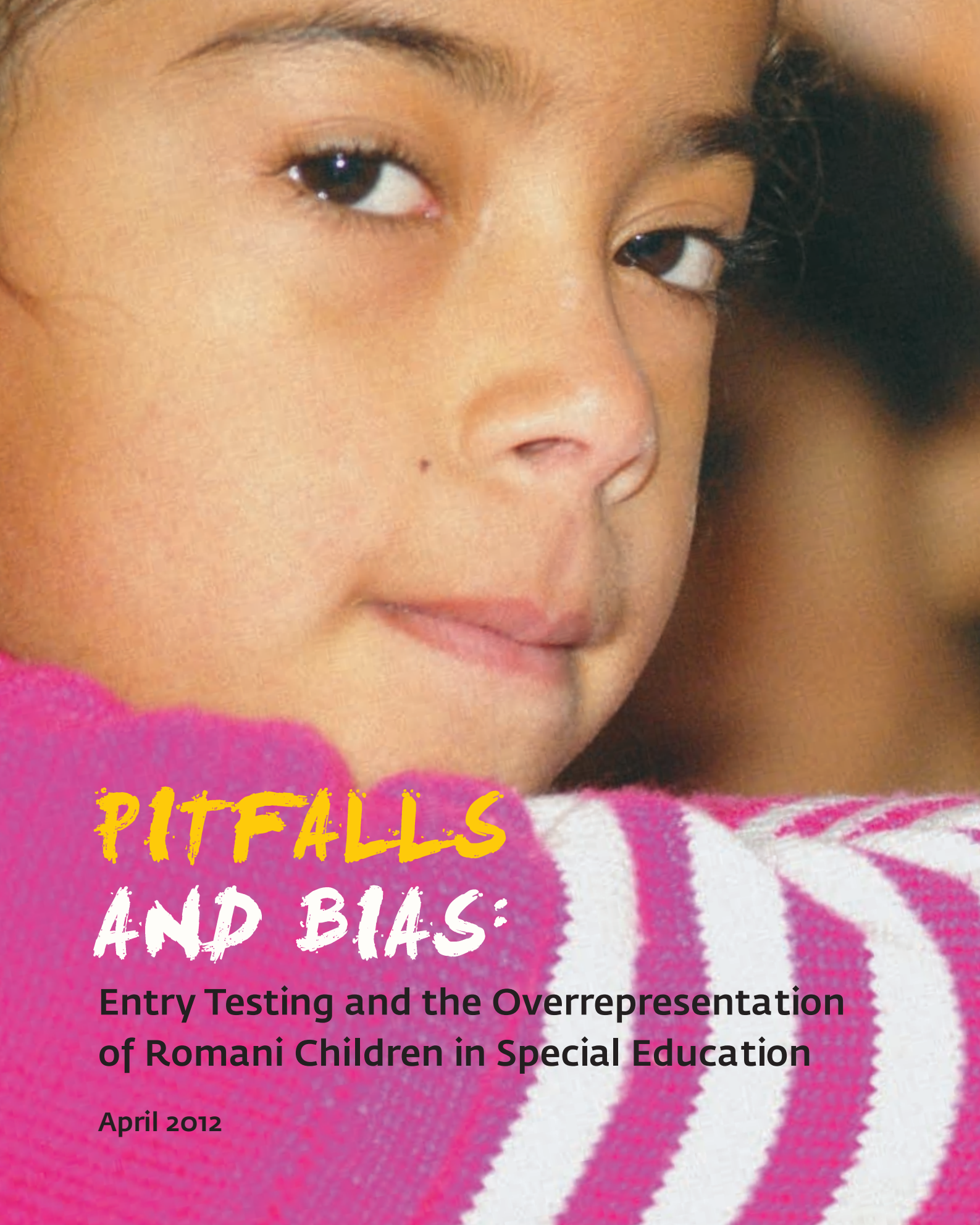

PITFALLS AND BIAS:

Entry Testing and the Overrepresentation of Romani Children in Special Education

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CONTENTS

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EXECUTIVE SUMMARY

This policy paper examines many of the ways in which Romani children from Central and South Eastern Europe are segregated from their non-Romani peers and placed in special education. The focus of this paper is on school readiness assessments (school entry testing) in the Czech Republic, Hungary, Serbia, and Slovakia, by which children's entry to school is delayed, they are streamed into preparatory or transition classes in special schools, or they are placed in special education classrooms or schools. This paper examines the link between such testing and the overrepresentation of Romani children in special education. The document also presents international good practice in the use of assessments for integrating rather than segregating children in order to address the individual educational needs of different pupils while mapping some potential directions for change in Central and South Eastern Europe.

SCHOOL READINESS ASSESSMENT AND ITS USES

A child is typically considered to be ready to attend school when he or she exhibits developmental maturity in his or her social, cognitive, and physical abilities considered necessary for success in school. When such maturity is measured on the basis of standardized assessments, the burden of proof is on the child; the child must demonstrate his or her readiness to attend school, but the school does not have to prove its readiness to accept the child and help him or her to develop needed skills. A central irony of entry testing is that the very children who would benefit the most from early school experiences may be denied those experiences on the basis of their test results.

Assessment at the time of enrollment in primary education generally serves at least one of two purposes: diagnosing disability and facilitating the inclusion of children in mainstream education. In most countries, including the Czech Republic, Hungary, Serbia, and Slovakia, assessment procedures are designed primarily to serve the first purpose. Based on a medical model of disability, these procedures result in the assignment to children of permanent disability labels.

Whereas nearly all countries use findings from assessments for diagnosing special educational needs requiring additional resources, a much smaller proportion of countries also make use of assessment data for facilitating inclusion of children in mainstream education through education plans or other strategies that take into account children's strengths and weaknesses as individual learners. Among countries in this group are Finland, France, Italy, New Zealand, the United Kingdom, and the United States. In all of these countries, the presumption of relevant legislation is that educational services for all children ought to be provided in standard schools and classrooms. Additionally, Finland, France, New Zealand, and the United Kingdom have abolished disability categories, effectively replacing a diagnostic approach to assessment with a formative one.

REGIONAL TRENDS IN SPECIAL EDUCATION ENROLLMENT RATES

The countries that are the subject of the case studies in this document have much higher rates of segregating pupils in special schools than their European counterparts like Finland, France, Italy, or the United Kingdom, none of which categorize special educational needs in legislation. For example, Italy has by far the lowest rate of segregation, with only 693 pupils in segregated institutions out of a total special educational needs population of 170,696, while the United Kingdom and Italy have remained the most consistent with low segregation rates between 2001 and 2008, at 1.1 percent and 0.5 percent or less, respectively. Both France and Finland's rates of segregating pupils in special schools have decreased in the same period, as has the percentage of pupils labeled with special educational needs.

In the Czech Republic, Hungary, and Slovakia, the percentage of pupils segregated in special schools (including those relabeled "practical schools" in the Czech Republic) remains well above the European average of two percent. In the Czech Republic, the percentage of children with special educational needs has dropped, from 9.8 percent to 8.6 percent, as has the percentage of pupils segregated in special schools, from five percent to 3.5 percent. In Hungary and Slovakia, on the other hand, the rate of identification of pupils with special needs has actually *increased*, from 4.1 percent to 5.8 in Hungary and from four percent to 7.7 percent in Slovakia. The rate of segregation in special schools is somewhat stable in Slovakia, 3.4 percent in 2001 and 3.6 percent in 2008, while the data available for this period do not point to a clear trend in the rate of segregation in special schools in Hungary.

TABLE S1. Classification and segregation of pupils with special educational needs

	Percentage of all pupils with special educational needs		Percentage of all pupils in segregated special education institutions		
Year	**2001**	**2008**	**2001**	**2002–2004**	**2008**
Czech Republic	9.8	8.6	5.0	5.0	3.5
Finland	17.8	8.0	3.7	3.6	1.3
France	3.1	2.7	2.6	2.2	0.61
Hungary	4.1	5.8	3.7	3.9	2.9
Italy	1.5	2.3	<0.5	0.5	<0.1
Slovakia	4.0	7.7	3.4	3.6	3.6
United Kingdom	3.2	2.8	1.1	1.1	1.1

SOURCES: European Agency for Development in Special Needs Education; Eurydice.

For Romani children in Central and Eastern Europe, a disability label generally serves to segregate them and provide them with an inferior education under the law through streaming into special education on the basis of testing prior to or in the first years of primary education. As is true throughout the region, Roma are disproportionately present in special education in the case study countries, accounting for a majority of pupils in practical schools in the Czech Republic; between 20 and 90 percent of children in special education in Hungary; 25–40 percent of pupils in special primary schools and 40 percent of students in special secondary schools in Serbia; and approximately 60 percent of children in special primary and secondary education in Slovakia. Pupils from Romani communities thus tend to have experiences in educational milieus in which teachers have lowered expectations of them, presume them to be academically and socially deficient, and blame them for their failure to succeed in schools. This failure in schools is based almost entirely on Romani children's placement in special education, where reassignment to standard education is rare and there is limited opportunity for secondary education, negatively affecting their later participation in the labor market and entrapment by poverty to complete a vicious circle of special education, school failure, unemployment, and poverty.

METHODOLOGICAL PITFALLS AND BIAS IN ENTRY TESTING

Among the roots of the broader problem of separating children into educational streams are two major methodological flaws in entry testing as practiced in the Czech Republic, Hungary, Serbia, and Slovakia. First, only one kind of instrument is used. Second, the instruments rely on standardized measures that assume a pupil's exposure to certain cultural experiences resulting in a repertoire of knowledge and skills associated with putatively intelligent behavior, as well as a vocabulary associated with membership in the middle class. All of these countries rely heavily on at least one of two culturally and linguistically biased tests commonly used to make disability determinations (the Raven's Progressive Matrices and the Wechsler Intelligence Scale for Children).

Raven's Progressive Matrices

First published in 1938, and used frequently today in Hungary, Serbia, and Slovakia (as well as in many other countries), Raven's Progressive Matrices are nonverbal assessments purported to be free of or to have reduced cultural bias. In these tests, "correct" responses are those which complete an abstract pattern of matrices in the most putatively obvious way. If respondents take a more creative approach to the patterns, however, the resulting responses are likely to affect test (that is, IQ) scores negatively. Moreover, the fact that performance improves with repeated administrations of the test to members of non-dominant cultural communities suggests that the Progressive Matrices are in fact not free of cultural bias. In similar fashion, children trained in inductive reasoning strategies tend to perform better on the test than do children who do not receive such training. Finally, changing testing conditions by presenting instructions in different ways has been shown to impact the performance of children from lower socio-economic strata, with such children performing better when the test is presented as a game than when it is presented as an evaluation of strengths and weaknesses.

The Wechsler Intelligence Scale for Children

This instrument was first published in 1949 and is now in common use in the Czech Republic, Hungary, and Slovakia (among others). The intelligence score generated by this test is determined by the sum of four index scores (Verbal Comprehension, Perceptual Reasoning, Working Memory, and Processing Speed), which are in turn derived from the ten subtests that make up the core battery and up to five supplemental subtests. In much the same way as scores on Raven's Progressive Matrices, performance on the tests that make up the Wechsler Intelligence Scale for Children are likely to be affected by cultural background and exposure to early schooling. Thus, children who respond to the question "How are an apple and an orange alike?" that both are food or both are round score lower than children who respond that both are fruits. Additionally, scores on coding and symbol search subtests tend to be lower for children who have not developed facility with pen and pencil, while letter-number sequencing relies on an understanding of the concepts of alphabetical and ascending order, both of which are fostered through classroom activities.

Although Raven's Progressive Matrices and the Wechsler Intelligence Scale for Children are not the only instruments used to diagnose disability in the Czech Republic, Hungary, Serbia, or Slovakia, the popularity of these instruments with the institutions and professionals responsible for assessment and placement suggests that Romani children by and large are at a disadvantage when their educational careers are determined. Moreover, of the other tests used in these countries, most exhibit biases similar to the two discussed above, while those most promising for assessing individual needs as a basis for facilitating inclusion in mainstream education are used less frequently.

TABLE S2. Use of the Raven's Progressive Matrices and Wechsler Intelligence Scale for Children in Czech Republic, Hungary, Serbia, and Slovakia

Country	Raven's Progressive Matrices	Wechsler Intelligence Scale for Children
Czech Republic	-	+
Hungary	+	+
Serbia	+	+
Slovakia	+	+

RECOMMENDATIONS

Taking into account the current situation in the Czech Republic, Hungary, Serbia, and Slovakia, as well as good practice from Central and Eastern Europe and beyond, the recommendations below are intended to facilitate and promote the use of assessments for integrating rather than segregating children in order to address their educational needs.

1. *Provide universal access to inclusive preschool education.*
   All children should have access to free, high-quality, inclusive preschool institutions for a minimum of two years to enable them to make a successful transition to primary education. Children should be provided the necessary materials, meals, and transportation to be able to attend preschool. The last year of preschool education should be universal and compulsory. Children should not be required to undergo an entry test to enroll in preschool and should have any needed academic and social supports provided to them in an inclusive preschool environment. The content and delivery of preschool programs should reflect Romani culture while providing opportunities for anti-discriminatory activities to promote social justice for all children.

2. *Make schools ready for children.*
   All children should be considered ready for school, even if some children might need increased levels of support to develop their academic and social skills once they are enrolled in school. Children should not be removed from the classroom in order to be provided necessary services, but should receive support in integrated settings where there are peers who can serve as models for appropriate social and academic school behaviors.

3. *Promote active parental involvement.*
   Taking into account that the earlier parents engage with their children's future, the more effective such engagement is, parenting support programs should be provided through health services and preschools to equip parents with the information and experiences required to navigate their children's educational paths. In addition to and parallel to any changes to the educational system, parents should be provided with accurate and accessible information on school choices and their consequences, with particular emphasis on the longer-term educational and employment prospects for children entering special education. As noted below in Recommendations 6, 8, and 11, parents should also be included in processes related to assessment and in generating individualized education plans for their children.

4. *Discontinue standardized assessment until new assessment regimes are in place.*
   Taking into account the documented tendency of existing assessment regimes in Central and Eastern Europe to misclassify Romani children as
   mentally disabled, these regimes should be replaced with new systems compatible with the recommendations below. As a transitional strategy, all testing should be abolished in the region until the new systems are piloted, evaluated, and put into place.

5. *Ensure that assessment does not delay school entry.*
   Taking into account that children continue to develop their physical, social, and cognitive skills throughout childhood, standardized psychological testing should not be used as an eliminatory instrument to delay entry to school. Instead, assessments should be used to identify children's strengths and weaknesses in order to plan instruction accordingly. Diagnostic stays in special schools in the first years of primary education should be eliminated.

6. *Conduct assessments using multiple tools.*
   Data for baseline assessment should be collected using multiple modes, including but not necessarily limited to interviews with children, parents/guardians, and teachers; observations during formal assessments, in the classroom, in the home, and during leisure time; and informal assessments based on samples of school work, curriculum-based tests, and anecdotal records; as well as standardized tests.

7. *Use baseline assessment to inform instruction.*
   Rather than using assessment instruments for the purpose of streaming children into special education, baseline data should be gathered in order to identify individual strengths and weaknesses to be addressed in an inclusive school and classroom environment, as well as to help teachers to track the effectiveness of their instructional methods. Annual or biannual reassessment is necessary for tracking the progress and adjusting services to the needs of all pupils.

8. *Ensure that assessments are culturally and class-relevant.*
   Advisory, counseling, and guidance facilities should use new or newly revised assessments in ways that respect the language and culture of all examinees. Integral to ensuring cultural relevance is creating a testing environment in which children can perform at their best. For Romani children, this may include having Romani teacher assistants and/or parents present during assessment.

9. *Restructure teacher education.*

All teachers should take courses related to the inclusion of pupils with disabilities, pupils from cultural and linguistic minority communities and pupils who would be considered gifted. Teachers should learn how to adapt lessons, activities, and materials to the needs of different pupils and how to work with families and related services professionals in standard classes.

10. *Abolish categories of disability.*

Current systems of special education focusing on treatment of individual children on the basis of disability should be replaced with a public health approach emphasizing prevention rather than cure at the population rather than individual level. Interventions should be offered to any pupil who demonstrates a need for additional support and funded on the basis of intensity of needed support without applying categories of disability. Social disadvantage should not be considered a disabling condition and should not be considered grounds for being identified as having special educational needs or for placement in special education.

11. *Individualize education plans.*

Individualized education plans should be designed and implemented in order to maximize the participation of children with special educational needs in standard classrooms through appropriate adaptations, accommodations or modifications to activities, materials, and/or curricula. Such plans should
be generated by teaching staff in consultation with other related services professionals and with parents.

12. *Restructure the system of advising centers.*

Educational advising centers should be reconceived as centers for
professional development that provide further training for teachers and other school professionals on how to integrate pupils with special needs into standard schools and classes. The services offered by such centers should be made available to all pupils through the regular and frequent presence of the centers' employees in standard classrooms. Ongoing changes in this area in Montenegro and in Bosnia and Herzegovina may serve as examples of good practice.

INTRODUCTION

The overrepresentation of pupils from cultural and linguistic minority communities in special education is endemic worldwide, and children from Romani communities in Central and South Eastern Europe are subject to this segregation and marginalization through their overwhelming placement in special education schools for pupils with mental disabilities. The purpose of this study is to examine some of the ways in which Romani children from the Czech Republic, Hungary, Serbia, and the Slovak Republic are segregated from their non-Romani peers and placed in the special education system. This is done through school readiness assessment (colloquially, school entry testing[1]), by which children are denied entry to school through a delay of school entry, streamed[2] into preparatory or transition classes in special schools, or directly assessed with standardized psychological and/or educational tests[3] for placement in special education classrooms or schools. This study reviews the issues associated with such testing, the links with the overrepresentation of Romani children in special education, and the relationships to secondary education and post-school employment opportunities. This study also examines international good practice in the use of school readiness/entry assessments that are used to integrate and not segregate children and draws conclusions and sets out recommendations about how to address issues around school readiness/entry assessments.

SCHOOL READINESS ASSESSMENT AND ITS USES

In the countries discussed in the case studies of this paper, a child is typically considered to be ready to attend school—either kindergarten[4]or the first year of primary education—when he or she exhibits developmental maturity in social, cognitive, and physical abilities that will allow a child to be successful in school. Admittance to kindergarten or to the first year of compulsory primary schooling is usually connected in some way with an assessment of a child's readiness for school and screening for special educational needs (SEN).

[1] School readiness, or school entry, testing is the assessment a child typically undergoes before the first year of compulsory schooling, during which the child's developmental maturity in the areas of physical /motor, social-emotional, language (for example, phonemic awareness, identifying letters), visual discrimination, and fine motor skills.

[2] "Streaming" is the tracking of pupils into homogeneous academic ability or interest groups. In the context of this study, streaming refers to the process of moving pupils from general education, out of the mainstream, into segregated transition, preparatory, or special education settings. This occurs through some form of assessment and subsequent determination of special educational needs.

[3] Psychological and/or educational assessments are norm-referenced, standardized instruments purportedly designed to provide estimates of an individual's intellectual/cognitive abilities and educational achievement levels. An example of an assessment for intellectual ability is the Wechsler Intelligence Scale for Children, Fourth Edition (WISC-IV), while an assessment for educational achievement is the Woodcock-Johnson III Tests of Achievement.

[4] In this paper, "kindergarten" is used as a general term for preschool, or early childhood education, for children ages three to five or six. In some countries, as will be noted, the last year of kindergarten is considered the first year of compulsory schooling, but in other countries, kindergarten is not compulsory.

School readiness assessment emerged from the rise of compulsory schooling several centuries ago. During the Reformation, Martin Luther first advocated for compulsory education in order for people to be able to read the Bible. In 1774, Empress Maria Theresa made primary education mandatory for children aged 6 to 12; similar laws were implemented throughout Europe at this time. The reasons for compulsory schooling, however, were not to ensure that individuals would be able to read the Bible; rather, schooling was a nation-building mechanism through which individuals in an empire's territories were to be assimilated into obedient citizens via academic and moral education.

During the nineteenth century in both Europe and the United States, in response to industrialization, early childhood care and education, including kindergarten, emerged so that working poor women could participate in the labor force (Kamerman 2006, 12–13). In the United States in the nineteenth and early twentieth centuries, during a time of rapid industrialization and immigration, schooling was compulsory for children, but children might enter school at any age. In 1908, American psychologist Edward Thorndyke conducted a national study of school efficiency through an examination of pupils' grades, ages, and performance through which he determined that only one in ten pupils graduated from high school and that one-third graduated from primary school (Angus, Mirel, and Vinovskis 1988, 220–221).

In various studies conducted in urban areas, many pupils who performed poorly in school were determined to have intellectual disabilities through tests developed in the newly emerging field of educational psychology; in competing paradigms of this new field, some considered such children to be curable through educational "treatment" (Angus et al. 1988, 222–223). It was also during this time that child labor laws began to be enforced, and one of the ways to enforce this was to concurrently enforce compulsory school attendance. Poor achievement, high failure rates of pupils, and overage pupils in schools were the impetus for the establishment of special education classes, IQ testing, tracking, and ability grouping in schools in order to teach pupils more efficiently (May and Campbell 1981, 130; Angus et al. 1988, 224). The Detroit, Michigan school district implemented the first documented school readiness assessment in 1920, when it began testing all first graders and then tracked them into classes for differing abilities, including special education classes (Angus et al. 1988, 225). The purpose of kindergarten then became to provide socio-educational experiences for young children and to ready them for primary school (Kamerman 2006, 11).

Questions about the best age for a child to begin compulsory education arose in the context of increasing attention to school efficiency. Gesell's theory of maturation and child development largely influenced the determination that age six was the most appropriate age at which to commence compulsory schooling (Snow 2006, 9), but the various approaches to child development are mirrored by competing ideas about criteria and methods for measuring a child's readiness for school. In a literature review of measuring school readiness, Snow (2006) identifies the competing frameworks. The maturationist developmental perspective is relatively static, based on the idea that

a child is ready for school when he or she reaches a certain age; this is the perspective on which compulsory schooling, and thus school readiness assessment at the age of compulsory schooling, is still based. In contrast, the Vygotskian socio-historical developmental perspective is marked by a dynamic view of a child's readiness for school, yet still bound in a zone of proximal development. Further, environmental factors can play into a child's readiness for school. Snow also points out that it is somewhat limiting to consider school readiness as an issue only for children ages three to five; he determines that there are very few studies of school readiness that address infancy and early childhood (2006, 27). All of these issues contribute to Snow's findings that school readiness assessment have limited and mixed predictive validity for school success/outcomes (2006, 10).

Increasingly the relationship between children and schools is moving away from a maturationist framework. Rather than place responsibility for being ready for school on the child, transitional, "interactional-relational" frameworks focus on the rights of the child and the reciprocal relationships among the child, families, the school, and the community (Bennet and Tayler 2006, 222; Snow 2006, 14; Kagan 2007, 22; High, 2008, 1009). School readiness is thus not easily defined; it is "multi-dimensional, highly variable, and culturally and contextually influenced over time" (Wesley and Buysse 2003, 353).

High (2008, 1,010) identifies six misconceptions about school readiness as it is currently understood in schools:

(1) Learning happens only at school.
(2) Readiness is a specific condition within each child.
(3) Readiness can be measured easily.
(4) Readiness is mostly a function of time (maturation), and some children need a little more.
(5) Children are ready to learn when they can sit quietly at a desk and listen.
(6) Children who are not ready do not belong in school.

Children are usually assessed for readiness in kindergarten or before entering the first year of primary school. If a child is determined not to have attained the developmental maturity necessary for school, entrance maybe delayed for a year (or more in some countries), the child may be retained for a year in the same (standard) grade, or a child may be placed in an early intervention, transition, or preparatory class, or in a special education class. In almost all cases, the burden of proof is on the child: The child must demonstrate her readiness to attend school, but the school does not have to prove its readiness to accept the child and help him or her develop her skills. Herein lies the irony of school readiness testing: *The very children who would benefit the most from early school experiences are denied those experiences* (see Shepard 1997, 85; Bennet and Tayler 2006, 13; Alcock, Holding, Mung'ala-Odera, and Newton 2008, 548; Gadeyne, Onghena, and Ghesquĉre 2008, 454; and Panter and Bracken 2009, 398).

STREAMING

Streaming is the tracking, or division, of pupils based on their ability or achievement. Countries vary in how streaming is practiced and the ages at which children are streamed. In most Central European countries, pupils are streamed before the age of 15 into schools selected (usually by parents and teachers) on the basis of academic performance. Children in these countries are accordingly placed in separate schools with particular dedicated tracks — academic or vocational — grouped by ability. Other countries have a comprehensive system of schooling, where all children in a particular geographic area attend the same school, but pupils might still be streamed, or tracked, into different academic tracks, and most of their classes will be homogeneously grouped by ability. Still other countries, such as Finland, do not stream children at all. All classrooms in all schools are grouped heterogeneously, with pupils of mixed ability levels. Streaming is distinguished from informal ability grouping in individual classrooms, such as in-class reading or math groups, which are not permanent.

Early research on ability grouping in both elementary and secondary schools (Slavin 1987, 1990) found that there was a very low positive achievement effect in homogeneous grouping. In fact, being in a low-ability tracked group limits student achievement (Boaler 2005, 137). However, learning together with peers of differing ability levels offers educational benefits to all pupils (Katz, Evangelou, and Hartman 1990; Bailey et al. 1998, 29). International assessments of student performance in mathematics and literacy[5] consistently find that streaming pupils increases inequities in educational and social opportunities and decreases the mean performance of a country's student population (Hanushek and Woessmann 2005, 11; Luyten et al. 2005, 3). School tracking largely reinforces socio-economic status, as in countries with tracked, selective school systems, socio-economic background impacts both the kinds of schools children attend and their performance on assessments (Schleicher, Tamassia, and Ikeda 2003, 28; Luyten et al. 2005, 62; Caro et al. 2009, 190). Conversely, in countries in which children are not streamed and attend heterogeneously grouped comprehensive schools, student performance in literacy and mathematics is higher, and their performance is impacted less by their socio-economic status (Luyten et al. 2005, 89). Pupils from Finland, who perform highest on all international measures, receive all of their schooling in mixed-ability classrooms. The gap between higher- and lower-performing pupils is narrower in Finland than in other countries, and the national percentage of lower-performing pupils is lower than in other countries (Haahr 2005, 196).

Children can also be streamed into segregated placements based on the determination of special educational needs. In most countries, assessment procedures for identifying special educational needs are built upon the medical model of disability, "aimed at intervention, remediation, care, and cure" of the deficit which is found in

[5] These international tests are Program for International Student Assessment (PISA), Progress in International Reading Literacy Study (PIRL), and Trends in International Mathematics and Science Study (TIMSS, formerly Third International Mathematics and Science Study).

the child (Ryan 1976; Glennon 1995; Ladson-Billings 1998; Linton 1998; Lynch 2001). The Soviet concept of defectology was (and to some extent remains in the region) the "dominant medical approach to categorization, assessment and intervention" (Lynch 2001, 17). This current model depends on a diagnosis in order to qualify for an intervention, treating a problem after it develops, instead of responding to emerging needs that could alleviate the need for more intensive interventions and services after identification (Moore 2008, 6). In the case of children from Romani communities, a diagnosis often serves to segregate children and provide them with an inferior education under the law. Romani children are usually streamed into special education in the earliest years, through a regime of school readiness testing and/or psychological and/or educational testing in which children are diagnosed and labeled as disabled and placed in special education settings, which are usually also segregated.

