schools whose school principals reported that parents have a direct influence on decisions relating to staffing, whereas it is less than 1% in the Czech Republic, Ireland, Italy, Luxemburg, Portugal and the Slovak Republic" (p. 238).

School autonomy on educational decisions has to be accompanied by a system of accountability which ensures that the practices carried out by schools lead to good results for their students. According to the European Commission (2006), accountability systems must be "designed in such a way that equality in the access, treatment and outcomes for students is measured and promoted" (p. 20). Participation in decision-making processes is often associated as serving as a way to monitor school accountability. Therefore, community participation ends up being a guarantee to hold the schools accountable for their educational results. Schools management bodies should

take into account and support the decisions made by the educational community, since, it plays a significant role in children's learning processes. Participation in the decision making and evaluation processes allows schools to maintain high expectations and high quality learning at the centre of the school's mission.

*d) Students' evaluation*

A way to involve families in the learning processes is inviting them to participate in the students' evaluation. It is a decisive area in which family participation makes it possible to exchange viewpoints and overcome easily possible difficulties. For example, in Cyprus the 113(1)99 Law for Special Education recognizes the right of parents to be present in their children evaluations and even to have a specialist of their choice in the classroom. Another example is the participation of families in Estonia who are present in the evaluation of the students at every level in schools (Riigiteataja, 1993).

*e) Students' learning activities*

Families and community members participate in the learning activities of students, participating directly in the classroom or other educational spaces that are created at the school. This participation can be implemented in after-school activities (e.g. collaborate with students in the library or in the ICT classroom after the school time), but also in the regular classroom activities (Interactive groups, coaching the teacher).

Community and family members' participation in the students learning activities is not a generalized practice in European educational systems. According to the PIRLS 2001 (Mullis, Martin, Gonzalez & Kennedy, 2003), Sweden obtains the highest percentage with 13,2% of respondents stating that more than 50% of students in their school have parents or guardians who volunteer in the classroom or another part of the school, demonstrating the low incidence of this type of participation in Europe. Even though it is not generalized, different examples are found in nowadays Europe that have been collected through INCLUD-ED. Practices such as the *interactive groups* (described in section 2.6) involves adults such as family members and volunteers into instrumental learning in the classroom activities promoting a greater number of interactions which benefit the learning processes for all, as well as providing positive role models in their social groups inside the school. Organisation of schools which includes the participation of the community represents an important increase of the resources, in this case human resources that support the students' learning. The literature and reforms reviewed indicate that family and community participation in schools is a strategy that should be promoted for its benefits in terms of educational and social inclusion. In this sense,



INCLUD-ED project 6 is expected to provide longitudinal data on how community participation supports the learning outcomes and promote social cohesion from the bottom up.

#### 4. EQUALITY OF DIFFERENCES: ACHIEVING EDUCATIONAL SUCCESS FROM THE RECOGNITION OF DIVERSITY

Certain educational practices are oriented towards school exclusion and failure. The vulnerable groups focused on here (migrants, cultural minorities, women, youth and people with disabilities) are examples of groups at risk, as demonstrated by educational theories, educational reforms, and databases. Equality in education, as well as inclusion for vulnerable groups, needs not only to involve recognising diversity but also to ensure learning achievement. It is only when there is an equality of differences that there is recognition of students' background and no obstruction to students' learning, in which diversity improves academic performance. The introduction of the principle of the equality of differences into the actual learning process creates a double benefit since it leads to mutual respect and the improvement of academic results in school. Nowadays schools face several challenges, on the one hand, supporting equal opportunities for everyone and, on the other hand, promoting diversity within the school. This dual challenge has been launched as the *Equality of differences* principle.

In this concept of equality of differences, 'equality' does not mean homogeneity or the passive acceptance of every difference, but rather it leads to the right to have equal educational opportunities. For example, the acceptance of cultural differences (the recognition of people's own mother tongue, their own history, their own geography, and their own literature in school curricula) should be accompanied by full competence in the mother tongue, and critical knowledge of the culture in the host country, including cultural sensitivity (and sensitivity to diversity in general) in the instrumental areas of the curriculum. Along these lines, the need to avoid watering down the curriculum is highlighted, for example through teaching crafts to the most disadvantaged students instead of instrumental learning. Also the need to avoid the stigmatization of these groups is noted, following the regular curriculum and, when adaptations are needed, adapting without stigmatization (Includ-ed. Strategies for inclusion and social cohesion in Europe from education. European Commission, 2006-2011b).

Moreover, beyond the right of the different groups and identities to the recognition of the diversity, this recognition contributes to higher quality education, both for vulnerable groups and for all the other students.

Good academic results in schools are related to high levels of diversity. Research has demonstrated that cultural diversity has positive educational impact in students, in issues such as the level of comfort with members of different racial and ethnic groups, which is essential in the increasing diverse societies, as well as in a higher level of educational aspirations (The Civil Rights Project, 2002).

#### **4.1. GENDER. Transforming interactions and community participation for overcoming gender inequalities**

Gender differences in educational and social inclusion and exclusion is one of the areas that have been most covered by the scientific community and international organisms in charge of collecting statistical data. Due to this comprehensive effort, there are different aspects that are well known and widely accepted by the scientific community.

The first one is the discussion around gender differences in educational achievement. Access to quality education was one of the principal demands of the early feminist movements in order to achieve equal participation in different social domains. The results of these efforts are nowadays translated into a widely recognized improvement observed in girls' educational achievements. Different surveys (OECD, 2005a; Mullis, Martin, Gonzalez, & Chrostowski, 2004; UNESCO, 2005<sup>20</sup>) considered that 1995 was a turning point in gender differences. All these sources provide data that shows that **girls' educational results have improved** to the point that in some cases they surpass the ones obtained by their male counterparts. Looking at EUROSTAT (2005) series from 1994 to 2005, it is served that in all the EU-27 countries the percentage of females aged 20 to 24 with at least upper secondary education surpass the percentage of males, with the exception of the Czech Republic (with a small advantage of 0.2% for boys). In the rest of the countries, the gender differences vary between 1.0% in Estonia and 18.0% in Cyprus, always in favour of women. However, when they reach the labour market women are again in disadvantage in comparison to men. For instance, between 2001 and 2003, the percentage of 20 to 24-year-old girls with less than upper secondary education outside the workforce surpasses the percentage found among boys. Young, low educated women are approximately 20% less employed and are 3 times more likely to be outside the workforce than young, low educated men (OECD, 2003a, 2004a, 2005b).

