Occupational aspirations and skills: an experiment

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Abstract

We propose a lab-in-the-field experiment to evaluate a low-cost scalable information intervention on high school students' occupational and educational pathways. We employ a career test to study how career suggestions impact students' occupational aspirations and expectations for a national high school exit exam. All students were required to answer career test questions related to three components of career counseling: self-awareness, education, and the labor market. Only the treatment group received career suggestions. Using an incentivized table of bets, participants reported their expected scores on the exam. Receiving career suggestions affects students' occupational aspirations, but 70% did not alter their aspirations after the treatment. Furthermore, receiving career suggestions negatively affected students' self-assessment of their skills for pursuing a technical program and did not affect their expectations for the exam. Additionally, there was no discernible difference in the exam performance of students who received suggestions compared to those who did not.

Keywords: occupational aspirations; academic performance; skills; career test.

JEL Classification Codes: J24, D84, C93, D91, I24.

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1 Introduction

Two paths may coexist in the individual career trajectories of people after completing secondary education: studying or working (Alvarado et al., 2020). Youth's time allocation to studying or working could follow a utility-maximization process, given the constraints they face, impacting their current and future consumption through human capital accumulation and its influence on future labor market outcomes (Behrman et al., 2014; Dalton et al., 2016). However, certain internal constraints, such as occupational aspirations, cognitive abilities, and self-efficacy, develop simultaneously as decisions are made (Simões et al., 2017). On the other hand, time allocation may also reflect the constraints imposed by external factors such as employment and educational opportunities or social norms (De Hoyos Navarro et al., 2016). The years of the life cycle after high school are characterized by change and vulnerability (De Hoyos et al., 2015) and receiving career counseling could increase students' academic aspirations and confidence in their abilities (Carlana et al., 2022).

The study of the relationship between skills and occupational aspirations using naturally occurring data is not trivial. The main issue is that motivation, simultaneously affects skills measurement (Ofek-Shanny, 2021) and students' occupational aspirations (Dudovitz et al., 2017). Moreover, eliciting occupational aspirations could become a cumbersome task due to uncertain career expectations and measurement error problems (e.g., missing answers on the survey questions) (Greve et al., 2021).

In economic theory, aspirations are generally defined as long-term goals that act as reference points in people's utility function (Dalton et al., 2016). Interventions aimed at raising aspirations are related with the level of education the participants desire to achieve or the type of career they want to pursue (Carlana et al., 2022). Gehrke et al. (2023) suggest that effective interventions should aim for students to develop aspirations that are aligned with their abilities. Receiving career suggestions could allows students to widen their set of aspirations that students perceive as attractive and attainable (Genicot and Ray, 2017), and thus reinforce, adjust, or change existing occupational aspirations.

Lent et al. (1994) propose that an individual's occupational or academic interest at any point in time is reflective of his or her concurrent self-efficacy beliefs and outcome expectations. In other words, people form interest in career-relevant activities in which they view themselves to be efficacious and in which they anticipate positive outcomes (Holland, 1997). However, self-efficacy beliefs and outcome expectations could derive from the amount of favorable social persuasory communications in relation to particular educational and occupational relevant activities (Bandura et al., 1986). Following this model, we suggest that career suggestions can shape self-efficacy and outcome expectations, in addition to influencing occupational aspirations. We argue that the suggestions and support from mentors, career advisors, and other role models provide information that could determine or modify beliefs about self-efficacy and outcome expectations through social persuasion and depending on how this information is incorporated into self-efficacy judgments (DiRenzo et al., 2013).

We conducted a lab-in-the-field experiment to study the impact of career suggestions on students' occupational aspirations and educational performance. We compared the reported occu-

pational aspirations and expected scores in a national high school exit exam between students who received career suggestions and those who did not. Students were asked to list their ranking of three ideal occupations, and we used an incentivized table to elicit their expected scores in the exam. For occupational aspirations, students had to fill three boxes with careers based on their preferences. For educational performance expectations, we employed a table in which students could allocate monetary values to their expected scores in four cognitive abilities. Since the four monetary values differed, we argue that the table provided a reliable signal of the accuracy of outcome expectations (Herranz-Zarzoso and Sabater-Grande, 2018), which translates into our measure of students' beliefs about their skills.