In the contemporary historical context, children from Romani communities in Central and South Eastern Europe, as well as children from ethnic minority communities in almost every country, are affected by "policies that purge" (Fine 1991, 81) based on differences that matter. Minow (1990, 51) asserts that:

> we typically adopt an unstated point of reference when assessing others. It is from the point of reference of this norm that we determine who is different and who is normal.... Unstated points of reference may express the experience of a majority or may express the perspective of those who have greater access to the power used in naming and assessing others.

This construction of members of Romani communities as possessing a difference that matters is in large part based on the "conferred dominance" of whiteness (McIntosh, 1990, 35). As such, Romani people are displaced outside of the "norm" of society. Citizens from Romani communities possess the most visible "difference" of many ethnic minorities—the color of their skin. It is this visible difference, which should not matter but does, that largely contributes to expectations around student performance in schools.

Children who are disabled by schools, whether standard or special, have experiences in educational milieus in which teachers have lowered expectations of them, presume them to be academically and socially deficient, which leads to fewer teacher interactions with these pupils in the classroom; pupils are placed in the back of classrooms and are called on less, have fewer opportunities to engage in meaningful, relevant, and challenging classroom tasks, and teachers then blame them for their failure to succeed in schools (Rist, 1978; Oakes 1985; Artiles and Trent 1994; Good and Brophy 1994; Grossman 1995; Anyon 1997; Artiles 1998; Gay 2001; Solorozano and Yosso 2001; Gay 2002). Artiles (1998, 32) asserts that teachers have assumptions about difference made about minority pupils. These assumptions lead to biased expectations of minority pupils that in turn lead to biased treatment of pupils; these biased, negative expectations of pupils generate cycles of self-fulfilling prophecies, whereby marginalized pupils continue to be marginalized, are not provided equality of educational opportunity, and thus perform poorly (Grossman, 1995, 66; Gay, 2002, 615).

This disabling is particularly evident in the case of children from Romani communities. The failure of schools limits opportunities for secondary education, in turn negatively affecting participation in the labor market and impacting their poverty status. The overall result is thus ossification of a cycle of special education, school failure, unemployment, and poverty.

REGIONAL TRENDS IN SPECIAL EDUCATION ENROLMENT RATES

The countries that do not categorize special educational needs in legislation — Finland, France, Italy, and the United Kingdom — have the lowest rates of segregating children in special schools. Italy has the lowest rate of segregation, with 693 pupils total out of a special educational needs population of 170,696. The United Kingdom and Italy have remained the most consistent with low segregation rates in the years between 2001 and 2008, at less than 0.5 percent and 1.1 percent respectively. Both France and Finland's rates of segregation in special schools have decreased in these years, as has the percentage of children diagnosed with special educational needs.

The Czech Republic's percentage of children with special educational needs has dropped, from 9.8 percent to 8.6 percent, as has the percentage of pupils segregated in special schools, from five percent to 3.5 percent. However, this is still well above the two percent average found in Europe (Meijer, Soriano, and Watkins 2003, 11). The rate of identification of children with special needs has increased in Hungary and the Slovak Republic, from 4.1 percent to 5.8 percent in Hungary and from 4.0 percent to 7.7 percent in the Slovak Republic. The rate of segregation in special schools is somewhat stable in the Slovak Republic, 3.4 percent in 2001 and 3.6 percent in 2008, while the rate has slightly dropped in Hungary, from 3.7 percent to 2.9 percent.

TABLE 1. Placement of students with special educational needs relative to total student population

	Total number of pupils		Percent SEN		Percent in special schools		Percent in special classes		Percent fully included	
	2001*	2008**	2001*	2008**	2001*	2008**	2001*	2008**	2001*	2008**
CZ	1,146,607	888,000	9.8	8.6	5.0	3.5	–	1.0	–	4.1
FI	583,945	556,470	17.8	8.0	3.7	1.3	–	2.6	–	4.1
FR	9,709,000	12,638,100	3.1	2.7	2.6	0.61	–	1.3	–	0.8
HU	1,191,750	1,323,511	4.1	5.8	3.7	2.9	–	No data	–	2.9
IT	8,867,824	7,326,567	1.5	2.3	<0.5	693 total	–	0	–	>99.9
SK†	762,111	740,654	4.0	7.7	3.4	3.6	–	1.4	–	2.7
UK	9,994,159	8,064,696	3.2	2.8	1.1	1.1	–	0.02	–	1.4

* SOURCE: Meijer, Soriano, and Watkins (2003).

** SOURCE: Watkins (2008).

† 2001 Data from Watkins (2008); 2008 data from Eurydice (2009a).

TABLE 2. Placement of students with special educational needs relative to population of students with special educational needs

	Percent SEN	Percent in special schools	Percent in special classes	Percent fully included
	2008**	2008**	2008**	2008**
CZ	8.6	41	11.7	47.3
FI	8.0	16	33	51
FR	2.7	22.3	46.7	31
HU	5.8	50	No data available	50
IT	2.3	<0.5	0	>99.5
SK†	7.7	47	18	35
UK	2.8	41	9	51

** SOURCE: Watkins (2008).
† 2001 data from Meijer, Soriano, and Watkins (2003); 2008 data from Eurydice (2009a).

TABLE 3. Placement of students diagnosed with intellectual disability relative to total student population

	Percent in special schools	Percent in special classes	Percent in standard schools
CZ	2.86	0.08	0
FI	1.04	0.08	.17
FR	0.26	0.47	.15
HU	4.63	2.58	0
IT	0	0	>99.9
UK	with statement: 0.46	–	1.70
	without statement: 0.09	–	14.32

SOURCE: Organisation for Economic Co-operation and Development (2001).

Legislation for all countries discussed in this policy paper includes provisions for children diagnosed with mild intellectual disability to be taught in special classes in mainstream schools. Finland, France, Italy, and the United Kingdom, as well as Serbia, have had this provision for at least a decade, with relevant provisions in place in Italy since 1971. This provision has been incorporated into the legislation of the Czech Republic, Hungary, and Slovakia since the early 2000s. Because this provision is relatively new for these countries, it might be expected that rates of inclusion would rise over time. Between 2001 and 2008, here have been slightly decreased rates of segregation in the Czech Republic and Hungary, but a slight increase in segregation in Slovakia. Special classes in mainstream

schools are more prevalent in Finland and France, while the Czech Republic, Finland, Hungary, and the United Kingdom fully include almost or just 50 percent of their pupils with disabilities in mainstream schools. Pupils with mild intellectual disability are less apt to be included than their sensory-, physically-, speech-, or learning-disabled peers. A 2001 study by the Organisation for Economic Co-Operation and Development (OECD) reports that in no country were all pupils with intellectual disabilities included in mainstream education, with the highest percentage, over 99 percent, in Italy, 16 percent of pupils in the United Kingdom, and zero percent in Czech Republic and Hungary.

The above data are based on a cross-national disability classification system developed by the OECD in order to document how countries classify children and allocate special educational needs resources (Florian et al. 2006, 40). The three categories of this taxonomy established by OECD are: Cross-National Category A, needs arising from impairments; Cross-National Category B, needs from learning or behavior difficulties; and Cross-National Category C, (social) disadvantage (OECD 2001, 176). This taxonomy is one-dimensional and does not take into account the complexities of children's characteristics, including demographics or how different countries interpret these characteristics (Florian et al. 2006, 40). The countries also report different disabilities or difficulties differently. For example, Cross-National Category A typically encompasses subcategories for, among others, visual impairment, hearing impairment, orthopedic impairment, autism, speech impairments, health impairments, and mild, moderate, and severe intellectual disabilities, but Cross-National Category B might include mild learning difficulties and learning disabilities. For example, Hungary has two categories for mental impairment: Cross-National Category A, Category 1: Moderate degree of mental disability, and Cross-National Category B, Category 7, mild degree of mental disability (learning disability) (OECD 2007, 58–59). A difficulty in analyzing data is that when data are reported in OECD publications, the subcategories for "Category A" and "Category B" are largely reported together, and rarely are the different types of disabilities disaggregated from the main categories used by each country. There is a need for a comprehensive overview of school placements where the data contained in the different categories and subcategories of each country are disaggregated to get a more robust description of the different types of inclusion practiced in different countries, and specifically, how children with different types of intellectual disability diagnoses (mild, moderate, or severe) are placed in schools.

AMONG THE ROOTS OF THE BROADER PROBLEM OF SEPARATING CHILDREN INTO EDUCATIONAL STREAMS ARE TWO MAJOR METHODOLOGICAL FLAWS IN ENTRY TESTING AS PRACTICED IN THE CZECH REPUBLIC, HUNGARY, SERBIA, AND SLOVAKIA. FIRST, ONLY ONE KIND OF INSTRUMENT IS USED. SECOND, THE INSTRUMENTS RELY ON STANDARDIZED MEASURES THAT ASSUME A PUPIL'S EXPOSURE TO CERTAIN CULTURAL EXPERIENCES RESULTING IN A REPERTOIRE OF KNOWLEDGE AND SKILLS ASSOCIATED WITH PUTATIVELY INTELLIGENT BEHAVIOR, AS WELL AS A VOCABULARY ASSOCIATED WITH MEMBERSHIP IN THE MIDDLE CLASS.

PITFALLS AND BIAS IN ASSESSMENT

Children are typically assessed for many reasons: screening and/or diagnostic, to determine what services they might need to facilitate their learning; and progress evaluation to determine what they have learned and what they should be taught. While it is important to assess children's abilities to ensure that they receive appropriate supports in education, the danger lies in relying on these assessments to make placement decisions. The American Academy of Pediatrics (1995, 437) maintains that:

> [w]hen instruments and procedures designed for screening are used for diagnostic purposes… children can be wrongly identified and their education jeopardized. For these reasons, the use of readiness testing that is designed for screening should not be used to make placement decisions. No child should be excluded from school, placed in a special education setting, or provided with special educational services on the basis of such testing.

A related danger lies in the reliance for placement decisions on standardized measures that assume a child's exposure to certain cultural experiences (Alcock et al. 2008, 530). Beginning with an historical overview of notions of intellectual disability and intelligence testing, this chapter examines relationships between socio-cultural and language backgrounds and experience on the one hand and labels of mental disability on the other, paying particular attention to two tests commonly used to make disability determinations which in turn impact children's placements in schools.

TAXONOMY OF "INTELLECTUAL DISABILITY"

Children are typically administered intellectual ability tests (IQ tests) during the process of assessment for intellectual disability. Almost all countries use the following categories of the American Association of Intellectual and Developmental Disabilities, *The Diagnostic and Statistical Manual of Mental Disorders IV-TR*, and the International Classification of Diseases-10 when labeling children:[6]

Profound: IQ below 20	Severe: IQ 20—34
Moderate: IQ 35—49	Mild: IQ 50—70

However, these labels, while used internationally to sort people and sometimes to stream them into segregated institutional settings, are social constructions. In the United States, in exploring the overrepresentation of children of color in special education programs for children with the label of mild mental retardation, Mercer (1973) and the President's Committee on Mental Retardation (1969) discussed the "six-hour retarded child." This is a child, usually poor and/or of color, who is considered to be "retarded" while in school, but who is considered to be "normal" and perhaps even a high achiever in his or her family and community, such that the disability label conferred by the school has no function outside of the school. By the 1960s in the United States, the practice of labeling African American children with mild mental retardation ("feeblemindedness") became an "embarrassment" to the government in the midst of the Cold War and parents became increasingly active to demand services and opportunities for their children who were labeled mentally retarded (Biklen, personal communication July 12, 2006). By 1973, the definition of mental retardation was revised, from an IQ of 85 to 70. With a signature, tens of thousands of individuals were "cured" of mental retardation.

While the Ministries of Education in the region stop just short of asserting that social or cultural disadvantage is hereditary, family background is repeatedly targeted as the cause of a child's school failure. In much the same way that Goddard asserted a causal relationship between feeblemindedness and social vice in the early twentieth-century United States, sociologists in the United States in the late 1960s attributed school achievement not to heredity, but to family and social background. Thus, Moynihan (1965) posited that the breakdown of African American family, which he in large part attributed to historical and structural injustice, was the cause of the breakdown of African American culture in the United States. Similarly, Coleman (1966) explored the correlations of poor African American children's low school achievement, and attributed it primarily to the family and the sociocultural milieu in which the child lived, using the presence of a set of encyclopedias in the home as one of his indicators of

[6] At different times in history this taxonomy has been known as "idiot," "moron," "imbecile," and "feebleminded." This taxonomy calls to mind the United States of the late nineteenth through mid-twentieth centuries' ideas on feeblemindedness and degeneracy (Trent 1994). Goddard linked feeblemindedness and social vice to heredity; scientists, educators, and society increasingly began to view persons identified as morons, idiots, or "moral imbeciles" as being drains on society's resources (as discussed in Gould 1995; and Trent 1994). Feeblemindedness was considered to be both a social burden and a social menace (Trent 1994).

parental interest in education. These studies were informed by the work of Lewis (1966/1996) and his theory of the "culture of poverty," which he asserts is an intergenerational way of life that impedes participation in the larger economic system. Children from these families and cultures came be known as "culturally deprived."

Goode and Eames (1996) critique this view, reframing the "culture of poverty" as instead a part of the culture of capitalism, in which a belief in the culture of poverty justifies the inequities extant in the marketplace. In this analysis, families and communities are deprived not so much culturally as economically, and thus educationally. Blatt (1981, 51), in discussing "cultural-familial retardation" in the mid-twentieth century, determines that perceived cultural and educational deficits in a child and his or her family are "less a function of their intellect and more a function of their realistic attempts to cope with an overwhelming socioeconomic situation." Ryan (1976) attributes one of Coleman's primary indicators, encyclopedias in the home, as more of an indicator for socio-economic status than parental interest, also asserting that "the primary effect of poverty, race, and family background is not on the children, but on the teacher who is led to *expect* poorer performances from black and poor children" (54). When teachers expect poorer performance from children, as discussed in the previous section, teachers tend to create classroom climates where lowered expectations of children create self-fulfilling prophecies of failure in schools. Similar to notions of cultural deprivation in the United States, the classification of "social disadvantage" blames Romani families for children's perceived mental disability through setting out the conditions for their school failure.

CULTURAL AND LANGUAGE BIAS IN INTELLIGENCE TESTING

Origins of intelligence tests

In 1905, Alfred Binet introduced the first intelligence test, the Binet-Simon Scale. Commissioned by the French government, the purpose of this test was to identify pupils in need of special academic assistance (Gould 1996; Hayman 1998; Sattler 2008). One of the ways that Binet went about constructing the test items was to ask French elementary school teachers to tell him the types of questions or activities that children who had problems in their classrooms found the most difficult. He included many of these items in his scale (for example, counting coins, repetition of digits, naming pictures of objects, identifying similar objects, analogies), variations of which are found in modern intelligence and ability tests. Thus the Binet-Simon Scale "became the prototype for subsequent mental ability scales" (Sattler 2008, 218). These subsequent intelligence and ability tests have rooted their validity in comparison to the Binet-Simon items (Humphreys 1984, as cited in Ceci 1991, 719; Gould 1996; Hayman 1998, 246).[7] Goddard, who introduced the Binet-Simon Scale to the United States in 1908, and Terman, who revised the Binet-Simon Scales in 1916 (as the Stanford-Binet), 1937, and in 1960, both worked with Yerkes to

[7] For a general discussion of notions of validity and reliability, please consult Annex 1.

develop the verbal Army Alpha and nonverbal Army Beta tests, published in 1919. These tests were correlated with the Stanford-Binet, and by the end of World War One were administered to over two million American men (Gould 1996; Sattler 2008, 220). Wechsler derived his Wechsler-Belleview Intelligence Scale, published in 1939, directly from the Army Alpha and Beta tests, and it is from the Wechsler-Belleview Intelligence Scale that all subsequent Wechsler tests, including the Wechsler Intelligence Scale for Children (WISC-all editions) were derived (Sattler 2008, 220). Thus, intelligence tests have their foundations in school-based notions of ability and student achievement, constructed from comparing and measuring pupils unsuccessful at certain tasks with the performance of pupils who are successful at those tasks. Every subsequent intelligence and ability test is standardized for this same purpose, which, as Ceci (1991) observes, is a circular endeavor: "[s]chool failure is both explained by a lack of intelligence and is itself the basis for the definition of a lack of intelligence" (719).

Cultural bias

Access to early educational experiences and equal educational opportunities

Binet, who believed that individualized and special approaches to instruction could mediate academic difficulty, developed his test for the purpose of identifying children who needed extra assistance to be successful in school, rather than for labeling and categorizing them. Indeed, most subsequent test developers have taken the view of tests as a means to label and categorize. Binet's test measure *acquired* differences in intelligence (performance). Screening children in schools arose from the practice of early medical screening, used to detect disorders in order to begin a treatment program. However, using educational screening to detect or predict a child's potential success or difficulty in school is problematic, as there are dimensions to intelligence beyond the analytical and memory abilities typically measured by intelligence tests and that can develop through school attendance and classroom experiences (Gredler 1997, 99). Sternberg's triarchic theory of intelligence posits that intelligence is manifested in three dimensions: componential (information processing, performance, and knowledge acquisition), experiential (for example, insights, dealing with novelty), and contextual (how to use individual strengths and weaknesses) (Sattler 2008, 232—233). These three dimensions of intelligence take into account students' learned behaviors, how students use their creative and practical abilities "to discern their strengths and weaknesses and then determine how to use their strengths and minimize their weaknesses" (Sattler 2008, 233).

Exposure to schooling may in fact influence the ways that children take tests, and thus, may influence the interpretation of children's performance on tests. For this reason, it is important to consider the educational, and cultural, experiences that children bring with them into the testing situation (Alcock et al. 2008, 530). For pupils who have not attended school or who have not had the opportunity to develop facility with pen and pencil/fine motor skill tasks, the coding and symbol search subtests scores could be reduced, not out of ability or intelligence, but out of unfamiliarity with the testing conditions. Intelligence tests also measure academic and performance behaviors that a child learns through exposure to the cultural contexts in which the tests were created and normed. If a

child does not come from a cultural majority community, then school is the place where these academic and performance behaviors are learned. If children are denied or delayed entry to school, or if they are not provided equal educational opportunities based on teacher assumptions and lowered expectations, the child is less apt to learn these behaviors and can therefore be expected to perform poorly on the tests that measure these behaviors (Ceci 1991; Figueroa and Newsome 2006; Alcock et al., 2008). Sattler (2008) cautions that although children from ethnic minority populations indeed might have the skills to correctly answer questions on intelligence and achievement tests, "*low-intelligence tests scores of some ethnic minority children may be a consequence of limited exposure to test content, of limited test-taking skills, and/or motivational factors*" (165, author's emphasis).

Test content, stereotypes, and quality of schooling

In the United States, the 1972 case of *Larry P. v. Riles* was the first to call into question the practice of using intelligence tests as the sole basis of placement in special classes for pupils with mild intellectual disabilities, with a California court's finding that intelligence tests were culturally biased and banning their use when assessing African-American children for special education. As argued by an expert witness for the plaintiffs, the tests' bias results from the fact that the tests were designed by white middle class psychologists from white middle class environments, such that children from different backgrounds (ethnic, racial, or class) could not be expected to have the same access to and experiences with items on these tests (Gordon and Rudert 1979, 180). More recently, Helms (2006) cites a report that most psychologists in the United States are educated and work in predominantly white environments and belong to predominantly white professional associations, and read professional journals edited by white editorial boards, all environments that legitimize dominant knowledge and experiences (851).

An examination of commonly used intelligence tests by Zoref and Williams (1980) found racial stereotypes in the tests, with racial stereotypes defined as non-white representations in items displaying stereotypical characteristics such as manual or unskilled labor, professional sports, primitive culture or religion. In the Stanford-Binet Scale, for example, the only non-white representation is an Indian boy wondering why a lazy white boy walks while sitting down, with the correct answer—presumably unknown to the Indian boy—that the white boy is riding a bicycle. On the other hand, the overwhelming representation of white males in intelligence tests and the reflection of the dominant culture in the test items mean that these tests perpetuate the hegemony of a monocultural (white middle class) social order (Zoref and Williams 1980, 320). For members of minority communities, then, test scores reflect what Skina, Knesting, and Bush (2002, 70) call "the tragic history of limited cultural and educational opportunity" that leads to these scores.

Testing conditions and their impact on performance

The ways that children interact with both the examiner and the testing conditions may also impact student performance on intelligence tests. Examiners must consider cultural and ethnic factors in establishing rapport with children when conducting assessments and interpreting the assessment information and results (Sattler

2008, 136). Ardila (2005) describes ways that testing procedures and conditions might conflict with children's home communities. For example, tests are administered through a highly regimented script with specific instructions and formal language which might be difficult for some children who might not have had access to educational settings where formal instructions are usually given. For collective cultures, demands for individual responses or requests to "do your best" might not be as valued as in the dominant culture. In addition, certain tasks that are part of intelligence tests, such as figure drawing or digit repetition might seem purposeless and unimportant. Some of the items on intelligence tests are timed or depend on a child's processing "speed." Time can be considered a social construct, and for some cultural groups, tests that are timed or depend on speed are inappropriate, as it might take a slow and deliberative process to carefully work through test items and produce quality work. Individuals who administer the tests are usually strangers to those to whom they give the test, which also might impact a child's performance on the test. Moreover, for some children it might be strange for an adult to ask questions to which they (that is, as the adults) should already know the answer. Therefore, it is essential that assessments consider the language and cultural characteristics of the children being tested both during test administration and when interpreting the results of the test (Center on the Developing Child 2007, 22).

Dynamic testing is a strategy that might be useful to consider when administering intelligence or ability tests to children from minority communities. Whereas standard assessment practices focus on stasis, evaluating preexisting, pre-learned skills, dynamic assessment emphasizes measuring the processes involved in learning and change (Sternberg et al. 2002, 143). In a study of the assessment of intellectual potential in rural Tanzanian school children, Sternberg and colleagues (2002) sought to determine if short intervention teaching of cognitive skills and strategies would have any effect on posttest scores, in essence, to assess developing abilities. All children were given a pretest, and then the experimental group of children received short intervention teaching sessions while the control group received no such interventions. All children were administered a posttest. The posttest scores of children who received short intervention teaching increased compared with children in the control group. Dynamic testing by its nature contributes to a less neutral relationship between the examiner and examinee than in traditional, static testing situations. The dynamic testing procedure seems to tap into "important abilities that would not have been measured were one only to have considered the pretest (static) scores" (Sternberg et al. 2002, 158). In discussing differences between static (traditional) and dynamic testing, Sternberg and colleagues note that the intervention teaching sessions were short, lasting less than an hour. In dynamic testing, children are provided feedback until they either solve a problem or give up. In this way, testing "joins with instruction, and the test-taker's ability to learn is quantified while he or she learns" (Sternberg et al. 2002, 143). Through this method of testing, children are able to show their knowledge through a brief intervention whereby children learn the nuances of test-taking, something they might not have had exposure to in the past.

Language bias

Culture and language are often interrelated, but there are specific concerns regarding language acquisition when administering, interpreting, and scoring assessments. For children for whom the dominant language of a country or region is not their home language, proficiency in the dominant language is acquired through exposure to the dominant language, typically through school experiences. Flowing from this, the language of school entry and intelligence tests is acquired through exposure (Oller 1997, 475). Oller (1997) also argues that language is a primary factor in IQ variance due to differences in the language and dialects used by examiners, differences in the accessibility of the language and dialects to the individuals being tested, and the resulting differences in the accessibility to the information in the tests (486). To take a concrete example, the Stanford-Binet has a history of not including individuals for whom English is not their first language in its norms, with the 1960 United States norming sample of the Stanford-Binet including only European Americans. The 1972 version of the test, upon which the Budapest-Binet is still based, used a norming sample that included African Americans and individuals with Spanish surnames, but individuals with a primary home language other than English were excluded from the sample (Sattler 2008, 568).

Multilingual

Many Romani children are bilingual, and some trilingual (for example, Romani children in southern Slovakia who might speak Romani, Hungarian, and Slovak). However, their intelligence might be questioned because of their styles of speaking, as how one speaks is often thought of as an indicator of intelligence (Gay 2002, 617). Because issues around language and Romani children are similar to those of Hispanic American and Native American children in the United States, Sattler's expectation that bilingual Hispanic American's speech patterns mix Spanish *qua* home language with English *qua* dominant language would seem to apply also to Romani children. As Sattler (2008, 147) explains, such mixing may include borrowing words from the dominant language, forming new words that combine home and dominant words, nonstandard pronunciation of dominant words, and/or nonstandard word order when speaking.

The Romani language is not yet codified, and the language has many distinctly different dialects. Romani is officially recognized as a minority language in the Serbian province of Vojvodina, but this is not typical throughout the region or the world. Like the wide range of dialects in the Romani language, Native American peoples speak many dialects (over 150) from six language families. Native American children might have an excellent to poor command of English, just as Romani children might have an excellent to poor command of the dominant language. Sattler (2008) cautions that test administrators who speak only the dominant language might have difficulty communicating with Native American children and that Native American children might be more hesitant to speak, might be more apt to speak softly, give shorter responses, appear to lack assertiveness, and might be less likely to engage with an examiner from the dominant culture (153). Individuals who are bilingual might also have differences in receptive and expressive language dominance, so attention to how children best express themselves in their primary language and in the dominant language is particularly important (Olmedo 1981, 1,083).

Bias in test administration

When using translated versions of assessments and interpreters to administer assessments to children whose primary language is not the dominant language, there are still issues to consider in diagnosis and placement. Direct translations of assessments might be inappropriate to use with individuals who speak different dialects (Olmedo 1981, 1,083). In a review of school psychologists' reports for English Language Learners in California, Figuero and Newsome (2006) determined that only one test was used to collect data (rather than using various tests across multiple domains as is best practice), tests were not administered in the child's home language, the tests were not administered by individuals who had any familiarity with the child's cultural, ethnic, or language backgrounds, and when interpreters were used (which was rare) no notes were made in the report about the interpreter possibly affecting the validity of the assessment (209). The sample size in this study is small, at only 19 reports, but anecdotal evidence indicates that these instances of test administration bias happen frequently in the case of Romani children. Test examiner bias may also be a factor in how the test is administered. Skiba, Knesting, and Bush (2002), in a review of literature related to culturally competent testing, report that examiners' ethnic and class prejudices and unfamiliarity with children's cultures can significantly impact children's performance on standardized assessments (64).

ISSUES IN COMMONLY USED TESTS

Wechsler Intelligence Scale for Children (WISC)

The Wechsler Intelligence Scale for Children was first published in 1949, revised in 1974 (WISC-R), then again in 1991 (WISC-III). The most recent revision was in 2003, as the WISC-IV. The test is administered to children individually, and the administration of the core battery of the test takes 65–80 minutes. The full-scale IQ score (FSIQ) is determined by the sum of four index scores: Verbal Comprehension; Perceptual Reasoning; Working Memory, and Processing Speed. The index scores are derived from subtests; there are ten subtests that make up the core battery and five supplemental subtests. Please see Annex 2 for a more in-depth description of the components of the WISC-IV.