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<sup>20</sup> UNESCO Institute for Statistics, 2005. *Global education Digest. Comparing Education Statistics Across the World*. Montreal: 2005. Retrieved January 25th 2007, from [http://www.uis.unesco.org/ev.php?ID=6086\\_201&ID2=DO\\_TOPIC](http://www.uis.unesco.org/ev.php?ID=6086_201&ID2=DO_TOPIC)

The second aspect that is widely accepted is that girls perform better than boys in all the areas of knowledge but not in those that traditionally are associated with maleness. In this sense, even girls latest overall improvement, boys continue to achieve better results in maths than girls do. Research has already showed that there is a hidden curriculum in schools which reproduces values and models (Martino et al., 2004; Brutsaert, 1999b; Swain, 2006). This involves, on the one hand, girls and boys internalising the tendency to aspire to careers that have traditionally been considered to be feminine or masculine, respectively. It also involves the teachers and family's expectations of the different "natural abilities" of boys and girls in different subjects such as reading and mathematics (Gorard et al., 2001; Bhana, 2005). All these associations are linked to the persistence of values that are related to traditional masculinity (Quinn et al., 2006). These are all findings that were known by the scientific community but need to be taken into account. More recent developments have been also reviewed that represent new insights into the relationship between gender and inclusionary practices. They are presented in what follows.

The recent great advancements of girls throughout the educational system go along with an **overrepresentation of males amongst school dropouts** (Eurostat, European Commission, 2004). This shift has been explained through the lens of studies on new masculinities. According to Quinn et al. (2006) the values of traditional masculinity have an impact on academic results: **school failure is comprised of traditional masculinity**. Renold (2001) states that there is a tension between the perception of success at school as being feminised and the construction of male identity, which influences boys experience at school. Moreover, according to Beaman et al. (2006), expected behaviour (lack of attention, hyperactivity, disruptive behaviour, etc.) is another additional issue that affects boys' bad results. In fact, as Mastekaasa (2005) notes, discipline-related reasons are more often the cause of leaving school before the age of 16 than work-related reasons.

Traditional masculinities do not only affect negatively boys' school performance but also they influence between-gender relationships through the development of **gender violence**. Oliver and Valls (2004) refer to the relevance of recognising the existence of gender violence in educational environments and not reducing its importance. Other authors note that these situations are often not detected in schools or are dismissed, and highlight the negative impact of ignoring gender violence in schools on students' learning processes (Chambers et al., 2004; Francis, 1999). Research shows that some adolescents link attractiveness with violence (Valls et al., in press); other evidences show

that laddish behaviour in boys is often valued in male groups of friends and for attracting girls (Francis, 1999). A positive evaluation of these attitudes linked to traditional masculinities, therefore has a twofold negative influence: on the one hand, by maintaining gender inequality and violence-based relationships; on the other hand, by not pursuing to do well at school. The role of the educational environment and the interactions which occur in it are significant in relation to academic results and contribute towards success or failure at school (Felouzis, 1993; Domagala-Zysk, 2006). The way out to this situation is considered the promotion of alternative masculine identities (Renold, 2001; Beck-Gernsheim et al., 2003; Weaver-Hightower, 2003; Swain, 2006).

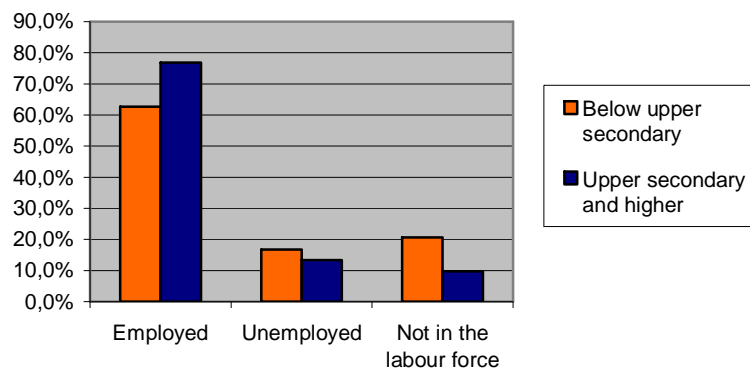
Affective and sexual relationships appear to have an enormous impact on the establishment of these alternative masculinities (Valls, Puigvert and Duque, in press). According to Jesús Gómez (2004) research **the transformation of the interactions in the whole school environment into more egalitarian relationships** contribute to the creation of alternative gender roles, to overcoming inequalities and to the further improvement in academic results. The educational environment can provide an educational model through which boys and girls obtain sufficient education to allow them to develop satisfactory and healthy relationships. Gómez coincides with other authors (Meraviglia et al., 2003; Jacox et al., 2006) when he emphasises the importance of the participation of the whole community (students, teachers, the administration, family members) in detecting, preventing and intervening in violent relationships. Along these lines, the Dialogic Model for Conflict Prevention is an intervention model in schools which involves the whole community in the creation of regulations and their implementation, with the aim to overcome difficulties in the school. This model has taken into account the recent dialogic turn in Feminism. If Feminism has been always associated to the claim of all women to participate in different spaces, Dialogic Feminism represents a step further by emphasizing the importance of integrating all women in the spaces of social participation. It means that not only "academic" women but the non-academic (the "other women") get involved at the schools in collaboration with the other educational agents (i.e. teachers and other professionals). This participation contributes to the transformation of gender interactions in the schools. It is necessary to analyse the conditions in which the involvement of all women in education can be generalized.

#### 4.2. *YOUTH: Educating Youth for long-term social inclusion*

The existence of a number of young people with low educational levels in Europe is a matter that has to be addressed in order to fulfil the goals established in the Lisbon strategy (European Commission, 2005). This is especially significant in countries where the number of **early school leavers** (people aged 18 to 24 whose highest level of education or training is ISCED 0, 1 or 2 and who have not received any education or training in the four weeks preceding the survey) reach the highest percentages: Spain (30,8%), Malta (41,2%) and Portugal (38,6%) (Eurostat. European Commission, 2004).

