

ADMISSION REQUIREMENTS FOR TEACHER EDUCATION AS A FACTOR OF ACHIEVEMENT

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ABSTRACT

Numerous researches have demonstrated the enormous role of teachers in achievements of students. Educated and motivated teacher that cares about the success of students devotes more effort to preparing the lesson and thus provides the students better conditions for achieving results. The problem occurs when teachers are not equally qualified, motivated and prepared so it is justified to ask why some people even opt for the teaching profession if they have no motivation for this noble profession. The purpose of this study is to highlight the diversities of the admission requirements to teacher colleges in developed and developing countries. Diversity of admission requirements will show that the selection of candidates can affect students' later academic achievements. Comparative analysis between developed and developing countries, precisely Finland, Japan, Korea, Singapore and Croatia, India, Russia and Turkey, determines if there are any differences in the admission requirements among the selected countries. The analysis and the qualitative approach to the statistical indicators of PISA tests conducted in 2012 show which group of countries achieves better results and points to the correlation of students' achievements and the admission requirements. Research results show that the developed countries have strict entry requirements to teacher colleges and have better understanding of the importance of selecting the best candidates into the teaching profession. Developed countries achieved better results in PISA tests which indicates to a connection between the selection of more capable candidates for teaching profession and student achievement. Research confirms that the role of the teacher is very important and that the future reforms of primary education should be extended to higher education, that is teacher education because teachers play a major role in the educational process.

Keywords: admission requirements, developed countries, developing countries, student achievement, teachers.

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Numerous researches have demonstrated the enormous role of teachers in achievements of students. Educated and motivated teacher that cares about the success of students devotes more effort to preparing the lesson and thus provides the students better conditions for achieving results. The problem occurs when teachers are not equally qualified, motivated and prepared so it is justified to ask why some people even opt for the teaching profession if they have no motivation for this noble profession. The purpose of this study is to highlight the diversities of the admission requirements to teacher colleges in developed and developing countries. Diversity of admission requirements will show that the selection of candidates can affect students' later academic achievements. Comparative analysis between developed and developing countries, precisely Finland, Japan, Korea, Singapore and Croatia, India, Russia and Turkey, determines if there are any differences in the admission requirements among the selected countries. The analysis and the qualitative approach to the statistical indicators of PISA tests conducted in 2012 show which group of countries achieves better results and points to the correlation of students' achievements and the admission requirements. Research results show that the developed countries have strict entry requirements to teacher colleges and have better understanding of the importance of selecting the best candidates into the teaching profession. Developed countries achieved better results in PISA tests which indicates to a connection between the selection of more capable candidates for teaching profession and student achievement. Research confirms that the role of the teacher is very important and that the future reforms of primary education should be extended to higher education, that is teacher education because teachers play a major role in the educational process.

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INTRODUCTION

Stephen Ritz is a teacher at a public school in South Bronx which is known as the poorest district in the United States. He got the idea to grow food with his students the entire year using technologies that require less water and room in order to maximize space within urban areas. The idea was completely successful because students were actively involved in growing food within and outside the school area which resulted in their healthier nutrition. Thanks to this program, the school became safer and more pleasant for learning and working, crime rate significantly dropped and class attendance increased from 40 to 97%. Additionally, the school achieved 100% percent passing rates on standardised tests. Teacher Stephen Ritz founded a non – profit organization with his students that is responsible for the construction of over a hundred gardens in New York with similar projects that are being prepared [4]. Given the results achieved, Stephen Ritz

is obviously highly motivated teacher dedicated to his job and fully committed to the teaching profession. Similar examples of outstanding teachers certainly exist throughout the world. There are teachers who by their actions and energy inspire students and make them better people. They are aware that education is an important factor of social and economic progress and the role of the motivated teacher is to inspire students to try to change themselves in order to change the world.

