The Sources of Inequity in the Education System of Serbia and How to Combat Them¹

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The concept of equal opportunity for all students is deeply embedded in \sim the Serbian constitution and in education laws. On that level, there is no doubt that everyone is ensured an opportunity to receive quality education. Many measures in education policy have been created specifically to achieve this objective and make the system fair and inclusive. The Coleman Report was linked to a wave of optimism that certain educational measures would help in achieving these noble goals. This aim is a high priority in education in a democratic country, and due to its importance needs to be re-examined. Thus, the present research examines the equity of students in the Serbian education system, detecting areas on all educational levels that could be (or already are) systemic sources of inequity (e.g., criteria for preschool institution enrolment, the system of student awards, rationalisation of the school network, the concept of entrance exams to secondary school or university, etc.). A number of measures have already been taken in the system specifically to deal with inequity (e.g., the Preschool Preparatory Programme, dropout measures, inclusion, scholarships, etc.). The effects of these measures in particular are analysed in the present work. In addition to an analysis of the systemic sources of inequity in the Serbian education system, the article also makes recommendations for their overcoming.

Keywords: equity, sources of inequity, education system, Serbia

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Viri nepravičnosti v edukacijskem sistemu Srbije in kako se z njimi spopasti

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Koncept enakih možnosti za vse učence je vpisan v srbsko ustavo in za- \sim kone s področja edukacije. Na tej ravni ni nobenega dvoma, da naj bi vsi dobili možnost za kakovostno izobraževanje. Veliko ukrepov v edukacijskih politikah je bilo sprejetih z namenom doseganja tega cilja in tudi z namenom, da bi bil izobraževalni sistem pravičen in vključujoč. Colemanovo poročilo je bilo povezano z optimizmom, da bodo nekateri edukacijski ukrepi pripomogli k doseganju teh plemenitih ciljev. Pravičnost ima tako visoko prioriteto v edukaciji demokratične države in zaradi njegove pomembnosti mora biti ponovno preučen. V tej razpravi tako preučujemo pravično obravnavo vključenih v edukacijski sistem Srbije. To počnemo tako, da odkrivamo mesta na vseh edukacijskih ravneh, ki bi bila lahko (ali so že) sistematični viri nepravičnosti v sistemu (tj. merila za vpis v institucionalizirano predšolsko vzgojo, sistem nagrajevanja učencev, racionalizacija mreže šol, koncept sprejemnih izpitov za vpis v srednje izobraževanje in na fakultete itn.). Z namenom spoprijema z nepravičnostjo je bilo sprejetih že veliko sistemskih ukrepov (npr. predšolski pripravljalni program, ukrepi za tiste, ki ne končajo šolanja, inkluzija, štipendije itn.). Učinke teh ukrepov v prispevku analiziramo. Poleg analize sistemskih virov nepravičnosti v edukacijskem sistemu Srbije prispevek prinaša tudi priporočila za njihovo odpravo.

Ključne besede: pravičnost, viri nepravičnosti, edukacijski sistem, Srbija

Introduction

The education system is expected to play its part in the social aspirations of a country to struggle with social exclusion, and is ultimately intended to improve social cohesion and reduce poverty. Inspired by the Coleman Report (Coleman, Campbell, Hobson, McPartland, Mood, Weinfeld, & York, 1966), a great deal of research has been done, resulting in a wave of optimism that some educational measures could help to reach these noble goals. Everyone should have an opportunity to receive quality education, i.e., groups from disadvantaged starting points must have the chance for a good start in life. If there is no equity in the education system, students, future citizens, could be deprived of numerous opportunities for choice, and therefore fail to achieve their full potential and participate fully in society (Lucas & Beresford, 2010; Maitzegui-Onate & Santibanez-Gruber, 2008; Schleicher, 2009). Across the OECD, for example, nearly one in three adults (30%) have only primary or lower-secondary education, which represents a real disadvantage in terms of employment and life opportunities (Simon, Malgorzata & Beatriz, 2007, p. 12).

If there is no equity in the education system, the loser is not only individuals but also the economy of the country, due to the loss of human capital and the burden of social assistance. The long-term social and financial costs of educational failure are high, in terms of higher costs for health, income support, child welfare and security (Simon, Malgorzata & Beatriz, 2007). Immigration also poses new challenges for fair and inclusive education, affecting the performance of education systems in a number of ways (e.g., foreign language background, low educational level of some immigrant groups). In Serbia, as in other countries that are seriously affected by demographic decline resulting in depopulation and escalating demographic aging,⁴ equity in education has a special significance for the country's development, because the inclusion of all sectors of the population in education contributes to an increase in human resources, which are vital for the development of the country (Ivić, 2014). Identifying sources of loss of human capital in the pre-university period is especially important, because it is in this period that preventive measures to reduce these losses can still be taken.