The proportion of employed young people who have achieved more than upper secondary education is higher than that of employed youth with less than upper secondary education. From these data it can be inferred that education guarantees further employment opportunities. In the table below, the relationship between education and probability to be employed is clearly observed:

Table 9: Employment status of 20 to 24-years-olds not in education by percentage of level of education attained



Source: OECD (2003a). Education at a Glance. Indicator C5: The situation of the youth population with low levels of education

This data demonstrates the relevance of education with regards to labour inclusion. **Segregated educational systems** do not respond to the needs of the labour market and do not prepare students (mainly the ones in lower tracks) to meet the current requirements of the labour market. Braddock and Slavin (1992) argue that “academic tracking is an anachronism” (p.14). They explained that the separation of academically oriented individuals and non-academically oriented individuals in education may have at

some point responded to the needs of the labour force in the past. However, nowadays our society needs a skilled workforce which has the tools and “capabilities to think, learn, and take decisions” (Braddock & Slavin, 1992, p.14) and be recyclable. These authors also stated that it makes no sense from a social and economic point of view to reduce the potential educational attainment of students which will hinder their subsequent marketability and mobility in the labour market, by means of tracking. Educational systems should provide individuals with skills and tools to achieve employment successfully as well as skills for reintegration into the educational system by eradicating educational dead ends.

Taking this into account, vocational training has an inclusionary function when it provides education to people with low education levels, facilitating their labour and social inclusion. However, vocational training has exclusionary consequences when choosing a vocational path rather than an academic one reduces their educational and social opportunities.

Young people’s educational success is also facilitated by **family education**. Children and young people learn based on their family practices. Providing education and training to families not only helps to improve the academic performance of children and young people but also demonstrates an example of lifelong learning practices for children and the community. In addition, family education promotes a transformation of family relationships. This transformation may be reflected by collaborative actions which did not take place previously with examples including the fact that a Roma mother and daughter now share the table at home to do homework and help each other and share positive experiences about education.

#### **4.3. MIGRANTS AND CULTURAL MINORITIES.**

- ***Overcoming Racism In School And In Society***

Although migrant students and students from cultural minorities are two different groups with its particularities, they have also many points in common. Thus, both will be referred to together in this section.

Cultural diversity is increasingly a reality in European schools, although it has popularly been considered to be a problem which entails additional difficulties. Nowadays, schools have to educate culturally diverse groups of students and ensure that they achieve as

good results as the other students. Educational equality is reached when all children have the same opportunity to acquire the knowledge which is necessary in the information society and when, at the same time, they have their cultural and religious identities included into the school (Castells et al., 1999). Both cultural minorities and migrant students are considered to be part of this reality.

The fact that cultural minorities and the immigrant population are groups which are at risk is demonstrated by educational theories, educational reforms, and databases. Data from the OECD (2002) demonstrated that while 89% of native students who were between the age of 20 and 24 had completed upper secondary education, only 19% of non-native students did. Along the same lines, in 2005 the rate of school leavers was 30.1% for non-native students and only 13% for native students (European Commission, 2006b). Data also shows that students with a migrant background (non-native or first generation native students) have lower results in mathematics, in comparison to native students (OECD, 2004a).

Students from certain social and cultural groups often experience **segregational practices**, for example tracking and streaming, that lead them to educational exclusion. Tracking students due to their culture is an exclusionary practice that has even lead to an overrepresentation of children from minority cultural groups in special educational programmes<sup>21</sup> (EUMC, 2004). As has been observed (Braddock, 1989), minority students are overrepresented in vocational educational tracks and underrepresented in academic programmes. In addition, Mickelson and Heath (1999) pointed out that “attending a segregated minority elementary school had a direct negative effect on high school track placement. The greater the proportion of elementary school time students spent in segregated minority schools, the lower the likelihood that they would be placed in a college-bound track” (p.577). Therefore, placing students in certain tracks because of their cultural background provides them with **fewer opportunities for school success**.

Regarding ability grouping, research has shown that ability grouping creates classes with a disproportionate number of students from different racial or social class groups; race plays a role in assignment to streams (as well as the students prior achievement, and their socioeconomic diversity), which is discriminatory ability grouping (Braddock & Slavin, 1992; Lucas & Berends, 2002). These authors report that certain ethnic groups of

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<sup>21</sup> In November 2007, the Grand Chamber of the European Court of Human Rights ruled that “segregating Roma students into special schools is a form of unlawful discrimination that violates fundamental human rights”. <http://www.errc.org/cikk.php?cikk=2866>



students in the U.S., as well as other students with low socioeconomic backgrounds are overrepresented in low streams, and they note that the effects of grouping on student learning opportunities are especially negative for cultural minorities.

Mickelson and Heath (1999) analysed the effects of segregated and racially identifiable tracked secondary courses in a school district in the U.S., and concluded that tracking and streaming is a source of inequality with regards to the educational opportunities of African American students. The author stated that within-school segregation, in the form of streaming in academic classes in secondary schools, affected student's opportunities to learn. "The lower the academic level of the class, the more likely the students was to be black. Conversely, the higher the academic level, the more likely the students were to be white. Additionally, classroom instruction that develops higher-order thinking and problem solving skills as well as greater content coverage, and classroom social relations that develop independent, autonomous thinkers and actors well-suited for both democratic citizenship and professional and managerial occupations were most likely to be found in more advanced classes and least likely to be found in lower level courses where drill and practice instructional techniques are often used" (Mickelson and Heath, 1999: 581).

Moreover, different programmes have been implemented which are specifically aimed at ethnic minority students in order to promote their integration. However, these programmes which either consist of helping these students to overcome their disadvantaged academic situation or maintaining their culture and language, segregate these students, making the integration of minority children difficult (Driessen, 2002; EUMC, 2004). Therefore, the review of educational systems demonstrates that streaming practices are aimed at minorities in many cases, not only through grouping by ability but also through other measures such as remedial groups and support segregated from the regular class.

