This paper is taken from

Human Rights and Citizenship Education
Proceedings of the eleventh Conference of the Children's Identity and Citizenship in Europe Academic Network

London: CiCe 2009

edited by Peter Cunningham, published in London by CiCe, ISBN 978-0-9562789-6-8

If this paper is quoted or referred to it must always be acknowledged as
Kovalcikova, I. & Kresila, J. (2009) How to secure equal opportunities for adequate schooling? Human rights contexts of the Slovak education system relevant to Roma pupils: Meeting student's learning needs through dynamic assessment, in Ross, A. (ed) Human Rights and Citizenship Education. *London: CiCe, pp 141 - 155*

CiCe
Institute for Policy Studies in Education
London Metropolitan University
166 – 220 Holloway Road
London N7 8DB
UK

Education and Culture DG
Lifelong Learning Programme

This project has been funded with support from the European Commission. This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

Acknowledgements:

This is taken from the book that is a collection of papers given at the annual CiCe Conference indicated. The CiCe Steering Group and the editor would like to thank

- All those who contributed to the Conference
- The CiCe administrative team at London Metropolitan University
- London Metropolitan University, for financial and other support for the programme, conference and publication
- The Lifelong Learning Programme and the personnel of the Education and Culture DG of the European Commission for their support and encouragement.

How to secure equal opportunities for adequate schooling? Human rights contexts of the Slovak education system relevant to Roma pupils: Meeting students' learning needs through dynamic assessment.

Iveta Kovalčíková and Juraj Kresila
University of Preso (Slovak Republic)

Abstract
Can we assess and measure latent learning capacity rather than quantity developed abilities?
Why are the children from socially disadvantaging environments (SDE) shifted into the programs of special education more frequently than majority children? Are they really less smart? The children from socially disadvantaging environments frequently score lower in the conventional static tests of cognitive abilities than children from the majority population. What could be a reason? Possible explanation includes: The conventional static tests of cognitive abilities:
- Do not adequately detect the latent learning capacity of the tested children,
- Do not adequately predict potentials for cognitive development .
How we can help them to meet their needs?
How can we assess and measure developmental potential rather than quantify developed abilities?

Outline of the problem

The transition of the Slovak society to a market economy is a dynamic process that can endanger certain social and ethnic groups which are not capable to adapt to their changing life situation. Romas are generally believed to be less equipped than the majority population to benefit from the opportunities that were brought about by the newly established democratic society. Romas are particularly hurt because of their limited access to labour markets, notwithstanding their housing and health conditions. Education is usually addressed as the prime system element in an attempt of breaking the vicious circle of undesired social reproduction.

Yet some figures on the current status of educating Roma children are worrisome. 70-80% of Roma have less than a primary school education, while very few Roma have completed secondary education, finally, less than 1 % of Roma continue to higher education. Roma pupils are disproportionately identified as underachievers. Disadvantages in education are deepened by low school attendance and overrepresentation in special education facilities. Based on the standardised IQ tests, many Roma pupils are diagnosed with a mild mental disability and shifted to schools intended for physically and mentally disabled children. As many as 90% of special education pupils in Slovakia are of Roma origin (Horňak, 2001). For obvious reasons special education facilities offer reduced curriculum of an *inferior standard*. Moreover, the system of special education facilities can limit opportunity to one track as its pupils may not apply for admission to regular secondary schools.

Many of the special schools are located close to Roma settlements, and are relatively easily accessible schools for Roma students. Typical Roma settlements bear the features of *socially disadvantaging background* environments. Among the children from the surrounding poor in stimuli a psychological deprivation is often manifested (intellectual immaturity, developmental irregularities and behavioural malfunctions).