The equity approach in education research began to emerge in the 1990s and in the beginning of the 21st century. In the literature on the concept of equity, there are many debates as to what 'equity' actually means (Castelli,

⁴ Serbia is among the countries in the world with an older population, the median age being 41.9 years. The population growth rate is -0.46%; the birth rate is 9.13 births/1,000 population, and the mortality rate is 13.71 deaths/1,000 population (2014 estimate). This means that the birth rate is insufficient to ensure simple reproduction of the population (Pešikan, 2016).

Ragazzi & Crescentini, 2012; Espinoza, 2007; Hutmacher, Cochrane & Bottani, 2001). The concept has been interpreted in different ways by various authors. Some authors propose a conception of equity that includes: opportunity - or legally recognised rights; access - to school; treatment - or educational models and measures; and results - or opportunity for success (Castelli, et al., 2012, p. 2246). Others proposes the classification: a) equity as equal opportunities for all; b) equity as equal treatment for all; and c) equity as equal results for all (Castelli, et al., 2012, p. 2246). The documents published by the main international organisations involved in social welfare and education issues (OECD and UNESCO) consider equity to be: a) equity in learning opportunities and education results: supporting the disadvantaged; b) equity in compensatory measures for resources: study support; c) equity in access to education: participation in primary, secondary and tertiary education; and d) equity as inclusion (Castelli, et al., 2012, p. 2249). Demeuse and collaborators propose four basic interpretations of equity that can be applied to education policy and practice (Demeuse, Crahay & Monseur, 2001, p. 70):

- Equity of access or equality of opportunity: Do all individuals (or groups of individuals) have the same chance of progressing to a particular level in the education system?
- Equity in terms of learning environment or equality of means: Do all individuals enjoy equivalent learning conditions?
- Equity in production or equality of achievement (or results): Do students all master, with the same degree of expertise, skills or knowledge designated as goals of the education system?
- Equity in using the results of education: Once they have left the education system, do individuals or groups of individuals have the same chances of using their acquired knowledge and skills in employment and wider community life?

Obviously, in all these proposals, the concept of equity is primarily associated with fairness in the provision of education: ensuring that personal and social circumstances are not an obstacle to achieving educational potential. For the purposes of our analysis, fairness is translated into pragmatic dimensions: equality of treatment for those who start from the same point; the series of compensatory measures directed towards groups at risk of disadvantage (such as ethnic minorities, rural students or economically disadvantaged students); and equal education opportunity, i.e., the series of initiatives designed to ensure that everyone has the same opportunities for success, starting from different conditions and resources.

Sources of inequity in the education system of Serbia

Creating equitable provisions for all students regardless of their diversity (e.g., socioeconomic or cultural background, place of residence, national or ethnic background, gender, language, religion, health) is a high priority in education in a democratic country. Due to its importance, it needs to be re-examined.

The concept of equal opportunity for all students is deeply embedded in the Serbian constitution and in education laws. Serbia established free, universal public primary education in 1958 (in the former Yugoslavia). At this level, there was no doubt that everyone would have access to quality education and would be educated. A range of measures were purposefully initiated to contribute to this objective and make the system fair and inclusive, such as: ensuring a well-developed school network (in 74% of villages with over 100 inhabitants there is at least a lower four-year primary school, (Ivić, 2012, p. 49)); establishing a higher level of education for teachers; the development of early care and a preschool education system; the implementation of supporting measures for the enrolment of students belonging to minority groups (e.g., schools in national minority languages; the education of teachers in their native languages; the translation of textbooks to the languages of the major national minorities; scholarships for students from economically disadvantaged groups; building dormitories for primary and secondary school students from remote areas; and the equal enrolment of girls and boys in school (the gender parity index was, and still is, approximately 0.99).

However, as usual, there is a gap between genuine democratic intentions and the legal acts to ensure their realisation, on the one hand, and what is actually occurring in practice, on the other. Regardless of equity measures, some disparities have remained apparent in the system, such as: low enrolment of minority-group students (Roma and Vlachos in particularly), rural students and students with disabilities; worse conditions in rural schools (a lack of equipment and resources for learning, multi-grade teaching, less qualified teachers, and lower achievement of rural students in comparison with their urban peers, etc.).

After the terrible crises of the 1990s (from hyperinflation to the NATO bombing of the country) and subsequent to entering the transition process, inequality in education increased significantly. Due to political and social crises, the 1990s witnessed a serious deterioration of the education system that had been built over the previous 50 years. Serbian education was greatly affected by the major political changes that occurred in 2000. Due to political instability and the change of government, many radical changes, declarations of intended changes and actual implementation of changes with various political connotations occurred during this period (Ivić & Pešikan, 2012).

