

# Reforms in Education: Children Cannot Wait

**The announced measures point at the right direction. It is well known that in education there is not only one formula, but many variables that can simultaneously influence the educational process, so these ideas need a joint approach to produce an impact on quality, at least, in the medium term.**

The government announced a set of measures aimed at improving the quality of public education which embraces different subject-areas of the academic activity. The project which shall be introduced at the parliament envisages the allocation of 20 thousand millions Chilean pesos to the townships so that they may face the changes proposed for municipal education. Likewise, for the first time, educational authorities have set a clear goal: to increase in 10 points the results of the SIMCE test for the fourth grade, and additionally to reduce the gap between the students of high and low social classes.<sup>i</sup> In brief, the proposals involve the following:

**In Relation to Teachers:** Incentives to attract better qualified students to the teaching career and other incentives for the performing teachers, such as a Teaching Excellence Allowance (Asignación de Excelencia Pedagógica) which rewards the best teachers of the municipal and private but state-subsidized systems. Furthermore, a voluntary retirement plan considers support measures for the teachers who are about to retire or receive low pensions, which will provide a bond up to 20 millions Chilean pesos for each teacher who retires. Thus, by 2013, nearly 17,000 teachers will be able to claim this benefit. Additionally, a bond between \$1 million and \$2 million shall be given to the retirees who receive low pensions.

**In Relation to Headmasters:** it is envisaged that they are elected through the Alta Dirección Pública Pedagógica (top pedagogic public management), and that performance agreements are settled with each one of them. Likewise, the headmasters will receive higher incomes according to the school size, the possibility of organizing their teams and the power to change 5% of the worst evaluated teachers, who currently cannot be dismissed.

**In Relation to Students:** the most important measure concerns the increase of the *preferential schooling subsidy* (Subvención Escolar Preferencial) intended for the most vulnerable students. A curricular change has been programmed in order to strengthen learning by establishing more Language and Math hours; in these areas, our students are not well prepared for the current labor market. Moreover, new and more frequent evaluations shall be performed through SIMCE tests in Physical Education, English and Technologies. A support plan will be established for 1,000 schools showing the worst performance, new teaching material in Language and Math, in addition to the creation of a virtual school where the students will have the possibility to have more material available through the Internet.

Furthermore, 60 excellence public secondary schools will be built in order to support the best students who have completed the primary subsidized education, rewarding their effort and academic achievements, so that they can have access to a quality public secondary education.

**For Families:** the aim is to have more and better information available for parents regarding the results of the SIMCE and PSU tests in order to guide their decisions.

### **Preferential Subsidy**

Among the announced measures, it is worth highlighting that some of them represent a continuity of last years' activities, such as the increase of the preferential subsidy which benefits the students with lower incomes. For the lowest 20%, this subsidy will amount to \$82,000 per month, which will benefit 400,000 students in 2011. For the following 20%, it will increase to \$78,000 per month, which will benefit another 400,000 students. This is a good way to improve the education of students coming from families with less cultural capital, by encouraging parents' freedom to choose the school they consider most appropriate for their children.

### **More Classroom Hours**

The measure aims at increasing Language hours, between fifth and tenth grade, by a total of 480 hours annually, and Math hours by 320. Furthermore, in English there will be a total increase of 80 hours in fifth and sixth grade. To achieve this, one hour per week will be subtracted from Social Sciences (a questionable issue) and Technological Education. The diagnosis is that many students do not understand what they read or lack the basic skills learned in Math. In fact, according to the results of last SIMCE, schools students between fourth and eighth grade are up to two years delayed in their knowledge of those subjects. The analysis of these tests' scores, according to the achievement levels of eighth grades 2009, showed that 38% of the students classified in an initial level in Reading, and 62% in Math.