In our analysis, we provide evidence regarding the impact of an official career test. We use the tool "Proyécta-T" [1], a career test provided by the Colombian Ministry of Education. This test is divided into three sections: self-awareness ("My world"), education ("The world of training"), and the labor market ("The world of work"). Each section may include questions related to skills, expectations, and preferences.[2] Students who received career suggestions answered the test directly on the Ministry's website and received a personalized list of careers based on their test answers. [3] Students who do not receive career suggestions, serving as the baseline group, answered the test question in oTree (Chen et al., 2016). For this group, we tried to simulate in oTree the templates of the test questions on the Ministry of Education website. Screenshots of the questions were taken from the Ministry's website, and buttons were overlaid onto the images to record the answers on our platform for the baseline group.

While the relationship between occupational uncertainty and educational attainment in young adulthood has been documented using survey data (Sikora, 2018), this often relies on interpreting blank or missing values as signs of uncertainty. However, distinguishing the reasons behind a "do not know" response or a missing value is challenging, as they may have various and distinct explanations (Greve et al., 2021). We hypothesize that career suggestions can help students reduce their occupational uncertainty because they receive 5 recommendations based on their reported skills, expectations, and interests. In our experiment, no missing values are allowed. Students must report the ranking of three ideal occupations to continue with the activity. Furthermore, to examine the impact of career recommendations in the medium term, we also conducted a repeated measurement of occupational aspirations and educational performance expectations after the national exam through a survey. The interplay of measurements before and after the exam can provide valuable insights into the stability of occupational aspirations and educational performance expectations, as well as their relationship with the exam.

We find that occupational aspirations are affected by career suggestions. Thirty-two percent of students who received career suggestions reported a different most preferred occupation before and after the treatment, whereas only 20% of students in the baseline group exhibited similar behavior. However, we found no differences in the average expected or actual scores in the national exam between these two groups of students. When we compared the most preferred occupation

[1] https://edusitios.colombiaaprende.edu.co/proyectat/herramienta-proyecta-t

[2] In Spanish, they used the labels "Desempeño", "Expectativas" and "Interés", respectively

[3] Students in the treatment group received general instructions via oTree, accessed career information through a provided link, then returned to oTree to report career suggestions and continue with the experiment.

reported after the treatment and in the survey we find no differences between the experimental groups. Additionally, more than 44% of the students appear to have stable occupational aspirations. We argue that career suggestions are helping students adjust their occupational aspirations but are not affecting their educational performance. Our results indicate that students are optimistic about their exam scores, but the correlation between their anticipated and actual scores depends on whether the educational performance expectations are measured before or after the exam. The correlation between the expected and actual scores before the exam ranges from 0.07 to 0.28, and after the exam, it ranges from 0.2 to 0.29. Finally, we find that receiving career suggestions reduces students' beliefs in their capabilities to attain a technical degree. This could be because students have high expectations for higher education, especially in pursuing a professional career.

We conducted the experiment with 17 groups of students in the last year of high school, in 7 schools. Students received an invitation to participate some days before the experiment and parental consent was required to participate. [4] The sample was restricted to students in Arauca, the department in Colombia with the second-highest rate of young people who are not in education, employment, or training[5], often labeled as *ninis* (from the Spanish phrase "ni estudia ni trabaja"). In Arauca, 57% of people aged 18-24 are *ninis*, with 54% of them unemployed and 46% out of the labor market (Cheyne García et al., 2024).

Experiments have vastly contributed to the understanding of occupational aspirations (Serra, 2022). The offered controlled environment gives an opportunity to understand the effects of information policies and career counseling on higher education choices (Carlana et al., 2022). We contribute to this experimental literature from a different perspective, by studying the effect of a low-cost and easily-scalable intervention aimed at improving students' aspirations regarding higher education (Bonilla-Mejía et al., 2019). Career suggestions imply the interaction of students with an online platform and involve sets of tailored information at the individual level. Our study sheds light on two elements. First on the understanding of the adjustment of of occupational aspirations. Second, on the effect of receiving career suggestions on career paths.

Regarding the first element, experiments have contributed to the evidence about occupational aspirations adjustment (Guyon and Huillery, 2021). The general finding is that some students fail to aspire to their potential due to external (i.e., poverty) and internal (i.e., behavioral biases) constraints (Dalton et al., 2016). Furthermore, occupational aspirations have been identified as markers of hopelessness and self-efficacy (Olenik-Shemesh et al., 2018; Dudovitz et al., 2017). In empirical studies, occupational aspirations have been found to be related to academic and labor market outcomes even a decade later (Greve et al., 2021; Sikora, 2018). In the domain of career guidance intervention within low-income contexts, Gehrke et al. (2023) report that a half-day workshop designed to expand students' aspirational has a weakly negative effect on the diversification in students' occupational aspirations. We contribute to this literature by analyzing how students adjust their occupational aspirations based on personalized career suggestions.