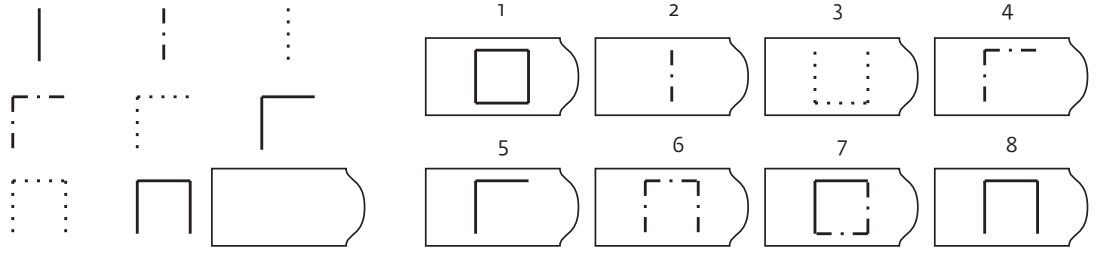
There are particular issues with scoring the test that might apply when it is administered to children who might not come from the dominant culture or who do not have exposure to early schooling. When scoring the question "How are an apple and an orange alike?", two points are given if the child responds they are both fruits, but only one point is given if the child responds they are both food, both round, and so on. Pupils who attend school are more apt to engage in activities that would foster deeper degrees of similarity classifications, which would result in higher IQ scores (Ceci 1991, 718). Additionally, in letter-number sequencing, children must understand the concepts of "alphabetical order" and "ascending order" (Whitaker 2008, 131), which is also fostered through classroom activities.

Raven's Coloured Progressive Matrices (CPM)

Raven's Progressive Matrices were first published in 1938. There are three versions of the Matrices: Standard Progressive, to be used with individuals ages six to adult; Coloured Progressive, to be used with young children (five to 11), the elderly, and individuals with moderate or severe learning disabilities/difficulties; and Advanced Progressive, for adults and adolescents who are perceived as having above average intelligence. After the WISC and the Binet, Raven's Coloured Progressive Matrices (CPM) are the second most used intelligence test (Brouwers, Fons, Van de Vijver, and Van Hemert 2009, 330). The Raven's CPM has the possibility of group administration, which makes it appealing to those who use it. Raven developed these tests while working with a geneticist on researching the genetic and environmental influences on intellectual deficit and intelligence (Raven 2009, 17; Raven 2000, 1).

The most recent edition of the Coloured Progressive Matrices is from 1998. The format of the test is a series of multiple-choice items in which examinees are presented an abstract pattern with a missing cell in the lower right corner. They are then asked to identify the missing cell that would complete the pattern. See Figure 5 for a sample matrix item; the item is not from the current version of the test. There are 36 items in three sets (12 items per set). The items in the first two sets are colored. The test takes between 15 and 30 minutes to administer, and can be administered to individuals or to a group.

FIGURE 1. Sample Progressive Matrices Item



SOURCE: John Raven (2000) "The Raven's Progressive Matrices: Change and stability over culture and time." *Cognitive Psychology*, 41: 1–42: 2.

Raven's Progressive Matrices are nonverbal assessments that are purported to be free or reduced of cultural bias. However, researchers have identified potential "method bias" that might in fact have a relationship to test results. "Correct" answers on the CPM are those that obviously complete the abstract pattern of the matrices. Some children might view the pattern aesthetically, not practically, and choose their response accordingly, thinking that a "correct" response would be more creative than an obvious one (Ardila 2005, 188). Test exposure or familiarity with the procedures of a test can impact performance on the test, and thus an individual's IQ score.

While the test claims to be relatively free of cultural bias, non-dominant cultural communities, such as illiterate Congolese mine workers, who traditionally do not do well on the Progressive Matrices improve their performance with repeated administrations, that is, as their familiarity with the testing conditions/procedures grow (Ombrédane, Robaye, and Plumail 1956 as cited in Brouwers et al. 2009, 331). Nonverbal tests in fact do require language – the instructions for the test, the conceptual skills that can be learned only through proficiency in a language – and language is related to culture (Oller 1997, 488; Gunderson and Siegel 2001, 51).

Two studies examined how testing conditions and training impact children's scores on the CPM. Klauer and Willmes (2002) conducted a study in which one group of first-grade children were specifically taught inductive reasoning strategies while the other group engaged in regular classroom activities. The group of children who were taught inductive reasoning strategies performed better on the CPM than those children who did not have specific strategy instruction. Désert, Préaux, and Jund (2009, 210) presented instructions for the assessment in two different ways: (1) as required by the manual: "We are going to do a series of exercises together in order to evaluate the domains you succeed in and those where you fail, to know your strengths and weaknesses. Do you best so we can know your strengths and your weaknesses," and (2) in a non-evaluative way: "We are going to do a series of games together because we created new games, and we want to know if they are well adapted to children of your age. Do you best so that we can know if the games are suitable for children of your age." These evaluative and non-evaluative instructions were given to French pupils from low and high socio-economic strata in test administration trials. The non-evaluative "game" instructions did not affect the performance of pupils with high socio-economic status (SES), but this test condition brought improved results of pupils from low-SES households, who might have been more keenly aware of lowered expectations associated with their families and backgrounds, thus impacting their performance when told that a measure was a test of their own abilities, as opposed to testing the measure's appropriateness for children their age. Thus, method matters in assessing intelligence, and no instrument that measures a construct can be completely free from cultural bias.

SUMMARY

An assessment of intelligence is valid only insofar as it has been normed with all representative populations of a country or region and appropriately measures what it is supposed to measure. An assessment can be used to determine a child's areas of strengths and weaknesses for instructional planning purposes. However, it is the inappropriate and biased ways in which these instruments are used that lead to segregation and denial of equality of educational opportunity for Romani children. Factors leading to misinterpretation of test results include the use of translations of tests, under-representation of certain ethnic or language groups when the test is standardized, and the failure to create a comfortable and engaging testing environment. Misdiagnosis can occur as a result of imprecise reporting of results, not following test administration protocol, or administering the test in culturally or linguistically inappropriate ways. Finally, practitioner malpractice may occur as a result of blatant bias or

discrimination, leading in turn to misinterpretation and misdiagnosis. The case studies which comprise the chapters that follow examine the policies and procedures around assessment, country-specific issues with tests, and the consequent school and labor market opportunities for Roma in the Czech Republic, Hungary, Serbia, and the Slovak Republic.

OF ROMANI CHILDREN WHO ATTEND PREPARATORY CLASSES IN PRACTICAL (SPECIAL) PRIMARY SCHOOLS, ONLY 10 PERCENT GO ON TO ENROLL IN STANDARD PRIMARY SCHOOLS, WHILE 80 PERCENT OF ROMANI CHILDREN WHO ATTEND PREPARATORY CLASSES IN STANDARD PRIMARY SCHOOLS GO ON TO ENROLL IN STANDARD PRIMARY SCHOOLS (BEDARD 2008, 17).

CZECH REPUBLIC

KEY INSTITUTIONS IN THE ASSESSMENT PROCESS

A pediatrician or health professional is the first institution that determines a child's readiness for school in the Czech Republic. The Czech Ministry of Health, through Act No. 258/2000, §50, mandates that a nursery or kindergarten may only accept a child who has received all of her vaccinations and does not have a communicable disease. The Education Act (Act No. 561/2004, Coll.) states that a medical specialist may also be involved with determining a child's readiness for school or a child's school placement through diagnosis of a health or significant intellectual disability.

Kindergarten[8] is not compulsory in the Czech Republic, but approximately 93 percent of children attend the year before the start of compulsory schooling (Eurydice, 2009). The last year of kindergarten is free, but parents are responsible for the costs of supplies, transportation, food, and other related expenses. For poor families, these costs can be prohibitive. The Czech government's National Action Plan for Inclusive Education (2010) addresses this issue, including among its goals the creation of material conditions for the development of inclusive education in the area of kindergarten/preschool education (11). Currently, action proposals are prepared and submitted for government approval.

For children who attend kindergarten, assessment of school readiness is typically conducted by teachers and school directors. The teacher, through the school director, refers the child to the School Advisory Facility to be assessed for school readiness or disabling conditions. The school, with the consent of the parents/legal guardians, then makes the decision to remove the child from kindergarten and/or delay the start of compulsory schooling. Similarly, when a child begins compulsory schooling, after examination and assessment by the School Advisory Facilities, a decision is made whether or not the child can continue in school, defer the start of schooling, or be placed in a preparatory or special class or school (Education Act § 35, 49).

The Education Act, under Section 116, establishes School Advisory Facilities; these facilities provide diagnostic, advisory, methodological, pedagogical and special pedagogical, psychological, and guidance services. There are

[8] Kindergarten attendance is voluntary in the Czech Republic, but most children attend kindergarten. The first year of compulsory schooling is first grade, at age six.

two distinct types of centers/services provided by School Advisory Facilities: Pedagogical-Psychological Counseling Centers and Special Pedagogical Centers. Both of these entities are comprised of psychologists, special pedagogues, social workers, and if necessary, physicians; the responsibilities of each institution is set out in Ministry of Education, Youth, and Sport Decree 72/2005. A child cannot be identified as having special educational needs unless the School Advisory Facility conducts a psychological and/or educational examination and makes the determination of need (Decree 73/2005, §2). Pedagogical-Psychological Counseling Centers provide expert opinions on children's pedagogical and psychological readiness for school and make recommendations for placement in appropriate classes or schools; this is accomplished through screening and assessing children using diagnostic instruments (§5). Appendix 1 of Decree 72/2005 emphasizes that diagnosis be used as a basis for determining specialized care and instruction and modified programs in integrated settings. One of the ways that a child can be assessed for special educational needs is through a "diagnostic stay" of two to six months in the school "to which [the child] should be included" (Decree 73/2005, §9.2). This means that a child is typically placed in a special school for the purpose of determining if in fact the child requires special educational services. The school psychologist is responsible for administering and interpreting the assessments that aid in the diagnosis of special educational needs. School psychologists are required to participate in the registration of children before the start of compulsory education to conduct screening, surveys, and questionnaires to detect disorders or special talents (gifted pupils) (Decree 72/2005, Appendix 3.III).

After pupils have been identified as having special educational needs by the Pedagogical-Psychological Counseling Center, pupils are then referred to a Special Pedagogical Center. Here, a special pedagogue specifically diagnoses the area(s) of educational needs of children with disabilities and develops materials to support their integration, provides special pedagogical services to pupils with disabilities who are integrated into standard schools and classes and who are educated in special schools and classes (§6). The Special Pedagogical Center is also responsible for processing proposals for the inclusion of pupils with special educational needs into standard classes and schools and proposals for individual education plans that guide their instruction once they are integrated (Decree 72/2005, Appendix 2.I.18-19).

The Institute for Pedagogical and Psychological Counseling was established by the Ministry of Education, Youth, and Sport in 1994. The Institute provides support, training, and advice to schools and teachers, carries out research related to psychology and education, and publishes methodological guidelines and information in the areas of its competencies.[9] The Institute is also involved in developing assessments, including perhaps most notably the Czech standardization of the WISC-III UK.

[9] Available online: http://ippp.cz.

The European Court of Human Rights is an institution that has the potential to impact the process of school assessment for children in the Czech Republic. On November 13, 2007, the European Court of Human Rights found that the Czech Republic had violated Article 14, the anti-discrimination clause, along with Article 2 of Protocol No. 1, the right to education, of the European Convention on Human Rights. This case was initiated in the European Court of Human Rights in April 2000, by D.H. and Others, eighteen Romani pupils who alleged that their rights were violated through their placement in special schools, after having lost their claim in the Czech Constitutional Court. Part of their argument was "that their intellectual capacity had not been reliably tested and that their representatives had not been adequately informed of the consequences of consenting to their placement in a special school" (*D.H. and Others v. the Czech Republic* judgment 2007, paragraph 23). The Court agreed, concluding that "there is a danger that the tests were biased and that the results were not analyzed in the light of the particularities and special characteristics of the Roma children who sat them" (*D.H. and Others v. the Czech Republic* judgment 2007, paragraph 201). The Court further concluded "that the relevant legislation as applied in practice at the material time [including legislation on assessment procedures] had a disproportionately prejudicial effect on the Roma community" (*D.H. and Others v. the Czech Republic* judgment 2007, paragraph 209). While the Court concluded that assessment practices and the application of legislation constitutes discrimination, the decision appears to be one without teeth, as the Court did not require revisions to the system, and thus, the rate of segregation of Romani children in segregated schools (now called "practical schools" instead of "special schools") remained relatively stable in the three years since the decision (GAC 2009, 24), the assessment tools and their administration remain unchanged, and, as will be discussed below, the policies continue to have a prejudicial effect on children from Romani communities.

Largely in response to the *D.H. and Others v. the Czech Republic* judgment, the Czech government commissioned several research projects to assess the state of education, including factors contributing to social and school segregation for Romani children, such as the diagnostic tools used with pupils from socially disadvantaged backgrounds. These studies have informed the National Action Plan for Inclusive Education (2010), the goals of which include, *inter alia*, planning activities to develop inclusive education, changing legislation to ensure the development and support of inclusive education, supporting inclusion in schools (pre-primary through tertiary), preparing pedagogical workers, and standardizing the work of School Advisory Facilities. In addition, the government has established Centers for Inclusive Education, to "support the implementation of inclusive values in the process of education at elementary schools in the Czech Republic."[10] These centers, located at ten sites throughout the country, offer expert consulting and assistance in the areas of teaching, psychological, and guidance services to create inclusive environments and ameliorate "socially pathological phenomena."

[10] Available online: http://www.cpiv.cz.

POLICY AND PRACTICE IN ASSESSMENT

After D.H. and Others appealed to the ECHR, but before the Court's decision, the Czech Republic amended its legislation on education. Most notably, in Section 185 of the Education Act, the term "special schools" was abolished, placing the institutions previously so categorized in the category "basic schools." Auxiliary schools, special schools where pupils with mild to moderate intellectual disabilities (and thus, Romani children who are so diagnosed) are placed, are now termed "special educational needs schools." Ministerial Decree 73/2005 elaborates on this, establishing the forms that special education can take: individual integration, group integration, or education in separate schools (§3.1.a-c) including special kindergartens, practical elementary schools (formerly auxiliary schools), and special primary schools. Separate primary schools are established for pupils with visual, hearing, vision and hearing (deafblind), physical, speech, specific learning and behavioral, and health disabilities (§ 5), with Section 48 of the Education Act permitting their placement in special schools. The ECHR noted in its decision that "in many cases special schools had simply been renamed 'remedial schools' or 'practical schools' without any substantial change in the composition of their teaching staff or the content of their curriculum" (*D.H. and Others v. the Czech Republic* judgment 2007, paragraph 145). Amnesty International (2010) and Bedard (2008) note that the name change has not brought about any substantive change in the way that pupils are taught or placed; pupils who are diagnosed as having special educational needs are still offered a reduced curriculum and have not been transferred to schools that offer a full curriculum. The Czech government recognizes this in the National Action Plan for Inclusive Education: in a 2010 study of 171 former special schools (out of a total of 398), the Czech School Inspection found that only seventeen percent of these schools were offering the Framework Education Program for Elementary Schools (the national curriculum) (5).

The definition of special educational needs conflates disability and disadvantage. A disability is considered to be mental, physical, visual, auditory, language/speech, autism or another developmental disability (OECD Cross-National Category A), while a disadvantage is related to health or social status. A health disadvantage is defined as a chronic disease or a health impairment that affects a child's learning or behavior in school (Education Act, §16.1-3, aligned with OECD Cross-National Category B). A social disadvantage is defined, *inter alia*, as "a family environment with a low social and cultural status, threat of pathological social phenomena" (Education Act, §16.4.a, aligned with OECD Cross-National Category C). "Pathological social phenomena" are not defined in the law. As in other countries of the region, socio-economic status is fused with disability, and pupils can be referred to a School Advisory Facility for psycho-educational testing based on their perceived "social disadvantage" and subsequently be placed in a practical school or classroom where they are denied participation in the whole curriculum, which limits their opportunities for secondary education and ultimately, their participation in the labor market.

Once a child enters mainstream school, there are many options for what will happen to that child. If a child has special educational needs, it is the decision of the kindergarten director, considering the opinion of the School

Advisory Facility or pediatrician, whether or not to accept the child (Education Act §34.6). When a child enters kindergarten, which is not compulsory, directors may, upon notifying legal guardians, remove a child from kindergarten if (a) the child has unexcused absences for at least two weeks; (b) the legal guardian of the child "grossly and repeatedly disturbs the operations" of the kindergarten; (c) a pediatrician or School Advisory Facility recommends such termination; or (d) the family repeatedly fails to pay the fees associated with the school (Education Act, §35).

A child may enter compulsory schooling at the age of six only if the decision is made that the child is "physically as well as mentally adequately mature" (Education Act §36.3); this determination is made by a School Advisory Facility. If a child is determined not to be ready for school, there is a possibility to postpone compulsory school attendance until the age of eight under Section 37 of the Education Act. A pupil can be removed from the first year of primary education and be provided a postponement of a year if the school director, with the consent of the legal guardian, decides that the pupil is not ready to satisfy compulsory attendance; the school director, in this case, must recommend to the legal guardian that the child attend preparatory or kindergarten classes to assist in the child's development. Preparatory classes are established specifically for pupils from socially disadvantaged backgrounds who are determined not ready for the first grade and for whom "there is a presumption that their inclusion in such a preparatory class may balance out their development" (Education Act §47.1).

A pupil may be placed in a program that offers primary education for pupils with special educational needs or in a special school (or practical primary school) by a school director, upon the opinion of the School Advisory Facility and the consent of the child's legal guardian. The school director is obligated by law to provide the child's legal guardian "information on differences in educational programs and organizational changes which could occur in relation to the transfer to a different educational program" (Education Act §49.2). Bedard (2008) reports that the transfer of pupils to practical (special) schools generally takes place at the end of their first year of compulsory schooling. Bedard also questions that, if the system of primary education has been purportedly equalized, why a recommendation from the Pedagogical-Psychological Counseling Center would be required for such a transfer.

Before a pupil is transferred to a classroom that offers a different educational program, the child might undergo a "diagnostic stay," which should last between two and six months (Decree 73/2005, §9.2). Like diagnostic stays in the Slovak Republic, this can be problematic, as pupils in practical (or special) schools typically study a reduced curriculum, such that they fall further behind relative to the standard education curriculum. Ironically, while the policy states that a child's "inclusion … in some form of special education" is preceded by the diagnostic stay, this stay usually results in the child's exclusion, as most children do not return to a standard school and remain, unintegrated, in the school of their diagnostic stay throughout their school careers (Bedard 2008,36). Amnesty International (2010, 35) reports a case where after a four-month diagnostic stay, a pupil returned to his standard primary school, but because of lost instruction during the diagnostic stay, he failed his end of year examinations

and had to repeat the fourth grade. During the next school year he was bullied and teased for having gone to a "special school," and his mother eventually transferred him to a primary school attended almost exclusively by Romani children. There is no legal mechanism or procedure for re-assessing pupils to determine if their placement should be reconsidered or changed. Only if there is a "significant change in special educational needs," which is left undefined, will there be a reassessment or review of a pupil's placement (Decree 73/2005 §9.3) and this reexamination must be requested by the child's parent or legal guardian.

TESTS USED FOR ASSESSING SCHOOL READINESS AND ABILITY

The methods of assessment by which Romani pupils were placed into special schools was one of the considerations of the European Court of Human Rights in their judgment against the Czech Republic in the case of *D.H. and Others v. Czech Republic*. The decision cited observations by the International Step by Step Association, the Roma Education Fund, and the European Early Childhood Research Association, and concluded that language and culture, prior learning experiences, or lack of familiarity with testing situations were not considered in the assessment of Romani children in this case. The court also cited the fact that "[t]esting was done in a single administration, not over time. Evidence was not obtained in realistic or authentic settings where children could demonstrate their skills. Undue emphasis was placed on individually administered, standardized tests normed on other populations" (paragraph 44). An example of the bias that is inherent in psychological tests, of not taking into account the ways that children experience the world, is recounted by Bedard (2008, 30) where a psychologist asked a Romani girl where her mother goes to buy bread and the girl replied, "To the Vietnamese guy's place." Even though the owner of the bakery where her mother shopped was in fact Vietnamese, the psychologist told the mother that the answer was incorrect, that she should have replied, "To the bakery." Bedard (2008) also provides anecdotal evidence that psychological examinations of Romani children tend to last between 15-30 minutes, far less than the time it would take to conduct a thorough examination, collecting multiple data points through observations, interviews, and family histories in making a determination of disability status or a recommendation of placement to special schools.

In an report commissioned by the government on the analysis of diagnostic tools used with children from socially disadvantaged backgrounds, including Romani children, Valenta and colleagues (2009) quote the *Report of the Government on General Measures Exercising the Judgments of the ECHR* (Government Resolution No. 303 of 16 March 2006), where the government states that it will take corrective measures and conduct an analysis of assessments used to diagnose intellectual ability of children that are used by Educational and Psychological Counseling and Special Educational Centers. Thus, the study was charged with collecting data on the validity of the assessments with Romani children who are at risk of being or who are socially excluded, including the methods by which psychological and counseling workers test children from diverse backgrounds and factors that can influence the test results, with the goal of improving the quality and cultural relevance of diagnostic tools and the interpretations

of the results (6). The analysis provided an overview of the tests most commonly used in the Czech Republic and attempted to address whether or not these diagnostic instruments were sufficiently culturally "neutral" for pupils from socially disadvantaged backgrounds (Valenta et al. 2009, 72). The analysis found that these instruments in fact "can be considered valid, when used in the procedure *lege artis* (qualified use, experience, dynamism, complexity, sensitivity, etc.)" (72). While tests might be considered neutral, test scores can be rendered unreliable and invalid for reasons such as not following test protocol, administering the test in linguistically and culturally inappropriate ways, language skills of examinee, the child's rapport with the examiner, and bias on the part of the examiner. Therefore, the authors recommend that the government identify, standardize, and ensure the use of standard test protocols and procedures in administering, scoring, interpreting, and diagnosing children from culturally and linguistically diverse groups in School Advisory Facilities, with an emphasis on awareness of bias against and increased acceptance of the linguistic, cultural and personal-social specifics of the Roma ethnic group (71).

Stanford-Binet

The Stanford-Binet, based on the original 1905 Binet-Simon Scale and the subsequent revisions by Terman in 1916, was translated to Czech and Slovak in 1972, and while items were adapted for Czech and Slovak culture, the test remained standardized on American norms. The fourth revision was standardized with Czech norms. The test does have some nonverbal items, but among identified weaknesses of the test are that the test is highly dependent on communication skills in Czech and that scores are typically lower for children from minority populations (Valenta et al. 2009, 26, 67)

Wechsler Intelligence Test for Children, Third UK Edition (WISC-III UK)

The Institute for Pedagogical and Psychological Counseling was charged with standardizing the WISC-III UK for the Czech population in order "to eliminate the existing practice of too many children placed in special schools without reasonable justification based on their intellectual and learning ability" (Resolution No. 686/1997). The Czech standardization has been available since 2002. The test was normed on a group of 1457 children, with a six-percent sample of Romani children. Romani children were found to perform poorly in verbal and non-verbal subtests, but performed best in speed and symbol searching subtests, where Romani children were found to have insignificantly lower scores than a comparable sample of non-Romani Czech children (*D.H. and Others v. Czech Republic* judgment 2007, paragraph 45). However, the rate of placement of Romani children in Czech (special) practical schools remains very high. The previous edition of the WISC, which is very possibly still in use, was standardized in Great Britain only and is not culturally relevant for Romani children (Cahn and Chirico 1999, 54). Sejrková (2000) critiques the suitability of the translation of subtest items of the previous edition of the WISC-III and determines that some of the items might not be comprehensible to the Czech population in general due to inaccuracies in translation.

Orientation Test for School Maturity

Kern's School Maturity Test was developed in German in 1970, with a Czech revision by Jirásek, also in 1970. It is one of the most widely used assessments of a child's readiness for school in the Czech Republic. There are three components to this test: (1) human figure drawing; (2) copying simple, short sentences; and (3) copying a group of dots/points. Nováková and Prokopec (2002) assert that, after three decades, this is still the best tool for assessing school readiness, and if a child is not successful in this test, the child should be referred for assessment for special educational needs. However, this test has not been revised since the 1970s and does not take into consideration the cultural backgrounds of Romani children, so the assertion that this is the best instrument for assessing school readiness is questionable. While this test might be reliable in assessing readiness for school for the ethnic Czech population, it is not reliable in assessing immaturity (Kovářová, 2008, quoting the administration manual). If a child performs below the standard, the test must be re-administered after three months, and only then should a child be referred to a School Advisory Facility for further psychological and/or educational testing (Trnková, 2009, 37). It is important that this three-month re-administration protocol be followed and that pupils who perform below the standard be provided with opportunities to practice the skills assessed so that when they are re-assessed they have the opportunity to demonstrate their growth over time.

CONSEQUENCES OF TEST RESULTS FOR SCHOOL AND LABOR MARKET OUTCOMES

Levels of education heavily impact participation in the labor market, particularly for members of Romani communities. Students must take entrance examinations to be accepted to secondary schools (ISCED 3), and most of the schools are competitive. Like the unified system of primary schools, the 2004/5 amendments to the Education Act placed all schools, including practical (special) secondary schools under the single umbrella of "secondary schools." However, in practice, the divisions among secondary schools remain. There are three tracks in secondary schooling: (1) secondary education that can be completed in one to two years that prepares the student for low-skilled labor (ISCED 3C); (2) secondary education that can be completed in two to three years where the student attains an apprenticeship certificate (ISCED 3C); and, 3) secondary education that can be completed in a six- or eight-year gymnasium, or a four-year program where the student completes a school leaving examination (ISCED 3A). This last track is the only form of secondary education where students have the option to go on to tertiary education.

The high rate of unemployment in Romani communities corresponds with low levels of educational attainment. In marginalized communities (settlements), only 39.1 percent of the working age population is employed (Bodewig and Rutkowski 2008, 9). Bodewig and Rutkowski (2008, 6) go on to make a distinction between "unemployed," which means that individuals are actively seeking employment, and "not in the labor force," which indicates that individuals have stopped seeking employment after actively searching and not finding employment. According

to Bodewig and Rutkowski, 56 percent of working-age inhabitants of marginalized Romani communities are in this last category.

