

The Case of the Propedéutico Program at Universidad de Santiago de Chile (USACH)

El caso del programa Propedéutico en la Universidad de Santiago de Chile (USACH)

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Abstract

This paper aims to provide relevant evidence on the experience and results of Propedéutico programs. It suggests that, while performing well on the PSU is highly correlated with a high socioeconomic status, being at the top of the class rank is likely to reflect the presence of the personal character and academic potential necessary to access and succeed in higher education regardless of social background. To make this argument, the paper relies on different sources. First, based on data about the performance of students enrolled in two top universities (PUC and USACH), it shows that students who were in the top 10% of their high school class rank tend to perform significantly better and graduate in a more timely manner than their counterparts who, coming from similar socioeconomic backgrounds, were not among the top 10%. Second, the paper describes how the Propedéutico programs operate and presents the results of its latest evaluation. These results suggest that, even though Propedéutico students have lower performance and experience greater challenges than their counterparts admitted through regular admission during the first year, most of them end up overcoming the academic gaps throughout the second year and graduating within a one-year lag (Koljatic & Silva, 2012). The paper concludes and summarizes what Chile can learn from the experience of Propedéutico programs. It also highlights what still needs to be done if the country wants to move towards a more efficient and equitable system of university admissions.

Keywords: propedéutico, higher education, equity, admission policy, class rank

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Resumen

El objetivo de este trabajo es proporcionar evidencia relevante sobre la experiencia y resultados de los programas Propedéuticos en Chile. Se parte de la premisa de que el desempeño en la PSU está altamente correlacionado con el nivel socioeconómico del estudiante, sin embargo, estar dentro del 10% superior del ranking de notas del curso tiende a ser reflejo de ciertas características de personalidad y del potencial académico necesario para acceder y graduarse exitosamente de la educación superior, independientemente del nivel socioeconómico del estudiante. El documento hace referencia a diversos recursos para argumentar en favor esta premisa. En primer lugar, en base a los datos sobre el rendimiento académico de los estudiantes matriculados en dos de las mejores universidades del país (PUC y USACH), se muestra que los estudiantes que se encontraban dentro del 10% superior del ranking de notas de su clase tienden tener un desempeño significativamente mejor y graduarse de manera más oportuna que sus pares que, procedentes de niveles socioeconómicos semejantes, no se encontraban entre el 10% superior de su curso en la escuela. En segundo lugar, el documento describe cómo operan los programas Propedéuticos y presenta los resultados de la evaluación más reciente al Programa Propedéutico USACH. Estos resultados sugieren que, a pesar de que los estudiantes que acceden a la universidad vía propedéutico tienen un rendimiento académico más bajo y experimentan mayores dificultades durante el primer año que sus homólogos admitidos a través del canal regular, la mayoría de ellos terminan superando las brechas académicas en el segundo año y se gradúan con un año de atraso (Koljatic & Silva, 2012). El documento concluye resumiendo lo que Chile puede aprender de la experiencia de los programas propedéuticos y pone de relieve los desafíos aún pendientes para que el país avance hacia un sistema de ingreso a la educación superior más eficiente y equitativo.

Palabras clave: propedéutico, educación superior, equidad, políticas de admisión, ranking de notas

In Chile, access to higher education is largely determined by students' performance on the *Prueba de Selección Universitaria* (University Selection Test, or PSU). However, some universities, in an effort to equalize college access and increase opportunities for talented but economically disadvantaged students, have started to implement programs that offer a side-door to access higher education. These programs vary depending on the institution, but most of them operate by allowing students who attended vulnerable high schools within the municipal or private subsidized sector and ranked within the top 10% of their class to gain admission to college education via an alternate route, one that does not require PSU scores. The underlying assumption of these so-called Propedéutico programs is that "merit" is equally distributed throughout all segments of society. It suggests that students who have persistently been at the top of their class are more academically talented and have demonstrated a broader set of academic aptitudes than those who perform well only on the day of the PSU. While performing well on the PSU may signal that a student comes from a high socioeconomic background (or SES) and was raised by more educated parents (Beyer, 2009; OECD & The World Bank, 2009), being at the top of the class is likely to reflect actual merit, which is understood by the Propedéutico as intellectual ability, discipline, resilience, and persistence (Comisión, Equidad e Inclusión, 2011). Following this rationale, students at the top of their class, regardless of their high school's social context and their families, will tend to have the personal character and academic skills necessary to access and succeed in higher education. Hence, Propedéutico programs aim to provide an alternate path to college admission that ensures highly meritorious students are given the opportunity to pursue quality college education.

As a result of the efforts of various actors and institutions, Chile is about to undergo an important change in the admission processes of its universities in 2013, a change that promises to bring greater equity and diversity to higher education. The *Consejo de Rectores de las Universidades Chilenas* (Board of Presidents of Chilean Universities, or CRUCH) has agreed to include the ranking of students' grades in high school (from now on called *class rank*) in the admissions process starting in 2013.

Drawing on national data, articles, and research results that refer to the academic potential and performance of students in the top 10% of their class rank and, more specifically, to the effects of Propedéutico programs on the rates of college access and success of disadvantaged students, this paper aims to provide relevant evidence to back up the importance and desirability of the inclusion of class

rank in the criteria for admission to higher education. The literature and data reviewed by this paper were selected because of their pertinence and relevance to the current educational reality in Chile. We decided not to include evidence from international experiences to favor the simplicity of the paper and maintain the focus on the national context. The remainder of this paper is organized as follows: First, it describes the broader context in Chile today and justifies the relevance of this paper. Second, it refers to the qualities and academic potential of what we call “the Top Ten student,” that is, those students who perform in the top 10% of their class in high schools and, therefore, show clear signs of academic merit. Third, it looks into the “Propedéutico effect,” the expansion of programs of this kind and how it works in the Universidad de Santiago de Chile or USACH. Finally, it concludes and summarizes what Chile can learn from the different Propedéutico experiences, and highlights what still needs to be done if the country wants to move towards a more efficient and equitable system of university admissions.

Context

Over the last 50 years, Chile has experienced great progress in most of its social indicators. Just to mention a couple, malnutrition rates in children under age six dropped from over 30% in the 1960s to less than 4% by the year 2000 (MINSAL, 2000). Similarly, the country has succeeded in reducing its adult illiteracy rate from about 25% in 1940 to around 4% in 2000 (MINEDUC, 2008). Figures 1 and 2 display the graphs of these developments.

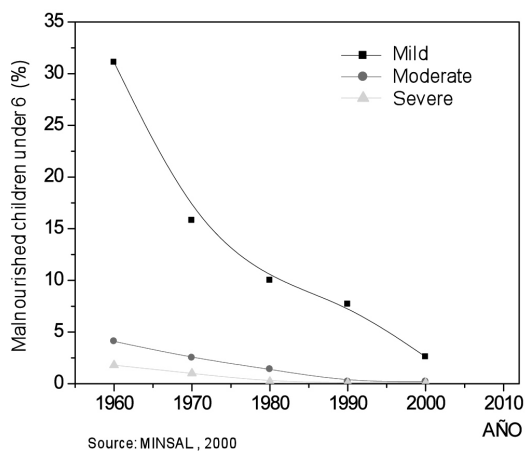


Figure 1. Malnourished children (%) 1960-2000.