Regarding the second element, experiments have contributed to the understanding of expected and actual academic performance (Herranz-Zarzoso and Sabater-Grande, 2018; Clark et al., 2020).

[4] We also requested parental consent to make cash payments to students

[5] The acronym "NEET" is more commonly used in Europe and East Asia

Departing from Lent et al.'s theoretical contribution (1994) on academic interest and performance, multiple field experiments have explored how academic expectations are affected by experiential factors. More controlled settings have shown that career paths are affected by personal performance accomplishments (Laajaj et al., 2022; Rodriguez-Planas, 2012), vicarious learning (Riley, 2024; Ahmed et al., 2024; Bhan et al., 2020), social persuasion (Gehrke et al., 2023; Ashraf et al., 2020; Carlana, 2019; Kerr et al., 2020) and physiological states and reactions (non-cognitive skills) (Kerr et al., 2020; Martins, 2010). Recent experiments, using information interventions in educational contexts, have shown that providing information can improve test scores and change the educational trajectories of students (Carlana et al., 2022; Goux et al., 2014) We contribute to this literature by showing that career suggestions do not affect educational performance expectations. Moreover, career stability is not related to the student's expected performance in a standardized exam.

At the risk of stating the obvious, we have found evidence that career suggestions have an effect on occupational aspirations. Furthermore, we have found evidence for stable occupational aspirations (Gottfredson, 1981). Much less obvious is our finding that participants who received career suggestions reduced their self-assessment of their skills for pursuing technical programs. Since occupational aspirations seem to be determinant in students' transition from school to work, understanding the occupational aspirations windows could help in the broader comprehension of the *ninis* problem.

2 Experimental Design

2.1 The aspirations and expectations

We grouped the tasks of the experiment in two categories. The occupational aspirations, capturing what the students wish to achieve related to their career (Kuhn and Wolter, 2023); and the educational expectation, capturing what students expect to achieve related to the access to higher education (Pinquart and Ebeling, 2020). Additionally, we include a measure of self-efficacy and expected school-to-work transitions.

Occupational aspirations

We requested students to list their ranking of three ideal occupations. Occupational aspirations were collected twice during the experiment, at the beginning of the experiment and after treatment. Participants were presented with three boxes, each corresponding to one occupation, and were instructed to fill them based on their preferences, with the first box representing what they would most like to pursue and the third box representing what they would least prefer. Importantly, once a box was filled, no changes could be made to the previous boxes, ensuring that each choice was distinct and sequentially ordered. We categorize the reported occupations according to the *Knowledge Field* (hereafter, field) *Knowledge Core* (hereafter, core) established by the Ministry of National Education. A *field* is a group of *cores* considering certain affinity in the contents. A *Core* is defined as "a division or classification of a *field* of knowledge into its essential fields, disci-

plines, or professions" (MEN, 2024). For example, the field of "Social sciences" consists of twelve related cores, such as "Anthropology, Liberal Arts", "Training in the military or police sector", and "Sports, Physical Education, and Recreation", among others. The Appendix C, presents a list of the *fields* and their corresponding *cores*.

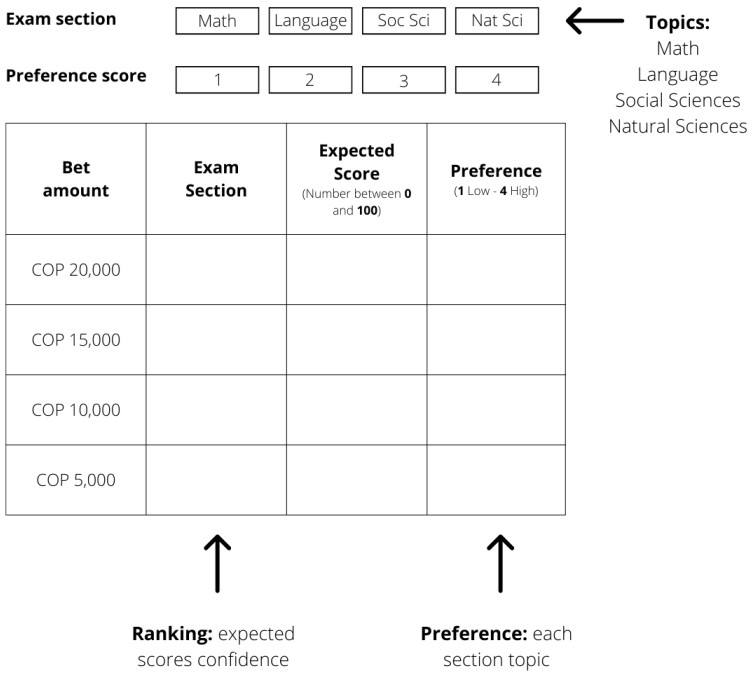

Figure 1: Graphical description of the bets table.