The reason for setting an example of successful teacher like Ritz is because we want to point out how important the role of the teacher can be in the educational process and in the acquisition of educational achievements of students. Hoglund i McClung [5] cited a research in their paper which proves how students learn better with more effective teachers and their results significantly improve if the class is held by a successful teacher several years in succession. The problem arises when not all teachers are equally successful and motivated nor have all the desirable competencies and qualities required for such an important profession. It is important to pay attention to the selection of the candidates wishing to enter the teacher's profession so we could provide to the students, holders of our future, the opportunity to have the very best teachers. Admission to the teacher related colleges should serve as a filter that only lets those who show genuine will for teaching. Otherwise, there is a risk that someone who has no incentive or the required qualities for releasing the creativity, skills and knowledge of students, marks dozens of generations of school attendants. The paper studies the correlation between enrollment in teacher training colleges in the developed countries and developing countries and the existence of mutual relations between the conditions of entry to teacher training colleges and the achievements of 15 year old students in the selected countries. Since the quality of the educational system is largely determined by the quality of teachers, it is of great importance to enroll only highly motivated individuals to the teaching profession.

MATERIALS AND METHODS

The aim of this study is to point out the cause – effect relationships and interconnectivity of conditions of entering the teacher training colleges in developed countries and developing countries with the educational achievements of students in these countries.

The task is to show the differences of the entry requirements to teacher training colleges in randomly selected developed and developing countries and their interrelationship with the educational achievements of students. The study begins with collecting and analyzing the content of pedagogical documentation and literature on the conditions of entry to teacher training colleges in randomly selected countries and the educational achievements of their 15 year old students.

Comparative analysis correlates entry requirements to teacher colleges in the developed countries and developing countries. The research includes Finland, Japan, Korea and Singapore as developed countries and Croatia, India, Russia and Turkey as developing countries. Comparative analysis determines and brings conclusions about the existence and influence of differences in entry requirements among selected groups of countries.

Educational achievements of 15 year old students are analyzed and qualitatively presented using statistical results of PISA studies published in 2013. The study reveals educational achievements of students of selected countries and points to the correlation of student's results and entry requirements, i.e. the quality of their teachers. Reading,

mathematics and science literacy of students of developed and developing countries were used and analyzed as indicators of student's achievements.

RESULTS

Admission requirements to teacher training colleges in the selected countries

It is the responsibility of the society to select only the most capable individuals into the teaching profession in order to provide future generations only with the best teachers. Bearing this hypothesis in mind, we studied the attitude of four developed countries towards selecting the teachers to their colleges. Results show that the observed countries have a variety of additional checks which are used to ensure a quality selection of the future teaching staff.

The Finnish education is regarded as one of the best in the world. Finnish students achieve high scores in international tests and Finnish teachers are role models to many of their colleagues around the world. The teaching profession is one of the most respected professions in Finland so it is no surprise that great competition is present for admission to teacher training colleges. Only the most capable individuals can become teachers and there are several conditions that must be met before a candidate can successfully enter the teacher college. It is necessary to finish high school and pass a demanding graduate exam with honors. Involvement of candidates in a variety of extracurricular activities represents an extra bonus upon enrollment to teacher college. Candidates must demonstrate their excellent interpersonal skills during the enrollment. After the graduate exam, candidates take entrance exam that tests the knowledge of the pedagogical literature. Social interaction and communication skills of candidates are tested in experimental conditions that mimic everyday school situations. The last step that only the best candidates reach is the interview in which they must explain why they have chosen teaching as a future profession [14].

The Japanese are a disciplined nation that stands up for the honor and respect and these are the qualities that are embedded in their education system. The responsibility of teachers in educating students is taken very seriously and it is expected that they fully devote themselves to their profession. The number of candidates that opt for the teaching profession is ten times greater than the number of places available. The Board of Education of each of the Japanese prefecture makes a decision in which way the applicants for admission to teacher training colleges will be tested. It is clear in Japan that the success or failure of education greatly depends on the quality of teachers, therefore outstanding talents with the appropriate skills are chosen for this profession. Candidates must pass the written exam followed by a special assessment. The emphasis is on the assessment of the character that can be determined through interviews and practical exams and the qualities and capabilities important for the teaching profession such as sense for the teaching profession, management skills and previous work experience. Persons who are not qualified teachers can also work in schools, but they must have exceptional skills and knowledge so they can contribute in improving the involvement of students in modern society [10].

Teaching profession is very popular in Korea as it offers long – term employment, good wages and working conditions. Number of available places for entering the college is based on the needs for recruiting teachers. Candidates are selected among the top 5% of students who complete high school which demonstrates the quality of entries to the teaching colleges [2]. Admission to teacher training colleges includes high school grades from certain subjects and recommendation from the teacher. Applicants must pass an

entrance exam followed by an interview and examination of attitudes of the candidates about the teacher's profession and ethics [3].