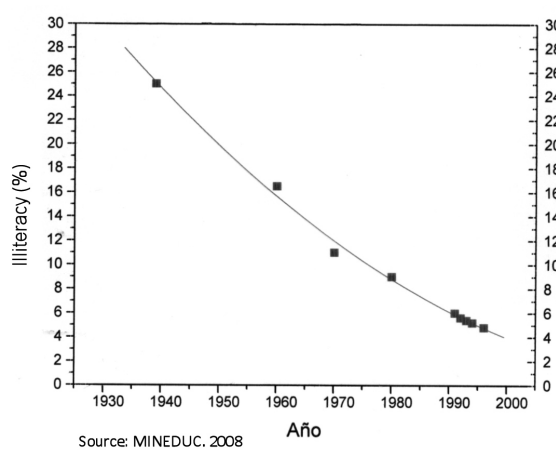


Figure 2. Illiteracy rate (%) 1930-2000.

Chile has also experienced significant improvements in educational matters. Figure 3 shows that as early as 1960 the country had already achieved almost universal primary education. Furthermore, secondary education attendance almost doubled over the second half of the 20th century, from about 50% of the population enrolled in 1960 to more than 90% in 2000.

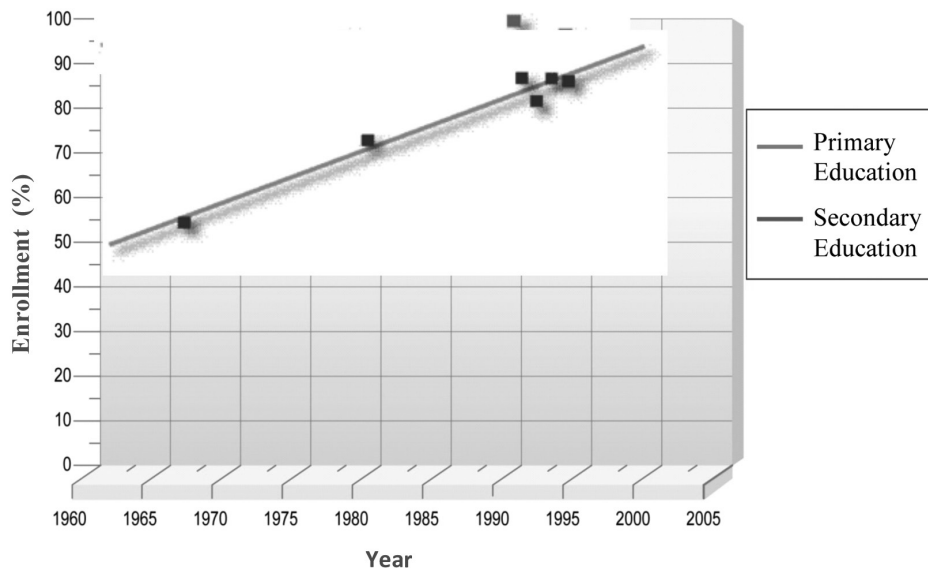
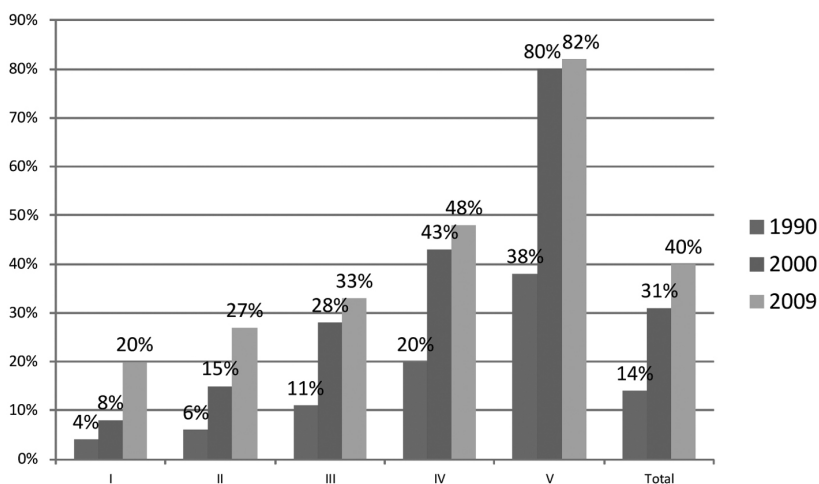


Figure 3. School enrollment (%) 1960-2000.

However, in spite of the developments in the country’s social and educational indicators, there is an area in which the country seems to be stalled: access to higher education. Even though the enrollment in tertiary institutions has more than doubled in the last decade and the gross enrollment rate reaches 40% (MIDEPLAN, 2009), the main problem continues to be the unequal access of students to higher education based on their socioeconomic status. Figure 4 presents data on the gross enrollment rate in tertiary education by household income quintile in the last three decades, and suggests that students in the lowest quintile of the income distribution enroll at rates that are four times lower than those of the wealthiest quintile (20% vs. 82%). Even more troublesome is that the participation gap remains wide even between the two top quintiles of the income distribution: the enrollment rate for students in Quintile IV is 48%, still low compared with 82% enrollment of students in the highest quintile (MIDEPLAN, 2009). This means that only the wealthiest students who come from families with highly educated parents are the ones actually accessing higher education.



Source: Data from CASEN 1990, 2000, 2009 (MIDEPLAN, 2009).

Figure 4. Participation in tertiary education by household income quintiles, 1990, 2000, 2009.

The inequalities in access to higher education in Chile could well be explained as a result of the current system of college admission, a system that largely relies on the scores of a standardized test for college admission, which until the year 2002 was the *Prueba de Aptitud Académica* (Academic Aptitude Test, or PAA) and since 2003 has been the PSU test. According to the evidence, standardized tests for college admission have continually benefited students coming from private schools (mostly from affluent families), and at the same time have reduced the chances for those coming from private subsidized and public municipal schools. It is important to note that municipal schools represent the majority of vulnerable, low-income students in the country. Figure 5 below reveals these inequalities.

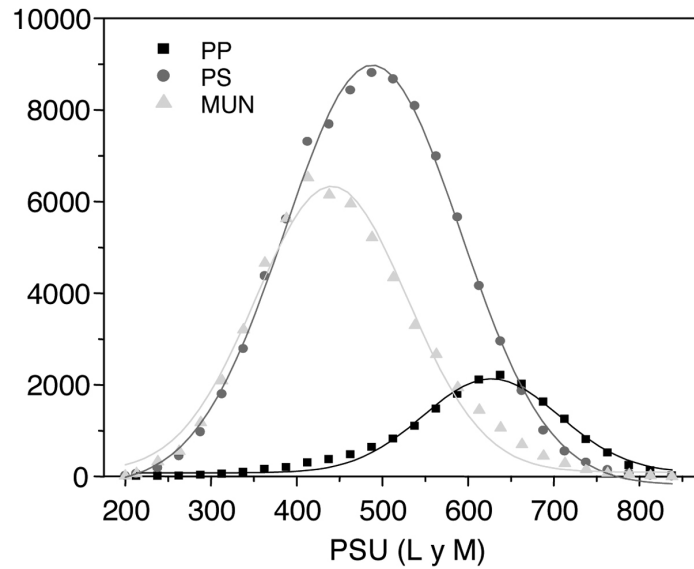


Figure 5. Average PSU by type of high school, class of 2011. Authors' elaboration using data from UNESCO.