Educational expectations

We now move to educational expectations. We asked the participants to report their expected scores for four sections of a standardized exam. The national high school exit exam comprises four sections: Mathematics, Spanish, Natural Sciences, and Social Sciences. We asked the students to report their expected scores in each section of the exam and assign an amount of money incentives to each expected score, like making a bet. Expectations for performance were established for each of these sections, with 0 representing the lowest possible score and 100 denoting the highest attainable score. We instructed them to try to be as accurate as possible because earnings depend on the difference between their expected and actual scores in the sections. Participants whose score difference was less than or equal to 10 points received their winnings during a scheduled meeting after the publication of individual exam scores by the state institution responsible for standardized test administration.

The task employed to elicit the expected scores in the exam is inspired by the idea of bets proposed by Clark et al. (2020) and adapted by Herranz-Zarzoso and Sabater-Grande (2018) to allow participants to bet based on their individual grade goals. In our task, participants have to place bets on their expected scores in four different sections. Figure 1 displays an example of the table with four columns. The first column shows the possible bets amount of money. In the second column, students are tasked with associating each bet with one of the four sections, while ranking the sections based on the confidence in their expected scores. In the third column, participants have to type their expected score. Finally, in the fourth column, we ask them to assign a number from 1 (low) to 4 (high) to indicate their preference for each section's topic. Importantly, the same test cannot be assigned different monetary values, nor can the same level of preference be assigned to multiple sections.

Self-efficacy beliefs

We also asked the participants to self-assess their skills for four types of career paths using a scale of 0 to 100. To measure self-efficacy, students were asked to rate their abilities for pursuing two types of higher education programs, technical or undergraduate, and two careers, military or self-employed, with 0 signifying "I feel incapable of doing it at all" and 100 indicating "I feel highly confident I can do it".

Expected Transitions

We also employed a task to understand the relationship between occupational aspirations and educational expectations following the idea proposed by Arcidiacono et al. (2020). Occupational aspirations were categorized into six broad groups: students, employees, self-employed individuals, unpaid workers, individuals in military service, and the "nini" category. Students were asked about the likelihood of being part of each occupational group in the upcoming year, conditional on their performance in the national high-school exit exam. We used the following three categories to characterize possible scores: Low (0-250 points), Medium (251-350 points), and High (more than 350 points). It is important to note that, for all students in the sample, these probabilities were elicited for all possible occupation-score combinations.

The survey

After the date of submission of the national examination, but before the date of publication of students' results, we conducted a survey to obtain a repeated measurement of occupational aspirations and educational expectations. We asked students to:

- List their ranking of three ideal occupations.
- Report their expected scores in each section of the exam (they had already submitted).
- Evaluate their skills for pursuing four types of educational and occupational pathways.
- Assess the likelihood of being part of six occupational groups in the upcoming year.

Additionally, we included questions about the municipality in this data collection. These additional socioeconomic questions were not included in the survey at the end of the experiment because some studies have shown that making external constraints salient could affect students' aspirations and performance in the exam (Genicot and Ray, 2017).

2.2 Treatments

Our treatment involves a variation in the information received during career counseling. The *Baseline*, capturing the effect of answering the questions of a career test; and the *Suggestions*, capturing the effect of receiving career suggestions based on the answers during the test.

The treatment *Baseline* refers to the case where students answer questions of the career test. This test includes 28 questions about skills, preferences, and expectations. The skills questions refer to the performance in the subjects, self-efficacy, type of intelligence, and socio-emotional skills. The preferences-related questions explore students' inclinations regarding subjects, hobbies, self-perception, fields of interest, role models, economic sectors, and job attributes. Expectations questions revolve around students' future academic path, desired job attributes, and envisioned lifestyle. For detailed information on these questions, their respective categories, and their weights for calculating career suggestions, refer to Figure A.2 in the Appendix [6].

In the *Suggestions* treatment, the students answered the questions and subsequently received career suggestions. These suggestions present 5 of 56 *cores*, which are determined by analyzing the weighted sum of the participant's responses and are customized to align with each student's specific answers closely. Personalized suggestions allow the students to reduce their options when it comes to making decisions about their future occupations.