Beyond the learning opportunities, the segregation of cultural groups also has consequences in terms of relationships. Braddock and Slavin (1992) explain that tracking inhibits the development of **interracial respect, understanding and friendship**; it undermines democratic values and contributes to a stratified society. Moreover, segregational practices such as ability grouping which are based on culture increase racism and xenophobic feelings. They limit the number of positive relationships across ethnic groups, and also affect the opportunity to develop interethnic friendships, which makes it difficult for interracial understanding and tolerance to exist, and facilitates racist

perceptions of race relations in those schools. On the other hand, by educating students together, the inclusion of students from minority groups helps people to learn to live together and leads to social cohesion (Includ-ed. Strategies for inclusion and social cohesion in Europe from education. European Commission, 2006-2011a).

As Europe is becoming more and more diverse every day there is a need for educational practices that contribute both to guaranteeing high achievement and a better coexistence involving tolerance between social groups. **Culturally mixed groups** have an influence on student achievement but also on social inclusion; in doing so, the use of school resources has a significant role, an example of this is that “Roma children adapt better when they study in mixed classes with the support of a Roma teacher assistant” (Gerganov et al., 2005:510). Moreover, “placing students into heterogeneous groups allows teachers to capitalize on the diversity so that they can use peers as resources to support learning” (Fung & Wilkinson, 2002:425).

Consequently, the majority of the supplementary measures should avoid carrying out educational practices which exclude children from the group-class activities during school hours. Segregational measures should be replaced by inclusionary support methods and supplementary classes, such as additional support in the classroom. This is provided in some countries to help students from minorities (Ireland, Slovakia), as well as migrant students (in Denmark, France, Poland, United Kingdom) and students who have language related difficulties (in the United Kingdom).

The importance of a **culturally sensitive curriculum** has also been highlighted: in that sense, there is a general trend in Europe towards promoting the recognition of cultural minorities in schools through the curriculum. The instrumental dimension of learning does not reflect the existing cultural plurality, and various studies indicate that the existence of an ethnocentric perspective within the school context has serious consequences for students from cultural minorities. Findley, Lindsey, and Watts (2001) confirm that one of the prerequisites for promoting students success at school is the attitude of teachers as well as the response that the school offers to diversity. The authors state that “if we want students to succeed, what they bring into the science classroom in terms of belief simply cannot be ignored; fundamental beliefs have considerable impact on learning” (2001: 3). Along the same lines Leclercq indicates that intercultural education “is not so much a matter of teaching something different, but more of teaching differently with the existing curricula” (Leclercq, 2002: 3). As an example, different ways to solve mathematic operations and problems in different

cultures should be taken into account in multicultural classrooms to avoid stigmatization of students from minorities (Bishop, 1999).

One of the ways to make these groups visible is by establishing their right to ensure that their own history and culture forms part of the curriculum, as is the case in Poland (School Education Act of 7 September 1991)<sup>22</sup>, where “public school and centre enables students to keep a sense of national, ethnic, language and religious identity and especially to learn a language and their own history and culture”. In Slovenia, the National Education Council implemented an educational plan, which encourages the inclusion of the Roma population. The priority set out was how to improve the inclusion of Roma students into schools by also taking their different lifestyles, traditions and cultures into account (Strategija vzgoje in izobraževanja Romov v Republiki Sloveniji (Strategy of Roma Education in the Republic of Slovenia), 2004). In Hungary, the *Minority Schools* programme not only offers the opportunity for minorities to receive classes in their mother tongue, but also even students whose native language is Hungarian have the opportunity to receive classes in one of the existing minority languages such as Greek, Croatian, German, Romanian, Serbian, Slovakian or Slovenian (EUMC, 2004).

Other practices go beyond the students and **involve families and members of the cultural community**. Programmes such as “Education of Roma” in Greece promote the participation of parents in schools “to strengthen the ties between the Roma and the school community at large” (UNESCO, 2004, 37-38). The “Step-by-Step” programme, carried out in Bulgaria, the Czech Republic, Hungary, and Slovakia, and promoted by the Open Society Institute, provides training and support for teachers while involving parents in the classroom. Parental involvement at all levels of education includes involving parents in the classroom as teachers’ aides, in parent-teacher associations, and in regular parent teacher interactions. The “Step-by Step” programme has been functioning successfully in Roma communities (Ringold, Orenstein & Wilkens, 2005). The involvement of Roma children’s parents has also been highlighted as being essential in order to avoid educational exclusion, through projects such as *Brudila Callí* in Spain (CREA, 2000-2003) and Romano Missio’s *Aina ammattiin asti* programme in Finland.

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<sup>22</sup> Act of 7 September 1991, art.13.1, Cit. in Eurydice 2006. *Eurybase: The Education System in Poland (2004/05)*. Section 1.5, *Official and minority languages*, <http://194.78.211.243/Eurybase/Application/frameset.asp?country=PL&language=EN>.

Parental involvement in success at school has also been highlighted in relation to other minority groups such as the Muslim community in Belgium, where schools which are predominantly Muslim are strongly stigmatized (Merry, 2005). It has also been promoted through experiences such as the role models project in Denmark, which involves parents with a minority ethnic background travelling throughout the country visiting schools and describing their experiences and how they succeeded in school and in their professional careers, to give the children self-confidence and show them that it is possible to succeed in Danish society (Undervisningsministeriet/The Ministry of Education, 2005).

In addition, family education can contribute to children's progress in school. Family participation in school activities has been shown to be a significant source of motivation and creation of meaning for cultural groups, such as for example Romani students (Gómez & Vargas, 2003). The inclusion of people (not only students) with different origins and from different cultural minorities into classrooms is a point of reference in schools for children who identify themselves with these people, but also for the rest of society. This is because it is a key factor in helping to overcome the stereotypes and prejudices which exist in these communities (Orfield, 2000) and it contributes to the recognition of minority groups and their identities.

Moreover, cultural recognition and better educational outcomes are promoted through democratic family and community participation in decision-making processes. They are also promoted through accountability systems in schools, when teachers, students, families and other members of the community coordinate their activities to overcome inequalities.