The Ministry of Education in Singapore selects only a limited number of candidates for the teaching profession. There is great interest for this profession because the state finances school fees and provides scholarships for students. The number of available places is determined by the approximate number of teachers who will retire in the near future. Candidates for the teacher training colleges are students that belong to one third of the most successful students based on the high school grades. Except excellent grades, candidates must successfully pass graduation exam followed by the entrance exam for the teacher college. Candidates who successfully pass the exams have an interview where they have to prove that they have the passion and values needed for the teaching profession, willingness to learn and communication skills in order to be good teachers. Only a certain number of candidates in the enrollment procedure reach the interview which is the last obstacle in entering the teacher training college [15].

Selected developing countries seek to improve their economy and increase the standard of living of the population. It is generally accepted that development is achieved by investing in education. Therefore, it is worth knowing how the developing countries choose their future teachers who will affect students and motivate them to work so they could one day lead their country to economic prosperity.

Admission to teacher training colleges in Croatia has changed since introducing graduate exam at the end of high school. Entry requirements to teacher colleges are average scores from all four years of high school, special achievements of students (competition results, second high school, etc.) and results of graduate and college entrance exam. Scoring of graduate exam results includes compulsory subjects (Croatian language, mathematics and foreign language) and one elective subject. Compulsory subjects are divided into a lower and more demanding level. Requirements for teacher training colleges are passing the demanding level of Croatian language, lower level of mathematics and depending on the type of teacher college, demanding or lower level of foreign language. Entrance exam depends on different teacher colleges so some colleges do not have entrance exam and some of them have. For example, entrance exam on certain faculties of philosophy includes a test of intellectual ability while other teacher's colleges include testing of visual, music, speech and physical abilities [11].

Qualifications that a teacher in India must have are determined by the state bodies for education. Both state and private schools must comply with these rules. Admission requirements vary depending on the federal state of India. The main condition of entry to the teaching college programs is ten or twelve years of schooling, although most countries introduced a minimum of twelve years. Some states introduced graduate exam as an additional requirement. These conditions apply for candidates who wish to study for primary school teacher. Candidates who want to work in high schools must have a degree in natural or social sciences, economics, agriculture, etc. [6]

Competition for admission to universities that hold teacher education in Russia is quite strong. There can be from 3 – 4 to 15 – 17 candidates for one available place. In the past, admission was based on the entrance exam and now it is necessary to achieve good results at the graduation exam that every high school student must pass. The exam is held at the end of the final year of high school at the same time in the entire Russia. Russia is specific in relation to other studied countries because it has specialized classes that take place in high schools which are associated with the education of teachers. Students at the class are introduced with pedagogical knowledge and are professionally oriented for

possible future occupations. About 70% of students attending these classes continue their education at teacher training colleges [12].

All candidates for admission to colleges in Turkey take the entrance exam, including colleges related to teacher profession. The success of entering desired college depends on the results achieved on the entrance exam and high school grades. The exam is held annually across the country at the same time and it consists of verbal and quantitative part. The verbal part of the exam tests literacy, grammar and reading comprehension while quantitative part tests math skills, problem solving and interpretation of various graphs and tables. The aim of the entrance exam is selecting the most capable candidates for higher education and guiding them to the programs they prefer based on their achievements and exam results. Admission test in Turkey is regarded as a “high – risk” test because of its impact on the future of the large number of candidates [1].

The influence of the admission requirements on educational achievements of students

It is visible according to the data of the entry requirements for the teacher colleges that the entry requirements in developed countries are more extensive and stricter in selecting the candidates. Requirements are not only grades or specific knowledge acquired during secondary education that is tested on entrance exam, but often the most important factor in selecting the candidates is interview and assessment of their personalities and attitudes on the teacher’s profession. In developing countries the conditions of entry are mainly confined to entrance exams and grades from secondary education while skills and intentions about teacher’s profession are not questioned. Analysis of the student’s results from PISA studies shows that it is possible to assess whether more extensive and detailed testing of candidates in developed countries ensures better achievements of students.

Results of the PISA study conducted in 2012 were used as a measure of student’s achievement. Reading, mathematics and science competencies and knowledge of students were tested. The table shows average results of students in developed and developing countries [13].