The above facts may be overlooked, but may also by considered as signs of marginalisation and discrimination, especially in view of the two legislative norms derived from the international instruments of Human Rights. The two norms that put the Slovak state education under obligation are as follows:

Seeking solution

As an attempt to address the problems outlined above, the research team of APVV (Slovak national research agency, Ministry of Education, SR) project *Dynamic assessment of the latent learning capacities of the children from socially disadvantaged background* (APVV-0073-06) has been put together. Within pursuing its aims the research team focused on:

a) How to assess cognitive abilities so as to get feed-back for improvement

b) How to build an efficient inclusive curricular setting within the Slovak primary education

a) How to assess cognitive abilities so as to get feed-back for improvement

Most of the Roma pupils shifted to special education are those diagnosed with borderline mental disability.

Flynn analysed (1984) 73 studies in which intelligence tests were administered to various standardized sample groups (the age of the tested groups ranged from 2 to 48 years) during at least two different time periods. He discovered that the average score gained during these tests rose over the course of 46 years by about 13.8 IQ points, irrespective of the nation, culture or age of the analysed sample groups. Numerous further studies by other researchers confirmed the accuracy of this finding. The systematic rise in IQ across generations was soon termed the "Flynn effect"(FE). According to Neisser (Neisser et al, 1996) the FE is an effect of:

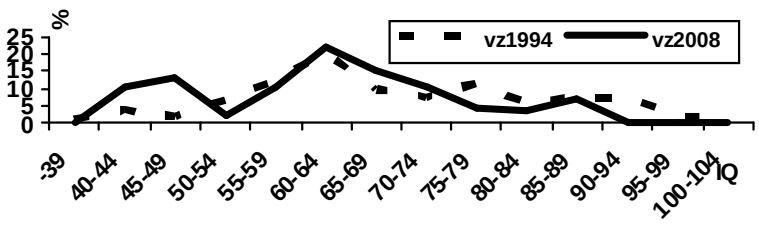
- growing urbanization, ever more penetration of means of mass communication into everyday life;
- higher quality education;
- a smaller number of children in families and thus greater attention paid to their mental development etc.;
- increasing levels of cognitive stimulation within society leading to development of children's cognitive competencies (greater number of sophisticated toys, earlier schooling etc.);
- confirmation of the nutritional hypothesis which claimed a link between improvements in diet and greater cerebral activity.

All these stated findings can be applied to questions of whether and to what extent the Flynn effect can be seen in the specific population of Roma children. If the Flynn effect has been shown to have occurred in practically all continents and all ethnic groups, it should be equally observable amongst Roma children.

Since the members of the research team included psychologists who carried out large scale IQ testing survey of primary school age Roma population from the largest settlements in 1994, the team decided to replicate the baseline IQ testing in one of the most known urban settlement – *Lunik*. The testing took place in 2008 on the sample of 100 children aged 6 – 8. Comparison of the Roma children test results of 1994 and 2008 served as the basis for analysis (see Ferjenčík, 2008, for more details). The first sample was made up of 236 Roma children, aged from 5.0 to 8.01 years old, who were due to begin compulsory school attendance in *Košice*, Slovakia in 1994. The second sample was put together fourteen years later, in 2008, as part of an APVV grant assignment. This sample was made up of 88 Roma children, aged from 6.08 to 10.03 years old, who were attending either the first or the zero class of basic school in *Košice*, Slovakia. During the testing both groups answered all components in the verbal part of the Wechsler Scale for Children as well as Raven's Coloured Progressive Matrices.

The distribution of verbal IQ results in both samples is given in figure 1:

Fig. 1: The distribution of verbal IQ results in the Wechsler Intelligence Scale



- IQ distribution in verbal subtest (Wechsler)
- Average verbal IQ: 1994 sample – 68.2, standard deviation of 15.9

2008 sample – 62.3, standard deviation of 12.8

The average verbal IQ for the sample of children in 1994 was 68.2 with a standard deviation of 15.9; the average IQ for the sample of children in 2008 was 62.3 with a standard deviation of 12.8. The difference between both averages determined by testing of the two separate groups was statistically significant ($t = -2.75$, $p = 0.04$) in favour of the 1994 sample.
So rather than an expected increase, we can observe the opposite, which is a decrease in the average IQ by about six points. (Further results published in Ferjenčík, 2008). The most significant finding drawn from the above comparison is that the so called Flynn effect (the gain of the mean IQ scores among the population on the lower half of the IQ distribution) was not in place in *Lunik* settlement after fourteen-year period between testing. The above finding generate legitimate requirement for devising a complementary assessment of cognitive capacity of Roma children.