TABLE 4. Participation in the labor force

	Unemployment rate (percent)		Labor force participation rate (percent)		Employment/ population ratio (percent)	
	Roma	Czech avg.	Roma	Czech avg.	Roma	Czech avg.
Working age total	11.7	5.4	44.2	69.9	39.1	66.1
15–24	24.7	10.7	42.4	31.9	31.9	28.5
25–54	7.8	4.8	44.2	87.8	40.7	83.5
55–64	15.2	4.6	50.0	48.2	42.4	46.0

SOURCE: Bodewig and Rutkowski (2008, 9)

Roma from marginalized communities are over 50 percent more likely to be unemployed and over 60 percent less likely to be employed than the national average. The majority of Roma in the labor force are employed as unskilled or low skilled workers, in manufacturing and construction (57 percent), other services (16 percent), or agriculture (six percent). Only 20 percent are employed in positions that are considered skilled (Bodewig and Rutkowski 2008, 13).[11] The United Nations Development Programme (2003, 31) cautions that it is difficult to assess unemployment levels because official figures on the size of the Romani population are not exact and ethnicity statistics are not typically disaggregated in unemployment office registries. However, in a joint study of the UNDP and the International Labour Organization (ILO), 46 percent of Czech Roma considered themselves unemployed, closely matching the ILO broad unemployment rate among Czech Roma of 36 percent (UNDP 2003, 33). This rate is one of the lowest of the countries in the case studies.

Employment opportunities in the Czech Republic increase with levels of education; there is a weak demand for un-, low-, and elementary-skilled workers (Bodewig and Rutkowski 2008, 68). To be considered a skilled laborer, one must have attained at least an apprenticeship certificate, but most Roma do not go on to secondary education where they can attain such a certificate. Whereas Roma who are active in the workforce have higher levels of education, Roma who attended special schools are largely outside the labor force.

[11] These statistics are from a World Bank survey of segregated Romani communities and are not representative of all Roma in all communities in the Czech Republic.

TABLE 5. Educational attainment and labor force status

Labor force status	Highest level of completed education (percent)		
	Special or less	Primary	Vocational +
Employed	15.2	22.6	50.3
Unemployed	18.5	17.6	15.5
Not in labor force	66.3	59.8	34.2

SOURCE: Bodewig and Rutkowski (2008, 12).

REPRESENTATION OF ROMA IN SPECIAL EDUCATION

The intent of the amendments to the Education Act was in part to comply with the anticipated judgment of the European Court of Human Rights in *D.H. and Others v. Czech Republic*, with the equalized system of primary education in the Czech Republic established in the amendments to the Education Act expected to address all of the needs of all of the pupils in mainstream classes. The government does, however, acknowledge in its second report to the European Court of Human Rights on the case of *D.H. and Others v. the Czech Republic* that during the "transformation of former special schools," the Ministry of Education, Youth, and Sport will need to make arrangements for children in practical primary schools to (gradually) engage in the mainstream curriculum, assign children to these schools only after all support has been exhausted in the mainstream, and develop procedures for (re)integrating children back into mainstream schools (Government of the Czech Republic 2009, section 4). The enrollment of children in former special schools has not diminished since the amendments to the Education Act or the judgment in the D.H. case, and in fact, the representation of Romani children in these schools has increased. Whereas Romani pupils constituted 64.5 percent of pupils in special schools in 2004–2005, this figure increased to 73.2 percent in 2006–2007 (Bedard, 2008: 23).

Where a child commences his schooling matters. Kindergarten attendance is an important predictor for school success, but only 48 percent of Romani children attend kindergarten, compared with 93 percent of majority Czech children. Of Romani children who attend preparatory classes in practical (special) primary schools, only 10 percent go on to enroll in standard primary schools, while 80 percent of Romani children who attend preparatory classes in standard primary schools go on to enroll in standard primary schools (Bedard 2008, 17). Romani children who attend special schools drop out at higher rates than their Czech peers in the first and third grades, which significantly impacts their ability to participate even in the low-skilled labor market, as they do not continue in the next stages of education. Moreover, regardless of age or grade level, pupils drop out of special schools at exceptionally high rates.

TABLE 6. Dropout rates in special schools, by grade (percent)

Grade	1	2	3	4	5	6	7	8
				Romani children				
Girls	21	11	19	8	34	2	1	4
Boys	24	11	17	20	18	3	5	2
				Non-Romani children				
Girls	10	10	19	13	39	3	1	5
Boys	9	15	27	10	24	4	4	7

SOURCE: GAC (2009, 23).

TABLE 7. Enrollment of Romani and non-Romani pupils in Czech schools

Type of school	Percent of Roma and non-Roma within schools	Percent of Roma and non-Roma cohorts attending respective school type
Primary (standard)	**100**	**89**
Romani children	14	72
Non-Romani children	86	92
Primary (special)	**100**	**11**
Romani children	44	28
Non-Romani children	56	8
Total	100	100
Roma	100	100
Non-Roma	100	100

SOURCE: GAC (2009, 24).

Data from a 2008 study commissioned by the Ministry of Education, Youth, and Sport (GAC 2009) show that there are significant disparities within the "unified" system of primary schooling in the Czech Republic in which Romani pupils are vastly overrepresented in special (practical) primary schools. On average, within standard primary schools, Romani children represent only 14 percent of the student population; and only 72 percent of Romani children attend standard primary schools, compared with 92 percent of the majority Czech student population. In vast contrast, 28 percent of Romani children attend special schools, but make up 73 percent of the population of special schools, compared with only eight percent of the non-Romani student population that attends special schools, making up only 27 percent of the population of those schools.

COUNTRY-SPECIFIC RECOMMENDATIONS

Although the Czech government has in name abolished special primary schools for pupils with mild intellectual disabilities, the issues around inequities in educational opportunities still exist in the newly named "practical" primary schools. This has not created a "unified" system of schooling, but rather has legally ossified the segregated system. The following recommendations are related to current testing practices, not to the overall system of special education. However, these recommendations support working towards a truly unified system of schooling, where no child would be placed in special or segregated classes and where each child would receive the appropriate supports and adaptations to allow him or her to participate meaningfully in the mainstream curriculum in mainstream classes.

- *Access to kindergarten:* Kindergarten should be free and compulsory for two years before entry into first grade. Kindergarten should focus on providing opportunities for children to explore, play, and develop their interests alongside promoting social and other skills that will equip them for success in primary school. Kindergarten should also be inclusive, working with children to develop skills with their peers, without streaming children to preparatory classes before they enter the first grade of primary school.

- *Access to early childcare:* Following the framework of the 2008 Ministry of Education Concept of Early Childcare from Socioculturally Disadvantaged Environments in order to develop a seamless and inclusive transition from birth to preschool to primary school and beyond, the Ministry of Education should continue cooperation with the Ministry of Health and the Ministry of Labor and Social Affairs in providing educational activities aimed at providing children the skills and opportunities needed for success in school.

- *School readiness testing:* Any assessment of a child's skills before entry into kindergarten or primary schooling should be used only as a formative tool to identify children's areas of strengths and needs to address in the general education classroom. At no time should any assessment determine the placement of a child in a practical or special school.

- *Special school placement:* End the practice of placing pupils in special/practical primary schools; instead, train and transfer the expert staff from these facilities to standard primary schools to serve as co-teachers or consultants who work with teachers to develop individualized supports, methods, activities, and materials for *all* pupils who need them. In addition, psychological and/or educational assessments should be used to target academic or behavioral strengths and needs to address in the general education setting, not as a mechanism through which children are segregated into special classes. If a child is assessed, the assessment session should follow testing protocols and the diagnostic methods currently used in the Czech Republic, such that the instrument itself is but one of four pillars upon which a diagnostic determination is made: (1) standardized tests, (2) interviews, (3) observations, and (4) informal assessment procedures.

– *Pre-service and in-service professional development:* Universities and secondary schools should incorporate inclusive education in the curricula for pedagogical and psychological/guidance students. Methodological supports and supervision should be provided for teachers and school psychologists/guidance counselors in order to combat potential bias in their practice and to create opportunities for inclusive, equal education and safe, appropriate, and welcoming school environments.

– *School advisory facilities*: Pedagogical-Psychological Counseling Centers and Special Pedagogical Centers should be restructured to provide support for all pupils and teachers in all schools. The authority of these Centers should be diminished, and staff should develop more of a collaborative relationship with the children's home schools, teachers, and families. If children are assessed for formative purposes, oversight should be expanded through a system of audits or other mechanisms through which it can be assured that protocols are being followed when all assessment are administered, including re-assessments in the appropriate time frames, attention to testing conditions, and proper attention to children's language backgrounds. The staff of Special Pedagogical Centers, like expert staff from special schools, should transfer their expertise to individual schools and serve as co-teachers and expert consultants.

PLACEMENT IN SPECIAL EDUCATION AND REMEDIAL CLASSES LIMITS THE LABOR OPPORTUNITIES FOR ROMANI ADULTS.

HUNGARY

KEY INSTITUTIONS IN THE ASSESSMENT PROCESS

Hospitals, clinics, and early childcare centers are the first institutions that assess children for disabling conditions; typically these assessments occur in the first three years of a child's life. Clifford and colleagues (2004, 31) note that fewer than ten percent of young children attend childcare centers, however, and that children in rural areas and settlements lack medical specialists and care and thus their needs might not become apparent until they enter kindergarten.[12] There are two main bodies tasked with assessing children for disabling conditions: (1) the Educational Counseling Service, and (2) the Rehabilitation Committee of Experts Examining the Ability to Learn (hereafter "Rehabilitation Committee"). When anyone suspects that a child might have a disability, the child is referred to the Rehabilitation Committee, which is comprised of a physician, psychologist, and special educator.

There are national and county/local Rehabilitation Committees that assess and determine special educational needs, as set out by §10.1 and 2 of the Ministry of Education and Culture Decree 14/1994 on Education Obligations and Pedagogical Support Services and Article 6.4.a of the Act on Public Education (1993, last amended in 2006). National Rehabilitation Committees assess and diagnose intelligence and personality in the context of hearing, vision, speech, and motor/physical domains, while the county/local Rehabilitation Committees are concerned with diagnosing or ruling out intellectual disability (based on a child's performance on assessments), autism and psychiatric disorders, and determining if diagnosed disorders have organic origins. If a parent, doctor, nurse, or other agent thinks that a child might have a disabling condition before the child enters school, one of these expert committees will examine the child and make a determination of disability status and a recommendation on the school placement of the child (Decree 14/1994 § 14.1.d). The Rehabilitation Committee is obligated to inform parents about their options on placing children in designated institutions/schools (Decree 14/1994, §14.3). However, the Rehabilitation Committee determines which schools are designated as placement options, and Bohács and Tóth (2008, 2) point out that most of the designated schools are special (segregated) schools, effectively limiting parental choice.

[12] Kindergarten is the first year of compulsory schooling in Hungary, but kindergarten is available from the age of three. Children typically attend the last year of kindergarten (the first year of compulsory schooling) at age five, and enter the first grade at age six, the age of compulsory schooling.

Compulsory schooling in Hungary begins at the earliest at the age of six and at the latest at the age of eight (Article 6.2). Kindergarten is the first year of compulsory schooling, but a child may attend at the age of five. A medical clearance is required to enroll in kindergarten, but a school readiness examination is not a requirement for enrollment. Once a child enters school, if the head teacher notices that a child might be having difficulty performing, the teacher may refer a child to the Educational Counseling Service to assess the child's readiness for school, particularly if the child has not attended kindergarten before the age of compulsory schooling (Act on Public Education, Article 6.4.a and Decree 14/1994, §22.4). On the basis of a preliminary examination, the Educational Counseling Service establishes that a child has special educational needs or struggles with "adaptive, learning, or behavioral difficulties" and prepares an expert opinion on school enrollment for a child (Article 35.4). In addition, the Educational Counseling Service refers a child to the Rehabilitation Committee for testing (Act on Public Education, Article 30.8). Throughout the assessment process, the teachers engage in continuous monitoring of the child, through observations and assessment, and prepare a report for the Rehabilitation Committee to assist in their assessment (Decree 14/1994, §13.6–9). Once the Rehabilitation Committee performs medical, pedagogical, and psychological assessments on the child and determines that the child has a disabling condition, the Rehabilitation Committee then transfers the responsibility for the child to the Educational Counseling Service, which provides pedagogical, psychological, developmental, and therapeutic supports, support for educators, and facilitates communications with families. Based on the findings of the Educational Counseling Service and the Rehabilitation Committee, either entity can recommend that the child remain in kindergarten for an additional year (Act on Public Education, Article 24.5).

Another recommendation that the Educational Counseling Service and Rehabilitation Committee can make is for a child determined to have special educational needs to be allowed to enter the first grade as a "preparatory year" as set out in Article 70 of the Act on Public Education. In this year, the child attends the first grade, but is exempted from class evaluation and assessment and an "individual development plan" must be prepared (Act on Public Education, Article 30.9).[13] Required for all pupils with special educational needs, the individual development plan is prepared by the special education teacher or therapist and should include, depending on the child's disabling condition, items related to intellectual, hearing, vision, motor or physical, speech, or psychological development (Decree 14/1994, §8.6). For children attending the preparatory year, advancement to the next grade depends on recommendations by the teacher and the Educational Counseling Service and/or Rehabilitation Committee, with the individual development plan specifying academic areas in which the pupil should catch up with his or her classmates by the end of grade four (Act on Public Education, Article 70.9).

[13] The "individual development plan" is similar to what is termed in other countries' legislation as the "individualized education plan," "individualized education program," or "statement of special needs."

Parents are also involved in the assessment process, as a child cannot be assessed without the consent of the parents or legal guardians. Decree 14/1994 requires that parents regularly — although "regularly" is not defined — receive detailed information about their child's development and progress (§14.1.b.). Under Article 13.8 of the Act on Public Education, parents have the right to appeal decisions made by the Rehabilitation Committee and Educational Counseling Service; this same article confers on parents the responsibility to accompany their child to the Educational Counseling Service sessions to ensure that the child participates in school psychological assessments, if so recommended. The public administration officer is also given the right to compel parents to meet the obligations set out for them in this section of the law in the best interests of the child. This is reinforced in Article 30.4, whereby the public administration officer "may compel the parents to appear at an expert examination with their child in the interest of the children/pupils or to enroll their child at an appropriate educational-teaching institution on the basis of the expert opinion." So, while parents purportedly have a choice of where to enroll their child, their choices are limited by the basis of the expert opinions offered. Additionally, while parental consent is required by law before assessment and placement can take place, the parental responsibilities can be forced or parental rights can be waived if a public administration officer finds it is in the best interest of the child to be assessed or to be placed in a particular educational setting.[14]

Hungarian legislation includes provisions for reassessment. Decree 14/1994 mandates that the Rehabilitation Committee carry out a yearly review of the child's assessments until the child reaches eight years of age, after which a triennial review is required (§9.4). In the case where children are diagnosed with mild mental handicap, the Rehabilitation Committee reviews its decision one year after determination, then every other year until the child reaches 12 years of age; after that, the Rehabilitation Committee conducts triennial reviews (Decree 14/1994, §20.4).

Hungary is characterized by a lack of coordination in the area of psychological diagnostics (Bohács and Tóth 2008; Lányiné and Nagyé 2008, 13; Csépe 2009). There is no nationwide system of diagnostic protocol, which impacts professional development and assessment procedures. This lack of a national system also impacts the authenticity and validity of the testing instruments, and there is documentation of diagnosticians not following procedures set out in the administration manual, using outdated instruments, and/or using unlicensed (illegal) copies of tests that have been brought into Hungary from abroad and poorly translated into Hungarian (Csépe 2009, 162). The Hungarian Psychological Association's Test Committee only recently was involved in the Hungarian standardization of the WISC-IV and provides free training and legal test protocols to Rehabilitation Committees

[14] Similarly, the United States' Individuals with Disabilities Education Improvement Act includes provisions for parental rights, including that a parent must provide written consent before a child can be evaluated for eligibility for special education services. However, under Section §614(a)(1)(D)(ii)(II) of this law, if a parent does not consent to initial evaluation, the school has the right to pursue the evaluation, if this is allowed by the state in which the parents reside (Education is not constitutionally mandated in the United States; it is under the purview of the individual states). On the other hand, the school or state does not have the right to provide special education services without the consent of the parent.

and Educational Counseling Services (Erőss et al. 2009). The OS Hungary Test Development publishing company is the institution responsible for test development, sales, and consultation on the use of the instruments.[15]

The placement of children in particular schools can at times be construed as a case of conflicting interests among professions and service providers. Educational Counseling Services operate out of particular schools, which make recommendations for children to be tested by the Rehabilitation Committee, which in turn recommends placements at the schools operated by Educational Counseling Services. In these situations, there is a danger that special schools and committees will prioritize increasing the populations of their respective schools over serving the best interests of the child (Csépe 2009, 163).

POLICY AND PRACTICE IN ASSESSMENT

As stated in the previous section, under Decree 14/1994, §22.4, a teacher may refer a child to the Educational Counseling Service for assessment for school readiness. Even though parental consent is required to carry out this assessment, the quality of the consent is problematic, with parents — especially those from disadvantaged communities — often not fully aware of the long-term consequences of placement in special education (Clifford et al. 2004, 31; Farkas et al. 2007, 220). Nagy (2008) also observes that many Romani parents are not provided information when asked for their consent to assess their children for and subsequently place their children in special education.

Access to kindergarten for Romani children is also a concern; although children can be denied admission to schools "only due to lack of space" (Act on Public Education, Article 66.4), what this means specifically is not clearly defined in the law. Anecdotal evidence further suggests that kindergartens close to reaching capacity admit children from the ethnic majority children on a preferential basis while delaying the admission of Romani children (Farkas et al. 2007, 204). Children are also denied entry to kindergarten through the Rehabilitation Committee or Educational Counseling Service's determination that they are not ready to begin compulsory schooling and should defer enrollment. Consequently, Romani children enter schooling later than their non-Romani peers; in 2000, Roma accounted for most of the 25 percent of children in kindergarten aged six or older (Clifford et al. 2004, 37).

The Hungarian government has made efforts to curb the disproportionate representation of disadvantaged and Romani children in special education schools and classes by distinguishing between children with organic and non-organic disabling conditions in the 2007 amendments to the Act on Public Education (Article 121.1.cc). Disabilities with organic origins include, among others, physical, sensory, intellectual, or speech impairments,

[15] Available online: http://oshungary.hu.

autism, dyslexia, and dyscalculia (Article 121.1.cc.i). Although children with organic disabling conditions are entitled (under Article 52.6) to specialized rehabilitative education for a certain percentage of their instructional day regardless of their educational placement, §14.1 of Decree 14/1994 allows for the Rehabilitation Committee to designate schools which are largely segregated (Bohács and Tóth 2008). By way of contrast, children who have impaired adaptive, learning, and behavior functioning without an organic origin are entitled to developmental (remedial) education in mainstream kindergartens and schools with Educational Counseling Services (Article 30.7).

Following the categorization system adapted by Csépe (2009), Nagy (2008) notes that mild intellectual disability is considered to be a disability with an organic origin, and that most Romani children are thus diagnosed upon assessment, such that they enter the remedial/special education system. The remedial system of education is based on a reduced curriculum ostensibly intended to enable pupils to catch up with the curriculum, but in practice pupils do not catch up, as they are not ever exposed to the full curriculum. As a result, the legal possibility for (re)integration from remedial to standard classes is rarely actualized, with the reduced curriculum further reducing pupils' chances of passing secondary entrance exams. Moreover, remedial classes are overwhelmingly segregated (Farkas et al. 2007, 217).

While the distinction between children with special educational needs (OECD Cross-National Category A) and children with adaptive, learning, and behavior difficulties (OECD Cross-National Category B) is meant to be a means to integrate pupils into mainstream classrooms, Csépe (2008) notes that there is no legislative provision to determine whether or not the special education funding or services follows the child with a non-organic (Cross-National Category B) diagnosis to the mainstream classroom. The fact that children with non-organic impairments are placed in mainstream classes without any supports at all, and the absence of a clear diagnostic procedure or protocol for distinguishing between organic and non-organic conditions are also problematic. Nagy (2008) further asserts that even though children with non-organic conditions should be educated in mainstream classrooms, the level of disability with which a child is diagnosed plays an important role in school placement.

A 2007 amendment to the Act on Public Education, Article 126, mandated that the Rehabilitation Committees reassess by December 31, 2007 all pupils who had been identified as impaired "due to the disorders of psychological development" (a category under the law before 2007 that was subsequently abolished). The same amendment ordered that the Rehabilitation Committees refer by March 2008 all pupils determined not to have conditions with organic origins, and therefore not eligible for special education services, to the Educational Counseling Service. While pupils in this category would still be funded and provided special educational services through August 2008, the amendment mandated the integration into mainstream classes of pupils with non-organic conditions who were taught in separate classes (Article 126.2). Eröss and colleagues (2009) report that over 30,000 pupils were reassessed, with one-third found not to have special educational needs of an organic nature but over half of those pupils identified as having adaptive, learning, or behavioral difficulties of a non-organic nature (Article

121.1.cc.ii). An additional 12 percent were found not to have any impairments at all, and five percent of the reassessed pupils were integrated into mainstream classes.

TESTS USED FOR ASSESSING SCHOOL READINESS AND ABILITY

The following are assessments of school readiness and intelligence tests currently in use in Hungary, including the recent Hungarian standardization of the WISC-IV. The assessments that are used in all four countries in this study that have been discussed previously in the section on methodological pitfalls and bias in commonly used tests (Raven's CPM and WISC) are discussed only in relation to issues that are country-specific.

Wechsler Intelligence Test for Children, Fourth Edition (WISC-IV)

In an effort to meet the mandates of the 2007 amendments to the Act on Public Education in general and the diagnostic distinctions between organic and non-organic origins of impairments that affect a child's participation in schools in particular, OS Hungary, along with psychologists and special educators, produced a Hungarian standardization of the latest edition of the WISC, the WISC-IV. While the test is not bias-free, the developers considered the WISC-IV the best choice (Eröss et al. 2009). Before this standardization, the most commonly used assessment instruments were the Hungarian adaptation of the 1956/1996 German version, the Hamburg Wechsler Intelligence Test for Children (HAWIK/-R), and the subsequent 1996 Hungarian version of the revised WISC, the MAWGYI-R (Lányiné 2008: 29). Interestingly, the Hungarian standardization of the WISC-IV has not entirely displaced the older German and Hungarian versions.

The Hungarian standardization of the WISC-IV was normed between 2005 and 2007 on a representative sample of 1000 children, 100 in each age group between six and 16. Sixteen percent of this sample was comprised of Romani children, matching the socio-demographic characteristics of Roma in Hungary. Nonetheless, the authors of the standardization (Bass and Lányiné 2008, 120; Eröss et al. 2009, 44–46) have pointed to problems with the standardization process, including that not one Romani child needed the test translated, the fact that there were two Roma psychologists who could have worked on the project but did not, and that the coordinator of the process was the director of the National Placement Authority Institute, who oversees the re-examination of children whose parents do not agree with the results of the first examination. They also question the use of the test with younger children entering school, especially if children are being assessed for intellectual disability. As in other studies, Romani children obtained scores one standard deviation below those of non-Romani children (Bass and Lányiné 2008, 120). While the developers attended to cultural and linguistic considerations — for example, replacing "How far is it from London to New York?" with "How far is it from Budapest to Vienna?", they did not determine that the test was bias-free (Kuncz and Mészáros 2008, 98).

The developers also noted that children's lack of facility in the dominant language makes it difficult to properly assess their ability and that that language can be a factor in score results, as Romani children who had a good command of the Hungarian language obtained an average (98.3) score on the WISC-IV (Bass and Lányiné 2008, 124). Mindful of cultural and linguistic factors, the test developers caution against using the WISC-IV as a diagnostic determination of intelligence independent from the complex assessment framework set out in Decree 14/1994, whereby children should be assessed through multiple modes, including observation, medical exams, interviews, and other educational assessments (Bass and Lányiné 2008, 127). Another cultural consideration raised by the developers was the need to make the testing room as comfortable as possible for Romani children, including artifacts that they might find in their homes or communities, and allowing the children to participate in the assessment in playful ways that put them more at ease (Bass and Lányiné 2008, 129).

Raven's Coloured Progressive Matrices (Raven's CPM)

Raven's CPM is used as an assessment of intelligence in Hungarian schools (Bass et al. 2008; Bohács and Tóth 2008). While OS Hungary distributes the non-verbal Raven's CPM, it posts a caveat on its product list website, stating that some of the international instruments in its catalogue are not standardized on the Hungarian population, but that some measurements, for example non-verbal tests, can be used domestically with appropriate caution. In the recent Hungarian standardization of the WISC-IV, while there was limited opportunity to compare the instrument with others, Bass and Lányiné (2008, 110) found very high correlations between the Raven's CPM and the WISC-IV. However, they also point out that although Romani pupils performed one standard deviation below non-Romani pupils on both the Raven's CPM and the WISC-IV, the instruments should not be used as independent measures of intelligence, as they are not culture-free instruments (2008, 120). Further, as in the WISC-IV, facility in the Hungarian language, rather than culture, is offered as a possible factor in test performance, as Romani children who have good language skills obtained an average score (98.4) on the Raven's CPM (124).

Budapest-Binet

The Budapest-Binet test is another widely used instrument to assess intelligence (Eröss et al. 2009; Kareki and Lannert 2009). The Stanford-Binet, on which the Budapest-Binet is based, was first developed in 1916 by Terman as an adaption of the first intelligence test, the 1905 Binet-Simon scale. The Budapest-Binet was standardized for the Hungarian school-age population in the early 1970s (Eröss et al. 2009, 72), and has not been restandardized since. In the United States, the most recent restandarization was based on the 2000 national Census, and includes an increased number of non-verbal subtests. The Budapest-Binet, however, is an obsolete instrument that continues to assess primarily through verbal responses (Kareki and Lannert 2009). Nonetheless, the Budapest-Binet is still in use, with some psychologists and pedagogical workers asserting it to be the best tool to measure intelligence (Eröss et al. 2009; Kareki and Lannert 2009).

Test of School Aptitude

In a study of selection in education and Romani children, Kende and Neményi (2006, 510) examined the Test of School Aptitude and how its use allows the streaming of Romani children into segregated special education settings. Largely unchanged since its development in 1971, the Test of School Aptitude assesses children's abilities in areas of social, emotional, psychological, and cognitive development. One of the major findings of this study was that, along with the unsound properties of the assessment instruments themselves, the various domains in which a child is assessed[16] are not disaggregated to provide a fuller picture of the child's performance, potential, or areas of need; instead, pupils are simply categorized as "good" or "bad" based on the first impressions of the examiners and placed accordingly (2006, 517). In a teacher training manual, Debre and colleagues (2008, 70) emphasize cultural considerations in administering and interpreting any diagnostic tool, including the Test of School Aptitude, with particular attention paid to a child's background and the possible impact on assessment results and the subsequent validity of the results.

CONSEQUENCES OF TEST RESULTS FOR SCHOOL AND LABOR MARKET OUTCOMES

Placement in special education and remedial classes limits the labor opportunities for Romani adults. As in other countries of the region, pupils must pass examinations to enter secondary education and obtain the qualifications that will make them competitive in the labor market. Pupils who attend special primary schools in Hungary are less likely to continue their education, except for short-term vocational training and special vocational schooling. Vocational schools are addressed in Article 27 of the Act on Public Education. Special vocational schools train pupils for low-skilled work and there is no possibility of participation in tertiary education. As an alternative, the education system offers "coaching" "for those students who wish to join vocational training but do not have a primary qualification within the scope of the full-time education system" (Article 27.8). This allows students who wish to pursue secondary vocational education an opportunity to concurrently obtain primary qualifications and the knowledge necessary to take a vocational entrance examination. It also allows students who do not wish to obtain primary qualifications the opportunity to participate in short-term vocational training.