- ***Learning both the language of instruction and the mother tongue***

Both migrant students and students from cultural minorities have specific language related difficulties. Drawing from the principle of *equality of differences*, every student has the right to equal educational opportunities, which includes both the right to be proficient in the language of instruction and to have full competence in the mother tongue. Along the same lines, the European Parliament resolution on *integrating immigrants in Europe through schools and multilingual education* states the right of school-age children to have a State education which includes their right to learn the language of their host country without having a detrimental effect on their right to learn their mother tongue. Descendants of immigrants (second and third generations) who are proficient in the language of the host country, should have also the opportunity to

familiarise themselves with the mother tongue and culture of their country of origin (European Parliament, 2005).

**Learning the language of instruction** is one of the factors linked to the risk of failure at school in the case of migrant students. In fact some authors attribute this lower performance to having a bilingual learning framework; this is the case for some migrant students, when their results are compared with the results of their monolingual classmates (Verhoeven, 1998). Thus, in order to reduce the differences between the results of native students and of foreign students, learning the official language is revealed as being a necessary factor in order to promote their integration. At the same time the preservation of their own language and culture has to be ensured.

In some European countries learning the language of instruction often motivates schools to separate recently arrived migrants from their normal class for a period of time if their level of the official language of instruction does not allow them to directly access the regular system. That way, and although the objective of these programmes is to progressively integrate the recently arrived migrants as quickly as possible within their group-class, this can lead to labelling students and reducing instrumental objectives. These reception methods are carried out in different ways, either through reception classrooms, intensive language classes, or transitional classes (in Spain, France, Denmark, the Netherlands, Estonia, Germany, Luxembourg, the United Kingdom, Cyprus, and the German community in Belgium).

In a sense, the conclusions drawn by the OECD corroborate the idea of lower performance due to bilingualism, by showing a connection between academic results and the student's native language. Despite this, it is also noted that the elements which hinder learning can be overcome through **supplementary measures**, thus rejecting deficit theories: "That performance differences between immigrant and native students cannot solely be attributed to these student characteristics. [...] It shows that some countries, where there are either relatively small performance differences between immigrant and native students [...] tend to have well-established language support programmes with relatively clearly defined goals and standards" (OECD, 2006: 3). Educational support must be provided for immigrant children when they are not proficient in the language of their host country, to prevent them from being at a disadvantage in comparison to other children (European Parliament, 2005).

Consequently, in order to overcome these inequalities, some countries have opted to introduce other linguistic support measures which do not involve segregation. Additional support is provided in classroom activities in some countries in order to help migrant students (in Denmark, France, Poland, and the United Kingdom). Also the extension of learning time in some countries is specifically aimed at migrant students (in the Czech Republic, Denmark, Germany, and Portugal).

Supplementary learning programmes can exist both inside and outside the classroom, both in and outside school hours, but in all of these situations, groups defined by level and labelling students should be avoided. Therefore, if this is carried out in the classroom during class hours, students can be distributed into heterogeneous groups in which students carry out the same activities and receive support at the same time. Moreover, supplementary classes are carried out outside the classroom after school hours, in order to reinforce what students learn throughout the school year.

Other practices go beyond the students and **involve families and members of the cultural community**, for example in countries such as Italy, Cyprus and Iceland, through offering tuition in the language of instruction to the parents and families of immigrant pupils, mostly as part of adult education programmes. Also documents are published in people's native languages and interpreters are provided for the parents and the children (Eurydice, 2004). It has been noted that some families may face discrimination due to the fact that their mother tongue is not taken into account (Includ-ed. Strategies for inclusion and social cohesion in Europe from education. European Commission, 2006-2011a). Practices through which the parents of students who have a foreign mother tongue are offered free language education help to encourage the inclusion of families which otherwise would be excluded.

Verhoeven (1998) upholds the hypothesis that those who have a bilingual cognitive framework are less efficient in various sub-processes related to reading and writing, when compared to their monolingual peers. A proponent of the monolingual approach, Krashen (1981) has argued that people learning foreign languages follow basically the same route as they acquire their mother tongue, hence the use of the mother tongue in the learning process should be minimized. In the U.S. the debate is quite animated: there is a political movement – *English Only* - which upholds the importance of English as the only language of reference in public life.

Over the past 15 years, however, monolingual orthodoxy has lost its appeal as a multilingual approach has demonstrated all its advantages in the learning processes. There are a variety of authors that defend the multilingualism perspective (Luciak, 2004; Cummins, 2000; Macedo, 2000) in the same way as others position themselves in favour of monolingualism.

Various authors maintain that **when there is a good acquisition of the maternal language the students' learning process is improved**. In fact Luciak (2004) points out that the incorporation of the language and culture of minority students can contribute towards their cultures being valued within the school context and this encourages the empowerment of students. This author even indicates that having "linguistic competence in their native language is of high importance for the language development of children. Research results show that good proficiency in a native language is a solid basis for achieving competence in a second language" (Luciak 2004: 71).

Cummins<sup>23</sup> (2000) points out the importance of the acquisition of various linguistic codes (including learning the native language if it is different to what is taught in schools) and that it does not have to be to the detriment of the instrumental dimension. According to Cummins, the acquisition of various languages is not an obstacle, but it can actually be an important factor which helps encourage success at school, "[...] bilingualism is associated with enhanced linguistic, cognitive and academic development when two languages are encouraged to develop [...] **why bilingualism is good for the rich but bad for the poor**" (Cummins, 2000: 4).

Then, although a bilingual (or multilingual) child may initially experience learning difficulties, a multilingual framework and within that the incorporation of the native language into the school curriculum, can lead to significant benefits in relation to academic success. In that sense, a study carried out by Rumbaut (1996), in which the Punjabi community in California and people from other immigrant groups who had recently arrived in the country were analysed, suggested that most of the students with

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<sup>23</sup> Through the use of the acronyms BICS and CALP Cummins introduced two concepts which refer to : 1. basic interpersonal communicative skills and 2. cognitive academic language proficiency. The distinction was intended to draw attention to the very different time periods typically required by immigrant children to acquire conversational fluency in their second language as compared to grade-appropriate academic proficiency in that language. Conversational fluency is often acquired to a functional level within about two years of initial exposure to the second language whereas at least five years is usually required to catch up to native speakers in academic aspects of the second language (Collier, 1987; Klesmer, 1994; Cummins, 1981a). Failure to take account of the BICS/CALP (conversational/academic) distinction has resulted in discriminatory psychological assessment of bilingual students and premature exit from language support programs (e.g. bilingual education in the United States) into mainstream classes (Cummins, 1984).

immigrant backgrounds experience rapid and positive adjustment and often outperforms the native-born majority group.