In Serbia, there is in fact no comprehensive research on equity in education. Analyses of different aspects of inequity (such as gender, ethnicity, rural/ urban, health status, family socioeconomic status (SES), poverty reduction, social exclusion and the introduction of inclusion in education) provide us with the pieces with which we can reconstruct the overall picture of inequity. However, there is no work that examines these challenges from a meta-position, attempting to recognise and discover the systemic sources of inequities. This is the focus of the present paper. Without this kind of approach it is not possible to create appropriate measures for the mitigation of harmful effects. In the analysis of the results of Serbian students in PISA testing, one part is devoted to the issue of equity (Baucal & Pavlović Babić, 2009; Pavlović Babić & Baucal, 2013), but this analysis has a very limited scope. The authors compare the impact of family SES on the achievement of students in different countries and analyse the variance between schools in Serbia, concluding that the achievement of children from families with low SES is considerably lower than their peers from families with better SES. However, this is a finding of situation, not a deeper analysis of the factors that lead to such differences. In the Strategy for Education Development in Serbia 2020 (2013), the problem is clearly recognised and the main coping mechanisms for overcoming it are offered.

According to documents and data analyses, we can say that the Serbian education system is still faced with the problem of ensuring equity and equality, and that education has been recognised as an important tool in fighting social exclusion and poverty in the country (*First National Report on Social Inclusion and Poverty Reduction in the Republic of Serbia*, 2010). An additional impetus for coping with the problem is Serbia's EU accession. Once candidate status for EU membership has been granted, social inclusion and poverty reduction issues will become a mandatory component in the EU integration policy of the Republic of Serbia (ibid.). Improvement of the system requires careful analysis of the *systemic sources* of inequity, as the basis for the creation of recommendations for to overcome inequity.

Black holes in the system

In the present research, the equity of students in the Serbian education system is examined, detecting the places at all educational levels that could be (or already are) *systemic sources of inequity* in the system. The method involves analyses of documents and statistical data. A list of the main hotspots in the system is provided in the following paragraphs, along with explanations and recommendations for overcoming them.

Criteria for preschool institution enrolment and the distribution of preschool institutions

The system of early childcare and preschool education (ECPE) in Serbia was established in the 1970s. In accordance with socialist values, the state at that time (Yugoslavia) introduced ECPE to assist working parents, especially mothers, to provide care for their children, thereby directly supporting the process of women's emancipation and gender equality. The main criterion for the enrolment of a child in a preschool institution (PI) was that both parents were employed (Pešikan, 2012a). One consequence of this criterion was that, because employed parents were more likely to have a higher level of education attainment and better job opportunities (due to social capital and social connections), children from such families had priority in enrolment in a PI. Due to the fact that childcare in a PI was largely subsidised by the public budget, children from privileged groups were doubly privileged. Even when a new bylaw was passed on the criteria for entry to a PI, giving priority to children from socially marginalised families, in practice this bylaw was often not applied, thus violating the declared rights of children from vulnerable groups. Even today, employment of parents is still the dominant criterion for enrolment of children in a PI (Table 1).

Table 1. Enrolment of children in preschool education according to theemployment status of parents (MoES, 2011)

Employment status of parents	Number of children	Percentage of children		
Both parents work	112,946	61%		
One parent employed	53,323	29%		
Both parents unemployed	11,043	10%		

The index of gender parity is good, with 49% of girls and 52% of boys having attended preschool education programmes (MICS 5, 2014). However, there are big differences regarding the place of residence (rural/urban), health status and ethnicity. In Serbia, almost as a rule, the socioeconomic status of the child's family is inversely proportional to attendance of a PI. The coverage of children from socially vulnerable groups⁵ is considerably lower than the overall coverage. The coverage of rural children aged 3–5 is 14%, and amongst the poorest families the coverage is only 7%, while it is 16% amongst children whose parents have a low level of education (compared with the national average for that school year of 43%, *Living Standard Measures*, 2008). The percentage of children living in Roma settlements aged 36–59 months who are attending an ECPE programme is 5.7%: 7% of girls and 5% of boys (MICS 5, 2014).

The other consequence of the employment of parents being a criterion for the enrolment of a child in a PI is the high concentration of PIs in cities, where enrolment of children in ECPE is the highest. There are significant regional differences in the coverage of children by ECPE, with the enrolment being greater in urban areas (Table 2). In Serbia, 77% of children are enrolled in urban areas. In the region of Central Serbia the enrolment rate is 82%, while in the most highly developed region of the country, Vojvodina, the enrolment of children in rural and urban settlements is somewhat more balanced than in the rest of Serbia: in urban areas, 66.51% of children are enrolled (*Statistički godišnjak za 2010*).