[16] The domains assessed are: graphic abilities, maturity, factual knowledge, quantity concept, verbal understanding, verbal expression, verbal thinking, performative thinking, verbal memory, visual memory, and coordination.

TABLE 8. Educational trajectories of Roma and non-Roma after primary school

	Academic year					
	2000—01		2001—02		2002—03	
	Percent		Percent		Percent	
Educational trajectory	**N**	**R**	**N**	**R**	**N**	**R**
Did not continue	1.1	9.9	1.0	10.1	1.1	8.1
Special vocational	1.1	5.5	1.1	5.4	1.3	6.1
Short-term vocational[17]	32.8	62.7	32.9	63.5	33.1	63.8
Vocational secondary	40.0	16.1	38.9	16.2	39.0	15.8
4-year high school	22.5	5.1	23.6	4.4	23.1	5.6
6-year high school	0.7	0.2	1.0	–	1.1	0.1
8-year high school	1.0	0.1	1.1	–	0.9	0.1
Total	100	100	100	100	100	100

N = Non-Roma R = Roma
SOURCE: Szira and Németh (2007, 40).

TABLE 9. Educational trajectories of graduates of special primary education in 2003-2004

Educational trajectory	Percentage in trajectory
High school	0.4
Vocational school	3.6
Short-term vocational training	31.7
Special vocational school	47.4
No further education	16.8

SOURCE: Szira and Németh (2007, 31).

While the majority of Romani students attend short-term vocational schools, researchers positively note that Romani students are engaging in secondary education, up from 30 to 64 percent in the last decade (Farkas et al. 2007, 208). However, even though secondary schooling has increased, the employment situation of Roma has not improved (Braithwaite 2001, 14). Over one-third of those living in long-term poverty in Hungary are Romani, or 53 percent of Roma, compared to the average long-term poverty rate of 7.5 percent for the overall population (Braithwaite 2001, iii). In 2003, 28.1 percent of Romani men aged 15–74 were employed, compared to 56.5 percent

[17] Short-term vocational training (ISCED 3) is a two-year program at vocational schools (*szakiskola*), where there are few apprenticeship opportunities, low labor market demand for the skills taught, and no school leaving certificate. It was originally established for pupils with disabilities, but since 1990 has admitted pupils without disabilities. The drop out rate is estimated to be 20–25 percent in grades nine and ten (Szira and Németh 2007, 44).

of the overall male population; 15.1 percent of Romani women were employed, compared to 43.7 percent of the total female population (Szira and Németh 2007, 15).

REPRESENTATION OF ROMA IN SPECIAL EDUCATION

Arguably, kindergarten education is a good predictor of success within the system of education of the dominant culture. However, at least 20 percent of Romani children live in areas without kindergarten, affecting their subsequent experiences in primary school (Farkas 2007, 203). These subsequent experiences often include placement in special or remedial classes or schools. Roma make up 1.9 percent of the population and 2.9 percent of all individuals with disabilities; from this, 9.9 percent are diagnosed with intellectual disabilities, and 29.4 percent of this number, almost one-third, are Roma (Kôvágó 2004, 43). This has implications for the overrepresentation of children from Romani communities' being segregated through placement in special classes: enrollment of Romani children in special schools has increased from 25 percent in 1975 to 42 percent in 1992, just before the collection of data by ethnicity was banned (Farkas et al. 2007, 220, quoting Kádár). Research estimates that current percentages of Romani pupils in special schools are between 20 and 90 (Kádár, n.d. sec. 3.1, paragraph 3). Nagy (2008, 17), reporting OECD and Hungarian government data, observes that Hungary has three times more pupils with mild intellectual disability than any other OECD country.

The system of remedial education is just as, if not more, segregatory than special schools. Remedial classes are under the purview of special education, but are considered developmental rather than "special classes." While the data in Table 11 appears to show a decrease in the populations of Romani pupils in remedial classes, the researchers who compiled the data in the table (see Farkas et al. 2007, 218) assert that this decrease is an effect of sampling, as in 2004 they selected every school that held a remedial class, even if there were low proportions of Romani pupils at the school.

TABLE 10. Percentage of Romani pupils by class type

Class type	Year	
	2000	2004
Standard	45.2	29.7
Catch-up	81.8	78.1
Remedial/segregated	84.2	71.2

SOURCE: Farkas et al. (2007, 218).

In addition to the fact that children from Romani communities are overrepresented in special education, many Romani children are absent from school altogether by becoming "private pupils," as stipulated under Article 7.1 of

the Public Education Act. Private pupils are exempt from class attendance, but must pass end-of-year examinations in order to progress to the next grade. Children can become private pupils through parental choice or on the recommendation of the Educational Counseling Service (in the case of children with special educational needs or adaptive, learning, or behavior difficulties), although parental consent is required. A new provision to the Public Education Act (Article 120) provides financial and academic assistance only to parents of children who are private pupils based on having special educational needs or adaptive, learning, or behavior difficulties, with this assistance conditional on parental participation in a parenting course. Private pupils in this category are also entitled to ten lessons per week with a special educator (Article 52.13) , but due to lack of traveling special educators and funding, these pupils often do not receive these lessons (Kővágó 2005, 87).

In 2001, in an effort to curb the high percentage of Roma who were private pupils, the Public Education Act was amended so that the public administration officer would be able to override parental choice and ultimately decide how the child should engage in compulsory education (Article 7.2). Despite the addition of this safeguard, however, there is anecdotal evidence that schools and pedagogical workers at Educational Advisory Centers continue to pressure parents to request private pupil status for their children (Advisory Committee on the Framework Convention for the Protection of National Minorities 2005, paragraph 92; Kádár n.d., section 6, paragraph 4). A Roma Education Fund needs assessment study found that Roma were eight times more likely to be private pupils than their non-Romani peers (World Bank 2004, 8).

COUNTRY-SPECIFIC RECOMMENDATIONS

- *Reassessment*: Maintain the system of reassessment currently set out in the Act on Public Education. Clarify the procedures for reassessment and ensure parental notification, including the consequences of enrollment in remedial and special education classes.

- *Kindergarten*: Ensure that all children have access to kindergarten education, especially children who live in remote or segregated areas who currently do not have access to kindergarten. Work with parents and communities to facilitate children's kindergarten attendance before the age of compulsory education.

- *Intelligence testing/SEN diagnosis:* Follow the caveats set out by the test developers and consider standardized intelligence instruments to be one part of the complex assessment of a child's overall abilities. Criteria for the diagnosis of disabilities of organic origin, particularly learning and behavioral disabilities, should be clarified.

- *Educational Counseling Service:* Expand the scope of the Educational Counseling Service to include the provision of pedagogical and psychological assistance to any child who might require it, in mainstream classes and schools, regardless of any referral or diagnosis.

AS WITH OTHER COUNTRIES IN THE REGION, ROMANI PUPILS IN SERBIA ARE OVERREPRESENTED IN SPECIAL SCHOOLS FOR CHILDREN WITH INTELLECTUAL DISABILITIES. WHILE ROMA MAKE UP APPROXIMATELY TWO TO THREE PERCENT OF THE POPULATION OF SERBIA, THEY REPRESENT 25–40 PERCENT OF PUPILS IN SPECIAL PRIMARY SCHOOLS FOR INTELLECTUAL DISABILITY AND 40 PERCENT OF PUPILS IN SPECIAL SECONDARY SCHOOLS (CRIGHTON AND KOWAR 2007, 77; STOJANOVIĆ ET AL. 2007). MOREOVER, IN SOME REGIONS THERE ARE SPECIAL SCHOOLS IN WHICH ROMANI CHILDREN ACCOUNT FOR 50–80 PERCENT OF ALL PUPILS.

SERBIA

KEY INSTITUTIONS IN THE ASSESSMENT PROCESS

The first institution responsible for assessing a child is a community health center affiliated with the Ministry of Health. In order to enroll in preschool, which is compulsory from 5.5/6.5 years, in the last year before enrollment to primary school, a family must provide a health clearance certificate, as well as a birth certificate to establish the age of the child (Law on the Fundamentals of the Education System 2009, Article 97, paragraph 3–4). A certificate of residence is not required for preschool enrolment (Law on the Fundamentals of the Education System 2009, Article 97, paragraph 5).

Until the adoption of the Law on the Fundamentals of the Education System (effective from September 11, 2009), the Law on Primary Education governed a child's enrollment into the first year of compulsory schooling. The fitness of children before they were enrolled in the first grade was determined by the school pedagogue or psychologist, and younger children were referred to a municipality-appointed special commission at a health center, comprised of a pediatrician, teacher, and school psychologist (Law on Primary Education, Article 39, paragraph 3). The decision of the commission on whether or not the child could enroll was final (Article 39, paragraph 5). If a child was found not eligible to enroll in the standard first grade, the child was referred to a municipal Commission for Categorization of Children with Developmental Disabilities (hereafter, Categorization Commission), that determined the type and degree of a child's disability (Law on Primary Education, Article 84, paragraph 4). The makeup of this Categorization Commission was dependent upon the child's suspected disability, with members potentially including a pediatrician, a specialist in the suspected area of disability, a psychologist, a special pedagogue, and/or a school social worker or guidance counselor (Stojanović et al. 2007, 551). The Categorization Commission also determined which schools would enroll the child, based on the type and degree of disability. Unlike the final decision on initial school enrollment, in the area of determination of type and degree of disability and placement, parents had the right to appeal decisions of the Categorization Commission, but after this reassessment the decision of the Commission was final, and the child was placed in the designated school (Law on Primary Education, Article 85, paragraph 2). In addition, Article 86 provided for the reassessment of a child at the request of a parent, school, or Categorization Commission.

While the Law on the Fundamentals of the Education System was changed in 2009, some of its provisions came into effect in the next school year. Among these provisions is the requirement that a "school maturity assessment" must be carried out by the school psychologist on children applying for enrollment before the age of 6.6 (Article 98, paragraph 11). Dependent on the findings of the assessment, these children may be enrolled in the (mainstream)

first grade, or in a preparatory preschool, with enrollment in the first grade deferred for one year (Article 98, paragraph 10). While the Law on Primary Education states that the decision of the special commission on enrollment is final (Article 39, paragraph 5), the 2009 amended Law on the Fundamentals of the Education System allows for the parents to appeal a decision on deferring enrollment and to request a reassessment. This reassessment is to be carried out by a school commission composed of a psychologist, pedagogue, teacher, and pediatrician (Article 98, paragraph 11).

By the new law, children enrolling in primary school from the age of 6.6 are placed in the first grade without prior assessment but are examined after enrollment by a psychologist and/or pedagogue to screen development and design instruction accordingly (Article 98, paragraph 4). This examination must be conducted in the child's home language wherever possible, with an interpreter contracted from the appropriate National Minority Council as necessary (Article 98, paragraph 4). In addition, these examinations must be adapted for physical and sensory disabilities, by "applying the type of examination best suited for the child's capacity to respond" (Article 98, paragraphs 5 and 6). If, based on the assessment after enrollment or by observation during the first months of schooling, the child is determined to need any additional support incurring financial consequences (Article 98, paragraph 6), including an "individual education plan or any additional support," the child is referred, with the consent of the parent, to a newly to be established municipal Intersectoral Commission for assessing the needs for educational, social and medical support. The referral to the Commission can come also based on parental request, or through the medical or social protection system, but parental consent is required in any case.

The Commission assesses the child's needs for additional support, with the involvement of the parent and/or additional informants, and provides recommendations on the types of support for which the child is eligible. If the Commission assesses the need for education according to an individual plan, the school has to develop such a plan, involving the school pedagogue/psychologist, teacher, parent, and possibly external experts. In case of multiple and serious disability, the Commission can recommend that the child be enrolled in a special school (Bylaw on the additional educational, health, and social support the child and student based on the Law on the Fundamentals of the Education System, Article 98, paragraph 6). In either case the parent has the right to decide whether to abide by the Commission's recommendation, with schools provided additional resources as needed to follow the recommendations, especially as regarding staff time. As Kovács-Cerović (2007) reports, the Serbian government began to dismantle the system of medical and school readiness screening in 2002, but after 2004 this initiative was dropped; it has been revisited only after 2008. Specifically, the law has moved away from categorizing disability, with the 2009 Law allowing for special education services to be provided to any pupil with "additional educational, health, or social support needs" in mainstream schools and classes (Article 98, paragraphs 6, 10).

The Faculty of Special Education and Rehabilitation at the University of Belgrade (called the Faculty of Defectology until 2006) is responsible for educating and training special pedagogues. The model used is medical rather than

pedagogical, focusing on diagnosis, categorization, and treatment of children who manifest various disabling conditions. Treatment accordingly focuses on remediation and rehabilitation rather than education and upbringing (Kovač-Cerović et al. 2004). Special pedagogues trained following the medical model are not teachers, as they lack the methodological, pedagogical, and other knowledge about teaching and are not permitted to teach in mainstream classrooms (Radivojevic, Jerotijevic, and Stojic 2007; Crighton and Kowar 2007; Radoman, Nanob, and Closs, 2006). Research carried out by Clossfound that the Faculty of Defectology was predominantly opposed to inclusive education, in large part because its graduates are not permitted to work as teachers in standard schools or classrooms (Closs 2003, 159; Radoman, Nanob, and Closs 2006, 159).[18] Also contributing to this position is a belief that specialized knowledge about working with children with disabilities belongs exclusively to special pedagogues/defectologists (Macura-Milovanović, Gera, and Kovačević 2010, 56). Additionally, faculty and special pedagogues still hold the view that children with disabilities are "uneducable" (Closs 2003, 159; Radoman, Nanonb, and Closs 2006, 159).

The Center for Applied Psychology, part of the Serbian Psychological Society, is responsible for publishing textbooks and other literature, organizing conferences and professional development seminars, and developing, producing, and distributing psychological assessment instruments, including ability tests, personality inventories, and test materials.[19] This includes the tests of school readiness that are administered to children. The Institute for the Improvement of Education accredits textbooks and other pedagogical materials and is concerned with the development and implementation of special education programs (Law on the Fundamentals of the Education System, Article 19).

A final and important institution relevant to the administering of tests is the municipality. The municipality appoints the Intersectoral Commission, which determines the additional educational, health or social supports needed by children.

POLICY AND PRACTICE IN ASSESSMENT

Under the Law on the Fundamentals of the System of Education, all children in the Republic of Serbia are guaranteed "[e]quality and accessibility of education without segregation and discrimination based on gender, social, cultural, ethnic, religious or other background, place of residence or domicile, financial or health status, developmental difficulties and impairments and disabilities" (Article 3, paragraph 1). In addition, Article 44 prohibits specific acts of discrimination, such as threatening, belittling, singling out groups or individuals on the

[18] There are 1,785 special pedagogues in special schools and only 155 working in the special classes in standard schools in Serbia (Radoman, Nanob, and Closs 2006).
[19] Available online: http://www.dps.org.rs.

bases listed in Article 3, in institutions. However, paragraph 3 of this Article does not consider "[s]pecial measures introduced for the purpose of achieving full equality, protection and progress of disadvantaged persons or groups" to be discrimination. Viewed this way, the enrolment of children in segregated special schools for the purpose of providing them with additional educational, health, or social supports does not constitute discrimination.

Like other countries in the region, the Republic of Serbia conflates social disadvantage with disability, as it relies on the OECD Cross-National Category classifications A, B, and C (children with disabilities, disadvantages and learning difficulties) and as under Article 5 of the Law on the Fundamentals of the System of Education, "[s]pecial achievement standards may be adapted to an individual pupil who is socially deprived, has developmental or other disabilities or for any other reason, while at the same time continuously monitoring his/her development." The law also provides three ways that children can be provided special education: in the standard education system within standard classes; in the standard system with additional individual or group support; or in a special school (Article 6, paragraph 3).

As recommended by, among others, the Working Group of the Ministry of Education (2008, 86) and Stojić and colleagues (2009, 113), Article 77 of the 2009 Law on the Fundamentals of the Education System introduces "individual education plans." To facilitate "an optimal level of inclusion" into standard education, Article 77 mandates that all children "in need of additional educational and pedagogical support, due to social deprivation, developmental impairment, physical disability or for other reasons," including preschool pupils, may have an individual education plan (IEP) (paragraph 1). Subject to parental consent, the IEP may include any of the following: (1) the pupil's daily schedule, including what supports the pupil receives throughout the day; (2) the pupil's educational objectives; (3) special achievement standards(if needed); (4) individual program by subject and the additional support the pupil receives; and (5) individualized approaches by teachers. Whereas the IEP must be evaluated quarterly in the first academic year, thereafter it is evaluated at the beginning of each semester. The teacher must use the IEP when planning instruction for the class. The IEP, then, would be an essential tool to include children in the standard classroom and monitor school compliance with the law, using the school readiness tests as a way to plan education support for children in standard classrooms.

TESTS USED FOR ASSESSING SCHOOL READINESS AND ABILITY

The following are intelligence tests and assessments of school readiness currently in use in the Republic of Serbia, including tests that have been newly developed. The assessments that are used in all four countries in this study that have been discussed previously in the section on methodological pitfalls and bias in commonly used tests (Raven's CPM and WISC) are discussed only in relation to issues that are country-specific. School psychologists use the WISC and the Binet-Simon Intelligence Test, but the most commonly used test is the Test of Intellectual Potential (Stojanović et al. 2007, 543).

Raven's Coloured Progressive Matrices (Raven's CPM)

Raven's CPM is used to assess children's intellectual ability. Fajgelj, Bala, and Tubić (2007), examined, among other things, the norms of the Raven's CPM and its generalizability to use for younger populations. They found that the norms and results should be interpreted with caution and that the test might not be appropriate for use with pupils over the age of 10. The test also might not be reliable for use with children ages 3.5/4.5 years because of a low reliability coefficient (Fajgelj, Bala, and Tubić 2007, 305). In addition, due to the 95-percent confidence interval determined in the Serbian norming, a child's "true" score may vary within a range of six to nine points (Fajgelj, Bala and Tubić 2007, 300).

Test of Intellectual Potential (TIP-1)

Ivic, Milinkovic, Pešikan, and Bukvić performed the Serbian standardization of this Italian test in both rural and urban areas, publishing it in 1989. It has not been restandardized since the original publication. This is the most commonly used test of school readiness, in part due to its allowance of a quick assessment of children's readiness (Stojanović et al. 2007, 543). Because the text as not normed with any children with disabilities, it is intended to assess only school readiness, and not to diagnose disability. The test is administered in five sections that assess the child's knowledge, social and emotional maturity, verbal expression/language, and intellectual ability/intelligence (Vasa Živković Primary School, n.d.). While there is no data available on cultural considerations for this test, the fact that it can lead to referral for further assessment for disability and subsequent placement in special education means that it could potentially contribute to the overrepresentation of Romani children in special education (Stojanović et al. 2007, 543). The Center for Applied Psychology continues to provide training seminars for school educators and psychologists in applying this instrument as a school enrollment examination.

Test of School Readiness (POŠ)

The Test of School Readiness battery (Toličič 1986), consists of four subtests: (1) speech comprehension; (2) reasoning; (3) fine motor skill assessment; and (4) perception. Bala, Sabo, and Popović (2001) used the POŠ to determine if there was a correlation between children's performance on the test and the development of their motor skills. They found that pupils who attended preschool longer than their older peers developed increased motor facility and increased performance on the POŠ. On the basis of this finding, they recommend incorporating more exercise in preschools in order for pupils to continue to develop their cognitive functioning. Similarly, Umek, Fekonja, and Baje (2006) found that even one year of kindergarten attendance mitigates the impact of low parental educational attainment on children's school readiness.

Test of School Maturity (TSM)

The Test of School Maturity was developed by Novović, Biro, Tovilović, and Baucal (2008) during the project "Integration of Roma Children in the School System of Serbia," part of the Ministry of Science and Environmental Protection's initiatives "Psychological Problems in the Context of Social Change" (No. 149018D) and "Psychological Characteristics

of Societies in Transition" (No. 149008). The specific aim of the project was to create a non-biased assessment of school readiness for children from socially disadvantaged backgrounds and as a mechanism to pinpoint areas for development, not as a means to stream children into special schools (Rakočević, Personal Communication, 2010). The TSM is composed of five subscales: (1) Information (practical knowledge and social skills); (2) Visual memory and attention; (3) Block design for visual-motor coordination, perceptual organization and planning; (4) Coding (visual-motor coordination, episodic learning and mental focusing); and (5) Vocabulary (Jovanovic, Smederevac, and Tovilović 2009). The test was normed on a sample of 400 children in eight groups of 50, ages 5.5 to 7.5 years old (Biro, Novović, and Tovilović 2009).

Biro, Smederevac, and Tovilović (2009, 284) promote a social (as opposed to medical) model of cognitive assessment, stating that "[i]nferior achievements of Roma children on IQ tests should not *a priori* be classified as a permanent cognitive deficit and mental retardation." The publication page of the website for the Center for Applied Psychology states that the TSM covers the "impact of unfavorable factors on intellectual development and opportunities to compensate and overcome the cognitive deficiencies that are assumed to arise as the effect of these factors [and] ways to partially circumvent or overcome" these factors.

CONSEQUENCES OF TEST RESULTS FOR SCHOOL AND LABOR MARKET OUTCOMES

While many children are streamed into special education upon enrollment to preschool or in the first years of school, students are also streamed into segregated, although not "special" environments through the system of adult education. The Law on the Fundamentals of the System of Education (Article 44) allows a child to end compulsory schooling at the age of 15. However, the Law on Primary Education (Article 94) allows persons older than 15 years of age who do not regularly attend school to acquire a primary education through Adult Education. The curriculum in primary Adult Education consists of mathematics and Serbian language, along with technical practice. While a diploma from these programs should entitle holders to attend secondary school, the opportunities for this are limited (Stojanović et al. 2007). One the one hand, Adult Education provides a positive opportunity for Romani students who either did not enroll in or dropped out of primary education. On the other hand, data show that Roma, including children under 15 years of age, constitute 90–98 percent of the population of these schools (Stojanović et al. 2007, 512). As a result, their secondary educational opportunities are limited to trade apprenticeships, and they have limited opportunity to participate in the labor force (Stojanović et al. 2007). The Law on the Fundamentals of the Education System (Article 176) calls for enrollment of youth under 16 years of age to cease after the 2012—2013 academic year.

As shown in the table below, educational attainment is a crucial factor for participation in the workforce.

TABLE 11. Educational attainment and employment rate

Education level	Employment rate (percent)
Primary education	42.8
Secondary education	58.2
Higher education	77.8

SOURCE: European Training Foundation (2006).

TABLE 12. Educational attainment of non-Roma and Roma

Educational level	non-Roma (percent)	Roma (percent)
No qualifications	5.6	25.6
Primary	23.8	29.0
Secondary	41.1	5.8
Tertiary	11.0	0.11

SOURCE: Minić (2008, 37).

Serbia has one of the highest overall unemployment rates in Europe, at 18.8 percent (Minić, 2008, 62). Serbia does not disaggregate employment data according to ethnicity, so it is difficult to make statistical determinations about employment and education of individuals from Romani communities. Nonetheless, the European Training Foundation (2006, 3) reports that the unemployment rate for Roma is more than twice the Serbian average. Consistent with this report, Čolak (2008, 21) points to a 2006 study of employment among Roma conducted by Roma Information Center (RIC) that found that 60 percent of the Romani population was unemployed—the highest unemployment rate in the workforce. Moreover, low or non-qualified education accounted for two-thirds of unemployed Roma in the study.

REPRESENTATION OF ROMA IN SPECIAL EDUCATION

School finishing is elusive for Roma. A national report on inclusion in education in Serbia reports that 72 percent fewer Romani pupils complete primary school than are enrolled in the first grade (Working Group of the Ministry of Education 2008, 43). The percentage of Roma who repeat a grade in the first three years is 11 percent, compared with a national average of one percent (Crighton and Kowar 2007, 77). Thirty-two percent of Roma have less than fourth-grade schooling, 28 percent attain primary education, four to eight percent of Roma attain secondary education, and 0.3 percent are enrolled in tertiary education (Kovač-Cerović et al. 2004, 4).

TABLE 13. Pupils in special schools

Level of education	Total enrollment
Primary	7,560
Secondary	1,269
Total	8,629

SOURCE: Nikolic et al. (2006, 351).

While legislation offers the possibility of schooling children with disabilities in standard classrooms with IEPs and appropriate supports, this is not yet a reality; the new legal provisions discussed above came into force in the 2010–2011 school year, and the dynamics of changes based on the new legislation will need to be closely monitored. In a sample of 97 standard schools, 8,099 pupils out of 77,600 had disabilities, approximately one percent (Nikolic et al. 2006, 352). Pupils with visual impairments were the most included, at 1,604, while pupils with autism were the least included, at 44. There were 472 pupils with intellectual disabilities included in standard classes.

TABLE 14. Pupils with intellectual disabilities included in standard classes

Grade	1	2	3	4	5	6	7	8	Total
Number	70	58	70	61	77	43	52	41	472

SOURCE: Nikolic et al. (2006, 352).

As with other countries in the region, Romani pupils in Serbia are overrepresented in special schools for children with intellectual disabilities. While Roma make up approximately two to three percent of the population of Serbia, they represent 25–40 percent of pupils in special primary schools for intellectual disability and 40 percent of pupils in special secondary schools (Crighton and Kowar 2007, 77; Stojanović et al. 2007). Moreover, in some regions there are special schools in which Romani children account for 50–80 percent of all pupils. Finally, a large number of Roma remain out of school altogether: Only 50 percent of children living under the poverty line are enrolled in preschool (Living Standard Survey 2007) and only 66 percent of children from Roma settlements were enrolled in school in 2005 (UNICEF 2005).

COUNTRY-SPECIFIC RECOMMENDATIONS

Primary education: Primary schools should be made more inclusive, providing appropriate supports for all pupils with their age-appropriate peers so that children are not pushed out of the primary system and into the system of adult education.