The Figure 5 above shows how segregated the Chilean educational system is today, and suggests that even though students from municipal and private subsidized schools largely surpass those coming from private paid schools in number, they tend to perform much lower on the PSU exam and are less likely to be admitted to higher education. Moreover, even though the data displayed is from the cohort graduating from high school in 2011, this trend does not appear to have changed since 1992, and has even worsened since 2003 with the introduction of the PSU to replace the PAA (Beyer, 2009). Thus, considering the equity gaps that the overreliance on standardized tests has caused in the admissions process, we are inclined to believe that these scores cannot tell the whole story about academic merit. Through the following figure we will explain why.

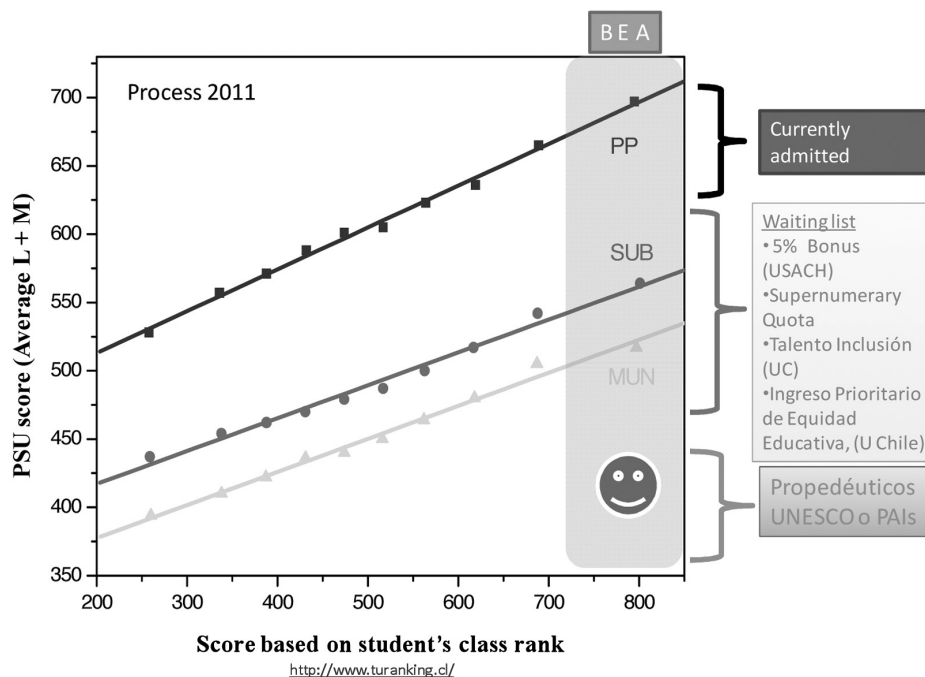


Figure 6. PSU vs class rank.

Figure 6 presents the current scenario in the admissions process for higher education. Just as Figure 5 does, it also makes reference to the segregation of our educational system: students from private paid schools achieved PSU scores (vertical axis of the graph) much higher on average than those from subsidized and municipal institutions and, therefore, are more likely to be admitted into higher education. The figure suggests that, even though there is a positive correlation between PSU scores and the students' class rank (horizontal axis), students performing well on the PSU are not necessarily those with the best academic potential. Let us hypothetically compare, for example, two students scoring 550 points on the PSU: one from a private paid school and another from a private subsidized school. Following the graph, the student from the private paid school is probably among the worst performing in terms of class rank, that is, he or she is likely to have obtained low grades throughout high school, which placed him at the bottom of the class. In contrast, a student from a private subsidized school who is able to achieve the same PSU score (550) is likely to have ranked among the top 10% of students with the highest grades in his or her high school class. Under the current admissions system, the student in the private paid school is much more likely to gain admission to a selective university than the one coming from the private subsidized school, even though the latter did much better during the four years of high school. The question that follows is: Are the students scoring high on the PSU test always more meritorious and talented than those who do not? The answer of the system as it works today seems to be yes, while our answer is "no, their position in the class rank should also be considered."

Still, some of the educational policies being implemented in our country to date have made it difficult to change the status quo. The best examples are the requirements to apply for student financial aid. Many of the scholarships offered to low income students (*Beca Juan Gomez Milla*, *Beca Bicentenario*, *Beca para Hijos de Profesionales de la Educación*, *Beca Vocación de Profesor*) require a minimum PSU score of 500, 550 or 600, and make no reference to class rank. Thus, higher education institutions have not had enough incentives to change the admissions process. The BEA (Academic Excellence Scholarship) constitutes an exception, because it is granted by the Ministry of Education to the top 7.5% of students with the best high school grades of their class, as long as they have studied in municipal or private subsidized schools and belong to the first four income quintiles. The BEA benefits students in the green area of the graph above, which we suggest are those who have demonstrated academic merit over time and should be admitted into properly accredited universities.

Finally, this figure makes reference to alternative programs that over the last decade have opened a side-door for students who, although they have demonstrated academic talent, have not been able to access higher education through the formal system because they did not score highly enough on the PSU test. Among these programs are: The USACH *5% Bonus* program, the *supernumerary quota*, the *Talento e Inclusión* Program implemented by the Universidad Católica, the *Ingreso Prioritario de Equidad Educativa* Program launched by the Universidad de Chile, and the USACH-UNESCO Propedéuticos.

The USACH *5% Bonus* program operated between the years 1992 and 2003, when the Academic Board agreed to increase by 5% the final score with which students within the top 15% of their graduating class were applying for admission. This measure benefitted a total of 15,191 students until 2003, when the CRUCH banned its further use, arguing that it delayed the overall process of university admission. The *supernumerary quota* involves additional vacancies for students who, having been awarded the BEA and having applied to universities that are part of the CRUCH or affiliated universities¹, have been left on the waiting list because of their PSU score. This way, students who are lacking a few points on their final score to be admitted will be awarded admission through this program (DEMRE, 2011).

The other three initiatives were started by the three flagship universities in the country: the Universidad Católica (PUC), the Universidad de Chile (U. Chile), and the Universidad de Santiago (USACH). In the remainder of this paper we will focus primarily on the Propedéutico Programs initiated by the USACH, distinguished by the high vulnerability of the schools with which the program has partnered to select their students. These schools had achieved very low scores in the national assessments, had high rates of grade repetition and student dropout, and a high percentage of students near the poverty line (De la Fuente, Hernández, & Raczynski, 2011). But first, we want to introduce the *Top Ten* student we are talking about to the reader.