The evidence shows that more classroom instructional time per week intended for Math, Reading and Science may explain the performance differences in those areas (Lavy V. 2010)<sup>ii</sup>. This research isolates the effect of classroom hours, controlling by different characteristics of pupils and schools, showing that there is a positive correlation between more classroom time and the results in the PISA test 2006 for those subjects. Nevertheless, the additional impact of one classroom hour is higher (almost double) in the countries of the Organization for Economic Cooperation and Development (OECD) than in the developing countries which took part in the test. Likewise, the research demonstrates that the productivity of classroom hours, in achieving that students learn from what they are being taught, is much higher in countries that have result measurement and control systems, and autonomy to manage the school's budget, and hire and dismiss teachers. This implies that, together with more classroom hours, it is necessary to make good use of them, that children work more and classroom time is better regulated and organized.

### **Better Teachers**

Other measures aim at improving the instruction and training of teachers working in education faculties, and that of the students who apply to these careers; these embrace the following:

- Incentives to attract the best talents to the teaching career. The teacher commitment scholarship (Beca Vocación de Profesor) will enable students with more than 600 points in the PSU test to study the career for free; with more than 700 points, they will additionally

receive \$80,000 per month; and with more than 720 points, they will get financial aid to study one semester abroad.

- An increase of the initial salary for those who have completed the teaching career and are among the best evaluated 30% in the INICIA test, whose purpose is to evaluate their knowledge. This measure, which will enter into force next year, will consist of a monthly bond for the best evaluated. The first 10% of best scores will receive an additional allowance of \$150,000; the following 10% will receive an allowance of \$100,000, and the last 10% will get an allowance of \$50,000, thus achieving an initial average salary of \$590,000.

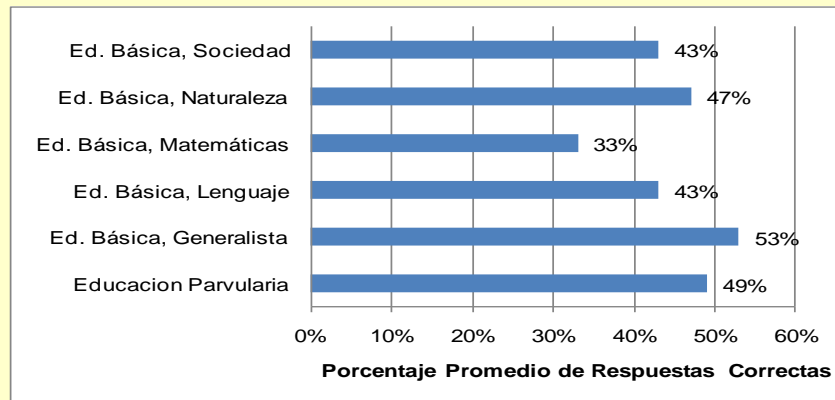
The precedent variable is a crucial one in the academic process, since good teachers are indispensable to achieve a good education. The systems with highest performances in the world engage their teachers from the top 30% of each graduating class, thereby guaranteeing high quality teachers once they complete their education, as in Singapore, Hong Kong, Finland and South Korea.<sup>iii</sup>

The evidence shows the importance of good teachers for the students' academic achievements and that having good teachers may be much more efficient than other measures such as reducing the number of pupils per classroom or increasing the teaching hours (Rivkin, Hanushek and Kain).<sup>iv</sup>

Currently in our country, the cut scores in the teaching careers, both from the Council of Rectors of Chilean Universities (CRUCH) and private universities, are below 500 points and, once they complete their studies, the students lack the necessary performances to teach a quality education. According to the results of the INICIA test for primary education, the correct answer average in Math knowledge obtains only 33%, and 43% in Language, (Chart 1).

Chart 1

TEST ON DISCIPLINARY KNOWLEDGE BY STUDENTS WHO HAVE FINISHED TEACHING STUDIES

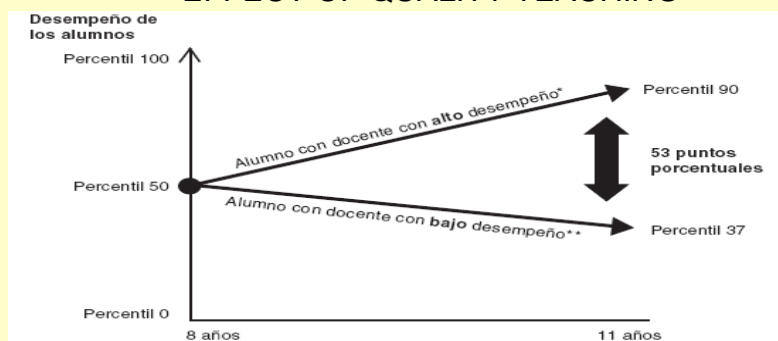


Source: Ministry of Education (MINEDUC), Programa de fomento a la calidad de la formación inicial docente (Program aimed at fostering initial quality teaching studies), INICIA, 2009.