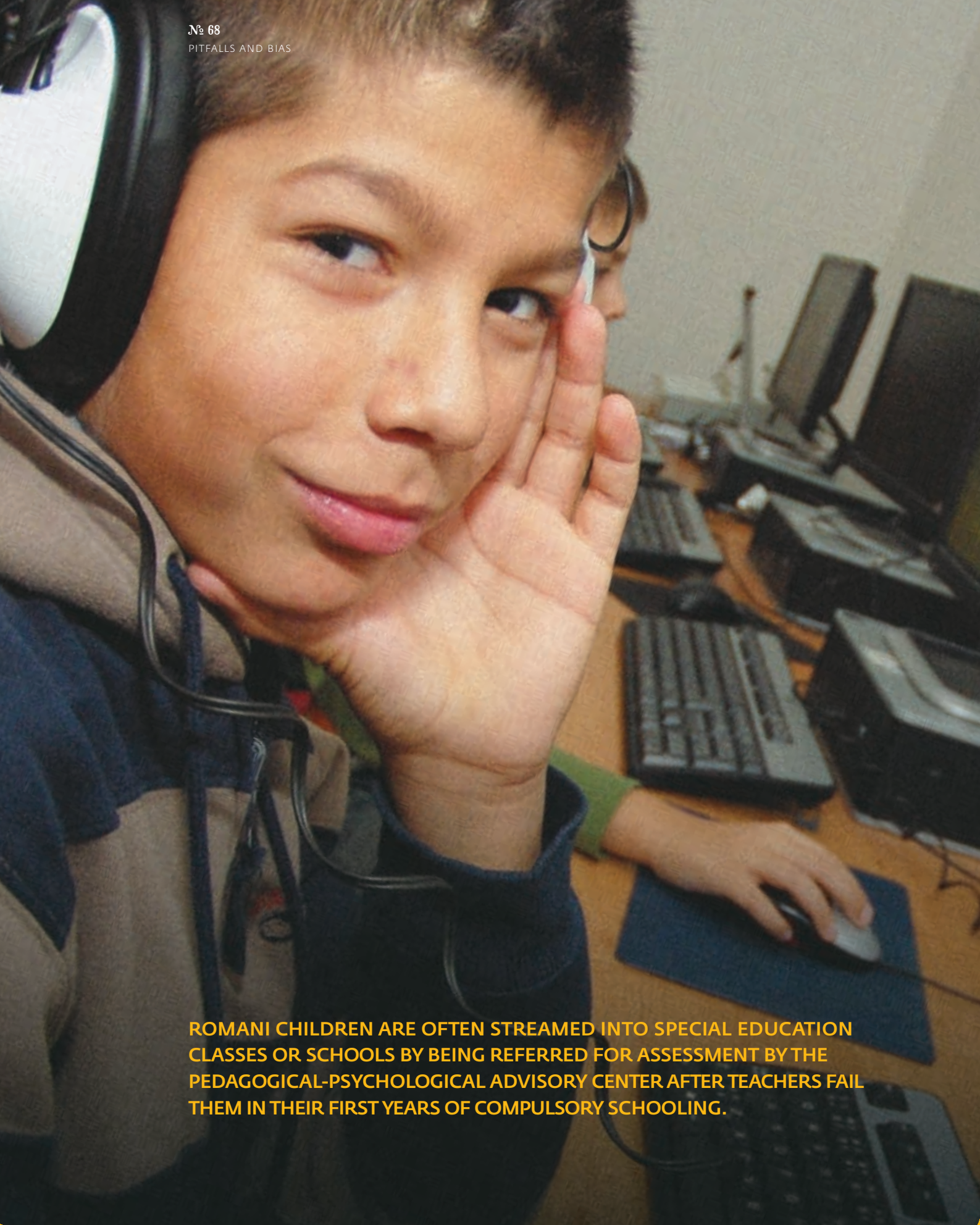
– *School entry testing:* There are already promising actions in this area, as the new Test of School Maturity has been developed and is in the process of being implemented, and the new legal setup largely displaces school enrollment testing with assessment of children after enrollment for educational support purposes. It is also commendable that the Serbian government has a provision in its legislation that allows for the use of an interpreter during assessments. This policy should be continued and expanded, and the results of these assessments should be used to guide instruction and supports rather than for diagnosis.

– *Preschool education:* Fewer than five percent of Romani children attend preschool, as compared with a national average hovering around 40 percent. While it is a positive step that the government has made the last year of preschool compulsory, the system of preschools should be extended to those children in marginalized communities or settlements.

– *Reassessment procedures:* The law should more specifically define the procedures by which pupils can be reassessed for transfer from special schools. Schools should also provide additional educational, health, and social supports as needed in the standard classroom to facilitate (re)integration.

– *Individual Education Plans:* Legal provisions for the inclusion of all pupils in standard education schools and classes should be utilized, with IEPs used to structure individualized provision of education services in the mainstream. School pedagogues can be valuable resources as co-teachers to provide the necessary supports for full integration.

– *Monitoring:* The legal provisions coming into force from the 2010/2011 school year should be supported with provision of relevant information in user-friendly form as well as with detailed monitoring with an eye to troubleshooting and preventing possible malpractice. Especially important will be to monitor whether IEPs for Romani children in mainstream classes incorporate lower education standards.



ROMANI CHILDREN ARE OFTEN STREAMED INTO SPECIAL EDUCATION CLASSES OR SCHOOLS BY BEING REFERRED FOR ASSESSMENT BY THE PEDAGOGICAL-PSYCHOLOGICAL ADVISORY CENTER AFTER TEACHERS FAIL THEM IN THEIR FIRST YEARS OF COMPULSORY SCHOOLING.

SLOVAKIA

KEY INSTITUTIONS IN THE ASSESSMENT PROCESS

The first institution responsible for the assessment of a child is the Ministry of Health, represented by the child's pediatrician. As in the practice in other countries, for the first 36 months of a Slovak child's life, he or she is periodically examined by a pediatrician. The pediatrician will conduct health and developmental screenings. If the pediatrician diagnoses the child as having a disability, the pediatrician, in cooperation with the parents or legal guardian, will make a recommendation for the child to be examined further by an expert advising committee at a pedagogical-psychological advising center, and then, if determined to have special educational needs, to be assessed for special education services by the advisory committee at a special pedagogical advising center.

The pedagogical-psychological advising centers are mandated to work in concert with special pedagogical advising centers (Education Act, Z.z. 245/2008, §131.2). The pedagogical-psychological component is responsible for not only counseling and therapy in the context of schools, but also for administering and interpreting psychological tests to diagnose educational need (Education Act §131.1). The special pedagogical component should work on the recommendations from the results of the psychological assessment and use special pedagogical methods, techniques, and procedures to diagnose, correct, and remediate pupils' special educational needs (Education Act §131.3.b-c and §133). The Research Institute for Child Psychology and Pathopsychology works closely with both advising centers. The Research institute conducts comprehensive research on child and youth development, publishes Slovakia's only professional journal for psychology, *Psychology and Pathopsychology of the Child*, provides internship opportunities for students at the philosophical and pedagogical faculties of Comenius University in Bratislava, and provides services for the advising centers, especially in developing new psychological and/or educational diagnostic assessments.[20]

If a child is not determined to have a disabling condition by his or her pediatrician, the parents have the option of enrolling the child in kindergarten. The first compulsory year of schooling is the first grade. During the period of enrollment in the first year of schooling, whether kindergarten or compulsory first grade, schools assess potential pupils through school readiness tests. If the school determines that the child requires further development in any of the domains assessed, the school can suggest to the parent that the child remain at home for that year to work on the skills identified as needing further development. Under Section 19.4 of the Education Act, if a child is

[20] Available online: http://www.vudpap.sk/

determined to come from a socially disadvantaged background, the school director, upon request of the guardian, can decide to postpone the entry of the child to school. A child is identified by a teacher or school director as "socially disadvantaged" (OECD Cross-National Category C) if the child meets three out of the following five criteria set out by the Ministry of Education: (1) at least one parent receives social benefits, (2) at least one parent is unemployed, (3) at least one parent has attained only primary education, (4) substandard living and hygienic conditions, and/or (5) the child's home language is not the official teaching language (Šoltésová et al. 2007, 421). The law specifically mandates that requests to delay school entry, assess a child for disabilities, or place a child in special education must come from the child's legal guardians, but the decisions to delay, assess, and place remain with the school director.

Tomatová (2004, 28) reports that a school psychologist is sometimes present during the school enrollment period to administer simple school readiness assessments of socio-emotional maturity, language sophistication (for example, vocabulary and grammar), fine motor skills (for example, using a pencil), and general orientation (for example, color recognition), and to advise the parents of children who may not be ready for school or who may have a disabling condition to request that the child be assessed at a pedagogical-psychological advising center. In the absence of a school psychologist, a teacher will administer these school readiness assessments. Once enrolled in compulsory education, if a child falls behind his or her peers, cannot keep up with the pace of lessons, or receives bad marks on classroom assignments and tests (as outlined in §55 of the Education Act), the classroom teacher will recommend to parents that they request an assessment from a pedagogical-psychological advising center.

The Education Act also allows for the placement of a pupil to a Diagnostic Center before a placement decision is made (§59 and §121). Diagnostic Centers are typically housed in special boarding schools, and the child resides there for a period of between three months (for example, for a child in kindergarten without identified special educational needs) and a year or longer (for example, for a child with special educational needs). According to the law, the child's legal representative must apply for a child's placement at a Diagnostic Center. The purpose of such a diagnostic stay is to assess the child's knowledge, skills, abilities and habits in order to identify corrective, remedial educational or psychosocial practices. This is problematic, in that during the assessment period the child is learning the reduced curriculum at the special school, potentially exerting a negative impact on test results in case of reassessment. Also problematic is the absence of legal provisions for reassessment of pupils once they are placed in special education settings. Instead, it is up to the legal guardians of the child to request a reassessment or a change of placement for the child.

No institution is specifically identified as responsible for the assessment of one area of special education: social disadvantage. There is no mention of diagnostic procedures for pupils identified as being from socially disadvantaged backgrounds, but social disadvantage is identified as an area of special needs in the Education Act (§2.i.).

Socio-economic and cultural status, along with family background, are conflated with disability, with coming from what the law defines as a socially disadvantaged background functioning as code for "Roma" (Hapalová and Daniel 2009, 16).[21] Social disadvantage makes a child eligible for special education services, because these conditions, according to the law, do not support the development of mental and emotional characteristics, nor support socialization.

POLICY AND PRACTICE IN ASSESSMENT

The conflation of Romani culture and background with disability leads to *de facto* and sometimes directly to *de jure* segregation, even though the Education Act specifically prohibits "all forms of discrimination and segregation in particular" (§3.d). A positive change in the 2008 revision of the Education Act (Z.z. 245/2008) is that that last year of kindergarten is now free of charge. This should provide children who live in material poverty access to rich literacy, numeracy, and peer experiences that are known to enhance development, improve school readiness, and increase standardized assessment performance (Swiniarski 2007, 23; Bennett and Tayler 2006, 38). However, kindergarten is not available in some schools, particularly in segregated settlements, and in practice, going to kindergarten often serves to stream Romani children who are determined to be "socially disadvantaged" into either special education classes, zero-year classes, or preparatory classes in special schools (Friedman et al. 2009, 17; Hapalová and Daniel 2009, 11; Marcinčin and Marcinčinová 2009, 27). While it is prohibited under Section 28.9 for kindergarten pupils to be placed into special classes "solely because they come from a socially disadvantaged background," the placement of kindergarten pupils in diagnostic centers effectively segregates them and exposes them to a weakened special curriculum that increases the likelihood that they will be assessed as having an intellectual disability and remain in special education. No such provision on the prohibition of students from socially disadvantaged backgrounds being placed into special primary or secondary schools exists in the Education Act (Hapalová and Daniel 2009, 8).

While the Slovak Ministry of Education has neither introduced methodological guidelines nor outlined procedures for pedagogical-psychological advisory centers to follow when administering diagnostic assessment for identification of children with special needs (Hapalová and Daniel 2009, 9), there are methodological guidelines

[21] Due to the discrimination against members of Romani communities in employment, housing, and education, most Romani families would meet three of the five criteria for social disadvantage established by the Ministry of Education: (1) at least one parent receives social benefits, (2) at least one parent is unemployed, (3) at least one parent has attained only primary education, (4) substandard living and hygienic conditions, and/or (5) the child's home language is not the official teaching language. Škobla, Leončikas, and Štěpánková (2009, 48) note that Roma are regularly at the highest risk of poverty, social exclusion, and discrimination, and that the Slovak government explicitly mentions Roma in its documents and actions plans to counter poverty and social exclusion. Thus the law in effect categorizes a whole group of people as socially disadvantaged, yet through this label, continues to educationally segregate Romani children, perpetuating the cycle of low education and subsequent unemployment and poverty. The Education Act § 107.4 also contributes to this, as a family's economic status determines a child's eligibility for special educational services under this category: "Contribution to the socially disadvantaged pupils environment is provided for pupils from families whose average monthly income over the past six consecutive months is the minimum amount of subsistence by a special regulation."

developed in the framework of a Phare project and provided to the pedagogical-psychological advisory centers for "assessing the fitness of school children from socially disadvantaged environments for the adoption by the first year of primary school" (Methodological Guideline 12/2005-R). These guidelines are for the school readiness assessment of a child who is over 6 years of age enrolling in the first year of primary school. By definition (Article 2), the child is considered, as a result of learning difficulties from dysfunctional social conditions resulting from social exclusion and language barriers, as not having the capacity to engage with the subject matter of the first grade. Children should be assessed in May (September at the latest) with the "Test of School Readiness" developed by Phare project SR0103.01 entitled "Reintegration of Socially Disadvantaged Children from Special Schools into Standard Primary Schools." The guidelines clearly state that the results of this test should not "determine the intellectual level and are not a sufficient criterion for the child to be referred to a first special grade of primary school," but they clearly allow for the placement of a child in a zero-year classroom (Article 3, related directly to Education Act §19.4 and 6). In addition, it is recommended that children from socially disadvantaged environments who are in special kindergartens of special primary schools be administered the rediagnostic tool "RR Screening" (also developed by Phare project SR0103.01) to exclude a diagnosis of mental disability (Article 4.3). Whatever their potential to reduce the overrepresentation of Romani children in special education, these methodological guidelines are nonbinding instructions not included in the Education Act, and, as will be shown below, which the government contradicts in its own policies.

The Education Act of 2008 states that children who have reached six years of age and are determined to be unable to manage the subject matter of the first year of primary school can be placed in a preparatory classroom in a special school. There are no diagnostic procedures cited in the law to specify how it is to be determined that a child us unable to manage, and there are no criteria for reassessment and transfer out of preparatory classes. According to the Decree of the Ministry of Education of the Slovak Republic 320/2008 (Section 13), however, the pupils who can be placed in these classes are those who (a) after passing the zero grade are not likely to successfully cope with the curriculum of the first year of school, (b) do not master the curriculum of the first year of school or underwent psychological testing that found no preconditions to successfully manage the curriculum of the first grade, or (c) were educated in primary schools under programs for pupils with disabilities but did not manifest a disability. Children are placed in special preparatory classes on the basis of assessment by an agent of the pedagogical-psychological advising center, informed consent of the legal guardian, and the permission of the school director. Section 13.4 of the Decree specifically states that the child is included in the class for an amount of time that is "only strictly necessary," but does not define criteria for transfer to a general primary school. Like diagnostic stays, preparatory classes in special schools use a reduced curriculum, and the longer a child remains in the preparatory class, the less likely it is that a child will be prepared for the standard first grade curriculum. This legislation on primary schools effectively justifies the segregation of Roma as pupils from a socially disadvantaged environment.

Pedagogical and other documentation is also mandated in the Education Act (Section 11). Along with describing the kinds of data required to be collected and maintained by schools in general, this section also defines the documentation required of pupils placed in special education settings. This documentation includes: (a) proposal of enrollment to a special classroom or school, (b) the pedagogical-psychological report and any other assessments, (c) a written statement on school integration, (d) an individual education program for the pupil, (e) the status of the school facilities, (f) number of staff, and (g) a list of cooperation with schools, facilities, and others that participate in the child's education. A pupil is required to be diagnosed by agents of both the pedagogical-psychological and special pedagogical advisory centers (§131), and this documentation must be collected and maintained under Section 11. Tomatová (2005, 38) and Friedman and colleagues (2009, 63) report that there are regular violations of these provisions, both in documentation and in assessment: pupil documentation is incomplete, and assessment provisions outlined in Section 131 of the Education Act are not followed, with the fact that over 40 percent of the time children were not assessed by a special pedagogue, but only by a psychologist pointing to an excessive reliance on tests administered out of educational contexts.

TESTS USED FOR ASSESSING SCHOOL READINESS AND ABILITY

The following are assessments of school readiness and intelligence tests currently in use, recently developed, or in the process of development in the Slovak Republic. The assessments that are used in all four countries in this study that have been discussed previously in the section on methodological pitfalls and bias in commonly used tests (Raven's CPM and WISC) are discussed only in relation to their norming and issues that are country specific. The WISC is the most frequently used intelligence test in the Slovak Republic, and the Czech version of Jirásek's Orientation Test of School Maturity (discussed in depth in the Czech case study) is the most frequently used school readiness assessment instrument (Kovalcíková 2009, 48).

Raven's Coloured Progressive Matrices (Raven's CPM)

Friedman and colleagues (2009) describe a study by Ferjenčík, Bačová, and Bányaiová (1994) in which the Raven's CPM score differences between Romani and non-Romani children increase with age, strongly indicating that Roma's developmental potential is stymied by placement in special schools. In this same study, Ferjenčík and colleagues find that the use of the Raven's CPM (and the WISC) is not appropriate with economically disadvantaged children just entering school with little previous opportunity to develop school-related skills, such that test results do not reflect the true intellectual aptitudes of children in this category (Tomatová 2005, 37).

Raven, Court, and Raven (1995) conducted the largest study of Roma in Slovakia to date, testing 728 individuals using the Raven's CPM. The resulting average IQ equivalent for five- to eight-year-olds was 83 (cited in Rushton, Čvorović, and Bons 2007, 4). However, even a single norming sample of 728 is relatively small, and is insufficient to generalize results to this population.

Wechsler Intelligence Test for Children, Third UK Edition (WISC-III UK)

Like the Raven's CPM, the WISC has not been adequately standardized with a Romani norm group (Tomatová 2004, 67). Synthesizing the findings of ten studies conducted on the WISC in Czech and Slovak Republics, Bakalar (2004, 296) notes that Romani sample sizes ranged from only 33 to 178, with IQ scores ranging from 71 to 82. In a 2006 study of the European standardization of the WISC-III, Dockal finds variation in the results of the testing among the United Kingdom, Czech and Slovak Republics, and German-speaking countries. He suggests caution when measuring intelligence using this tool, including the nonverbal tasks associated with the instrument.

Test of Intellectual Potential

In a study of the Test of Intellectual Potential (TIP), translated from the Italian to Slovak and normed with, among others, a sample of 30 children from socially disadvantaged backgrounds, Džuka, Kovalčíková and Kočišová (2008) found that this assessment was more valid than other commonly used instruments in assessing children from disadvantaged groups. At the same time, they caution that the results might be affected by the order of the administration of tasks and that any interpretation should be made keeping in mind that the norming sample was too small and should be further verified with a larger sample. Also relevant are Fabio's (2007) observations that the original sample came from schools throughout Italy and that the norming group did not include individuals with intellectual or emotional disabilities.

Snijders-Oomen Nonverbal Intelligence Test (SON-R 5.5-17)

The Research Institute for Child Psychology and Pathopsychology was contracted by the Slovak government in 2007 to standardize the SON-R using a Slovak norming group of children of preschool age and younger. The instrument was tested on 30 Romani children, five of whom were adopted by non-Romani families. Qualitative data in the form of interviews with teachers were also collected. While the average IQ results for Romani children were below 80 points, Gärtner and Tellegen (2008, 94) found that there was a discrepancy between the IQ scores and the capability possessed by the children in their lives. The findings of the qualitative research point to absenteeism, language barriers, and socio-economic status as factors that might affect the results. Thus, they advise that these tests be interpreted with caution.

Test of School Readiness

The Research Institute for Child Psychology and Pathopsychology developed the Test of School Readiness in the framework of the Phare project SR0103.01 to address issues around school readiness and diagnostic assessment for children from Romani communities such as

– Differences between the child's stimulation in the home environment and the academic tasks on which the child is tested at school entry (Tomatová 2005, 37),
– The cultural bias of standardized assessments (Friedman, et al. 2009, 57),
– Language barriers and tests that have not been culturally translated,

– The fact that the assessment experience might be the first interaction a child has with a non-Romani adult (Friedman, et al., 2009), and
– Discriminatory attitudes of test administrators.

The purpose of this project thus was to develop a culture-fair assessment of a child's readiness for school entry, with particular emphasis on children from a socially disadvantaged background. This test, which was sampled on 209 children from the target background, assesses communication skills, fine motor skills, cognitive processes, social and emotional maturity, mathematical ideas, and basic phonological awareness (Mesárošov and Marušková 2004). The test developers determined that this test was indeed a more culture-fair way to assess the target population of pupils and the Ministry of Education recommends it use (Friedman et al. 2009, 59). However, the use of this test is not compulsory, and available information suggests that it is rarely administered (see Šoltésová et al. 2007, 490).

RR Screening Test

The RR Screening Test, developed under the same Phare project as the Test of School Readiness, was designed to be an instrument for distinguishing between intellectual disability and socio-economic disadvantage. The test recognizes the various communication styles and backgrounds of pupils, the test is short (to address the attention span of children) but not time-limited (to eliminate stress), uses images and content familiar to Romani children, and includes a matrices portion using plastic cards that allow for direct manipulation. This follows findings by Alcock and colleagues (2008, 548) about the cognitive performance of Kenyan children, where children who did not have exposure to school were not successful at tasks in which they were required to copy a drawing or shape, but were able to recreate the drawing or shape appropriately when presented with manipulatives. While this test can be used to rule out intellectual disability, it cannot confirm it (Tomatová 2005, 37). In the pilot test of this instrument, seven to 10 percent of pupils diagnosed with intellectual disability were found to have none, while another 40 percent of pupils in special schools were found to have been placed there unnecessarily (Friedman et al. 2009, 59; Šoltésová et al. 2007, 490–91)

CONSEQUENCES OF TEST RESULTS FOR SCHOOL AND LABOR MARKET OUTCOMES

The opportunity for Romani students to participate in secondary education, and thus participate competitively in the workforce, is profoundly remote. By the end of the ninth year of primary school, students must decide what paths their lives will take, as this is the last year in which they can apply to secondary schools. Given that students from Romani communities often experience delay in the start of their compulsory schooling (either through zero-year classes or denial of entry to school on the basis of school readiness tests) are streamed into special education on the basis of intelligence assessments, or are retained in primary grades by their teachers,

their chances to complete the ninth year of primary school and to make a successful transition to secondary education are extremely limited. The use of the more culturally relevant assessment instruments developed under the Phare project could potentially reduce the numbers of Romani children referred to zero-year classes or special education, but until their use is mandated, Romani children will continue to have an unequal opportunity to participate in secondary education.

Secondary schools in Slovakia are highly compartmentalized, and most require an entrance examination. Choices are further limited by the fact that students are permitted to apply to only two schools. Further, many *gymnázia* and secondary technical/vocational schools are highly competitive; entrance examinations for secondary schools across the country take place in the span of a couple of days, so students must carefully consider their options. The majority of Romani students in secondary education enroll in special apprentice schools, which are open to students who have completed ten years of compulsory school attendance without successfully completing grade nine. Students who complete this training do not receive a school leaving certificate and are therefore not able to go on to further education.

TABLE 15. Secondary school enrollment, share of population, and Romani enrollment, 2003–2004

Type of school	Number of pupils	Share of population (perecent)	Romani students
Gymnáziá	78,134	23.31	4
Secondary vocational schools	112,670	33.61	53
Secondary specialized schools	108,486	32.36	113
Total	299,290	89.28	170

SOURCE: Salner (2005, 8).

The table below shows how Roma participate in compulsory schooling. The majority of Roma spend the last year of compulsory schooling in primary school, indicating that there is little to no incentive for most students to enroll in secondary education. This significantly impacts their employability and, consequently, their economic status.

TABLE 16. Number of years of compulsory education spent in primary school, 2001

Number of years	Total	Roma (percent)
1	54,834	11.12
2	56,814	9.88
3	57,118	9.35
4	60,435	8.20
5	55,152	8.41
6	56,397	8.20
7	57,500	8.03
8	59,029	7.60
9	60,174	6.83
10	3,086	62.44
Total	576,331	8.28

SOURCE: Šoltésová et al. (2007, 420).

According to a UNDP study, out of the Romani male population who would be considered able to work, ages 15–59, a total of 10.5 percent were involved in the workforce, with 72 percent of persons unemployed (Filadelfiová, Gerbery, and Škobla 2007, 71). This study also found that levels of education are related to participation of Roma in the workforce, as higher levels of education are associated with employment and lower levels of parental leave. Completion of secondary school more than doubles the chance of full-time employment. On the other hand, dropping out of primary school and attending special schools result in similar employment outcomes, with 1.2 percent of Roma in each category employed on a full-time basis. At the same time, regardless of educational attainment, the unemployment rate for Roma remains very high.

TABLE 17. Percentage of Roma above school age who no longer study, by employment status and education

Employment status	Highest level of completed education					
	Incomplete primary education	Primary education	Incomplete secondary education	Secondary education	Higher education	Special schools
Full-time employment	1.2	5.0	9.2	21.3	25.0	1.2
Part-time employment	0.6	1.6	2.2	1.9	25.0	–
Unemployed	60.6	66.3	66.8	58.4	25.0	64.2
Other (for example, pensioner, maternal leave, and so on.)	37.6	27.1	21.8	18.4	25.0	34.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

SOURCE: Filadelfiová, Gerbery, and Škobla (2007, 66).

REPRESENTATION OF ROMA IN SPECIAL EDUCATION

Nearly a decade ago, in the 2001/2002 school year, four percent of pupils in the Slovak Republic were classified as having special education needs, and 3.4 percent of pupils were educated in segregated settings (Meijer, Soriano, and Watkins 2003, 9). This is one of the highest percentages in Europe (Friedman, et al. 2009; Fajth 2005, 19). Romani children are often streamed into special education classes or schools by being referred for assessment by the pedagogical-psychological advisory center after teachers fail them in their first years of compulsory schooling. The Slovak Republic does not collect data on scholastic achievement by ethnicity, but it does keep such data on socio-economic status; the table below describes the percentage of pupils from socially disadvantaged backgrounds[22] who repeated years of primary schooling. Pupils after the first year would be streamed into special education, while pupils who repeat higher grades would finish their primary schooling in the tenth year, and thus be ineligible for secondary education that would make them competitive in the labor market.

TABLE 18. Percentage of pupils from socially disadvantaged backgrounds repeating grades

Grade	Percent repeating from socially disadvantaged background
1	24.71
2	18.28
3	15.98
4	15.52
5	15.28
6	14.19
7	13.45
8	11.333
9	3.67

SOURCE: Vláda Slovenskej republiky (2008).

[22] In a 2006 study by the Methodological-Pedagogical Center in Prešov, primary school pupils from socially disadvantaged backgrounds accounted for 15.49 percent of the total sample of 237,229 pupils from all regions in Slovakia (see Metodicko-pedagogické centrum v Prešove 2006).