The top ten student

According to a study conducted in 1997 by the Institute of Sociology of the Universidad Católica, the students who rank in the top 8% of their class in high school demonstrate exceptional academic potential, regardless of the school where they studied (Bralic & Romagnoli, 2000). The purpose of the aforementioned research was to examine the study habits of a representative sample of Chilean students in high school grades 10 and 11. The sample consisted of 4,049 students from Regions II, V, VIII, X and the Metropolitan Region; from municipal, private subsidized, and private paid schools; from the humanistic-scientific (general education) and the technical-professional (vocational) track, mostly aged 16-17, and of both sexes. As shown by the results grouped in Figure 7, the study concludes that students whose high school GPA places them at the top of the class rank have greater facility for studying and enjoy it more than their average peers in the class (see Figure 7.A and 7.B). In addition, they show an exceptional interest in pursuing higher education (Figure 7.C), and are more prone than their counterparts on average to have read at least one book of their own interest during the year (Figure 7.D).

¹ U. Diego Portales, U. Mayor, U. Finis Terrae, U. Andrés Bello, U. Los Andes, U. Adolfo Ibáñez, U. del Desarrollo, U. Alberto Hurtado.

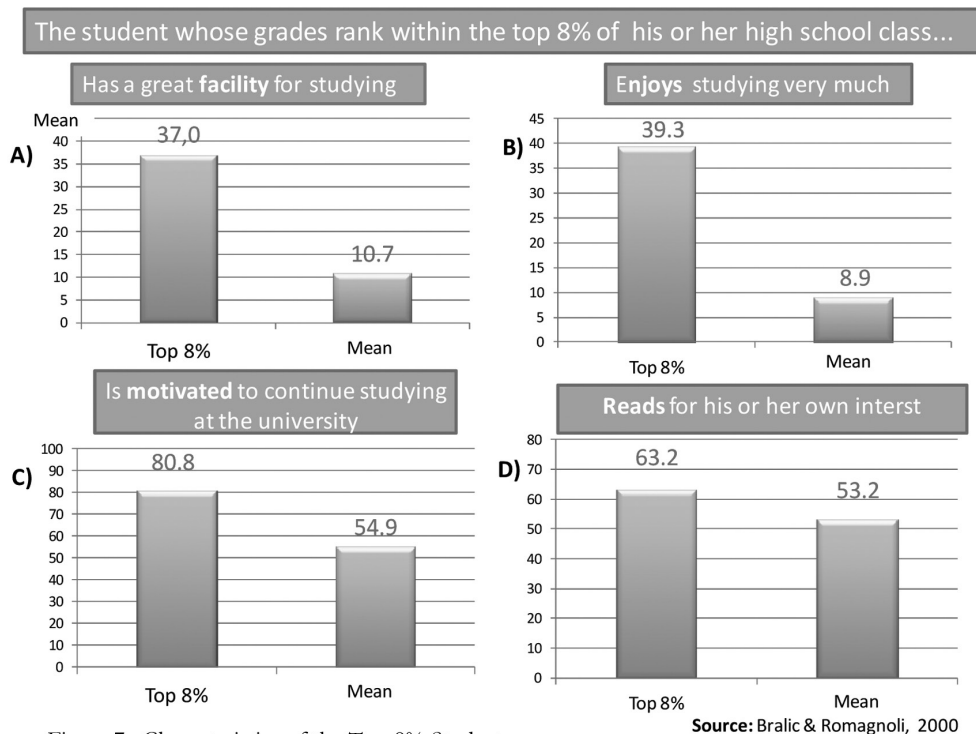


Figure 7. Characteristics of the Top 8% Student.

Thus, the top 8% of students in high school undoubtedly appear to have characteristics that signal high academic potential. But are these characteristics a good predictor of their future academic performance? The evidence we have so far suggests that, yes, the most talented students in high school are likely to perform well in higher education and, therefore, a national policy that aims to provide college opportunities to the most talented students in the country –regardless of their social class and school– should increasingly rely on the student’s class rank.

To further support the statement above, we next provide data on the actual college performance of top 10% students versus those who were not at the top of their high school class rank. Figures 8 and 9 illustrate the case of Universidad Católica, while Figures 10 and 11 show the situation at the USACH.

The evidence from Universidad Católica suggests that, even among students coming from the most elite schools in the country, those who were in the top 10% of their class rank tended to perform significantly better than their counterparts who came from the same school (and probably from the same socioeconomic and cultural background), but were not at the top of their class rank. Figure 8a below shows these differences between Universidad Católica students coming from private schools, while Figure 8b shows the same for students coming from municipal or private subsidized schools.

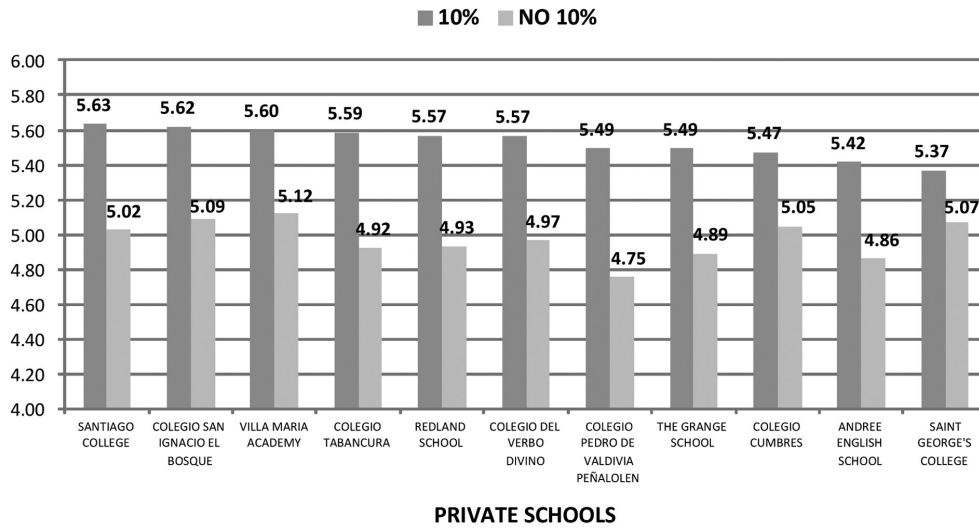


Figure 8a. Cumulative GPA of students enrolled in Universidad Católica between years 2004-2010 by school of origin and high school rank. From PUC.

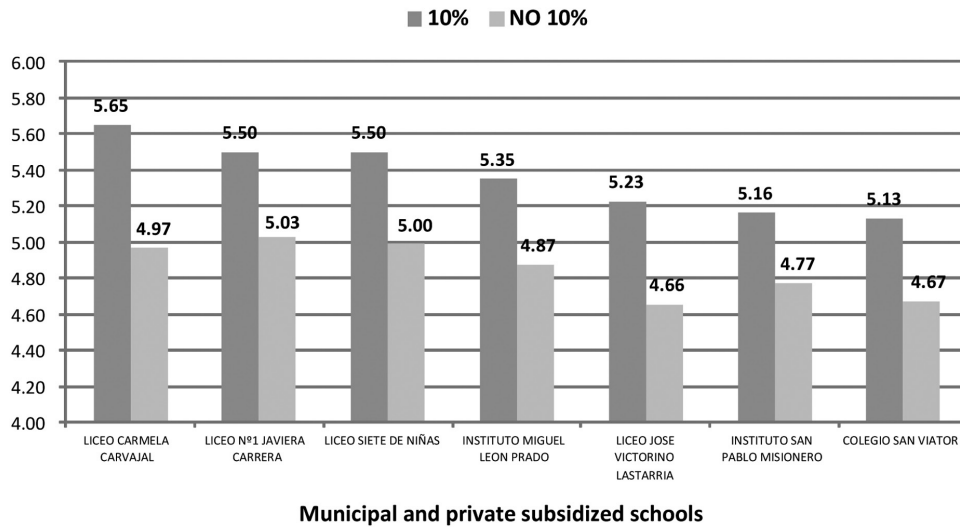


Figure 8b. Cumulative GPA of students enrolled in Universidad Católica between years 2004-2010 by school of origin and high school rank. From PUC.