	Number of children	of				% of children enrolled in			
		2008	2007	007 2006 2005 2004 2003 2	2002	urban area			
Serbia	184,066	4.75	9.58	13.80	16.53	21.29	33.43	0.61	77.16
Central Serbia	129,249	4.97	10.02	13.88	16.01	19.45	34.55	0.61	81.68
Vojvodina	54,817	4.21	8.54	13.62	17.75	24.45	30.79	0.63	66.51
Belgrade	50,243	6.71	12.31	16.20	18.32	19.73	25.75	0.98	88.21

Table 2. Enrolment of children in preschool education by year of birth and typeof settlement

The network of preschool institutions is underdeveloped and cannot meet the needs of local communities, families and different categories of children. Furthermore, the geographic distribution of PIs is unfavourable and jeopardises access to preschool education for children from vulnerable groups. There are no systemic data on the distance of the PI from the child's home; however, some analyses indicate that in rural areas this distance is twice as high

⁵ In Serbia, the vulnerable groups are children from the following categories: socioeconomically deprived families; families in which the parents have a low level of education; children with special needs and disabilities; ethnic minority (such as Roma or Vlachos); and children from rural areas.

as in urban areas (urban: 1.1 km, rural: 2.2 km, MICS 4). An analysis of the implementation of the *Preschool Preparatory Programme* indicates that the distance to the PI significantly influences the availability of preschool education to children (Pešikan & Ivić, 2009). Many poor municipalities do not have the financial resources to develop a network of PIs; in many municipalities, the traffic infrastructure does not allow for increased accessibility to PIs; parents are unable to organise or pay for transport of children; and investments in the construction of new PIs, as well as adaptation of other available spaces, are insufficient both on the national and the local levels (a somewhat better situation is evident in Belgrade and Novi Sad).

The main purpose of quality preschool education should not be minding children of working parents, but fostering the early development and learning of children, for the benefit of the individual, his/her family and society. The enrolment of young children (aged 3–6) in preschool education is increasingly becoming the norm (OECD, 2007, p. 46); however, disadvantaged children frequently participate less in early child care and education, despite evidence that they have the greatest need and benefit the most from it (Leseman, 2002; Machin, 2006). The enrolment of children in preschool education in Serbia is deeply unfair, as the least coverage is provided to children from marginalised social groups, who have no quality incentives in their environment and for whom early developmental incentives are essential. Furthermore, this also represents the beginning of the loss of human resources in the education system, which is one of the most serious problems in Serbian society (Ivić, 2014, 2015).

The expansion of the network and capacity of preschool institutions should be adapted to demographic indicators, with the needs and interests of children, parents and local communities being a precondition for increasing coverage and expanding the offer of programmes and services in preschool education. Investments must be made in the construction of new preschool facilities and the reconstruction of existing facilities, as well as the adaptation and use of other available potentials in local communities. Given that some findings indicate that ECPE services are more used by wealthier households (64.1% of children from wealthier households relative to 7.4% of children from poor households, MICS, 2005, p. 185), the structure of beneficiaries should be reviewed and interventions targeted accordingly. The status of private providers also needs to be defined. Diversification of preschool institutions, programmes and services should be encouraged as an opportunity for children in need of empowerment of early development. Directing resources to children and regions with the greatest needs is seen as an important step towards improving equity (OECD, 2007; Pešikan, 2015).

Rationalisation of the school network

As stated above, Serbia has a well-developed school network, which it inherited from the previous state (Federal Republic of Yugoslavia). The existing network of schools and education institutions is an important education resource, but it needs proper mobilisation. Today, however, the network is outdated, as it remains essentially unchanged since being created in the early 1960s, and it no longer corresponds to the demographic, economic, political or social reality in the country (Bogojević et al., 2003). The network of educational institutions at different levels of education is not equally developed (Ivić, 2012). The network of primary schools is well-developed, but it has not been aligned with the many changes that have occurred in recent decades and is in need of optimisation (Bogojević, Ivić & Karapandža, 2003; Ivić, Jankov, Pešikan, & Antić, 2004). There is no school busing in the country. Furthermore, approximately 23% of children are not covered by any transportation due to a lack of public transport or roads, and many of them walk between 4 and 15 kilometres to school (Bogojević, et al., 2003). The general capacities of the secondary school network (general, vocational and art middle schools) are good and developed, but the network is not in line with the needs of particular regions, nor with the plans for the economic development of Serbia. The geographic distribution of these schools is unfair towards students in less developed and rural regions, frequently offering them only a limited range of profiles. As a rule, general high schools and art schools are located in cities (about 50% of municipalities in Serbia have no art school, SEDS, 2013), and are not evenly accessible to all categories of students, particularly those from rural and remote areas.

Due to the need for economic efficiency in education, rationalisation (not optimisation) of the school network was initiated by the Ministry of Education (MoES) (Erić, 2010). Unfortunately, this activity was driven by "fiscal logic" rather than "educational/pedagogical logic" and consisted of merging some classes and increasing student numbers per class to 30 (instead of a maximum of 26), and even 34 in "specific cases" (without specification of the criteria). It also involved closing some small schools without taking into consideration either the characteristics of the school network in Serbia today or the serious implications of these fiscal measures (called rationalisation and optimisation!) for the quality of education in Serbia (Ivić, 2012). It is an example of the clash of economic and pedagogic efficiency in education that violates the students' right to accessible and quality education. In fact, these measures had specious financial effects (see: Ivić, 2012, p. 62–67).

