

## The Importance of 15 Years Old Students' Academic Achievement and the Participation of Albanian Students in the PISA Assessment

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### Abstract

Albania now it is a candidate place for membership for the European Union which has a range of challenges in advance to overcome. The execution of a qualified education it is the beginning of the integration of Albanian education policies with those European which have decided the education of the youth in one of five primary objectives. In this article you will find a summary of studies that assess the cognitive achievements of 15 year old students in relation to the economic development of countries. Moreover, the author makes an analysis of the results achieved by Albanian students in the Program for International Student Assessment (for 15 years old students) PISA and concerns are presented in relation to poor results in strategic political documents. The author refers specifically to two participations of Albanian students in PISA 2000 and PISA 2009. Based on PISA 2009 reports and in the world literature concerning factors that affect academic achievement of adolescents, in this article are provided some recommendations as well.

**Keywords:** Academic achievement, Adolescent, European integration, Albanian students.

### 1. Youth education and related policies

Education of young people is not an issue that belongs only to the youth and their families, but it is an issue that preoccupies the whole society and for this reason we are taking more and more attention. Here we refer to the European Strategy (2010) for 2020, which continuously goes on in accordance with the Lisbon strategy, The European Council has defined a framework "for the unification and mobilization of all instruments and policies" to promote "intelligent, sustainable and inclusive employment growth". In this Strategy (2010), education is highly valued and is one of the five main objectives of the EU, which are guidelines not only to the member states, but also for countries like Albania who aspire to be part of the European Union.

EU development policy has given special importance to the education of its citizens, following the development of human capital policy. Global economic policies are one more reason to aim that all EU citizens own the skills they need to compete in a modern and integrated society. Continued macroeconomic studies about economic growth of powerful nations show that the future of a country's economy depends on cognitive skills of its workers (European Strategy, 2010).

### 2. Concerns expressed in the policy documents for academic achievement to 15-year-old Albanian youngsters

High academic achievements of students in the 9th grade, make one of the biggest challenges not only for students but also for parents since under these achievements will be taken the decisions about the education of youngsters in the future. Equally concerned are the teachers and directors of education from the school level up to the highest levels where policy decisions are made and designed for students' achievements are an indication that relates directly to the performance of their work.

So, for instance, in the Undergraduate Education Strategy (SKAP , 2009-2013 , p 5 ) are expressed the concerns about the continuity of education of youngsters, where it says : " Access to university education represents low level compared with OECD countries. Currently , in Albania the average attendance was 11.9 years (OECD : 14 years , EU 17.4 years), which is explained by the low level of secondary education enrollment". In the monitoring report on education sector strategies (2011 ) it is noted that , as a result of favorable policies pursued by MES, the number of students enrolled in secondary schools has reached 91 % from 95-100 % which is the standard of OECD countries. For achieving its purpose in relation to its EU membership, Albania must make great efforts to move closer to EU standards in all aspects of development and in this case, some important standard of education.

In Undergraduate Education Strategy 2009-2013 , is also displayed a concern about student outcomes, which in

this document represent one of the main indicators of quality and performance of the education system. This document states: "... the results of students associated with the intention to equip students with the knowledge and skills capable of facing the challenges of the time required by them. International Programme for Student Assessment (PISA), which constitutes in one of the most prestigious international studies for measuring student achievement is initially implemented in 2000. This program showed that the results are relatively weak "(SKAP, 2009, p 10). The following table shows the results obtained from Albanian students in reading, math and science.

Low achievements of 15 years olds students, are reflected in the later years of their schooling. So, for instance, by DART is made public that for the academic year 2008-2009, in general secondary education, the passing rate is 65% and 6.5 GPA while in secondary vocational education, the passing rate is 63% and 6.7 GPA. LSMS data for Albania (2008) show that only 62% of 14-year-old children have completed eight years of basic education, where 20% of the total drop is caused by the lack of interest in education.

World Bank Report on Albania (2011, p 11), cited low ratings of Albanian students in their achievements in the standardized test of Pisa 2009. This report claims that Albania is ranked among the lowest in Europe, with the achievements in mathematics ranked in the last place. It is stated that about 40% of Albanian students have reached only the level of basic knowledge in math and science, or 20 percentage points less, compared to Montenegro which is ranked as the last. The report points out that although there is an improvement compared with the achievements in Pisa in 2000, Albania in 2009 is below the level of what could be achieved, considering the the level of income in this country. Actually, the achievements of Albanian students are being ranked as the last in Europe and in the fourth place in the bottom of rankings of all the countries participating in this international recognition.