TABLE 19. Failure rates of all pupils in the Slovak Republic, 1995–2006

Year	Number of pupils at beginning of year, 1–9	Number of Roma	Number of pupils at end of year, 1–9	Pupils who failed		Pupils who failed (from socially disadvantaged backgrounds)	
				Number	Percent	Number	Percent
1995–96	661,082	8,113	659,354	14,743	2.24	–	–
1996–97	664,902	7,698	640,278	15,482	2.42	–	–
1997–98	645,941	5,915	644,796	15,389	2.39	–	–
1998–99	647077	6,123	645,728	15,599	2.42	–	–
1999–2000	671,706	5,546	670,227	16,203	2.42	8,981	55.43
2000–01	650,966	4,654	649,980	15,924	2.45	9,397	59.01
2001–02	626,645	4,489	625,617	15,017	2.40	8,633	57.59
2002–03	602,360	4,255	600,888	15,597	2.60	9,144	58.63
2003–04	579,001	3,072	576,728	14,813	2.57	9,811	86.23
2004–05	555,333	3,454	553,902	14,916	2.69	9,755	65.42
2005–06	532,108	2,758	530,981	13,768	2.59	9,505	69.84

SOURCE: Vláda Slovenskej republiky (2008).

As seen in Table 18, nearly one-quarter of children from socially disadvantaged backgrounds, which means Romani children, are retained in first grade. As shown in Table 19, the failure rate for all pupils in the Slovak Republic is steady at approximately 2.5 percent; however, the failure rate for pupils from socially disadvantaged backgrounds is over twenty times higher than the national average.

As children from socially disadvantaged backgrounds are being retained in the early years of the schooling, so too are they being transferred to special schools in the early years. In the 2008/2009 school year, 1,310 pupils were transferred from mainstream primary schools to special schools for pupils with intellectual disabilities, 943 of them in grades one through four (Hapalová and Daniel 2009, 9). Friedman and colleagues (2009, 55) report that 85.9 percent of these transfers occur in the first three years.

In 2004, Tomatová compiled data from the 2000 Slovak census and the Institute of Information and Prognosis of Schooling, and determined the number of pupils in special basic schools and special classes for pupils with intellectual disabilities. Friedman and colleagues (2009), through field research, estimated the number of Romani pupils enrolled in these schools and classes. The numbers of pupils in special primary schools have decreased, while the numbers of pupils in special classes have increased. Romani pupils remain overrepresented in both settings.

TABLE 20. Enrollment in special primary schools and special classes for children with intellectual disabilities

Number of pupils in special primary schools	Number of pupils in special classes for children with intellectual disabilities	Total
17,177	2,758	19,935

SOURCE: Tomatová (2004, 99).

TABLE 21. Enrollment of Roma in special education

	Number of pupils enrolled	Number of Romani pupils	Percent of Romani pupils
Special primary schools	13,807	8,200	59.4
Special classes	5,590	4,795	85.8
Special secondary schools	5,114	1,794	35.0
Totals	24,511	14,789	60.3

SOURCE: Friedman et al. (2009, 8).

COUNTRY-SPECIFIC RECOMMENDATIONS

– *Detailed and specific referral protocols:* The Slovak government should incorporate into its legislation detailed protocols for the assessment and re-assessment of pupils, specifying a procedure to be followed when recommending a child for special education, including a timeline between initial referral and assessment, dissemination of results to all stakeholders, and mandates for periodic (yearly) reassessment. The explicit roles of all stakeholders, including psychologists and special pedagogues, should be defined.

– *Distinguishing between disability and disadvantage:* The Slovak government should make a clear legal distinction between pupils who have disabilities and pupils who come from socially disadvantaged backgrounds. As it currently stands, social disadvantage is placed in the category of disability, and thus, these pupils are more likely to be transferred to special classes or schools, as their schooling is in part under the purview of legislation pertaining to special education.

– *Romani teacher assistants:* Teacher assistants who are funded under Decree 649/2008 should be present and act as both interpreters and cultural brokers when children from Romani communities undergo any sort of testing, including school entry assessments.

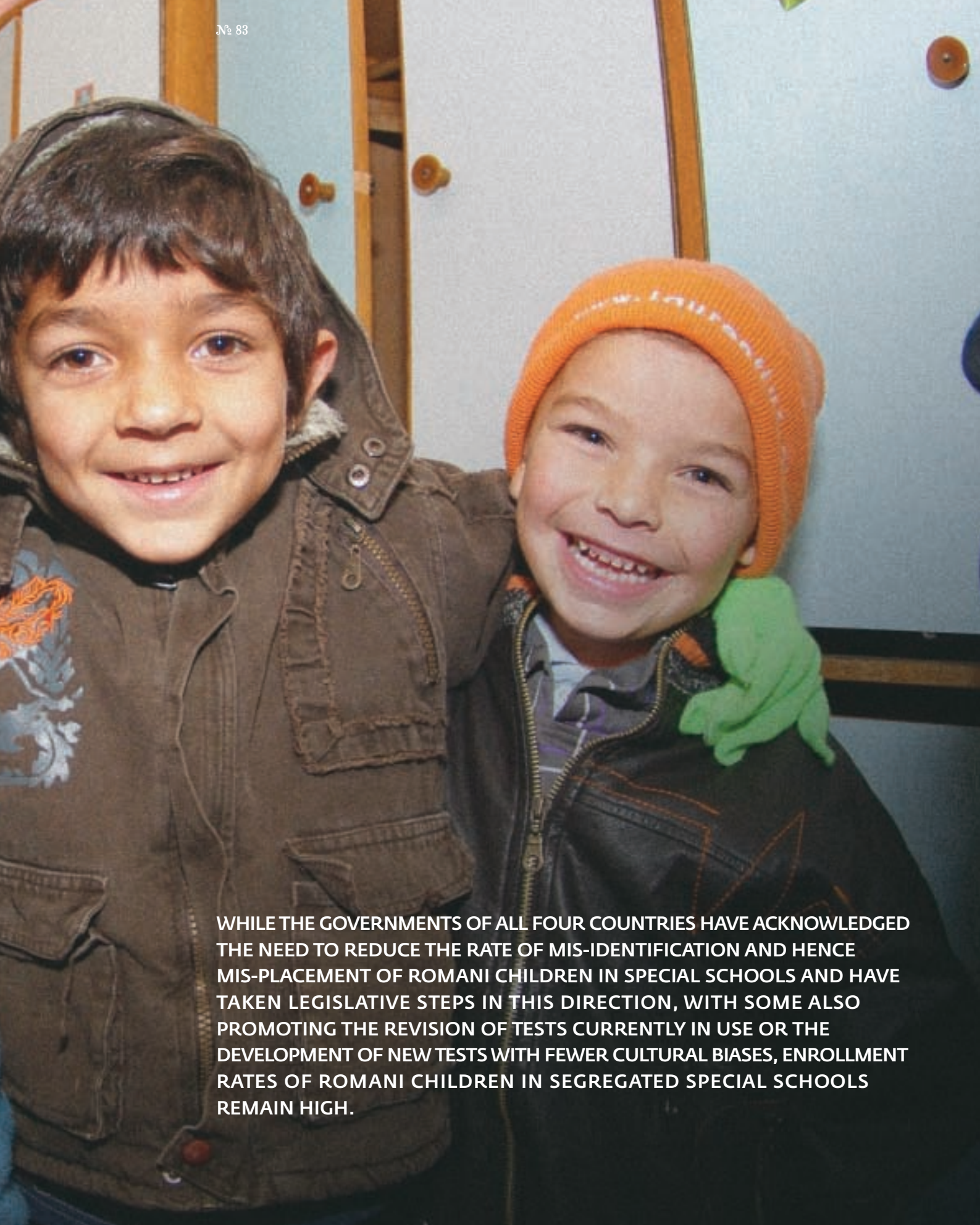
– *Reassessment:* All pupils in special schools and classrooms at present should be re-assessed using the RR Screening instrument. Those pupils found not to have an intellectual disability should be immediately transferred to a standard classroom and should be provided intensive and appropriate supports to assist in their reintegration.

– *Special kindergartens:* Special kindergartens should be abolished, with all kindergartens integrated. Required special education services provided in the mainstream with an eye to facilitating increased opportunities for the cognitive development of all children.

– *Pre-primary education:* Kindergarten (or the last year or pre-primary education) should be made the first year of free, compulsory schooling.

– *Reorganization of the system of advising centers:* The system of pedagogical-psychological and special pedagogical advising centers should be decentralized in such a way as to provide services and co-teachers, counselors, and expert consultants based in mainstream schools. Services should be provided to any child needing assistance, and the role of special pedagogues should be redesigned to emphasize making mainstream schools ready to accept and appropriately instruct children with disabilities.


BUFFALO
SABRES
Team



WHILE THE GOVERNMENTS OF ALL FOUR COUNTRIES HAVE ACKNOWLEDGED THE NEED TO REDUCE THE RATE OF MIS-IDENTIFICATION AND HENCE MIS-PLACEMENT OF ROMANI CHILDREN IN SPECIAL SCHOOLS AND HAVE TAKEN LEGISLATIVE STEPS IN THIS DIRECTION, WITH SOME ALSO PROMOTING THE REVISION OF TESTS CURRENTLY IN USE OR THE DEVELOPMENT OF NEW TESTS WITH FEWER CULTURAL BIASES, ENROLLMENT RATES OF ROMANI CHILDREN IN SEGREGATED SPECIAL SCHOOLS REMAIN HIGH.

GOOD PRACTICE AND PROGRESS

Internationally there exists tension between the purposes of initial assessment: (1) the diagnosis to recognize a child as having special educational needs that requires additional resources to support their schooling, and (2) the formative use of recognizing the strengths and weaknesses a child has in order to inform instructional strategies or the construction of an Individualized Education Plan (IEP), to facilitate including the child in the mainstream (Watkins 2007, 22). The determination of special educational needs should not necessarily determine where a child is placed, for example, in a special education classroom or school. However, it often happens that if a child is determined to have special educational needs, the child is streamed to a special education setting instead of being educated in a mainstream setting. While almost all countries use data for the first purpose, this chapter presents models of pre- and primary education in Finland, France, Italy, New Zealand, and the United States that use data in the latter context. While these countries can be said to have serious issues with their own systems of special education, for example, over-identification of ethnic or linguistic minority students and segregation or exclusion of some students, these issues are not reviewed in this report, which focuses on the legislation and assessment policies of these countries in a formative context. Also presented in this chapter are Bosnia and Herzegovina and Montenegro, both of which have taken significant steps in recent years toward using assessment for integrating rather than segregating children.

FINLAND

Unlike many countries that include specific disability categories in their education law, there is no categorization of disability in Finnish education law. Instead, special educational services are provided, "alongside other teaching," to any pupil who has "moderate learning or adjustment difficulties" (Basic Education Act, 628/1998, §17.1). Only if a pupil has a disability, illness, severe developmental/intellectual disability, or a psychiatric disorder can the pupil be transferred to special education. Moreover, the pupil must be educated to the greatest extent possible with non-disabled peers and only segregated as a last resort, usually in part-time segregated classes within mainstream schools.

There are only eight segregated schools in Finland intended for children with visual, hearing, or significant physical disabilities. Special education teachers are assigned to classrooms where there are pupils who are entitled to receive special education services in order to: (1) work with the children with special education needs, (2) serve as co-teachers in the general education classroom and work with all children, including those with special educational needs, and (3) provide consulting services on special education to other professionals and parents (Takala and

Aunio 2005, 48). Additionally, any pupil who has fallen behind or needs special support is entitled to remedial teaching (§16).

Preschool in Finland is not compulsory, but 96 percent of children attend. The preschool curriculum consists not of different subjects, but of play and exploration that develop children's learning abilities. Almost all children complete compulsory schooling (99.7 percent), with a less than 0.5 percent dropout rate (Järvinen 2007, 4; Halinen and Järvinen 2008, 79). Children are not tracked in their schooling, as classrooms are heterogeneous, and all pupils follow the same national core curriculum for the period of compulsory schooling, and decide thereafter which secondary path they wish to take.

Assessment in Finland is considered to be formative, based on a pupil's educational goals and in support of the learning process (Järvinen 2007, 10). In preschool and in the first year(s) of compulsory schooling, if a teacher or parent becomes aware of a pupil's need for support in areas of physical, cognitive, emotional, or social development, the child is assessed to identify opportunities to (1) make decisions about how to guide the pupil to develop skills, (2) determine appropriate supports, and (3) gather an overall picture of the child, including his strengths and interests. Every school in Finland has a "student welfare group" comprised of teachers and health care staff and chaired by the school headmaster. This group, which works in close cooperation with parents, addresses concerns expressed by teachers and families to develop and monitor the effectiveness of supports for learning (Halinen and Järvinen 2008, 91). Supports are implemented immediately as necessary after academic or social difficulties or other issues become apparent; expert opinions (for example, from a school psychologist) are sought only if the supports implemented prove ineffective, and only for the purpose of facilitating assessment for making decisions on other needed measures such as the development of an individualized education plan or determining the types of special education supports a pupil might need (National Research and Development Centre for Welfare and Health [STAKES] 2003, 31).

FRANCE

As in Finland, French legislation concerning special education does not contain categories of disabilities; the law simply states that "public education provides academic, vocational, or higher education for children, adolescents, and adults with disabilities or health impairments … for enrollment in the mainstream" (Code of Education, Title I, Article L112-1). While there are segregated special schools and special classes within mainstream schools, the presumption of the law is inclusion. The Education Code also entitles children, with the specific provision of inviting family participation, to have their skills and needs assessed by a multidisciplinary team in order to provide a suitable education, with appropriate adjustments/accommodations in mainstream schools. The law also allows for reassessment of the pupil when the school and family deem useful (Title I, Article L112-2/2-1).

Student assessment, which can be initiated before compulsory schooling begins, is not primarily a mechanism for eligibility. Instead, it is considered to be a needs analysis in order to develop a personalized education plan, inform instructional decisions for the child, and guide the development and use of adaptations and appropriate materials and activities. Children are provided services and supports throughout the assessment period. France has instituted a Network of Specialized Aid to Struggling Pupils (RASED), comprised of special education teachers, school psychologists, and other service providers. The purpose of RASED is to prevent and/or remediate learning difficulties. The members of RASED act as consultants and specialists who provide specific intervention services at any stage of primary schooling, typically in mainstream classes.

ITALY

The Italian constitution quite simply states that "Schools shall be open to everyone" (Article 34.1). Italy is generally thought to be the most inclusive educational system in the world. In 1971, with Act Number 118, Italy mandated the "right of compulsory education of pupils with disabilities in standard classes of public schools"; Italian law defines a person with a disability as "a person with a stabilized or progressive physical, mental or sensorial impairment, causing such learning, relationship and working integration difficulties that give rise to social disadvantage or exclusion" (Act No. 104/92, Article 3.1). In 1992, Act Number 104 "abolished special schools and special classes." Class size in Italy is limited to twenty pupils, with a maximum of two pupils with disabilities per class. Supports and services must be integrated in the classroom, and classes which include pupils with disabilities usually have a special education co-teacher. There are very few segregated schools in Italy: seven for pupils who are deaf and two for pupils who are blind.

Children undergo assessment when a disabling condition is suspected. The purpose of the assessment is not to place children (nearly all of whom are included in mainstream classrooms), but rather to justify the number of support personnel teaching hours in the classroom, as is the child's right under the law. This process, known as "statementing" (*certificazione di handicap*) does not lead to segregation, but becomes a way that individuals with disabilities receive services for as long as necessary. The statement has two parts: a functional diagnosis, completed by a multidisciplinary team of physicians, therapists, and psychologists that should describe the disabling condition of the child and her strengths/potentials; and a profile, completed by teachers and related services professionals, describing diagnostic elements related to the child's academic strengths and weaknesses. A Personalized Education Plan (PEI) is then drawn up to guide the pupil's instruction and to direct what services are provided for the pupil in the mainstream classroom to meet the pupil's educational needs and to develop the pupil's strengths and potential.

NEW ZEALAND

There are no disability categories specified in New Zealand education law, and "people who have special educational needs (whether because of disability or otherwise) have the same rights to enroll and receive education at State schools as people who do not" (Education Act 1989 No. 80, Part 1, Article 8.1). If a child's disabling condition is not identified at birth or through periodic pediatric screenings and difficulties arise in the first year(s) of school, the class teacher refers the child for assessment after securing the consent of the child's family. The Ministry of Education affirms that "New Zealand special education has taken a deliberately non-categorical approach to support for children and young people with special education needs. This means that needs are defined in terms of the support required, rather than by use of diagnostic labels" (New Zealand Ministry of Education, Assessment section, paragraph 6). Assessment is carried out over time, and must be based on multiple modes of assessment, such as observations in different settings, standardized instruments, assessment of the child's learning environment and of how the child learns, and/or a portfolio of the pupil's work. The Ministry also states that assessments must consider the "diversity of belief systems and cultural expectations" of the pupils/families/*whānau* (Māori-language for extended family). The purpose of the assessment is to obtain information to construct a pupil's Individual Education Program (IEP) which sets out goals, objectives, ways that the pupil best engages with the curriculum, and any accommodations and services that are required for the pupil to be successful in the mainstream classroom. The Education Act also allows for interventions to be provided to any school to address school governance or performance concerns or the welfare or educational performance of any pupil, with or without special educational needs (Part 7A.78H).

UNITED KINGDOM (ENGLAND)

The Warnock Report called for a reconceptualization of the idea of "handicap" in British education law, asserting that categories of disability

> focus attention on only a small proportion of all those children who are likely to require some form of special educational provision [and] that the basis for decisions about the type of educational provision that is required should be not a single label "handicapped" but rather a detailed description of special educational need. *We therefore recommend that statutory categorization of handicapped pupils should be abolished* (Warnock 1978, 42).

In addition to introducing the concept of special educational needs, the Warnock Report introduced the concept of integration, or inclusion, of pupils, regardless of their educational needs. Three years after publication of the Warnock Report, disability categories were removed from British education law and have not been returned since. The United Kingdom continues to have one of the lowest rates of segregation of pupils with disabilities in the world.

The United Kingdom Education Act 1996 part V, Chapter 1 §312(1) determines that a child has special educational needs if "he has a learning difficulty which calls for special provisions to be made for him." A learning difficulty is defined as "significantly greater difficulty in learning than the majority of children of his age (2.a). Under the Education Act, schools have a "[d]uty to education children with special educational needs in mainstream schools" (§316). The Code of Practice outlines three steps to meeting pupils' special education needs: (1) "School Action," in which the school meets the needs of the pupils with its own resources; (2) "School Action Plus," whereby the school has some outside help to meet needs, for example, a school psychologist; and (3) "Assessment and Statement," where a school conducts an official assessment of a pupil and produces a special educational needs statement that outlines the provision of special educational needs and supports that the school is not able to provide with its own resources. This assessment process is a lengthy and complex one, but very few children in the UK need to go through this process (Directgov 2010). Mainstreaming is still the presumptive placement when a pupil has a statement, and, based on concerns about exclusion and statementing, mainstream schools increasingly make services provisions available to any pupil who exhibits special educational needs, regardless of whether the pupil has a special educational needs statement (CSIE 2009, 1).

UNITED STATES

The United States as a whole does not require school readiness testing to enter school, although some states, such as Ohio, require such testing in some form. On the other hand, almost all states require a vaccination/health clearance to commence schooling. The Individuals with Disabilities Improvement Act (IDEIA, 20 U.S.C. §1400 et seq.) includes a provision on "Child Find," whereby states are compelled to identify, locate, evaluate, develop, and implement methods of service delivery to all children with disabilities who are in need of special education and related services. This provision arises from the genesis of the law in response to extensive lobbying by parents of children with disabilities; before 1975, when the law was passed, millions of children with disabilities were denied entry to schools. Child Find usually occurs through medical check-ups and early childhood education monitoring and screenings.

Typically, if a child has a low-incidence disability (for example, deafness, blindness, deafblindess, multiple disabilities, significant language or speech impairment, or genetic conditions such as Trisomy 21, otherwise known as Down syndrome), special education services are provided from well before school age. However, if a child has a high-incidence disability (these disabilities are socially constructed, without a medical basis: specific learning disability, emotional disability, or mild intellectual disability, diagnosed in a higher percentage of the population), this might not become apparent until the child starts school. In this case, there is a category in the law, "developmental delay," whereby if a child between the ages of three and nine is determined to be experiencing delays in physical, cognitive, communication, social/emotional, or adaptive development, the child is eligible for special education services under that label. In this way, schools can avoid labeling a child with a learning,

intellectual, or emotional disability that will follow and stigmatize him throughout his school career. If the child shows improvement in academic and social domains, she is then released from special education; however, if by the age of nine, usually grade three, the child is still exhibiting delays, the child will then be evaluated for a disability under a specific special education category.

Even with these measures that are meant to avoid labeling and stigmatizing pupils, there is a history of the overrepresentation of African American and Native American pupils in special education, especially in the categories of intellectual disability and emotional disturbance, in schools in the United States. In 1984, the *Larry P.* v. *Riles* case in the U.S. Court of Appeals determined that the overrepresentation of minority pupils in California was linked directly to bias in the IQ tests that were used to diagnose and place them in special education. Subsequently the law mandated that any assessments used to diagnose a disabling condition cannot be discriminatory on a racial or cultural basis and must be administered in the child's home language. In addition, a child cannot be diagnosed with a disability unless he or she is evaluated using a variety of assessment tools and strategies, and no single assessment can be the sole criterion for determination of disability status (20 U.S.C. §1400 et seq., §614(b)(2)).

In addition, a child cannot be determined to have a disability if the child has had "(A) lack of appropriate instruction in reading, including in the essential components of reading instruction [...] (B) lack of instruction in math; or (C) limited English proficiency" (20 U.S.C. §1400 et seq., §614(b)(5)). One of the ways that this guideline is being addressed is through Response to Intervention (RtI), a framework that integrates assessment and instructional interventions to raise academic achievement for all pupils and for the specific purposes of preventing academic failure and unnecessary referrals for evaluation for special education, as well as to address the overrepresentation of minority pupils in special education. Assessment serves three purposes in this framework: screening, progress monitoring, and diagnostic, corresponding to the three tiers of RtI.

Tier 1 occurs in the general education classroom, with the general education teacher, where all pupils engage in the general education curriculum and all pupils are screened three times per year, using quick baseline assessments to gather benchmark data on skills, usually reading and mathematics, that indicates if a child is working on grade level. The assessment results are used to plan instruction and any interventions/accommodations that might need to be implemented to assist the child in improving her skills. A child moves to Tier 2 if it is determined that the child is still struggling after interventions implemented by the general education teacher. In this tier, pupils usually work in small groups for a small part of the school day, still engaging in the general education curriculum, but with more targeted and scientifically-based intervention strategies provided by specially trained instructors to help the pupils to improve their skills. Pupils' progress is monitored in this tier using daily assessments and data graphing, which informs instructional/intervention decisions. Interventions at this tier usually sufficiently increase pupil performance on identified skills, and while the pupil might continue to need monitoring, interventions,

or assistance in the general education classroom, no other kinds of action are required. Children who might need more intensive interventions move to Tier 3. In the third tier, which is not "special education," children are provided individualized instruction in smaller groups for a longer portion of the day that is tailored to their specific needs in a particular skill. Pupils often move between tiers, according to their needs at various times. However, it is only after it has been documented that a child has not been successful in the third tier can a child be referred for evaluation for special education services for a specific learning disability.

CHANGES IN PROGRESS

Bosnia and Herzegovina

The government of Bosnia and Herzegovina is highly decentralized and fragmented, with the state's two entities (Republika Srpska and the Federation of Bosnia and Herzegovina) divided into twelve administrative units: the ten cantons of the Federation of Bosnia and Herzegovina, the Republika Srpska, and the Brčko District. Each of these has its own government, and the cantons and Republika Srpska are further divided into autonomous municipalities. There is very little inter-canton administrative communication or legislative unity among the units. In 2003, the government of Bosnia and Herzegovina passed a Framework Law on Primary and Secondary Education, but the cantons and municipalities are responsible for implementing the provisions of the law. Article 3 of the Framework Law on Primary and Secondary Education in Bosnia and Herzegovina ensures "optimum development for every person, including those with special needs," and Article 19 paragraph 1 presumes inclusion, as "[c]hildren and youth with special needs shall be educated in standard schools and according to their individual needs," although this article also allows special facilities when "it is impossible to provide appropriate education in standard schools" (Article 19, paragraph 2). However, parents must give their consent before children are placed in special educational settings, and such placement should happen only after all options in mainstream settings have been exhausted and then only with the wishes of the parents/legal guardians (Article 23; Tsokova and Becirevic 2009).

Bosnia and Herzegovina has the lowest rate of preschool attendance in Europe, at only six percent (Fetahagić et al. 2007, 95). In an effort to increase this rate, the government passed the Framework Law on Preschool Education in 2007. One year of preschool is now compulsory, but only four out of twelve administrative units are in the process of harmonizing their legislation in conformity with this requirement (United Nations Children's Fund Executive Board 2009). Kindergartens are meant to be fully inclusive, with the Framework Law on Preschool Care and Education prohibiting discrimination on any grounds in Article 6. The integration of children with special educational needs is provided for in Article 12, along with the inclusion of such children in preschool according to individual programs adjusted to their abilities and needs.

Due to the fragmented governance structure and the lack of a unified database for educational statistics in Bosnia and Herzegovina, it is difficult to provide statistical information about special education placement. Despite

legislative provisions for inclusion, however, less than one percent of pupils with special educational needs were included in standard primary school classrooms during the 2003/2004 school year, with the remaining pupils attending special classes, special schools, or placed in residential institutions (Fetahagić et al. 2007, 96). No official data exist on the number of Romani children enrolled in special education, but Bešić and Vantić-Tanjić assert that until recently, Romani children made up the majority of those pupils enrolled in special schools (2009, 22). Different studies provide estimates of Romani participation in primary schooling at between only 10 and 20 percent, with the 80 to 90 percent of Romani children not attending primary school due in large part to poverty and discrimination (Government of the Federation of Bosnia and Herzegovina 2004; Fetahagić et al. 2007, 96; Hadžić, Mešanović, and Smajić 2007, 41; Bešić and Vantić-Tanjić 2009, 23).

In the Federation of Bosnia and Herzegovina, municipal-level Commissions for Assessment of Capacities and Determination of Support for Children and Youth with Special Needs conduct assessments of academic and social difficulties of children upon the request of parents or health or school officials. Parents have the right to appeal the findings of the Commissions (Government of the Federation of Bosnia and Herzegovina 2004). Approximately eight percent of the primary school-aged population are identified with special educational needs, similar to the Czech Republic and Slovakia (Hadžić, Mešanović, and Smajić 2007, 56). On the other hand, tests of school readiness administered to all children are increasingly used to assess individual needs rather than as a bridge to assessment for special education placement (Bešić and Vantić-Tanjić 2009, 21). For example, schools in the Zenica-Doboj Canton have been instructed not to administer school readiness tests, but instead to fill out a form providing information about social and emotional aspect of a child based on interviews with the child and parents (Hopić and Čehajić 2009, 23?4). Children found to be in need of special educational services were previously streamed into segregated settings, but children diagnosed with mild/moderate intellectual disabilities—primarily Romani children—are increasingly integrated into standard classes in mainstream primary schools (Ministry of Civil Affairs of Bosnia and Herzegovina 2008; Bešić and Vantić-Tanjić 2009, 22; Tsokova and Becirevic 2009). One of the ways that this integration is accomplished is through Individual Education Plans that are developed with an expert team of special educators and related services professionals who outline the specific adaptations, accommodations, activities, and methods that should be implemented by the regular classroom teacher.