Since 2010, there have been some uncoordinated activities within the MoES on something resembling the optimisation of the network, without involving all of the relevant partners, without prior preparation of local communities for the task, and without their full participation in the process. In fact, the rationalisation of the school network has been based on closing schools that are not cost-effective (Ivić, 2012). However, the short-term economic efficacy achieved by closing schools and reducing classes has had adverse long-term effects both on the even regional development of the country (closing schools in rural and underdeveloped regions automatically leads to the migration of the younger population and the depopulation of these regions) and on children's right to education, i.e., it hinders their access to education. Thus, the rationalisation of the network may lead to additional threats regarding the fairness of education, and could adversely affect its already inadequate pedagogical efficiency. To mention just one telling example of the gap between financial and pedagogical effectiveness: small rural schools with multi-grade teaching are more expensive per capita than urban schools with a great number of students, but the financial benefit achieved by closing them jeopardises both the right to education of vulnerable groups of children and the opportunities for the development of the regions concerned. The priority must be given to pedagogical efficacy and rural development rather than to short-term financial benefits.

Optimisation of the school network is needed, along with a good solution that will contribute to equity of education. It is essential to have a process that respects educational, cultural and wider social rationalities, that guarantees the right to education to all categories of the population, and that is the most economical and rational in the long term. It is impossible to take unified measures throughout the entire school network, because the problems of particular categories of schools are very different. Therefore, optimisation measures must be undertaken according to local characteristics, and not based on the national average. Small rural schools should be preserved wherever possible. Although they depend on the demographic situation of the community in which they are located, they also have an impact on that demographic situation. This concept is supported by the use of extended school activities in rural and underdeveloped areas to allow schools to become multi-functional centres (educational, cultural, administrative, etc.) and agents of development in local rural communities. A flexible network of educational institutions that are readily adaptable to social changes and the different needs of beneficiaries should be established.

The lack of remedial support mechanisms for students from socially underprivileged groups

As we have seen, the school network has not been adapted to the numerous social changes (demographic, industrial, economic, etc.), and this represents one of the sources of inequity in the system, which is further combined with the network's lack of corrective mechanisms. Specific support measures enabling students from vulnerable groups to continue their education are poorly developed: there are no dormitories for primary school students who have to continue their education in a place other than their residence (Ivić, 2012); if primary school students continue their schooling in another place, the problem of too early separation of children from their families arises; the transportation of students has not been adequately regulated (there are no school buses, no state subventions for travel expenses, inadequate public transport, etc.); there is a problem ensuring conditions for practice and work at school (e.g., musical instruments, help with students' homework); and there are no scholarships for students to enable them to undertake schooling and employment at that base. Students in Serbia have only modest possibilities to gain a scholarship.

The MoES used to give scholarships to students according to two criteria: school achievement and the socioeconomic status of the family.6 However, there is only one option when it comes to scholarships, and the availability is insufficient to meet all needs. In the previous state of Yugoslavia, scholarships offered by companies in the local community and region represented very important support for the schooling of students in need. This was also a good route to obtaining a job after graduation (if the student finished studying at the prescribed time). However, due to the transition and the major changes in the country (economic as well as social and the dominant values), as well as the economic crisis, the unemployment rate has increased and many stateowned enterprises have closed, while others are impoverished. The possibility a scholarship being a measure for ensuring the equal education of children from different regions has therefore been drastically reduced, as has the possibility of young people obtaining a job. Poverty is much more prevalent in rural areas than in urban areas (9.8% vs. 4.3%), and regional differences in the degree of development are amongst the highest in Europe (The National Strategy for Economic Development in the RS, 2007). Households with two underage children (without income) have a poverty index that is almost twice the average (12.7% vs. 6.6%), while those with three or more children have a poverty index as high as 30.5% (SEDS, 2013:75). It is obvious that the right to education of students

⁶ See http://www.mpn.gov.rs/prosveta/ucenicki-studenstski-standard/

from socially disadvantaged groups is doubly thwarted: their families are impoverished, many becoming unemployed, and the economy in their region is in a difficult situation, with many companies being closed and workers being dismissed, so there are no possibilities for students to obtain scholarships.

There is a need for diversified sources of support due to the high poverty rate in the country in general, and particularly in rural areas (the gap between rural and urban regions is, unfortunately, increasing) and amongst families with children (*Statistički godišnjak za 2014*). The fact that less than 1% of the students at the Belgrade University come from rural families (Cvejić, 2010) is one of the indicators of both the persistent importance of students' social origin in academic achievement and the inequality in the system. It is clear that the equity issue remains very relevant and unresolved in the Serbian higher education system. However, the current government policies for allocating resources to universities do not appear to take this into account. In fact, the evaluation criteria adopted focus solely on issues of quality, which, "if equity fails to be taken into consideration, risk generating consequences which could be not only in contrast with equity but also dubious in terms of authentic merit and quality" (Benadusi, 2009, p. 19).

Identifying and providing systematic help for those who fall behind in school is one of the recommendations for combating inequity in the system. Remedial teaching (additional classes for poor students) is one of the measures created for poor students who are not in line with others for various reasons (lack of previous knowledge, learning difficulties, etc.). Remedial teaching exists in the curriculum and school documentation, but is unfortunately seldom organised in school practice. Thus, the systemic measures to support poor children in education are still lacking.