Table 1: Reading, mathematics and science competencies in selected countries

Country	Reading	Science	Mathematics
OECD average	496	501	494
Developed countries			
Finland	524	545	519
Japan	538	547	536
Korea	536	538	554
Singapur	542	551	573
Developing Countries			
Croatia	485	491	471
India	-	-	-
Russia	475	486	482
Turkey	475	463	448

According to the information given in Table 1, it is clear that developed countries achieved above – average results in all researched elements. Finland, as a representative of Europe, has difficulties with reaching the results of the developed Asian countries in spite of very successful results.

Observed developing countries achieved below average results compared to OECD average in all analyzed elements. Croatian results are among the best of the developing countries. Expressed specificity belongs to India because it did not take part in 2012 PISA study so its results can not be compared with the results of other developing countries. India has participated in the study in 2009 and achieved very poor results ranking 71st place among 73 countries surveyed. Achieved results were such a big shock for India that it withdrew from participating in PISA 2012 in order to avoid unwanted surprises. Poor results provoked wide debates about the effectiveness of education in India. It was concluded that India must adapt its education for the coming global changes. It is said that one of the key factors of changes in education were teachers “who will completely control their subject and have a vision that extends beyond the borders of the subject itself” [9]. Great success of students from developed countries is a result of such teachers described in Indian debates which brings us to the conclusion that India is on the right track and that the discussions about their education and teachers is developing in the right direction.

DISCUSSION

A research was conducted in Croatia which showed that part of the candidates who enrolled in teacher colleges choose this profession because they were not able to enter the college they really wanted. These participants become teachers who are responsible for the education of tens of generations of students [8]. The truth is, some of these candidates will become good and successful teachers regardless the reasons why they choose teaching profession, but many of them will leave a mark on students just because they did not want or were not able to motivate them to work, research, learn and to be creative. Developed countries have set more demanding and specific entry requirements and this way prevented admission to teacher colleges for people who were not motivated enough for the teacher’s profession.

Requirements for admission to teacher training colleges can be divided into two categories. The first category includes assessing, evaluating and testing knowledge gained in high school, high school grades, special accomplishments, graduation exam and entrance exam. Common for these requirements is that they can be statistically and numerically expressed and presented. The second category consists of specific conditions that are different between developed and developing countries and is the most important factor in choosing candidates for the teaching profession. These conditions are interview, checking and evaluating communication skills and examining attitudes for the future teaching profession.

Admission requirements for teacher training colleges in developed countries are a combination of both of these categories. Finland, Japan, Korea and Singapore as a condition for entering to teaching profession ask for a high school degree and good grades (though grades are not specified as a requirement in Japan). Finland as an additional factor takes into account participation in extracurricular activities and certain achievements in high school. Candidates in all four countries must pass an entrance exam for college while in Finland and Singapore candidates must pass the graduation exam which precedes the

entrance exam. The specific entry requirements are what makes developed countries stick out. The interview that includes an assessment of the character of the applicants and examination of the attitudes about the teacher's profession is present in all the selected developed countries. Each of the developed countries has one entry requirement that is specific. Finnish candidates participate in an experiment that tests their social and communication skills. Qualities and capabilities relevant for the teaching profession and leadership skills are taken into account in Japan. One of the entry requirements in Korea is recommendation of a secondary school teacher about the readiness of the candidate for enrollment to teacher training college. Candidates in Singapore must prove their willingness to learn and communication skills. Students from developed countries have achieved above – average results on the PISA survey in 2012 and their results are at the top of the scale which indicates that they have good educational system and effective teachers.

Admission to teacher colleges in developing countries mostly consists of evaluating secondary education and testing the candidate's knowledge. High school degree is a requirement in all countries, while Croatia and Turkey also take grades into account. In order to enter the teaching profession, students from Croatia, India and Russia must pass the graduate exam that largely determines their further education. Candidates in some colleges in Croatia and Turkey must pass the entrance exam. In Croatia, entrance exam can test intellectual abilities or specific skills necessary for the profession while great number of colleges has no additional exam. Entrance exam in Turkey tests math skills, problem solving, literacy, grammar and reading comprehension. Russia introduces classes in secondary education where students can learn pedagogical skills that can help them in entering teacher colleges. Students in researched developing countries have achieved below average results on PISA tests in all elements, except India who has not participated in the survey in 2012 due to the mentioned reasons.