Questions for further research:
What is the reason for the above decrease in average IQ amongst the tested population? How is it possible that the Flynn effect has been observed everywhere regardless of geographical and ethnic status, and yet within the Roma children's population we have seen the opposite trend? Can we in some way question the validity and suitability of the available standardized tests measuring cognitive abilities? How can we objectively measure and evaluate the level of children's cognitive abilities?

The research team subsequently analysed the possible methods of testing and assessing cognitive abilities. The two main testing paradigms include:

- Conventional STATIC testing of cognitive abilities
- Alternative DYNAMIC assessment.

The main characteristics of static testing of cognitive abilities lies in the fact that it interprets the manifest level of cognitive abilities, i.e. products formed as a result of pre-existing skills, mix of abilities that have fully developed and abilities that are not fully developed. Possible criticism of the conventional static paradigm is that it does not adequately detect the latent learning capacity of the tested children as well as they do not adequately predict potentials for cognitive development (Sternberg, Grigorenko, 2002). As children from socially disadvantaging environment (SDE) frequently score lower in the conventional static tests, the research team has decided to work on developing an alternative dynamic testing (assessment) tool for determining abilities and latent learning capacities of pupils from SDE. Dynamic assessment of cognitive abilities is aimed to measures pupil's response to the introduced change during administration. It combines testing and instruction the purpose of which is to quantify latent cognitive capacity and *learnability*. Apart from standardised static test of general abilities, dynamic testing paradigm seems to serve the purpose of a scientifically sound measure to predict pupils' eligibility for mainstream education.

b) How to build an efficient inclusive curricular setting within the Slovak primary education

The key features of the Slovak education system did not changed until the reform of 2008. The past features which survived from the socialist regime have some serious systemic weaknesses that indirectly affected Roma children. It was mainly the gifted and more able pupils who could benefit from such system. Despite communist ideal of equality the education system was highly selective and the academic success in passing admission highly correlated with the results obtained by conventional IQ tests. The lowest achieving children were separated to the special education facilities based on the IQ tests scores. As a result, there was a distinct almost discrete separation of intact and handicapped school population. Obviously, most Roma pupils found themselves in the latter group.

The softer form of separation which allows individually integrated pupils in regular school has been introduced recently. In these cases, children are placed in special classes within regular schools and are taught with special curricula under the supervision of a special pedagogue. This form of special education is considered less harmful because transfer into standard class is possible and relatively large portion of primary curriculum is expected to be transferred.

Slovakia is in the process of curricular reform with the more utilitarian type of curriculum underway. Similarly to other neighbouring countries the subsidiary model of national and school level curriculum is to be adopted. More attention is expected to be paid to education achievements rather than to prescribing certain sum of knowledge. Yet the transition to the new type of education system is not straightforward as both educators and the ministry department in Slovakia lack experience and have only blurred picture of

what an outcomes-based education is based upon. Existing teachers during they formative years were not trained in designing their own curriculum on school level. Moreover, despite academically demanding curriculum, Slovak pupils' performance on the international monitors is moderate (thus underachieving does not seem to be the problem exclusive to Roma population).

In an attempt to address the existing education system's shortcomings the research team dealt with the question of utilising a new curricular setting in Slovakia in order to stimulate pupils' effective gain of objectively measureable skills and knowledge. Such aim can be achieved through an application of adequate cognitive constructivism tailored to the needs of individual pupil. The theoretical underpinning for the programs of cognitive constructivism can be found in Reuven Feuerstein's theory of Mediated Learning Experience (MLE) which was modified by Mogens Jensen of the International Centre for Mediated Learning (ICML) Georgia USA (www.mindladder.com).