For example, data show that students who were in the top 10% of the class rank in a public school of excellence such as the Instituto Nacional achieved a cumulative GPA in the Universidad Católica of almost 0.9 points higher than those not in the top 10% of their class. Similarly, the top 10% student from the elite private school Verbo Divino obtained on average a cumulative GPA of 5.57, 0.6 points higher than the grades attained by their peers not in the top 10%. It is worth mentioning that we checked the data and corroborated that this same pattern holds for students coming from all schools that have more than 30 students enrolled at Universidad Católica.

Even more interesting is the fact that this same pattern of performance in higher education holds across socioeconomic classes taking into account all high schools, both at the Universidad Católica (see Figure 9) and the USACH (see Figure 10).

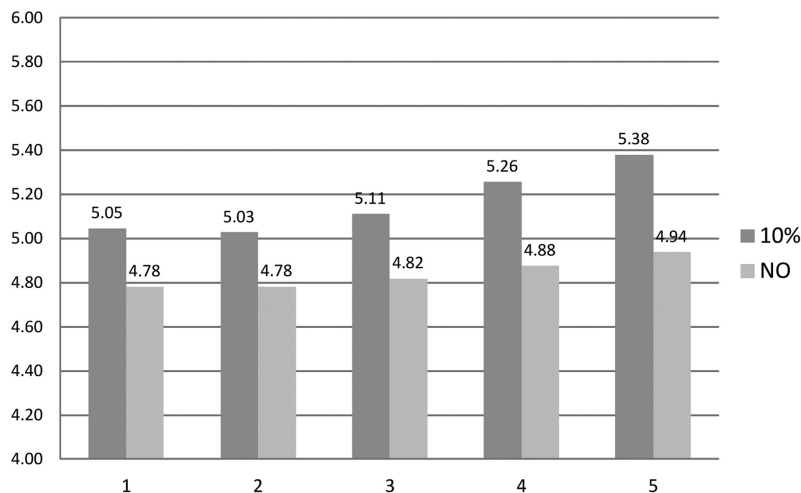


Figure 9. Cumulative GPA of students enrolled in Universidad Católica by family income quintile (2004-2010). From PUC.

At first sight, Figure 9 appears to confirm what is widely known: that there is a positive correlation between social class and academic performance, so students from the top 20% of the income distribution get better grades in higher education than those from the first income quintile. This reality finds theoretical support in theories of “capital deficiency,” which contend that students from disadvantaged socioeconomic backgrounds underperform due to the lack of resources or *capital* (economic, human, cultural, and social) available in the environment in which they were born and raised (Massey, Charles, Lundy, & Fischer, 2003). However, if we look at the whole picture this does not always appear to be the case. In fact, the evidence suggests that, on average, a top ten student from the lowest income quintile (quintile 1) achieves a college GPA as high, or even higher, than a student from the wealthiest quintile but who was not among the highest 10% of his or her high school class (GPA of 5.05 and 4.94 respectively). Here again, the student’s high school rank turns out to be a good predictor of future college performance.

The same scenario can be appreciated in the USACH, as illustrated by Figure 10.

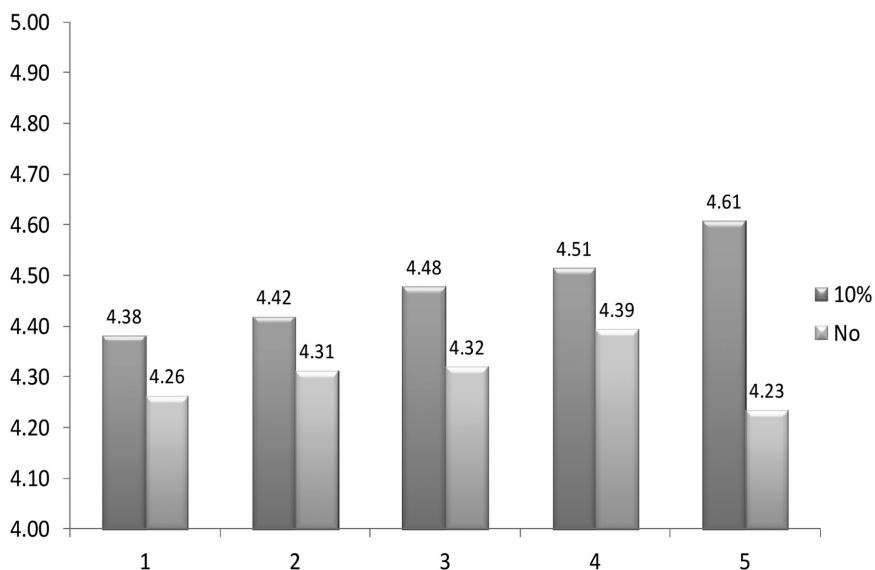


Figure 10. Cumulative GPA of students enrolled in USACH by family income quintile (2006-2010). From USACH.

Finally, the data from the USACH suggests that the top 10% student not only tends to obtain better grades in college, but that he or she also tends to complete the degree in a more efficient period of time than peers not among the top 10% of their class rank (see Figure 11).

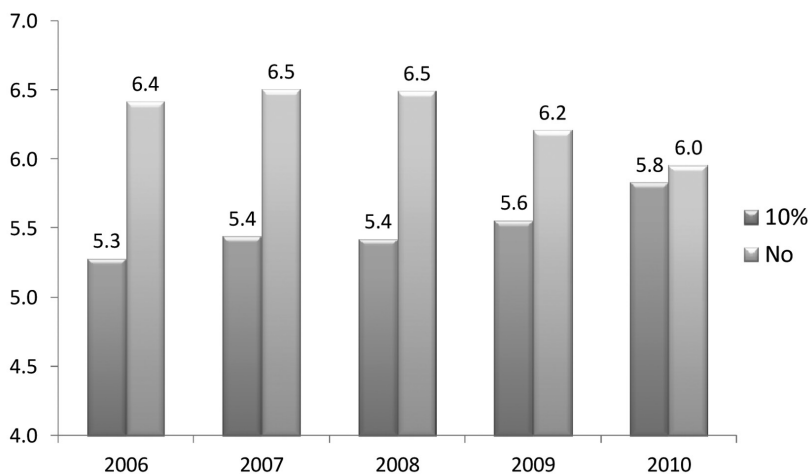


Figure 11. Time to degree (years), 2006-2010. From USACH.