### 3. Analysis of academic achievements to 15-year-old youngsters in reading and mathematics for PISA 2009

In PISA report, 2009 are being mentioned some European partner countries as Albania, Montenegro, Romania and Bulgaria, which are considered to be characterized by very low scores of the students' performance and in addition of severely disadvantaged a socio-economic background compared to the countries that show a high level in the PISA testing (PISA, 2009, Vol II, p 105). To better understand the poor performance of Albanian students, it is necessary to list the standards for achievements presented in Table 3, which shows the division in three levels to areas where students are tested; a) reading, b) math c) science. In PISA's test are respectively 6 levels, and points that determine the achievement of each level, are set according to a descending order. The following table explains the allocation levels for each test, the scores for each level, and the percentage of pupils achieving 15-year-olds from OECD countries and clarifies that each of us is to reach an average of 385 in reading, 377 in math and 391 points in science.

**Table 1.** Criteria and achievements of 15-year-old students at the International Testing Student Assessment (PISA 2009)

Reading			Maths		
Level	Lowest points per level	The average of student achievement in OECD countries	Level	Lowest points per level	The average of student achievement in OECD countries
6	698	8%	6	669	3.10%
5	626	7.60%	5	607	12.70%
4	553	28.30%	4	545	31.60%
3	480	57.20%	3	482	56%
2	407	81.20%	2	420	78%
1a	335	94.30%	1	358	98%
1b	262	98.90%			

**Source:** OECD (2012), PISA 2009 Technical Report, PISA, OECD Publishing. <http://dx.doi.org/10.1787/9789264167872-en>

From a detailed analysis of Albanian students' achievement in PISA 2009 in reading (Vrapi, and Lami, 2011), we note that Albanian students, in a significant percentage (11.3%) under-achievement level 1b, showing the need for creating a special level for our students. It is evident that the highest percentage of student achievement (26.6%) is below the level 2 (ie level 1a) which is considered as the base level. Only 14.4% of our pupils reach level 3 and level 4 is reached by 3.1% of participants from Albania. Table 2 gives a clear view of the weaknesses of Albanian students.

**Table 2:** The percentage of Albanian students reading achievement for each achievement level

Levels	Under level 1b	1b	1a	2	3	4	5	6
Achievements in %	11.3%	18.7%	26.6%	25.6%	14.4%	3.1%	0.2%	0%

If the analyses of AVA (NAASA) specialists (National Agency for the Assessment of Student Achievement, 2011), shows that the highest percentage of results achieved by Albanian students in mathematics is below 1 (40.5%) when it is known that the base level is the level 2, and at this level perform only 20.6% of students. It is quite clear that Albanian students' achievements are far from the required standard. Table 3 provides an even more detailed information (Vrapi, & Lami,2011).

**Table 3.** Percentage of achievement in mathematics for Albanian students for each level of achievement

Levels	Under the level 1	1	2	3	4	5	6
Achievements in %	40.5%	27.2%	20.6%	9.1%	2.6%	0.4%	0%

City of Tirana is one of the cities with the highest concentration of population in the country. Being the capital of Albania , it is close to the attention of monitoring for educational standards . However , the statistical office of the DART reported that for the 2010-2011 school year to students in the 9th grades of secondary schools of Tirana , the annual average grade in the case of Albanian language is 7.3 and 8 in the final tests, while the annual average grades in mathematics and the exam is 6.7 the final exam is 6.73 . From these statistics it is realised that 38 % of students have low annual achievements in regard to grades in the case of the Albanian language. In mathematics , the percentage is even higher , 53.4 % . For the 2011-2012 school year , the average grades are respectively : the annual average in the case of Albanian language exam 7.4 and 7.7 final exam. While the annual average grade in mathematics was 6.7 and 7.1 final exam . There is a growing number of students remaining in the case of the mother tongue of 1.1 to 2.3 and in mathematics from 1.6 to 2.35.

#### 4. Findings of studies on youth academic achievements of 15-year –old youngsters and the economic growth

Efforts to understand the connection between academic achievement, the individual development and the economic development are early. Eg. Nelson and Phelps (1966), stated that although individuals increase their knowledge after the age of 15, what they have achieved up to this age, it is estimated to be predictive of significant accumulation of skills which will be used effectively in the future, as these individuals have this capacity formed. Researchers Mankiw, and Weil Romer (1992), based on the neoclassical theoretical framework on the economic growth, in the analysis of their study, they emphasize the education, by considering it as an important factor of production.