"Winner takes it all": Cumulating of the benefits

It is well known that socioeconomic background – including parents' education and income, racial, ethnic or immigrant background, and other individual factors – influences the student's educational outcomes. Public provision of education can foster equity when it counterbalances poor home circumstances at the beginning of children's lives, but it may increase inequity when it provides a common resource harvested by those who are best prepared for it (OECD, 2007).

An important source of inequity in education is *the criteria for receiving state aid in education*. Obtaining budget-funded scholarships in higher education in Serbia is based solely on the student's ranking in the entrance exam. It

is therefore based on an achievement test and does not take into account the socioeconomic situation of the family. Although defining vulnerable groups, the Law on Pupil and Student Standards founds its measures on student attainment, whereas financial status is not sufficiently represented in the criteria, constituting only 30% of the points for ranking (*First National Report on Social Inclusion and Poverty Reduction in the Republic of Serbia*, 2010). Hence, as a rule, students from economically and culturally wealthier backgrounds have better school achievement and, on the basis of gaining a better ranking in entrance exams, have access to scholarships, subsidised accommodation or other benefits in education. Students from a poor background do not gain the necessary support for their education, and due to their lower achievement have no possibility of obtaining any kind of public aid, in spite of having greater need than others.

Student competitions and awards

Additional teaching of gifted and talented students is planned in the school curriculum. It is a very important measure for students from less privileged cultural backgrounds, because they have little or no educational support at home. However, in the school reality, this measure is left to the good will of teachers to work with their good students or prepare them for competitions. Many students from socioeconomically advantaged backgrounds have private tuition. In Serbia, the share of students attending out-of-school lessons is relatively high – higher than the average in OECD countries – with 26% of families with school age children investing in this form of teaching and spending more than 60% of their household budget (OECD, 2012). If the school fails to perform its duty, this can be compensated for with a private tutor - preparation for tests, competitions, university or secondary school entrance exams, etc. - but not for all students, only for students from a better socio-cultural background. This contributes to their higher achievement and to their privileged position in education. Even in situations in which students with a less privileged economic background are prepared for competitions by teachers in school, there are a lot of financial obstacles for their participation in a competition (such as paying for travel costs and accommodation).

The geographic distribution of institutions with artistic profiles does not provide equal access to schools to young people from all municipalities. Generally, comprehensive and art schools are placed in cities (about 50% of municipalities in Serbia have no art school, SEDS, 2013), and are not evenly accessible to students from rural and underdeveloped areas. Despite their abilities, such students often do not have access to education in comprehensive and art schools, primarily due to the poor social status of their families. Furthermore, this type of education does not lead directly to employment, is time consuming and requires additional investment. Two economic indicators confirm this. When we look at average salaries by municipalities and districts, it is clear that the majority of municipalities that have a modest number of secondary schools fall into the category of municipalities with lower average earnings (SEDS, 2013). Another indicator is the profile of poverty in Serbia: poverty is much more prevalent in rural areas than in urban areas (9.8% vs. 4.3%), and regional differences in the degree of development are amongst the highest in Europe. Households with two underage children (without income) have a poverty index that is almost twice the average (12.7% vs. 6.6%), while those with three or more children have a poverty index as high as 30.5% (SEDS, 2013). Schooling of talented and gifted students involves additional costs (materials, equipment, etc.), further reducing the possibilities for students from socially vulnerable groups to enrol.

Weak links between school and home

Research shows that home influences school performance. In Serbia, the cooperation of schools and parents is largely reduced to informing parents about student success, or lack of success, and to interventions regarding grades. Parents with a low level of education are particularly neglected in school, and are unsure how to include themselves in their children's education. If we want to increase equity in education, it is important to strengthen the links between school and home in order to empower disadvantaged parents to help their children to learn. Research shows that children spend a significant amount of time learning out of school (in OECD countries, out-of-school learning - doing homework, working with a tutor, etc. - represents more than 20% of children's total learning time); home factors, including parental support for education, engagement with children's learning and cultural assets (such as books) are associated with stronger school performance; homework can improve school outcomes, but reliance on homework may also threaten equity, as some children lack the home support necessary for the realisation of its benefits; and parental involvement - working with children at home and actively participating in school activities - improves results. All other things being equal, schools that foster communication with and participation of parents, as well as encouraging and assisting parents to support their children with their school work, tend to have better outcomes (OECD, 2007, p. 19).

The partnership between schools and home needs to be implemented through various methods of parental/guardian involvement in school life, in the school decision-making process, in defining specific objectives and practices that correspond to the specific conditions of the families and schools, and in creating a school culture and environment that is most beneficial to students.