Developed and developing countries share equal entry requirements and traditionally these requirements are high school degree, graduate or entrance exam, etc. Difference that puts the developed countries on top is number of specific entry requirements. Interviewing the candidates is the key in choosing the best teaching staff in developed countries. "Intelligence plus character – that is the true goal of education" [7], and developed countries are acting exactly according to these words of Martin Luther King. Finland, Japan, Korea and Singapore did not stop at evaluating the knowledge and statistical figures as a measure of success of their candidates. These countries interviewed their candidates and examined their attitudes and motivation about teacher profession and got teachers with character who contributed to the excellent results and achievements of students.

Given the major role that teachers play in the success of students, future reforms of education must extend beyond the primary or secondary school. They certainly must include higher education, i.e. teacher education and pay greater attention to the selection of candidates in professions that are in direct contact with people and especially young children on whose personalities they have strong influence. Developed countries are an example of how teachers must have a lot more than just knowledge. They must be motivated and have a clear vision of the enormous importance they will have in teaching younger generations. Teacher profession in developed countries is a noble one and enjoys high reputation in the society and this is the goal that developing countries should aspire to by selecting only the best individuals.

REFERENCES

- [1] Bastürk, R., Investigation of Appointing Teachers Employed in the Public Education Institutions in Turkey, Hacettepe Üniversitesi Eğitim Fakültesi Dergisi (H. U. Journal of Education), 2007, 33: 33-40.
- [2] Center on International Education Benchmarking, South Korea: Teacher and Principal Quality, 2015. URL:<http://www.ncee.org/programs-affiliates/center-on-international-education-benchmarking/top-performing-countries/south-korea-overview/south-korea-teacher-and-principal-quality/> (28.6.2015.)
- [3] Educational Testing Service, Preparing Teachers around the World, Policy Information Center, 2003, pp 18.
- [4] Global Teacher Prize, Meet the finalists: Stephen Ritz, Global Teacher Prize, 2015. URL: <http://www.globalteacherprize.org/top-10-finalist/stephen-ritz> (22.6.2015.)
- [5] Hoglund, B., McClung, C., Teaching Quality Impacts Student Achievement, ASQ Primary and Secondary Education Brief, 2012, vol 5/issue 3.
- [6] International Bureau of Education, World Data on Education: India, VII Ed. 2010/2011, United Nations Educational, Scientific and Cultural Organisation, 2011.
- [7] King Jr., M. L., The Purpose of Education, Morehouse College Student Paper, The Maroon Tiger, 1947. URL: <http://www.drmartinlutherkingjr.com/thepurposeofeducation.htm> (30.6.2015.)
- [8] Kuzijev, J., Topolovčan, T., Uloga odabira učiteljske profesije i samopoštovanja u sagorijevanju učitelja u osnovnoj školi, Andragoški glasnik, vol. 17/br. 2, str. 125-144.
- [9] Lahiri, D., The PISA Shocker, The Times of India, 2012. URL:<http://timesofindia.indiatimes.com/edit-page/The-PISA-shocker/articleshow/16728855.cms> (30.6.2015.)
- [10] Ministry of Education, Culture, Sports, Science and Technology (MEXT), "Attracting, Developing and Retaining Effective Teachers", Japanese Country Background Report, OECD, Paris, 2003, pp 47-49.
- [11] Nacionalni informacijski sustav prijava na visoka učilišta, Studijski programi, 2015. URL: <https://www.postani-student.hr/Ucilista/Nositelji.aspx#> (28.6.2015.)
- [12] Obukhova, I., Oleynikova, O., Muraveva, A., Teacher Education in Russia, European Dimensions of Teacher Education – Similarities and Differences, Faculty of Education, University of Ljubljana, The National School of Leadership in Education, Slovenia, 2011, pp 85-95.
- [13] OECD, PISA 2012 Assessment and Analytical Framework: Mathematics, Reading, Science, Problem Solving and Financial Literacy, 2013.
- [14] Sahlberg, P., Secret to Finland's Success: Educating Teachers, Stanford Center for Opportunity Policy in Education – Research Brief, 2010.
- [15] Sclafani, S., Rethinking Human Capital in Education: Singapore as a Model for Teacher Development, The Aspen Institute, Washington, 2008, pp 3.