In different European countries it is possible to note that cultural minority students have the opportunity to be **taught in their native language**. This is the case in Finland, Sweden, Romania, Lithuania, the Czech Republic, Austria, Belgium, France, Luxembourg and Slovenia. In these countries students have the right to receive instruction in their own language. In some cases this depends on whether there is sufficient demand (a minimum number of students) (in Romania and the Czech Republic) or a request expressed by parents or students (in Lithuania, the Flemish community in Belgium, and Luxembourg).

Another proposal for the use of the native language consists of the creation of bilingual schools in which half of the class is taught in the national language, and the other half is taught in the minority language. This is the case in Latvia where, after the educational reform in 1999, the language of instruction in private pre-schools and private Basic schools was Latvian, Russian or another minority language, with the objective of providing all students with a good knowledge of both Latvian and their own native language (EURYBASE, 2005).

In certain countries such as Spain, some minority languages are introduced into the school, although they are not part of the school curriculum. Thus for example, there is an agreement between Spain and Morocco to send Moroccan teachers to Spanish schools to teach non-compulsory Arabic classes outside school hours (BOE law from the 10th of October 1985), although it is not a general rule but a practice carried out in certain schools.

#### ***4.4. PEOPLE WITH DISABILITIES. The Right To Be Included Into The Mainstream And The Opportunity To Be Known By The Others***

A group which has traditionally been segregated from ordinary classrooms and schools is students with disabilities. Since various types of educational provision have demonstrated their limitations, the **inclusive approach** has gradually become the one which is most widely applied. Nowadays, the inclusive option is widely supported, although in the case of students with disabilities, people believe that inclusion for the mildly disabled is more feasible than it is for those with profound and multiple learning difficulties (PMLD).



Based on the literature review we can state that the experience of students with special needs in mainstream education has been demonstrated to be beneficial, especially if special support is added to ordinary classes (Myklebust, 2006). Inclusion is also what the students with disabilities themselves demand. In the “Lisbon Declaration - Young People’s views on Inclusive Education”<sup>24</sup> (European Agency for Development in Special Needs Education, 2007) young disabled students claim “the right to be respected and not to be discriminated against”, as well as the possibility that many of them want to study at university, and not to be separated from other people without disabilities. They said that “Everyone in society needs to be aware of, understand and respect our rights”.

Moreover, the inclusion of people with disabilities into mainstream schools and classrooms not only benefits them but also benefits non-disabled children (Fisher, Roach, & Frey, 2002; McGregor & Vogelsberg, 1998; Includ-ed. Strategies for inclusion and social cohesion in Europe from education. European Commission, 2006-2011a). “Inclusive education is mutually beneficial to us and to everyone” (European Agency for Development in Special Needs Education, 2007).

The participation of everyone in the same learning activities has been considered to be good practice. The ordinary curriculum is not useful for some children, although these children can achieve the general objectives in different ways. Thus, tailoring the curriculum can be a useful tool to facilitate access to it in the case of students with disabilities; however the common framework should be maintained as much as possible. Flexible learning objectives (adapting specific objectives to some learners based on a shared curriculum), activity adaptation (that is, modifying the way in which the objectives are achieved instead of modifying the objectives themselves), and multiple adaptations (a combination of both) are three potential strategies to improve the curriculum and make it accessible to diverse students (Stainback & Stainback, 1996). ICT has facilitated inclusive education to a great extent for this group of students, by improving their communication systems, overcoming some of the barriers they face in education, work and other social spheres (Lewis, Trushell & Woods, 2005; Schopper-Grabe, 2004).

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<sup>24</sup> This declaration arises from the European Hearing: “Young Voices: Meeting Diversity in Education”, organised by the Portuguese Ministry of Education and the European Agency for Development in Special Needs Education, which was held on the 17<sup>th</sup> of September 2007. Young people with special educational needs from 29 countries attending secondary, vocational and higher education attended the hearing and agreed the proposals in the declaration. <http://www.european-hearing-2007.org/>

Two elements are important in order to achieve the successful inclusion of students with disabilities. First, the **inclusion of the resources into the classroom**. Students with disabilities claim the right to have the same educational opportunities as everyone else, but with the necessary support to meet their needs; personal assistants in the classes and access to adapted material are some of their demands: "Inclusive education with individualised, specialised support is the best preparation for higher education" (European Agency for Development in Special Needs Education, 2007). In this sense, the provision of resources should facilitate inclusion into regular schools and classrooms, for example, by aiming the resources at particular students, no matter what school they attend, instead of providing special schools with these resources, which would promote segregation (Includ-ed. Strategies for inclusion and social cohesion in Europe from education. European Commission, 2006-2011a).

Stevens and Slavin (1995) highlighted the role of the special education teachers scheduled to provide additional instruction and support to learning disabled students in the regular classroom: "The instructional support for learning disabled students in the cooperative elementary school is further enhanced by the use of an in-class model of support services, where the special education teacher goes into the regular education classroom and team teaches with the classroom teacher. In this way, the learning disabled student continues to receive the additional instruction from the special education teacher while at the same time getting the social and motivational benefits of being in the regular classroom" (Stevens & Slavin, 1995: 344). Several educational systems in Europe integrate students with special needs into the mainstream education by providing additional staff (in Cyprus, Belgium, Denmark, Finland, France, Ireland, Italy, Malta, the Netherlands, Poland, Poland, Slovakia, Slovenia, and the United Kingdom). Other educational systems carry out a continuous evaluation of students and ensure cooperation between special institutions and mainstream schools in order to facilitate the transferral of students with special needs from special schools into mainstream schools (in Romania, The Netherlands, Denmark and France).