Benhabib and Spiegel (2005) also qualify incredibly important education and related production. According to them, education may facilitate the transmission of knowledge needed to use the new technologies. Although in a different light, representatives of "endogenous growth" highlight the role of education by linking it with the innovation capacity in the economy, where the most important thing according to them are new ideas and use technology based on these ideas.

Studies of the last ten years have shown that economic development is influenced not only by the years of education of the workforce, but over all the cognitive abilities of these individuals (Woessmann and Hanushek, 2012). The relationship between students' cognitive skills and economic growth has been the focus of a series of studies (Hanushek and Woessmann, 2008-2011), which are based on data collected from international tests like TIMSS and PISA.

In these studies, researchers have discovered that the development of human capital is associated with the economic development of countries that possess this human capital. Hanushek and Zhang (2009), highlight the fact that in different countries, in different time periods, there are changes in the quality of the educational services which have an impact on the student achievement. However, researchers estimate that the achievement of these students, there are other variables that affect for instance, how variables related to the family, health status or even some quantitative indicators of school. Also, the findings indicate that the increasing of the students' cognitive abilities has an indication for the reassessment of education because it is because of these cognitive skills which have their effects on the economic development process (Hanushek and Kimko, 2000).

## 5. Factors affecting the academic achievements of 15-year-old youngsters

Academic achievement of school-age children and adolescents in particular have been the focus of many researchers decades. In these studies it is concluded that academic achievement are influenced by a number of factors associated primarily with the personality of the child himself, but also the parents who care for his health and growth (Bronfenbrenner, 1979, 1997). Secondly, the achievements of teenagers are influenced by processes, which mainly are involved in processes under the influence and interaction of the family and the family members with each other (Antoniou, Dalla, Kashahu, Karaj, Michailidis, Georgiadi, 2013; Kashahu and Karaj, 2012), but also the interaction of adolescents and their peers in some various microenvironments (Bronfenbrenner, 1997). Of the same importance are the socio-economic contexts of the family (Cheung and Andersen, 2003; Eamon, 2005; Hochschild 2003; Jeynes, 2001), which affect the way parents interact with the school and teachers of their children (Hoover-Dempsey, Walker, Sandler, Whetsel, Green, Wilkins, and Closson, 2005). Also, time is another factor that affects how the student progresses eg. changes that occur with the time on the child or the environment (Bronfenbrenner, 1997, Cicchetti and Toth, 2000; Lerner and Steinberg, 2004).

Parental involvement in children's education is regarded by many scholars in relation to adolescent academic achievement (Cancio, Eest, and Young, 2004; Eppler and Weir, 2009; Epstein, 2011; Henderson and Mapp, 2002; Hill et al., 2004; Kashahu, 2012; Kashahu and Karaj, 2012; Mcwayne, Hampton, Fantuzzo, Cohen, and Sekino, 2004; Sheldon, 2003). In particular, the cooperation of teachers with parents (Kashahu, 2012; Kashahu and Karaj, 2012; Kohl, Lengua, and McMahon, 2000; Rimm-Kaufman, La Paro, Downer and Pianta, 2005; Vickers and Minke, 1995) especially when it comes to specific cases such as mathematics and mother tongue which are found to have a substantial impact on 15-year-old students' achievements (Kashahu, 2012; Kashahu and Karaj, 2012)

Nowadays, it is being studied the possibility of improving academic achievement through programs for preparing students after school. Study Vandell, Reisner, and Pierce (2007) found that systematic participation of students in quality programs for preparing lessons after school showed that they not only have improved a lot from the academic standpoint, in reaching results with significant differences in standardized tests, compared with the period when these programs were not attended, but these students gained good habits to work, and reduced behavioral problems.

## 6. Conclusion

The facts in the above analysis the achievements of our students in international testing PISA 2000 and 2009 seem troubling when you consider what it can produce in the future so poor progress in school, not only for these young people, but for all the society. All interested stakeholders to change this situation, should begin to change something. In fact, MES has made continuous efforts to change the existing situation, starting with reforms and changes in the laws of higher education, establishing evaluation and monitoring educational institutions as the National Inspectorate of High Education (INAP), in order to set standards for teachers and educational leaders.