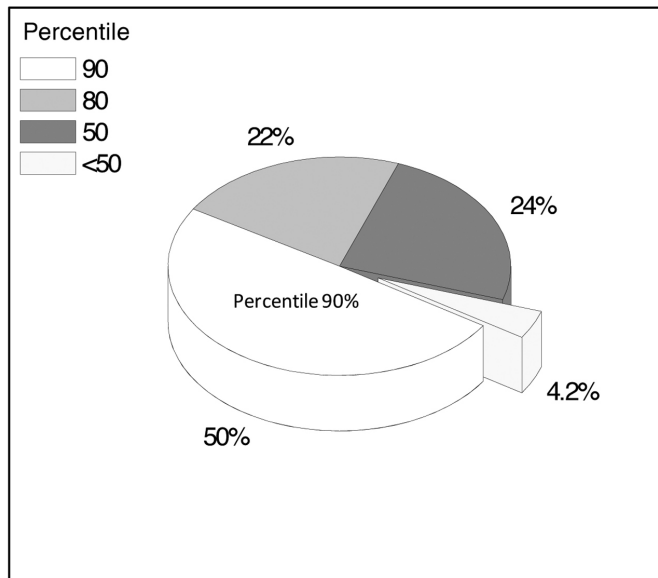
In summary, the evidence presented in this section demolishes two common myths: that high SES students always have more academic potential than students from low socioeconomic backgrounds, and that students coming from a more disadvantaged context will not be able to succeed in a highly selective university such as the Universidad Católica.

However, we would like to make clear that the evidence above should not be interpreted as if the students getting the best grades in high school were the only ones who are academically competent and able to achieve college success. Take, for example, the case of PENTA UC (2001).

PENTA UC is an intensive after-school enrichment program that carefully selects children (5th to 11th grade) from socially disadvantaged areas who are judged to have “a high potential for academic talent”², and provides them with an opportunity to develop this academic potential and satisfy their educational needs. The program is very intensive, providing about 300 hours a year of extracurricular activities. The results are encouraging. From 2003 to the present, 440 students have completed the program successfully, the majority of whom came from municipal schools (71.4%), about a quarter from private subsidized schools (23%), and only a small minority from private paid schools (6.1%). The program’s greatest success is manifested in the fact that the great majority of PENTA graduates continue studies in higher education (82%), and they score on average 711 points ranking³ (meaning that they are well positioned in their class rank) and 632 points on the PSU. However, in spite of the promising results, Figure 12 below shows that, of all of the students selected by PENTA UC, only half of them ended up being a top ten percent student when they finished high school and a small proportion of them (4.2%) even performed below the average of their class.

² This is determined with the help of a test that measures general cognitive skills, and a questionnaire of self-appreciation and motivation to learn.

³ This score was calculated through the formula provided by www.turanking.cl



440 students completed the program since 2003, 71.4% municipal – 22.5% p. subsidized – 6.1% p. paid
 81.8% PENTA graduates are admitted into higher education: they score 711 points ranking & 632 points PSU
 94.7% approved, 3% dropped out
 Majors: 27.9% Engineer– 13.3% Sciences– 12.7% Health– 5.4% Economy– 5.1% Social Sciences – 27.6% other

Figure 12. Class rank of PENTA students (in percentiles). From PENTA UC.

Even though the results of PENTA UC do not provide information on the likelihood that a student within the top ten percent of his or her class will be admitted to higher education in comparison with other students attending the program, still, the fact that 82% of its students are admitted into higher education demonstrates that students who are committed enough to their education to engage in a program such as this and who receive quality tools and training to improve –even if they are from the most disadvantaged areas and perform “below average” in high school– can still have the academic potential to get into college. However, it is important to remember that this is possible due to the high quality education and academic remediation to which these students have been exposed over the years through PENTA UC, a small-scale program that would be very hard to replicate nationwide. By this we mean that, even though the system applied by PENTA UC may be the most efficient to predict academic potential, it is too demanding and costly to become a public policy, while the contemplation of class rank involves the simple consideration of an objective measure that has proven to be a good proxy for academic talent and success.

The propedéutico effect

Before focusing on the evidence about the effects of the Propedéutico, we will first describe more in detail how the USACH Propedéutico Program, the first of its kind to be implemented in the country, works. The USACH-UNESCO Propedéutico Program provides an alternate channel to ensure college admission for low-income students who graduate from low-performing high schools in the top 5% of their class rank. The program is comprised of two stages. The first consists of five months of preparatory courses provided during the last semester of high school to students whose cumulative GPA from 9th to 11th grade has placed them in the top 10% of their class rank. The preparatory classes provided at this stage are taught every Saturday and involve three subjects: Math, Language, and Personal Development. One hundred percent attendance is required. In the second stage, students who comply with the above requirements and who completed high school within the top 5% of their class are guaranteed admission and a full tuition scholarship to study the two-year *Bachillerato* program (Bachelor’s program in general studies) at the USACH. See Figure 13 for further information on the structure of the program.

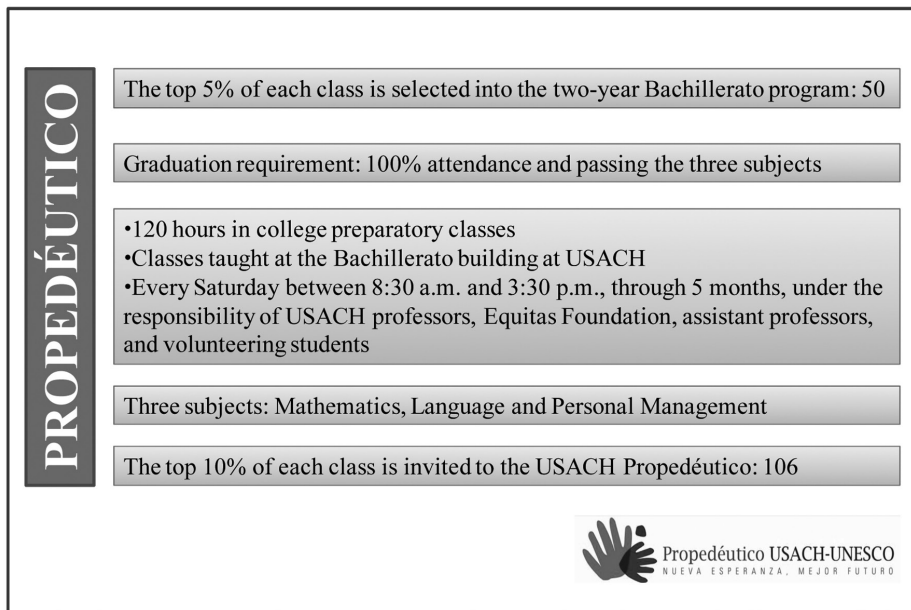


Figure 13. Structure of the USACH-UNESCO Propedéutico Program.

In addition, it is important to make clear that the Propedéutico is not a paternalistic program; it rewards academic merit, not poverty. The university does not take responsibility for other social problems the students may bring to college and redirects them to networks of social protection provided through Municipalities in order for them to take advantage of the programs provided there.