Second, **cooperative learning** has a positive impact on disabled children, when they work in mixed groups with non-disabled peers. Cooperative and interactive work with peers makes a positive contribution to their academic achievement (Fisher, Roach, & Frey, 2002; Hehir, 2002; Stevens & Slavin, 1995). According to Slavin (1991) cooperative work between physically or mentally handicapped children and their normal-progress peers increases academic achievement and self-esteem for all students (both mainstreamed and normal-progress children). Also a reduction in the degree to which the

normal-progress students reject their mainstreamed classmates is observed, as well as significant improvements in relationships between mainstreamed academically handicapped students and their normal-progress peers. The advantages of cooperative learning have to be taken into account when comparing with competitive learning situations, which make it difficult for slower learners to compete successfully (Bartolo, 2007).

Thus, inclusive education also affects social inclusion. Disabled students develop better social skills and relationships, and they are better prepared for being more independent in the future (Hess, Molina, & Kozleski, 2006). In this sense, Kliwer and Fitzgerald (2001) reject the essentialist notion of the need to exclude children with disabilities from the school community. Tracking practices involving people with disabilities produce a lack of awareness and knowledge. Including students with disabilities starting off with pre-primary education is a way to avoid potential inequalities later, and “facilitate the integration of these into society and to help them to live as normal a life as possible”<sup>25</sup>. The negative attitudes towards students with disabilities which can still be found amongst teachers, other pupils and some parents are related to this lack of peaceful coexistence which lead to statements such as this one from a disabled student: “Once in my university, I understood that many of my classmates had not met any disabled person before me” (European Agency for Development in Special Needs Education, 2007). The idea is that students with disabilities should be brought up along with non-disabled students, since they will live alongside each other as part of their daily existence (in the community, in jobs, and in their free time etc). Becoming acquainted with each other is thus considered to be the best tool in order to get along with one another.

**Family participation** in the school has been identified as playing an essential role in the education of children with disabilities (Porter, 1997; Stainback & Stainback, 1996). The participation of family members has to have a decisive impact in order to ensure that these children obtain the same results as other children do. However, some difficulties are involved in this participation (Hess, Molina & Kozleski, 2006). These authors discuss the tension between the specific needs of the children (as stated by families) and efficient education for the majority of the students. This tension is associated with the causes behind the segregation of students and the creation of obstacles for families. These authors believe that the difficulties related to family involvement are related to the fact that usually the teachers are the people who make the decisions and they have a

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<sup>25</sup> Swedish National Agency for Education website. <http://www.skolverket.se/>

lack of understanding of the families' culture and behaviour. Barriers should be overcome in order to facilitate the participation in and involvement of families in decisions related to their children. For example, the significance of the families' participation in decision on what kind of education and what placements their children with disabilities should be allocated is highlighted (Includ-ed. Strategies for inclusion and social cohesion in Europe from education. European Commission, 2006-2011a). This is the case of Finland, where admission of pupils to special needs education requires consultation with their parents or other guardians, and in case it was made against their consent, the parent or guardian may appeal against the decision (**Perusopetuslaki, 08/21/1998. /Basic Education Act of 08.21.1998**). Moreover, students with disabilities themselves claim the right to choose and decide on where and how they want to be educated (European Agency for Development in Special Needs Education, 2007).

Moreover, the lack of adequate **teacher training** appears to be one of the barriers in the literature on the inclusion of disabled students. It is necessary to ensure proficient teacher training which prepares teachers for the education which integrates children with disabilities into classes along with the other students in a way which facilitates better attitudes and expectations. As students with disabilities have stated, inclusive education is best if certain conditions exist. These conditions include well trained teachers who are motivated, well informed and who understand their students' needs, as well as good coordination between teachers throughout the student's schooling (European Agency for Development in Special Needs Education, 2007). Along the same lines, the role of special education teachers as support teachers not only for students but for the class teacher (Porter, 1997; Koutrouba, Vamvakari & Steliou, 2006), and the role of special schools as resource centres for ordinary schools, is highlighted. These aspects are underlined because they provide several support services to pupils, teachers and ordinary schools (Meijer, Soriano & Watkins, 2003) and they are facilitators of inclusion while at the same time maintaining the necessary resources to respond to the needs of students with disabilities. Also the role of attitudes and expectations is important; because it is common to associate a disability with having low ability, therefore it is important to take into account the fact that there is a continuum of learning abilities amongst students with disabilities, as there is in every group of society, (Bartolo, 2007).

## 5. CONCLUSIONS

This report collects the main findings of Project 1 within the Integrated Project *Includ-ed*, which responds to the objective of identifying the educational elements that contribute to educational and social inclusion by connecting theories, reforms and outcomes. These main findings are divided between exclusionary strategies (those which are obstacles for achieving educational and social inclusion) and transformative strategies (those which contribute to this goal).

### Exclusionary Strategies

Segregation is identified as the main characteristic of the educational systems and practices that hinder educational success for everyone.

- ***Early tracking***

There is agreement in the literature that early tracking have negative consequences in terms of reducing the equality in later educational and social opportunities; its negative effects increase for students with disadvantaged social backgrounds. According to these data, the European Commission has already recommended delaying this practice to promote equity and efficiency in the European educational systems.

- ***Mixture, Streaming and Inclusion***

Research have found the negative effects of streaming, of grouping the students according to their level of achievement. However deeper analyses at the European level are needed, which clarify the characteristics of streaming as well as the relationship between the implementation of streaming and academic results. In addition, in order to compare the different results from streaming and inclusion, it is necessary to differentiate mixture from inclusion. Inclusion uses the same human resources as streaming in a different way, maintaining all children in the same classroom with heterogeneous groups and introducing the same human resources as streaming in the classroom. Mixture maintains all children in the same classroom but without the additional human resources placed in both streaming and inclusion. Current studies and statistics cannot clarify the different effects of streaming and inclusion because they confuse mixture and inclusion.

## Transformative Strategies

School inclusion and the coordinated action among all educational agents from the school and beyond (i.e. teachers, families, and community) have been identified as a main characteristic that promotes educational success for everyone.

- ***Inclusion***

There is evidence that educational practices based on inclusion (not mixture) have higher educational achievement than those based on segregation or discrimination. This becomes particularly relevant when teaching students from vulnerable groups, at risk of social exclusion. There are inclusive strategies that help to achieve high performance for all in ordinary classrooms, contributing to equal opportunities for educational success and social inclusion for everyone. Deeper analyses on different types of resources' distribution and use are needed, from the perspective of inclusion/exclusion.