Recently, MAS has generated a new initiative "School community center - a friendly school for all". Concretely by Law. No. 69/2012, dated 21.06.2012, Article 62 paragraph 1 of this law, the parents as " the key partner of the educational institutions and child welfare ." The initiative undertaken by the MAS is not only based in the law, but aims to make the partnership a reality by turning the school into a community center because the school is built exactly where school-family partnership and community, which aims to implement the cooperation between the parties and to reach the full development of potentials for each student.

In the last decade it has been worked hard in schools, to build a culture of communication and interaction between school personnel and parents, but if the school has to be turned into a really friendly community center, at the national level, this should start from colleges and faculties that prepare teachers, to increase political attention on this new national curricula reflecting the university, to the training of school leaders and teachers on duty . On the other hand , teachers at school should be more focused on student achievement. Opening after school programs to help students prepare for school tomorrow, I should say that it is an efficient way towards the realization of the objective for higher results in student's achievements. A number of studies have shown that this is a way (Harvard Family Research Project, 2003; Vandell, Reisner , and Pierce , 2007). This does not mean just try to help students to achieve their best results, but also scientific analysis of the results achieved by considering each variable that affects them. For this, teachers need to be more in-depth planning when of their annual and daily work, as well as aspects of teaching methods and assessment of student work in order to break our school once and for all by learning mechanical and the installation focuses on skills and learning skills during during all their lifes.

## Reference

- Antoniou, A.S., Dalla, M., Kashahu, L., Karaj, Dh., Michailidis, G., & Georgiadi, E. (2013). Socioeconomic Adversity and Family Stressors in Relation to School Achievement Among Greek, Serbian and Albanian Students. In A-S G. Antoniou & C. L. Cooper (Ed.), *The Psychology of recession in the Workplace* (pp. 23-42). New Horizons in Management.
- Benhabib, J. & Spiegel M. M.. 2005. "Human capital and technology diffusion." In *Handbook of Economic Growth*, edited by Philippe Aghion and Steven N. Durlauf. Amsterdam: North Holland: 935-966.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1997). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22, 723-742.
- Cancio, E. J., West, R. P., & Young, K. R. (2004). Improving mathematics homework completion and accuracy of students with EBD through self-management and parent participation. *Journal of Emotional and Behavioral Disorders*, 12(1), 9-22.
- Cheung, S. Y., & Andersen, R. (2003). Time to read: Family resources and educational outcomes in Britain. *Journal of Comparative Family Studies*, 34(3), 413-434.
- Cicchetti, D., & Toth, S. L. (2000). Developmental processes in maltreated children. In D. Hansen (Ed.), Nebraska symposium on motivation: Child maltreatment (Vol. 46, pp. 85-160). Lincoln, NE: University of Nebraska Press.
- Eamon, M. K.(2005). Social-demographic, school, neighborhood, and parenting influences on academic achievement of Latino young adolescents. *Journal of Youth and Adolescence*, 34(2), 163-175.
- Eppler, C., & Weir, S. (2009). Family assessment in K-12 settings: Understanding family systems to provide effective, collaborative services. *Psychology in the Schools*, 46(6), 501-514.
- Epstein, J. L. (2011). *School, family, and community partnerships: Preparing educators and improving schools* (2nd ed.). Philadelphia, PA: Westview Press.
- EUROPE 2020, (2010) A strategy for smart, sustainable and inclusive growth.
- Hanushek, E. A., & Woessmann, L. (2008). The role of cognitive skills in economic development. *Journal of Economic Literature*, 46(3), 607-668.
- Hanushek, E. A., & Woessmann, L. (2011a). The economics of international differences in educational achievement. In E. A. Hanushek, S. Machin, & L. Woessmann (Eds.), *Handbook of the Economics of Education*, Vol. 3 (pp. 89-200). Amsterdam: North Holland.
- Hanushek, E. A., & Woessmann, L. (2011b). How much do educational outcomes matter in OECD countries?. *Economic Policy*, 26(67), 427-491.
- Hanushek, E. A., & Woessmann, L. (2011c). Sample selectivity and the validity of international student achievement tests in economic research. *Economic Letters*, 110(2), 79-82.
- Hanushek, E. A., & Woessmann, L. (2012). Schooling, educational achievement, and the Latin American growth puzzle. *Journal of Development Economics* (forthcoming).
- Hanushek, E. A., & Zhang, L. (2009). Quality-consistent estimates of international schooling and skill gradients. *Journal of Human Capital*, 3(2), 107-143.
- Hanushek, E. A., & Woessmann, L. (2007) 'The Role of Education Quality for Economic Growth', *Policy Research Working Paper* no. 4122, World Bank.
- Henderson, A. T. & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. Austin, TX: Southwest Educational Development Laboratory.
- Hill, N. E., Castellino, D. R., Lansford, J. E., Nowlin, P., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2004). Parent academic involvement as related to school behavior, achievement, and aspirations: Demographic variations across adolescence. *Child Development*, 75, 1491-1509.
- Hochschild, J. L. (2003). Social Class in Public Schools. *Journal of Social Issues* 59(4), 821-840.
- Hoover-Dempsey, K. V., Walker, J. M. T., Sandler, H. M., Whetsel, D., Green, C. L., Wilkins, A. S. & Closson, K. (2005). 'Why do parents become involved? Research findings and implications'. *The Elementary School Journal*, vol. 106, no. 2, pp. 105-130. Gjendet në URL: <http://www.vanderbilt.edu/peabody/family-school/papers/Hoover-Dempsey2005.pdf>
- Jeynes, W. H. (2005). Effects of Parental Involvement and Family Structure on the Academic Achievement of Adolescents. *Marriage & Family Review*, 37(3) 99-116.
- Kashahu, L. (2012). The Influence of family functioning and school-family relationship in adolescent academic achievement at the subject of the Albanian language. *STUDIME SOCIALE Revistë e Institutit të Sociologjisë Vëll*. 6, nr. 2, Pg 101-110
- Kashahu, L., & Karaj, Th. (2012). The impact of family functioning and of some other aspects of parental involvement in education, in adolescents' academic achievements. *Journal of Educational and Social Research* Vol. 2, No. 6, Pg 11-17
- Kohl, G.O, Lengua LJ, McMahon RJ. (2000). Parent involvement in school conceptualizing multiple dimensionsand their relations with family and demographic risk factors. *Journal of School Psychology*; 38:501-523
- Lerner, R.M, Steinberg, L.D (2004). *Handbook of adolescent psychology*. 2nd ed. Wiley; New York
- Mankiw, N. G., Romer, D., & Weil, D. (1992). A contribution to the empirics of economic growth. *Quarterly Journal of Economics*, 107(2), 407-437.
- Nelson, R. R., & Phelps, E. (1966). Investment in humans, technology diffusion and economic growth. *American Economic Review*, 56(2), 69-75.
- OECD (2010), PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunitiesand Outcomes (Volume II), OECD