The available evidence suggests that the students’ learning differences derived from teachers of different effectiveness are highly relevant. That is the case of a research undertaken in the United States which demonstrates that if two average 8 year old pupils are appointed to different teachers – one with high performance and another with low performance – their scores in the academic achievement tests will differ in more than 50 percentage points in a period of 3 years.

Chart 2

EFFECT OF QUALITY TEACHING



Source: McKinsey Report, 2008, analysis of results from test applied in Tennessee, USA.

### **The Headmaster's Leadership**

The leadership of each headmaster, together with the attributes to practice it, is a key factor to obtain effective schools. Several studies reveal that having specialized leading teams who act as leaders in the process, contribute to get better results from their pupils.<sup>v</sup>

This suggests that, together with establishing a selection system of the best headmasters, their remunerations should have different incentives than those of the teachers, depending on their responsibility level and performance. Currently, in the municipal system, the salaries of the headmasters are not much higher than those of the teaching staff, despite their additional administrative load. While teachers have a relative guaranteed stability, unless they are qualified as non-satisfactory, the headmaster positions must participate in tenders every 5 years. According to a recent study, the headmasters' salaries per hour are on average only 20% to 30% higher. In the OECD countries, this difference may exceed 50%.<sup>vi</sup>

### **Conclusions**

The announced measures, which consider the different features of the academic activity, point at the right direction. It is well known that in education there is not only one formula, but many variables that can simultaneously influence the educational process, so these ideas need a joint approach to produce an impact on quality, at least, in the medium term. We must not overlook the real objective which is to achieve a better education for the children.

Nevertheless, we must bear in mind that this type of measures will render results only in the mid and long term. In the short run, more professionals of other fields should be allowed to practice teaching, especially in those areas lacking teachers, such as the case of Math and English. This is a way to make up for the deficit of good and motivated professionals in the sector.

Although it is no doubt impossible to achieve an adequate motivation in a system with irremovable teachers and headmasters; until now this issue had not been dealt with, which is one of the main reasons for bad results in education. This is going to be a key step which, hopefully, is going to bear fruits in the short and medium term.

Probably, the implementation of this type of reforms, which is necessary to substantially improve education, will experience a strong opposition from the injured parties: the low performance teachers. Here, we must keep in mind that the purpose is to

gradually remove bad teachers from the system and to establish a series of incentives aimed at awarding teachers and headmasters who exhibit better performances.

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<sup>i</sup> In the last 10 years, the SIMCE test in that subject area increased only 3 points.

<sup>ii</sup> Victor Lavy. Do Differences in School Instruction Time Explain International Achievement Gaps in Math, Science and Reading? Evidence from Developed and Developing Countries. NBER Working paper 16227, July 2010.

<sup>iii</sup> McKinsey Report 2008 on Education. How the World's Best Performing Schools Come Out on Top. Published in PREAL Nr 41 by M. Barber and M. Mourshed, July 2008.

<sup>iv</sup> Teachers, School and Academic Achievement, *Econometrica*, Vol. 73, nr 2, p. 417-458, 2005.

<sup>v</sup> McKinsey report, op. Cit., OECD 2009, L. Fontaine and B. Eyzaguirre, Las escuelas que tenemos, Punto de Referencia 299, CEP. Chile, October 2008. Sammons, Khamis and Coleman, 2004.

<sup>vi</sup> D. Bravo, D. Flack and D. perunana, 2008. "Evaluación docente y rendimiento de los alumnos". In [www.fundacionpobreza.cl](http://www.fundacionpobreza.cl) Umbral Social 2009.