The Propedéutico Program was implemented for the first time by the USACH in 2007. Since then, the program has spread rapidly throughout the country.

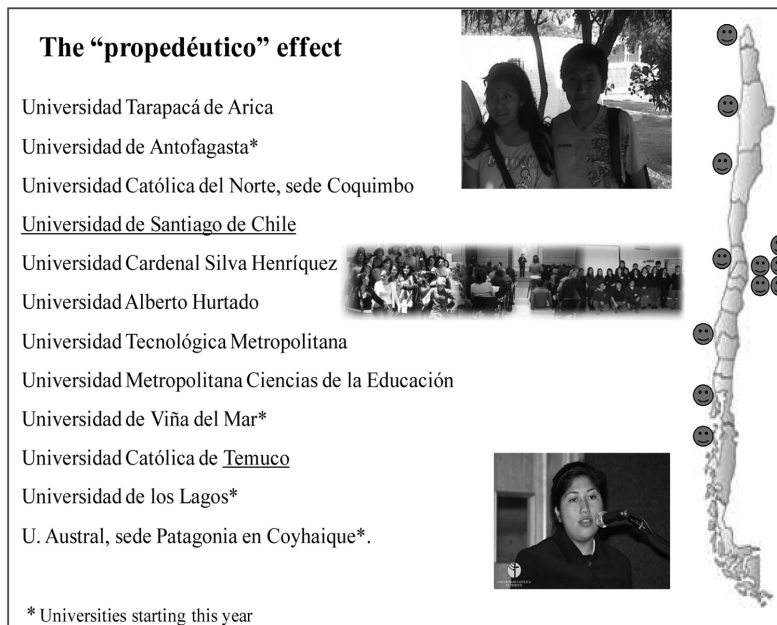


Figure 14. The propedéutico effect.

Currently, there are 12 universities from Arica to Coyhaique that have committed to offering admission to socially vulnerable talented students through the Propedéuticos. For the complete list of institutions, see the chart above. An example of the characteristics of students benefited by Propedéutico programs, in terms of SES and academic potential, can be seen through the data on enrollment in 2012 for the Universidad Católica de Temuco (see Figure 15 and Figure 16).

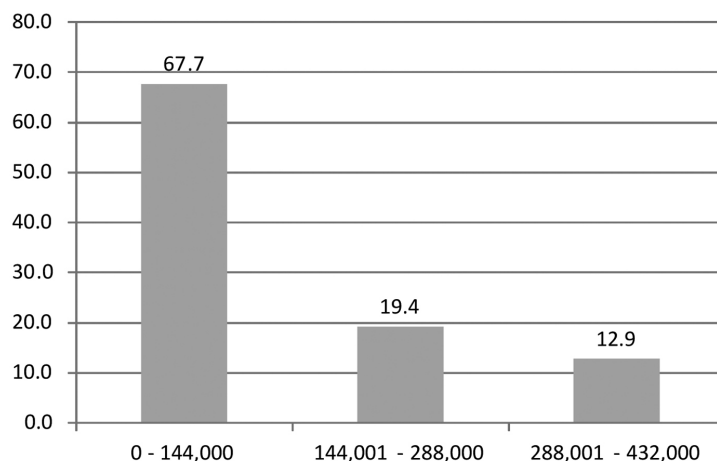


Figure 15. Students in the Propedéutico UC Temuco by gross family income (entry cohort 2012). From UC Temuco.

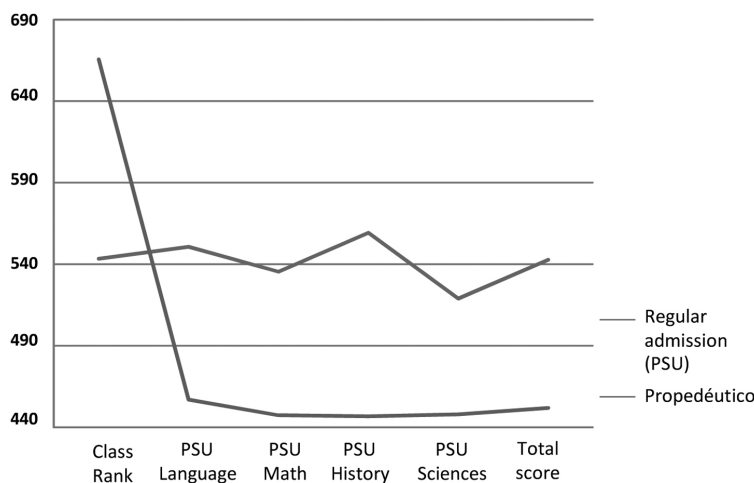


Figure 16. Class rank and PSU scores of students enrolled in the UC Temuco (entry cohort 2012). From UC Temuco.

All students who entered the Propedéutico Program at the Universidad Católica de Temuco (UC Temuco) in 2012 had a family income of under 432,000 Chilean pesos (about 850 USD) and more than two thirds of them had a family income under 144,000 Chilean pesos (282 USD). Thus, based on data from the Instituto Nacional de Estadística (INE, 2008), all of these students come from the lowest 60% of the income distribution of the country (Quintile 1, 2, and 3).

In addition, Figure 16 illustrates the differences in performance between students admitted to UC Temuco through the regular admissions channel and those entering through the Propedéutico. On average, the Propedéutico students performed better in high school and, therefore, the score they attained, as a function of their class rank, would be higher than that of their counterparts admitted through regular

admission. Conversely, the figure shows that the Propedéutico students tend to score poorly in all PSU test subjects, a fact that explains why they cannot normally access admission through the formal channel.

All Propedéutico programs operate under the premise that academic merit is not a function of economic merit. Their goal is to contribute to a more equitable system of college admissions by facilitating the entrance of talented students who are left behind by today's college admissions process.

In terms of the effects that this kind of program has on the enrollment, persistence and successful graduation of socioeconomically disadvantaged students, the outcomes achieved by the students benefited by the Propedéutico USACH are encouraging, although not devoid of obstacles. A recent study by Professors Mladen Koljatic and Mónica Silva (Koljatic & Silva, 2012) from the Universidad Católica compares the performance of students entering the *Bachillerato* program of the USACH either through regular admission or the Propedéutico (what they call Test-Blind Admission). Table 1 displays students' high school GPA and PSU scores. The table suggests that, on average, the high school GPA of students admitted through the Propedéutico is practically the same as those entering via regular admission. However, their PSU scores are far from being similar, with the students from the regular admission process scoring about two standard deviations higher than those admitted through the Propedéutico.

Table 1
Class rank and PSU scores of USACH students by system of admission (entry cohort 2007)

	Regular admission	Test-blind admission	Stand diff.
High school GPA	6.2	6.2	0
Mathematics PSU	632	443	1.76
Language PSU	641	429	1.92

Note: Standardized differences are calculated as the mean of the regular admission group minus the mean of the test-blind admission group divided by the total standard deviation (Koljatic & Silva 2012).