- Publishing. Gjendet në URL:<http://dx.doi.org/10.1787/9789264091504-en>
- OECD (2012), *PISA 2009 Technical Report*, PISA, OECD Publishing. <http://dx.doi.org/10.1787/9789264167872-en>
- Rimm-Kaufman SE, La Paro KM, Downter JT, Pianta RC. (2005). The contribution of classroom setting and quality of instruction to children's behavior in kindergarten classrooms. *The Elementary School Journal*;105:377–394.
- SKAP., (2009). Strategjia Kombëtare e Arsimit Parauniversitar 2009-2013
- Vandell, D. L., Reisner, E. R., & Pierce, K. M. (2007). Outcomes Linked to High-Quality Afterschool Programs: Longitudinal Findings from the Study of Promising Afterschool Programs. *Policy Studies Associates, Inc.*
- Vandell, D.L., Reisner, E.R., Pierce, K.M., Bradford, B.B., Lee, D., Bolt, D., and Pechman, E.M. (2006) *The Study of Promising After-school Programs: Examination of Longer Term Outcomes After Two Years of Program Experiences*. Washington: Policy Studies Associates.
- Vickers HS, Minke KM. (1995). Exploring parent-teacher relationships: Joining and communication to others. *School Psychology Quarterly*;10:133–150.
- Vrapi, R., dhe Lami, A., (2011), *Raport Vlerësimi i PISA 2009, për leximin*. Raport i pa publikuar AVA
- World Bank (2011) Albania Country Governance Review, Report No. 64388 AL, Households Perceptions in a Period of Reform, Human Development Department Europe and Central Asia Regional Office Management Unit, Europe and Central Asia Regional Office, Washington DC