- ***Education of social agents***

Social agents have a great influence in children's education; they include both teachers and family members and community. On the one hand, the relevance of a teachers' training grounded in research on effective practices was highlighted, for they have a key role in promoting transformative or exclusionary practices in schools. On the other hand, the existence of family education programmes in the school, contributes to increasing the academic background of these families, especially in the case of those with low socio-economic status or low educational level. This has an influence in the children's learning context, contributing to improve their performance, hence overcoming theories of reproduction. Further research is needed about the connections between family education and children's performance.

- ***Community participation***

Research identifies connections between community or family involvement and children's achievement. However, there are different types of participation that must be distinguished. We found a tendency that links school success to family and community participation in learning contexts, in school decision-making, in accountability systems, etc. Further research is needed that analyses the different types of community participation in relation to learning. This would contribute to design school practices that better respond to the needs of the diverse students and the different communities. It would also contribute to overcoming prejudices and stereotypes associated to certain groups in the community by getting to know others through participation.

- ***Equality of differences***

Students who belong to vulnerable groups are at higher risk of being placed in educational practices of segregation (i.e. tracking and streaming) for reasons such as language, culture or disability. They need both the opportunities to achieve educational success and the recognition of their identities and particularities within school. The principle of “equality of differences” is useful to analyse what practices account for these needs. Families should have equal right to decide whether their children attend separated education provisions. Participation of different members of the community can contribute to overcoming prejudices and stereotypes.

In conclusion, educational strategies exist in the European educational systems which contribute to academic achievement and social inclusion and cohesion. The ones identified above contribute to this objective; some of them however need further in-depth study and scientific elaboration.

## 6. SOME FINDINGS

Next, the main findings of this report are listed. They are discussed in the previous sections of this report.

	State of the art	Advancements	Work to be done
<b>1) Mixture, streaming and inclusion</b>	<ul style="list-style-type: none"> <li>• Early tracking has negative effects over educational achievement.</li> <li>• There is confusion between three kinds of practices: mixture, streaming and inclusion.</li> <li>• Resources on its own do not explain educational achievement. There is not enough information about the use of the resources and its relation to success.</li> </ul>	<ul style="list-style-type: none"> <li>• Creation of a typology to define and to study the different practices of mixture, streaming and inclusion.</li> <li>• Identification of the type of use of the resources which generate success.</li> <li>• Definition of a classification of inclusionary practices along with the criteria and variables to analyse them.</li> </ul>	<ul style="list-style-type: none"> <li>• Deeper analysis on the practices of mixture, streaming and inclusion and on their effects.</li> <li>• Deeper analysis on which distributions and uses of the resources promote educational success.</li> </ul>
<b>2) Streaming practices</b>	<ul style="list-style-type: none"> <li>• Studies demonstrate that there is a relation between streaming and performance.</li> <li>• There is confusion about the concept of streaming, because in different contexts and in different documents it is used to refer to different practices.</li> <li>• Surveys offer contradictory results and do not give clear information on streaming.</li> </ul>	<ul style="list-style-type: none"> <li>• A classification of four types of streaming, along with the criteria and variables that help to define it, and an initial exploration of their relation to performance.</li> </ul>	<ul style="list-style-type: none"> <li>• Deeper analysis on the connections between streaming and educational performance.</li> <li>• Deeper analysis on the psychological effects of streaming on students.</li> <li>• Deeper analyses on the types of streaming that are being implemented in Europe and their consequences.</li> </ul>
<b>3) Community education</b>	<ul style="list-style-type: none"> <li>• Evidence that children's achievement depends on the cultural and economic background of all the educational agents.</li> <li>• Children' performance improves when raising the educational level of all the educational agents.</li> </ul>	<ul style="list-style-type: none"> <li>• Contradiction between the state of the art and actions implemented: while much attention has been paid to teachers' education, the other educational agents (families, community members, etc.) have not been worked enough.</li> <li>• In the schools where both teachers' training and family education are carried out, students' performance increases.</li> </ul>	<ul style="list-style-type: none"> <li>• To develop analysis on family education and in general community education.</li> <li>• Further studies on which kind of teachers' training leads to educational success.</li> </ul>
<b>4) Community Participation</b>	<ul style="list-style-type: none"> <li>• Certain types of participation of the community in education and schools promote educational success and improve students' performance.</li> <li>• There is confusion about the concept of community participation since it includes very different areas and degrees of participation.</li> </ul>	<ul style="list-style-type: none"> <li>• Classification of different types of community participation to define the different ways and degrees of participation.</li> </ul>	<ul style="list-style-type: none"> <li>• To analyse the different types of community participation in schools.</li> <li>• To study the situation of Europe regarding community participation in schools.</li> <li>• Definition of which forms of community participation are better contributing to educational inclusion.</li> <li>• To analyse how schools can promote community participation.</li> </ul>
<b>5) Gender</b>	<ul style="list-style-type: none"> <li>• Feminism is advancing towards the lead role of the voices of all women.</li> </ul>	<ul style="list-style-type: none"> <li>• Those schools oriented towards this dialogic feminism are developing gender actions led by all women (teachers, mothers, sisters, students, etc.) instead of being led only by professionals.</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis of the advantages of the involvement of all women, both for the performance and for the participation.</li> <li>• Analysis of the conditions in which the involvement of all women in education can be generalized.</li> </ul>



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**INDEX OF FIGURES AND TABLES**

**Figures:**

- Figure 1: Correlation between parents' occupational status (HISEI) and student performance in reading literacy for education systems grouped by age of selection 14
- Figure 2: Ability grouping within schools and students performance in science ..... 22

**Tables:**

- Table 1: Age of selection and performance variance in the science, reading and mathematics scale ..... 13
- Table 2: Effects of streaming according to the reviewed literature ..... 18
- Table 3: Types of streaming..... 19
- Table 4: Types of inclusionary practices..... 26
- Table 5: Mixture, streaming and inclusion..... 30
- Table 6: Streaming: Definition, criteria and variable characteristics ..... 33
- Table 7: Inclusion: Definition, criteria and variable characteristics ..... 38
- Table 8: Types of community participation..... 46
- Table 9: Employment status of 20 to 24-years-olds not in education by percentage of level of education attained ..... 54