With regard to academic performance once in the *Bachillerato* program, the results show that during the first semester the Propedéutico students attained grades significantly lower than their regular admission counterparts in every subject. The greatest difference is seen in Mathematics and the smallest in Music, although even in this subject the gap reaches one standard deviation (see Table 2). However, even though the picture displayed in Table 2 looks discouraging at first glance, the persistence of Propedéutico students through the second year was surprisingly high and promising, especially considering their low GPA. The dropout rate after the first year of studies was 13.1% for regular admission students and 21.7% for those in Propedéutico. The authors report that this difference, though still important, is not statistically significant.

The outcomes from the second year presented in Table 3 are more encouraging and come to confirm the notion that originally inspired this program: overall, a high proportion of students admitted through the Propedéutico (52%) have the academic potential and personal capabilities to overcome the challenges of the first year and successfully complete the *Bachillerato* program within a one-year time lag. Despite the fact that the percentage of students from regular admission who graduated in a timely manner by the end of the fourth semester is considerably higher than their Propedéutico peers (51.7% and 21.7% respectively), the numbers within a one-year lag time improve considerably, reducing the graduation gap between the regular admission and Propedéutico students from 30 percentage points to 11 (63% vs. 52% respectively). As the authors of the study conclude, considering the extremely adverse environment and educational deficiencies of the Propedéutico students, the fact that more than half of them completed the *Bachillerato* program within three years instead of two, appears promising. In other words, even though they experience great challenges during the first year, most of them end up overcoming their academic gaps in the long term. Furthermore, if not for the opportunity provided by the Propedéutico USACH Program, these students probably would never have had the chance to complete a degree in higher education.

Table 2
First semester college PSA of USACH students by system of admission (entry cohort 2007)

	Music	English	Math	Psych.	Philos.	Comm. Skills	1st Sem. GPA	First-year dropout rate (%)
Regular Admission (n=145)	6.0	5.7	4.9	4.7	5.0	5.2	5.2	13.1 (86.9)
Test Blind Admission (n=46)	4.9	4.1	2.8	3.0	3.8	3.5	3.5	21.7 (78.3)
Stand. Diff. *p<.01	1.0*	1.4*	1.8*	1.5*	1.4*	1.4*	1.4*	.22

Source: Koljatic & Silva (2012).

Table 3
Second college GPA, second year persistence, and timely graduation of USACH students by system of admission (entry cohort 2007)

	2nd Sem. GPA	Second-year Persistence (%)	Graduated timely by the end of the fourth semester (%)	Graduated timely or within a one year lag (%)
Regular Admission	5.0	78	51.7	63
Test Blind Admission	5.0	61	21.7 (z = 3.40, p < .01)	52 (z = 1.19, p > .05)

Source: Koljatic & Silva (2012).

Throughout the years of implementation of Propedéutico programs and considering the results of the first evaluations, we have learned that the core of the Propedéutico model, and what we believe constitute the keys to success, are:

1. A preparatory stage in Language, Mathematics, and Personal Management. We do not call this stage remedial because we are aware that in five months the program cannot remedy the shortcomings of a lifetime.
2. The model works well only with academically talented students (top 5-10% class rank).
3. It is highly advisable that the admission to college via Propedéuticos is done through a two-year Bachillerato program (or equivalent). This way, students have enough time to overcome the academic deficits they bring from school and the model ensures that talented students exempted from taking the PSU test can succeed in college.

Discussion

The experience of universities implementing Propedéutico Programs has been enlightening and inspiring for the country. The fact that CRUCH institutions will implement a new system of college admissions that includes class rank in the formula starting in 2013 is largely due to the promising results demonstrated by programs such as the aforementioned.

Throughout this report we suggest that academic talent is evenly distributed and does not discriminate by social, cultural, or racial background. Moreover, the evidence presented seems to support the idea that those students who year after year reach the top 10% of their high school class –regardless of the family or school they come from– are the most likely to possess the academic potential needed to succeed in higher education. This notion breaks with the definition of merit that higher education institutions have held until now, and suggests that moving from an admissions model that largely relies on test scores toward one that emphasizes the abilities and effort of the top 10% student is a valid step toward a more equitable system.

This paper was intended to provide relevant inputs that may add to the discussion of whether including the class rank into college admission policies is likely to bring more equity in the access to higher education. However, we would like to acknowledge some limitations of this work to prevent misinterpretations. First, we are aware that when considering Universidad Católica in our analysis (Figures 8a, 8b) we are talking about one of the most selective universities in the country and, therefore, it is not clear that these groups of students are representative of the whole population of higher education students in Chile. Further research aiming to study whether the same pattern seen in Universidad Católica (that the top 10% of their class rank perform significantly better than their counterparts who came from the same school but were not at the top of their class rank) also occurs in other universities.

In addition, we would also like to clarify that there is a difference between the students who will be benefited by the incorporation of the class rank into college admissions and those who have been benefited by programs such as the Propedéutico. The first group includes those students who have had outstanding performance in high school and do not really need additional preparation or remedial courses to succeed in college. These are the students who under the current admissions system often do not get admitted to their university of choice only because they missed a few PSU points. Therefore, these are the students that the new admissions system will benefit directly. The other group of students is those who have been able to succeed largely thanks to additional remediation and further support provided by more comprehensive programs such as the Propedéuticos. Even though these students also perform at the top of their class rank, they tend to come from extremely low-performing, highly vulnerable schools and, therefore, it would take them more time and effort to succeed in higher education. This distinction is important to keep in mind when thinking about who will be the “winners” in the new arrangement for admissions, and we suggest that this would be the first group of students described. For the second group, Propedéutico Programs will still be needed, at least until the enormous social and educational gaps are narrowed, or eventually disappear. Thus, even though we think that the experience and results of Propedéutico Programs can and should be considered to justify the inclusion of the class rank in the college admission policy, we acknowledge that these are two different types of policies that lead to different pathways to college and, as such, they should be understood and further studied separately in the future.

Still, for the country to truly move toward a university system with a more equitable admissions system, it is up to the government to take responsibility for the remaining hurdles that need to be addressed in order for the new admissions system to be effective. We refer to all the state funds intended to finance higher education whose main requirements still rely on PSU scores rather than on class rank. For example, the *Becas Vocación de Profesor* (Scholarship for Teachers Vocation) or BVP, which are intended to motivate “highly talented” students to become teachers, still reward students based on a very limited understanding of merit that relies exclusively on PSU scores. This program, among others, needs to be changed to conform to the overall shift in the system of college admissions.

Finally, the important progress that our system of college admissions has undergone so far cannot be complete if the *Aporte Fiscal Indirecto* (Indirect State Contribution to higher education institutions) or AFI does not change the way in which it has been operating to date. It was already said by a report

written by the OECD and the World Bank a couple of years ago: the AFI discourages universities from enrolling students from underprivileged backgrounds. This is because the amount of the AFI received by universities is exclusively determined by PSU scores, which –as we have said before– are highly correlated with socio-economic origin” (OECD & The World Bank, 2010).

Therefore, to effectively improve both the quality and equity of our higher education system, it is not enough to include class rank into the regular admissions process. State policies aiming to provide institutional funding (AFI) and all forms of student aid should also be aligned with these changes. The CRUCH has already played its part; now, it is time for the government to demonstrate that education policy is moving in the same direction toward greater quality and equity.

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