In the Sarajevo and Herzegovina-Neretva Cantons and in the Republika Srpska, these expert teams of special educational support professionals are known as "mobile teams," as they visit the standard schools and provide support to pupils or consulting services to teachers in order that the pupil remains in an inclusive setting. In the Canton of Sarajevo, the mobile team consists of 50 special education professionals who work in 56 schools and have served over 200 children (Hopić and Čehajić 2009, 31/2). The Bosnia and Herzegovina government has expressed a commitment to the professional development of teachers to assist in the development of individualized curricula, teaching in heterogeneous groups, and working with mobile teams to implement individualized programs for pupils with special educational needs (Ministry of Civil Affairs of Bosnia and Herzegovina 2008, 26).

Teachers report high satisfaction with their professional development activities that focus on including pupils with special educational needs (United Nations Children's Fund Executive Board 2009).

Montenegro

Like Bosnia and Herzegovina, Montenegro has recently introduced a mandatory, fully inclusive preschool year, with the hope that this will serve to better prepare children for first grade. Children are required to take a test of school readiness, but these are not widely used to stream children into special schools (Petričević, Sejdović, and Zeković 2009). Article 9 of the Law on Elementary Education assures the rights of children with disabilities to acquire basic education in standard classes, but it is the Commission for Orientation of Children with Special Needs that determines if the child can be included in standard classes and what methods will be used for that inclusion. Like other commissions in the region, the Commission for Orientation is a multidisciplinary team that consists of a physician, psychologist, special pedagogue, social worker, but Montenegrin Commissions also include "the parent and teacher, respectively educator of the child that is being oriented" (Law on Education of Children with Special Needs, Article 19). Inclusion is affirmed throughout Montenegro's education legislation, with provisions for inclusion in elementary and special education law and regulations. Additionally, once a child has been categorized with a disability by the Commission for Orientation, the Law on Education of Children with Special Needs mandates reassessment of children to "check the accuracy of the orientation" (Article 21). Parents also have the right to appeal against the Commission's decision.

While there are still medicalized categories by which children are diagnosed, the work of Commissions for Orientation are increasingly taking a socio-educational approach to assessment, moving away from categorizing for placement to special schools and towards assessment for planning instructional adaptations in the standard classroom (Crighton and Kowar 2007, 63). In 2007, two percent of children attending primary school were identified as having special educational needs (1,591 children), and of those, 93 percent were taught in standard classrooms, with the remaining pupils in special classes within the standard school (Government of Montenegro 2007). Of the 1,591 children with special needs who attended primary school, 551 were Romani, and only six of these children attended special classes (Petričević, Sejdović, and Zeković 2009). Montenegro has five special education institutions: one for children with speech and hearing impairments, one special vocational school, one for children with behavioral difficulties, one for children with visual and physical impairments, and one for children with significant cognitive disabilities. Of the 443 children who attend these schools, seven are children from Romani communities (Petričević, Sejdović, and Zeković 2009). However, Petričević, Sejdović, and Zeković (2009, 25) also report that there are very low enrollment rates, high dropout rates, and a 20 percent rate of segregation of Romani pupils in schools.

Mobile teams constitute a mechanism through which inclusive practice is supported. Also known as "mobile services," mobile teams are established by Article 17 of the Law on Special Education. These teams, composed of

psychologists, speech therapists, special pedagogues, and other trained staff, provide services to pupils and consult with standard teachers in standard schools. In this way, the services follow the child, such that the child does not have to be placed in a special school in order to receive special educational services. These services are outlined in individual education plans developed by the mobile teams and the standard teachers.

THE DETERMINATION OF SPECIAL EDUCATIONAL NEEDS SHOULD NOT NECESSARILY DETERMINE WHERE A CHILD IS PLACED, FOR EXAMPLE, IN A SPECIAL EDUCATION CLASSROOM OR SCHOOL. HOWEVER, IT OFTEN HAPPENS THAT IF A CHILD IS DETERMINED TO HAVE SPECIAL EDUCATIONAL NEEDS, THE CHILD IS STREAMED TO A SPECIAL EDUCATION SETTING INSTEAD OF BEING EDUCATED IN A MAINSTREAM SETTING.

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

This policy paper has examined some of the ways that Romani children from the Czech Republic, Hungary, Serbia, and the Slovak Republic are systematically denied access to equal educational opportunity through their overrepresentation in special schools for pupils with intellectual disabilities. This happens through the implementation of legal provisions for school readiness and intelligence testing, which stream children from the earliest years into special education, where they remain throughout their school careers. Children are assessed to determine if they are ready to learn, and if they are determined not ready to learn, then they are denied the very thing that will prepare them to learn—access to school. Children are then assessed to determine if they have special educational needs, and if they are determined to have such needs, they might be placed in special schools or special classes in mainstream schools. Placement in special education in turn negatively impacts opportunities for secondary education and participation in the labor market as adults, perpetuating a cycle of poverty and geographic segregation that follows the next generation of children into schools.

The study examined the different uses of readiness and intelligence testing across Europe. In Finland, France, Italy, and the United Kingdom, the emphasis is on developmental, formative assessments, with data from tests used to guide instructional planning in primarily inclusive school settings. In much of Central and Eastern Europe, on the other hand, assessments are medicalized and summative, and data from tests are used largely as instruments to segregate Romani children into special schools. Following an examination of the tests most commonly used to assess intelligence, the policy paper moved to case studies of the various institutions/agents, legal frameworks, and practices relevant to testing and placement decisions in the Czech Republic, Hungary, Serbia, and the Slovak Republic. For each case study, the different tests used to assess school readiness and intelligence were examined, including considerations of norming, testing conditions, and the revisions of extant or development of new instruments. Finally, a review of special school enrollment and labor data for each case study country revealed the extent to which placement in special schools, precipitated by entry testing, affects participation in the workforce.

Despite the fact that Czech, Hungarian, Serbian, and Slovak education legislation contains clauses that prohibit discrimination based on, *inter alia*, ethnicity and ability status and provide for the inclusion of children with disabilities into standard classrooms through individualized education plans, Romani children diagnosed with mild

intellectual disabilities continue to be overwhelmingly placed in segregated special schools, where they are taught a reduced curriculum which severely limits their access to secondary education. While the governments of all four countries have acknowledged the need to reduce the rate of mis-identification and hence mis-placement of Romani children in special schools and have taken legislative steps in this direction, with some also promoting the revision of tests currently in use or the development of new tests with fewer cultural biases, enrollment rates of Romani children in segregated special schools remain high. The recommendations in the next section are therefore offered with an eye to eliminating segregation in special schools and to provide educational opportunities that offer promise for post-school outcomes.

RECOMMENDATIONS

In the Czech Republic, Hungary, Serbia, and the Slovak Republic, as in many other countries of Central and Eastern Europe, the tests of school readiness and intelligence used by the multidisciplinary bodies that diagnose intellectual disability are largely under-normed on Romani populations, making them inappropriate instruments to measure the intelligence of Romani children. In addition, testing conditions are often not culturally relevant and tests are often administered in ways that do not follow testing protocol, with the results of the tests interpreted through the examiners' own cultural biases. Further, intelligence and school entry tests are rooted in the measurement of tasks associated with the child's (or family's) exposure to school. These considerations suggest two possible approaches to eliminating discriminatory testing of Romani children: abolishing entry testing altogether, and using tests as a baseline assessment to provide formative data to be used to plan instruction for all pupils while facilitating school enrollment. Taking into account the current situation in the Czech Republic, Hungary, Serbia, and Slovakia as well as good practice from Central and Eastern Europe and beyond, the recommendations that follow are intended to facilitate and promote the use of assessments for integrating rather than segregating children in order to address their educational needs.

1. *Provide universal access to inclusive preschool education.* All children should have access to free, high-quality, inclusive preschool institutions for a minimum of two years to enable them to make a successful transition to primary education. Children should be provided the necessary materials, meals, and transportation to be able to attend preschool. The last year of preschool education should be universal and compulsory. Children should not be required to undergo an entry test to enroll in preschool and should have any needed academic and social supports provided to them in an inclusive preschool environment. The content and delivery of preschool programs should reflect Romani culture while providing opportunities for anti-discriminatory activities to promote social justice for all children.

2. *Make schools ready for children.* All children should be considered ready for school, even if some children might need increased levels of support to develop their academic and social skills once they are enrolled in school.

Children should not be removed from the classroom in order to be provided necessary services, but should receive support in integrated settings where there are peers who can serve as models for appropriate social and academic school behaviors.

3. *Promote active parental involvement.* Taking into account that the earlier parents engage with their children's future, the more effective such engagement is, parenting support programs should be provided through health services and preschools to equip parents with the information and experiences required to navigate their children's educational paths. In addition to and parallel to any changes to the educational system, parents should be provided with accurate and accessible information on school choices and their consequences, with particular emphasis on the longer-term educational and employment prospects for children entering special education. As noted below in Recommendations 6, 8, and 11, parents should also be included in processes related to assessment and in generating individualized education plans for their children.

4. *Discontinue standardized assessment until new assessment regimes are in place.* Taking into account the documented tendency of existing assessment regimes in Central and Eastern Europe to misclassify Romani children as mentally disabled, these regimes should be replaced with new systems compatible with the recommendations below. As a transitional strategy, all testing should be abolished in the region until the new systems are piloted, evaluated, and put into place.

5. *Ensure that assessment does not delay school entry.* Taking into account that children continue to develop their physical, social, and cognitive skills throughout childhood, standardized psychological testing should not be used as an eliminatory instrument to delay entry to school. Instead, assessments should be used to identify children's strengths and weaknesses to plan instruction accordingly. Diagnostic stays in special schools in the first years of primary education should be eliminated.

6. *Conduct assessments using multiple tools.* Data for baseline assessment should be collected using multiple modes, including but not necessarily limited to interviews with children, parents/guardians and teachers; observations during formal assessments, in the classroom, in the home and during leisure time; and informal assessments based on samples of school work, curriculum-based tests and anecdotal records; as well as standardized tests.

7. *Use baseline assessment to inform instruction.* Rather than using assessment instruments for the purpose of streaming children into special education, baseline data should be gathered in order to identify individual strengths and weaknesses to be addressed in an inclusive school and classroom environment, as well as to help teachers to track the effectiveness of their instructional methods. Necessary for tracking the progress and adjusting services to the needs of all pupils is annual or biannual reassessment.

8. *Ensure that assessments are culturally and class-relevant.* Advisory, counseling, and guidance facilities should use new or newly revised assessments in ways that respect the language and culture of all examinees. Integral to ensuring cultural relevance is creating a testing environment in which children can perform at their best. For Romani children, this may include having Romani teacher assistants and/or parents present during assessment.

9. *Restructure teacher education.* All teachers should take courses related to the inclusion of pupils with disabilities, pupils from cultural and linguistic minority communities, and pupils who would be considered gifted. Teachers should learn how to adapt lessons, activities, and materials to the needs of different pupils, and how to work with families and related services professionals in standard classes.

10. *Abolish categories of disability.* Current systems of special education focusing on treatment of individual children on the basis of disability should be replaced with a public health approach emphasizing prevention rather than cure at the population rather than individual level. Interventions should be offered to any pupil who demonstrates a need for additional support and funded on the basis of intensity of needed support without applying categories of disability. Social disadvantage should not be considered a disabling condition and should not be considered grounds for being identified as having special educational needs or for placement in special education.

11. *Individualize education plans.* Individualized education plans should be designed and implemented in order to maximize the participation of children with special educational needs in standard classrooms through appropriate adaptations, accommodations, or modifications to activities, materials, and/or curricula. Such plans should be generated by teaching staff in consultation with other related services professionals and with parents.

12. *Restructure the system of advising centers.* Educational advising centers should be reconceived as centers for professional development that provide further training for teachers and other school professionals on how to integrate pupils with special needs into standard schools and classes. The services offered by such centers should be made available to all pupils through the regular and frequent presence of the centers' employees in standard classrooms. Ongoing changes in this area in Montenegro and in Bosnia and Herzegovina may serve as examples of good practice.

THE OVERREPRESENTATION OF PUPILS FROM CULTURAL AND LINGUISTIC MINORITY COMMUNITIES IN SPECIAL EDUCATION IS ENDEMIC WORLDWIDE, AND CHILDREN FROM ROMANI COMMUNITIES IN CENTRAL AND SOUTH EASTERN EUROPE ARE SUBJECT TO THIS SEGREGATION AND MARGINALIZATION THROUGH THEIR OVERWHELMING PLACEMENT IN SPECIAL EDUCATION SCHOOLS FOR PUPILS WITH MENTAL DISABILITIES.

ANNEX 1: RELIABILITY AND VALIDITY

In using tests to assess intelligence, ability, or school readiness, which can lead to a child's school placement, it is important to understand how the technical concepts in measurement could potentially become fertile ground for discrimination and bias if not attended to with high scrutiny during test administration, interpretation, and scoring. It is also important to know the purposes of tests, as an instrument may be valid for one purpose and not another, and the instrument may have adequate reliability, but may not be sufficient to make critical educational decisions (Shepard 1997, 92), which risk leading to unequal, inferior educational opportunities and poor outcomes for pupils from minority communities (Rock and Stenner 2005, 28).

RELIABILITY

Reliability refers to the consistency of measurement, the degree to which random variations affects the measurement of a trait, characteristic, or quality (Sattler 2008, 109), or the degree to which the scores are free from errors. A test is considered to be reliable if it produces the same, or very nearly the same, results or scores when it is administered on different occasions or if the different items on the test yield consistent results. Reliability has a scale of 0 to 1, with 0 being no reliability, and 1 being perfect reliability. Two ways by which reliability is determined are through testing for internal consistency and through testing and retesting.

Internal consistency

Internal consistency is often determined through the split-half procedure, where one part of the instrument is compared with the other part of the instrument; for example, the odd items are compared with the even items. For the most recent edition of the Wechsler Intelligence Scale for Children, the WISC-IV, the test's split-half internal consistency for the index and full scale scores were between .88 to .97, but the reliability of the subtests were in the .70s and .80s (Williams, Lawrence, and Rolfhus 2003b, 2). The Raven's CPM has internal consistency between .85 and .90 (Raven, Court, and Raven 1990). Internal consistency reliability for the most recent edition of the Stanford-Binet (5^{th}) ranges from .95 to .98 for the composite score, between .90 and .92 for the cognitive area index scores, and between .84 and .89 for the subtests (Stanford-Binet catalogue, n.d.).

Test-retest reliability

Test-retest reliability is derived from scores that individuals obtain on the same test administered on two different occasions. The mean interval between tests in determining the reliability of the WISC-IV was 32 days; the test-retest

reliability for the WISC-IV for the index and full scale scores .86 to .93 (Williams, Lawrence, and Rolfhus 2003, 3). The Raven's CPM has an average test-retest reliability of .90 (Raven et al. 1990), with the lowest reliabilities for the Raven's CPM are found for young children (Sattler 2008, 688).

Confidence intervals

Because there is always a degree of error in a test, it is not possible to determine a child's "true" score. For this reason, test developers calculate confidence intervals, which are a range of scores around the calculated/obtained score that likely includes the child's true score (Sattler 2008, 112). The WISC, Raven's CPM, and Stanford-Binet all have confidence intervals of 95 percent. For the WISC, this means that if a child is tested and the results indicate an IQ of 70, the actual result could be 66–74. In the Serbian norming of the Raven's CPM, a 95 percent confidence interval means that for younger children there could be a 9 point range around the true score; for older children, the point range is 6 (Fajgelj, Bala and Tubić 2007, 300).

Sattler (2008) identifies factors that affect reliability, including, *inter alia*, test length, the homogeneity of items, guessing, and variations in the testing situation. Confidence interval score ranges do not take into account inappropriate testing conditions, shortened test times in which administrators do not follow the manual specifically or score items correctly, and tests administered in linguistically and culturally inappropriate ways. If these were to be considered, then the score range would in all probability be much higher, with the result that test scores would not be considered reliable. Sattler (2008) emphasizes that because scores are used for diagnosis and classification:

> *Individuals who use the test findings need to know that the IQ and other major scores used to make decisions about a child are not perfectly accurate because they inherently contain measurement error*. Consequently, [the examiner] should report confidence intervals associated with the IQ and other similar or total overall scores (112, author's emphasis).

VALIDITY

Validity refers to whether the test measures what it is supposed to measure and the appropriateness of inferences or conclusions that are based on the test scores (Sattler 2008, 117). In order for a test to be valid, it must, among other things, be reliable. However, validity is considered to be more subjective than reliability, and there is no single, universal definition of validity (Sattler 2008, 117). However, there are different types of validity that are generally agreed upon, including content validity, construct validity, and criterion-related validity.

Content validity

Content validity refers to whether the items contained in a test represent the domain(s) being measured. Determination of content validity is subjective and involves a careful examination of the items where the following questions are addressed:

1. Does the test measure the domains it purports to measure?
2. Are the items or questions appropriate?
3. Does the test have sufficient information to cover what it purports to measure?
4. What is the level of mastery of the assessment? (Sattler 2008, 117)

The developers of the WISC-IV assert the content validity of this instrument on the basis of a revision process where extensive literature reviews were conducted and experts consulted to select items that would sample the domains of intellectual functioning the test should measure (Salvia and Ysseldyke 2007, 306). Content validity of the Stanford-Binet, fifth edition, is based on expert reviews of the items and empirical item analysis (Salvia and Ysseldyke 2007, 319).

Construct validity

Construct validity is the degree to which a test measures "a specified psychological construct (that is, an inferred entity) or trait," such as intelligence or nonverbal reasoning (Sattler 2008, 118). A discussion of the ways that construct validity are determined, including factor analysis, is beyond the scope of this paper, but the two components of construct validity are convergent and discriminant validity, that is, scores from one test correlate highly with other tests in different formats that purport to measure the same things (convergent) or they do not correlate highly with other tests of unrelated measures (discriminant). So, a test of intelligence has construct validity if, compared to children who have low scores, children who obtain high scores on the test also have better recall, understandings of concepts, imagination, grades in school, teacher ratings of scholarship, and parental ratings of intelligence (Sattler 2008, 118).

In essence, test developers search for information that is consistent with expectations about the hypothesized "inferred entity," or construct as evidence of that construct, or for evidence that is inconsistent with the hypothesized construct (Cole 1981, 1,071). "Value judgments are basic to test validation" (Cleary et al. 1975, 23).

Criterion-related validity

Criterion-related validity is how well test scores of a particular instrument correlate with another type of criterion, such as other test scores. Just as test developers look for consistency in expectations about a particular construct, test developers look for consistency in expectations about how performance on one test compares with that on other tests. There are two types of criterion-related validity: concurrent and predictive.

Concurrent validity

Concurrent validity is determined through correlations of scores of one instrument with a related instrument, with both instruments being administered at the same time. The WISC-IV bases its concurrent validity on correlations with other Wechsler intelligence scales (Preschool and Primary Scale of Intelligence [WPPSI], Adult Intelligence

Scale [WAIS], Abbreviated Scale of Intelligence [WASI], and Individual Achievement Test [WIAT]), where correlations ranged from .86 to .89. Correlations to other non-Wechsler instruments, such as the Adaptive Behavior Assessment System or the Children's Memory Scale, were low, between -.01 to .72 (Salvia and Ysseldyke 2007, 307). The Stanford-Binet was correlated with the WPPSI, the WISC-III, and the WAIS, with correlations between .82 and .84 (Salvia and Ysseldyke 2007, 319). Sattler (2008) reports that the Raven's CPM has adequate concurrent validity, through correlations between the .50s and .80s with other intelligence tests and the .30s to .60s with achievement tests (688).

Predictive validity

Predictive validity refers to the use of a score to predict a criterion performance level, for example, how well an intelligence test will predict school performance. Salvia and Ysseldyke (2007) find no evidence of predictive validity for the WISC-IV (307). There is some evidence of predictive validity of the fifth edition of the Stanford-Binet. It was compared with the Woodcock Johnson III Tests of Achievement and the Wechsler Individual Achievement Test II; the correlations ranged from .33 to .84 (Kush 2005, 983).

Factors affecting validity

The reliability of a measurement affects its validity; in order for a test to be valid, it must be reliable. A child's test score can be invalidated for reasons such as the child's test-taking skills, fatigue, attention, degree of rapport with the examiner, understanding of wording of the test instructions, speed, language skills, educational opportunities, and familiarity with the testing material (Sattler 2008, 122). Errors in administration also affect the validity of a score (Salvia and Ysseldyke 2007, 155; Sattler 2008, 164). If the test is administered to a child whose ethnicity, race, or language background was not represented or insufficiently represented when the test was standardized, at least some part of the score will be invalid (Salvia and Ysseldyke 2007, 155; Sattler 2008, 163). Hilliard (2004) argues that determining the validity of a test score should also consider context, including variables such as culture and opportunity to learn.

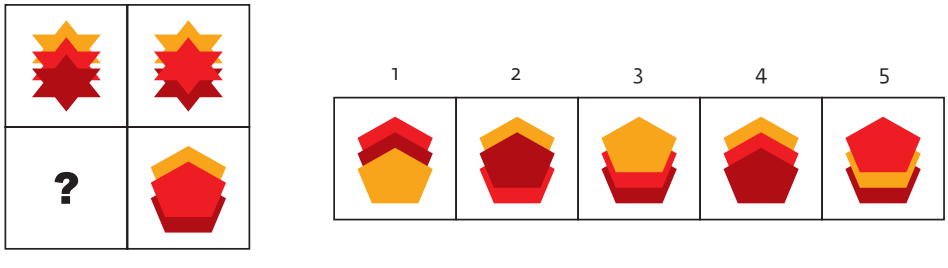
Instrument validity and educational decisions

Salvia and Ysseldyke (2007) conclude that the WISC-IV has limited validity and limited usefulness when making educational decisions (307). Sattler (2008) cautions that the Raven's CPM measures intelligence based on figural reasoning alone, and will not provide a valid measurement of cognitive ability for individuals who have difficulty with figural reasoning, suggesting that the assessment be supplemented with a vocabulary test (688). However, even if a test is valid, the resulting decisions made on the basis of a score (for example, placement in a special school or special class) may be biased or discriminatory.

ANNEX 2: COMPONENTS OF THE WISC-IV

The following descriptions of the components of the WISC are from Sattler (2008) and the *WISC-IV Technical Report #1* by Williams, Weiss, and Rolfhus (2003). The Verbal Comprehension Index (VCI) is made up of three subtests: Similarities, Comprehension, and Vocabulary. The domains assessed in the VCI are verbal conceptualization, stored knowledge access, and oral expression, and the child must provide the answer to questions orally. The Perceptual Reasoning Index (PRI) is also comprised of 3 subtests: Matrix Reasoning, Picture Concepts, and Block Design. The domains assessed in the PRI are visual perception, organization, and reasoning with visual, non-verbal material. This index requires visual-motor and fine motor coordination. Figure A1 is a sample item from the Matrix Reasoning subtest, in which a child must determine which option completes the matrix.

FIGURE A1. Sample Matrix Reasoning Subtest Item



SOURCE: Williams, Weiss, and Rolfus (2003a, 4).

Figure A2 is a sample item from the Picture Concepts subtest, where a child must choose one picture from each row that go together (for example, "Pick one here that goes with one here. Why do they go together?")

FIGURE A2. Sample Picture Concepts Subtest Item

SOURCE: Williams, Weiss, and Rolfus (2003a, 4).

The Working Memory Index (WMI) contains two subtests: Letter-Number Sequencing and Digit Span. This index requires that children respond orally to sequences presented orally. Figure A3 is a letter-number sequencing sample item from the WMI; this subtest contains 10 items of three trials each in which the child is told a series of numbers and letters and is asked, "Tell me the numbers first, in order, starting with the lowest number; then tell me the letters in alphabetical order."

FIGURE A3. Sample Letter-Numbering Sequencing Subtest Item

Item	Trial	Correct Response	
1.	T-4-L-5-Z-2-H	2-4-5-H-L-T-Z	H-L-T-Z-2-4-5
2.	6-R-9-J-1-S-5	1-5-6-9-J-R-S	J-R-S-1-5-6-9
3.	M-1-K-5-R-2-H	1-2-5-H-K-M-R	H-K-M-R-1-2-5

SOURCE: Williams, Weiss, and Rolfus (2003a, 5).

NOTE: Figures A1, A2, and A3 are from the *Wechsler Intelligence Scale for Children, Fourth Edition (WISC-IV)*. Copyright © 2003 NCS Pearson, Inc. Reproduced with permission. All rights reserved. "*Wechsler Intelligence Scale for Children*" and "*WISC*" are trademarks, in the US and/or other countries, of Pearson Education, Inc. or its affiliate(s).

Finally, the Processing Speed Index (PSI) consists of two subtests: Coding and Symbol Search. The skills assessed in this domain are visual perception, organization, visual scanning and multiple motor responses. This domain requires that children attend and sustain effort for two minutes while manipulating visual materials quickly. In the Coding subtest the child must copy the symbols that are paired with the geometric shape, drawing each symbol (for example, two lines in each circle) in its corresponding shape within a time limit. Figure A4 shows the key (top row) and the shapes in which the child must copy the vertical or horizontal line(s) and circles.

FIGURE A4. Sample Coding Subtest Item

Coding (59 items in Coding A and 119 items in Coding B)

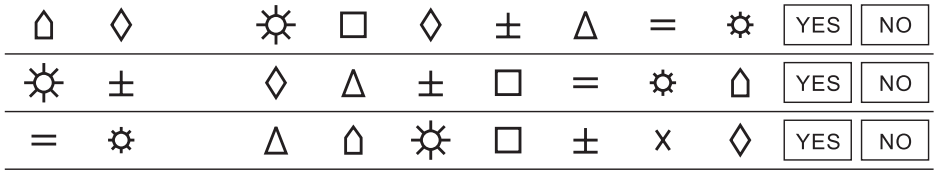
The task is to copy symbols from a key (see below).

1	2	3	4	5	6
X	0	=	L	/	V

2	4	1	5	6	3	8	2	1	6	4	3

Symbol Search (45 items in Symbol Search A and 60 items in Symbol Search B)

The task is to decide whether a stimulus figure (a symbol) appears in an array (see below).



NOTE: The items resemble those that appear on the WISC-IV but are not actually from the test.
SOURCE: Sattler (2008, 269) Reprinted with permission.

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For Romani children in Central and south Eastern Europe, a disability label generally serves to segregate them and provide them with an inferior education under the law through streaming into special education on the basis of testing prior to or in the first years of primary education. As is true throughout the region, Roma are disproportionately present in special education in the case study countries, accounting for a majority of pupils in practical schools in the Czech Republic; between 20 and 90 percent of children in special education in Hungary; 25–40 percent of pupils in special primary schools and 40 percent of students in special secondary schools in Serbia; and approximately 60 percent of children in special primary and secondary education in Slovakia. Pupils from Romani communities thus tend to have experiences in educational milieus in which teachers have lowered expectations of them, presume them to be academically and socially deficient, and blame them for their failure to succeed in schools. This failure in schools is based almost entirely on Romani children's placement in special education, where reassignment to standard education is rare and there is limited opportunity for secondary education, negatively affecting their later participation in the labor market and entrapment by poverty to complete a vicious circle of special education, school failure, unemployment, and poverty.

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