Systemic measures created for coping with inequity

In the analysis thus far, we have demonstrated the sources of inequity in the education system in Serbia. We now turn to another potential source of inequity in the system. Many measures have already been taken in the system *to purposefully struggle with inequity*: the introduction of the Preschool Preparatory Programme, which lasts a minimum of four hours per day and is obligatory for all students age 5.5–6.5, i.e., one year before starting compulsory primary schooling; as well as the introduction of inclusion in the system, positive discrimination of Roma students, and adult education compensatory measures. In spite of the noble aim, which is beyond doubt, the implementation of these specific measures appears, in varying degrees, to represent yet another source of inequity in education in practice.

Realisation of the Preschool Preparatory Programme

The *Preschool Preparatory Programme* (PPP) was introduced in the 2007/08 school year, with the aim of increasing the primary education enrolment of students, decreasing dropout and increasing social inclusion and educational attainment of the population throughout the country. There have been two problems with the introduction the PPP: (1) incomplete coverage of children; and (2) monitoring and analysis of the implementation of the PPP in practice.

Data about the enrolment of children in the PPP differs depending on the source (Pešikan, 2012b): from 93.16% (according to the Ministry of Education) to 92.65% (according to the DevInfo database), compared to 87.82% in 2010/11 (*Statistički godišnjak za 2011*). As many as 98.1% of students enrolling in the first grade of primary school, and 79% of Roma students, have been included in the PPP (MICS 5, 2014), while the gender parity index is almost 1.00. There are, however, great regional differences in enrolment in the PPP. The highest enrolment is in urban areas, while there are significant deviations from the average in rural and underdeveloped regions (e.g., in Bor County, East Serbia, the figure is around 60%, while in Braničevo County it is approximately 55%, Pešikan & Ivić, 2009). The second problem has arisen as a consequence of the rationalisation of the number of employees in the MoES (Pešikan, 2012a). In the first years of the implementation of the PPP, the Preschool Department of the MoE prepared annual reports containing serious analyses of the realisation of the PPP, enriched with abundant qualitative data from the sites. These reports were a good basis for monitoring the implementation and efficacy of the PPP (Pešikan & Ivić, 2009). However, due to a reduction in the number of employees in this sector, in the last four years, the reports have been reduced to basic data, insufficient to provide a good insight into PPP implementation. This is one more example of the clash between financial and pedagogical efficiency in education, with the priority being given to the wrong side.

The introduction of inclusion in the system

Inclusion is a measure *par excellence* for improving equity in education. Introducing the inclusion of all students is a demanding measure that requires well-prepared terrain (schools, teachers, non-teaching staff, students with no special education needs and their parents, students with special education needs and their parents).

There are many problems with the introduction of an inclusive approach in schools in Serbia: local governments are rarely involved in the planning of the coverage of children in primary school and the inclusion of children with specific needs; the low capacity of schools to identify internal obstacles and create an inclusive school development plan; strong resistance to inclusion; a persistent medical rather than pedagogical approach to the problem (despite the adoption of the Rules on the Additional Support to Education, Health and Social Services (Pravilnik, 2010); the predominant lecturing approach to teaching, which does not leave room for an individualised approach; very poor external, institutionalised, professional assistance; lack of parent participation in the decision-making process regarding their child; the existence of prejudice, particularly towards Roma children; education professionals in general knowing little about inclusion and failing to understand it well; the lack of education statistics on children with disabilities and special needs; the problem with the continued education of these children after primary school; the absence of systematic budgeting of the resources necessary for the removal of construction and information-communication barriers in schools; the lack of pedagogical assistants; and insufficient application of an individualised approach and inadequate adjustment of teaching to children's needs (Radó, 2009; Radó & Lažetić, 2010; SEDS, 2013).

Inter-ministerial cooperation (education, health and social policy) and support to local authorities with respect to inclusion need to be improved. Furthermore, a great deal remains to be done with regard to creating an inclusive environment in school, especially in rural areas, where nothing has yet been done with respect to improving the education of children resident in these areas (*First National Report on Social Inclusion and Poverty Reduction in the Republic* of Serbia, 2010, p. 14).

Positive discrimination of Roma students

Economic analyses show that the situation with Roma education represents an enormous loss, both on the individual level (Roma completing secondary school can look forward to a 52% higher income than those only completing primary school) and on the national level (World Bank, 2010). In view of the absence of data, the progress made in Roma education in Serbia cannot be objectively assessed as yet. The surveys and analyses indicate improvement, but significant differences in the coverage and duration of education still persist between the Roma population and the general population, and the gap increases with the education level.

Positive discrimination has been created at the entrance to secondary and higher education. Unfortunately, the implementation of this measure is facing obstacles (school principals avoid accepting Roma students, finding various alibis, and this possibility is sometimes misused). The positive discrimination of Roma students in higher education is not successful to the same degree at all Serbian universities. The Department of Literature of the Faculty of Arts in Novi Sad represents a good example, particularly with respect to the education of Roma girls, even at doctoral level. However, the number of negative examples is rather high. The lack of multicultural education in the preparation of teachers is a contributing factor,⁷ resulting in teachers failing to understand the specificities of Roma culture, and overlooking the fact that they are the most marginalised and poorest group.