The latter of the two programs has developed a theoretical model of cognitive profile which is based on 40 descriptors of knowledge constructing functions (KCF). The profile for individual learner can be constructed by means of software which processes the data (130 scaled evaluating statements on learner's behaviour). The obtained learners profile indicates the areas and the methods for active intervening or targeted mediation so as to stimulate the underdeveloped knowledge constructing functions and achieve cognitive modification of the child.

The outlined programme of cognitive modification, as a part of the research project, is planned to be implemented in preparatory classes (a pre-primary zero class devised mostly for Roma children to enable them smoother transition from pre-school to primary stage of education). Well developed knowledge construction functions which allow learner to build upon are fundamental for acquiring curricular contents in further stages of schooling. To name some of the KCF:

- orientation in time (affects planning, consequential thinking, cause and effect);
- signs, traces and symbols (affects concept of number, language, awareness of logical evidence, etc).

Conclusion

Results of the IQ testing indicate that Roma communal way of life endangers natural cycle of inter-generational transfer of cultural knowledge. It happens due to lacking or inadequate natural parent-child pattern of cognitive mediation within their traditional habitat. It is characteristic for inadequate stimuli to foster natural learning and is denoted as socially disadvantaging environment. Where Roma communities are unable to cope with the novelty of their life situation in an industrial society the state education is obliged to make provisions for remedy. Instead of exposing cognitively unprepared pupils to the coverage of curricular contents, centrally prescribed for certain age group, it seems to be more efficient to apply rigorously sound cognitive training in the form of mediated learning experience. This is the way the Slovak education can materialise its commitment towards inclusion of Roma population. Romas can on the contrary benefit from the full deployment of their intellectual faculties to gradually remove the invisible barrier between them and the majority and to exercise and enjoy the full range of the human rights.

References

Ferjenčík.J. (2008) Meranie inteligencie: Flynnov efekt a rómska populácia (In print)

Flynn, J.R. (1984) The mean IQ of Americans: Massive gains 1932 to 1978. *Psychological Bulletin.* 95, pp 29– 51

Horňák, L. (2001) Individuálny vzdelávací program ako prostriedok akcelerácie kognitívneho vývinu rómskych žiakov na špeciálnych základných školách, in *Rómske etnikum v systéme multikultúrnej edukácie*. Prešov: PF PU

Neisser, U., Boodoo, G., Bouchard, T.J., Jr., Boykin, A.W., Brody, N., Ceci, S.J., Halpern, D.F., Loehlin, J.C., Perloff, R., Sternberg, R.J., & Urbina, S. (1996) Intelligence: Knowns and unknowns. *American Psychologist.* 51, pp 77–101

Sternberg, J.R., Grigorenko, E. (2002) Dynamic Testing. New York: Cambridge University Press

[i]

[i] (1) From: *Convention against Discrimination in Education* (Adopted by the General Conference of the United Nations Educational, Scientific and Cultural Organization on 14 December 1960)
Article 1
1. For the purpose of this Convention, the term "discrimination" includes any distinction, exclusion, limitation or preference which, being based on race, colour, sex, language, religion, political or other opinion, national or social origin, economic condition or birth, has the purpose or effect of nullifying or impairing equality of treatment in education and in particular:
(b) of limiting any person or group of persons to **education of an inferior standard;**

(2) From: *Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities* (Adopted by General Assembly resolution 47/135 of 18 December 1992)
Article 4
4. States should, where appropriate, take measures in the field of education, in order to encourage knowledge of the history, traditions, language and **culture of the minorities** existing within their territory. Persons belonging to minorities should have adequate opportunities to gain knowledge of the **society as a whole.**[i]