It is worth mentioning some of the measures created in the *Strategy for Education Development in Serbia 2020* (2013) that are intended to increase equity in higher education:

• Ranking students on entrance to the faculty (linked with budget-funded study) must combine two criteria: achievement in the entrance exam

⁷ E.g., one exception to the rule is the programme Active Learning for Students from Socially Marginalised Groups (I. Ivić I sar. (2005). Aktivno učenje za decu iz socijalno marginaliyovanih sredina. Belgrade: Education Forum).

and the social status of the student (the criteria ratio can, for example, be 50–50);

- Introducing the obligation for both the state and the students to pay part of the tuition fees. The amount of participation would be determined according to the student's place in the ranking list, but the social and economic status of the student must also be taken into account;
- Students would provide funds to co-fund scholarships either in cash (as in the current system) or from loans offered by the National Development Bank and other interested banks (which would be repaid after graduation), and these loans would be subsidised by the state based on the achievement and social and economic position of the student.

Adult education compensatory measures

Those who fail at school often find it difficult to recover later on, and those with weak basic qualifications are much less likely to continue learning in adult life. In Serbia, a system of adult compensatory education has been established, offering second-chance programmes for those who lack basic education and skills. However, there is still the problem of including everyone in programmes of additional education and learning, especially with regard to the poorest and most vulnerable groups. The territorial distribution of facilities for adult education in Serbia is very unfavourable, especially for the population living in rural areas, because most institutions are located in cities: 90% of the adult education schools are located in central Serbia and Vojvodina, while other parts of Serbia are insufficiently covered by such institutions. The number of institutions participating in the formal education of adults has been reduced since the beginning of the 1990s to a small number of schools for adult education. There is an increasing tendency to cover adults through non-formal education, especially via education and learning programmes offered by NGOs and private providers. According the Strategy for Education Development in Serbia 2020, specialised primary schools for adult education should be abolished and replaced by the establishment of learning centres in existing educational institutions, with new programme content geared to the needs of adult education. This would result in economic benefits from the existing network (in afternoons and on weekends) and achieve a good geographic distribution. The development of a broad network of providers of adult education is needed; a network that, for certain education programmes, will operate under the same conditions and standards as the accreditation process.

Some good programmes for adult education have been developed through EU-funded projects, such as the programme *Second Chance (Druga šansa*, Ministry of Education, 2010–2013), which provides compensatory adult primary and secondary education. In some countries, such as Sweden and the United States, a good proportion of dropouts "drop back in", as there are strong adult learning systems that allow for later completion (OECD, 2007, p. 47). In Serbia, the concept of lifelong learning is accepted in documents, but the existing system of adult education is not sufficiently developed to enable an easy and smooth return to the system and the completion of programmes in the context of lifelong learning. A very small proportion of adults in Serbia take part in lifelong learning programmes. A system for the recognition of previously acquired knowledge and skills, both non-formal and informal learning, has not yet been established.

Conclusion

In this paper, we provide evidence showing that the equity issue remains a very relevant and unresolved problem in the Serbian education system. Serbia has established free, universal public primary education, with a range of democratic measures purposefully created to contribute to this objective and make the system fair and inclusive. In spite of the fact that equal opportunities are deeply embedded in the Serbian constitution and in education laws, the implementation of measures lags behind the intentions. Recognition of the sources of inequity in the system is extremely important in seeking remedial measures.

The analysis of systemic sources of inequity and systemic measures for alleviating inequalities in education in Serbia should be considered within the context of a theoretical understanding of the role of education in reducing social inequalities in society. It is a fact that the declarative emphasis on education as a mechanism for vertical promotion in society is very often present in pedagogical conceptions (sometimes in the political manifestos of certain parties, particularly left-oriented parties) in many countries, and in Serbia as well. It is also a fact that this declaration is difficult to realise in reality (exceptions can be found in some Scandinavian countries or Cuba). Thus, most analyses of systemic equity, as well as of the results of PISA testing, find that students from families with better educated parents and better SES (typically from urban regions) have better achievement than their peers from the families with lower SES (and from rural regions). The explanation for the gap between declarations on equity, on the one hand, and existing differences between students, on the other, is provided by theories that view education as a system for the reproduction of the social structure, including the reproduction of social inequity (Bourdieu & Passeron, 1970; Apple, 2010, 2011, 2013). These theories are well-grounded because the education system is part of the general social structure. Consequently, the education system can be a mechanism for achieving social equality only in certain special historical situations, when general social changes are taking place (a revolution, complex social changes that include significant changes in the education system enabling vertical social promotion).

From this point of view, the social, economic and political situation in Serbia is such that educational measures intended to increase fairness in education can only mitigate the unfairness of the education system, if they are actually realised. The difficulties in the implementation of measures for increasing fairness can be explained by the resistance arising from the status of education in the general organisation of modern society in Serbia. Even in this situation, however, our commitment to equitable education must be an urgent priority in education in Serbia today.

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