2.3 Payments, sampling and implementation

The experiment involved 387 students, of whom 327 completed the survey conducted after the exam. One participant self-identified as non-binary and is therefore not included in our analysis. Participants received a fixed payment of COP 20,000 in all treatments, conditional on completing the activity. At the end of the experiment, participants completed a survey, which included socioeconomic questions and a quiz with questions from previous years' national high school exit exams. Each session lasted approximately 90 minutes. This average payment is equivalent to roughly 0.5 times a daily minimum wage by the time we conducted the experiment. We made cash payments to the students at the end of the activity.

During the scheduled meeting after the publication of individual exam scores, participants received the payments related to the difference between the expected and actual scores in the exam. Fifty-eight percent of the students who participated in the experiment received their payment, 32 in cash and 91 via bank transfer. Students received on average COP 22,421 for their bets.[7]

[6] Original Technical sheet (Spanish): https://proyectateherramienta.mineducacion.gov.co/MenVocOcup/imagenes/FichaTecnica.pdf

[7] This average payment is equivalent to roughly 0.7 times a daily minimum wage by the time we conducted the experiment.

The experiment was programmed in oTree (Chen et al., 2016) and the survey was administered using pen and paper. We obtained approval from the Ethics Committee at Universidad del Rosario in Bogotá. The experimental sessions took place in August 2022 (before the exam), the survey was conducted in October 2022 (after the exam), and the variable payment of the experiment was in December 2022. Our participants were completing high school in three municipalities of the Department of Arauca, Colombia.

3 Hypotheses

We start with the comparison, in terms of expectations, between the students who answered the questions of the career test and those who additionally received career suggestions:

Hypothesis 1 (H1): Score expectations in the exam are higher when the students receive career suggestions compared to those who only answered the questions of the career test.

To provide some intuition for H1, we introduce the concept of occupational aspirations. Occupational aspirations are an individual's point-in-time indicator of the individual self-concept. The aspirations can be either ideal or realistic. The ideal aspirations reflect career goals given ideal conditions, while realistic occupational aspirations reflect the perceived likelihood of entering a particular educational or occupational path (Rojewski, 2005). We argue that receiving career suggestions aids students in considering educational and occupational pathways that correspond to achieving their potential (Guyon and Huillery, 2021). By providing insights into potential career paths aligned with their preferences, these suggestions may raise students' motivation to access higher education programs, thereby raising their score expectations in the exam.

Our second hypothesis is related to the internal constraints that pertain to access to higher education (Dalton et al., 2016), especially self-assessment bias. Self-efficacy refers to one's beliefs in their capabilities to execute behaviors necessary to produce specific performance attainments (Bandura, 1977). We argue that receiving suggestions can enhance students' self-assessment of their skills. These suggestions, aligned with their preferences, can strengthen individuals' beliefs in their capabilities to attain designated types of performances (Carlana et al., 2022).

Hypothesis 2 (H2): Receiving career suggestions increases the students' beliefs about their capabilities to achieve a higher education degree.

We also explore the difference between the expected and actual academic achievement (Pinquart and Ebeling, 2020). Expectations are the outcomes people feel they will most likely achieve given one's perceived situation and constraints (Zimmerman, 2011). Whereas self-efficacy beliefs are concerned with one's response capabilities (i.e., "can I do this?"), expectations involve the imagined outcomes (i.e., "what will happen?")(Lent et al., 1994). We argue that receiving career suggestions could modify people's self-evaluations of the likelihood of attaining specific levels of performance. These suggestions can enable students to make more accurate assessments of their skills as they are better able to identify the *knowledge core* that aligns with their preferences.

Hypothesis 3 (H3): Receiving career suggestions leads to a more accurate outcome expectation about the scores in the exam.

Table 1: Frequencies of Knowledge Fields by gender

Field	Men	Women	Total
Social Sciences	20.67	28.27	25.32
Health	8.67	32.49	23.26
Engineering	39.33	8.44	20.41
Agriculture	10.67	8.44	9.3
Arts	9.33	8.02	8.53
Management	3.33	6.33	5.17
Education	4	4.64	4.39
Other	2.67	3.38	3.1
Natural Sciences	1.33	0	0.52

4 Results

4.1 Descriptive statistics

We asked for some demographic information at the end of the experiment that allowed us to characterize our sample. Sixty-one percent identified as female, averaging 17 years old (std. dev. 1.06), and 49% had previously participated in career counseling activities. Forty-five percent simultaneously work and study, while fifty-one percent believe that caregiving negatively impacts their learning process. Thirty-six percent reported repeating at least one year, and twelve percent left school at some point during their studies. Eleven percent aspire to pursue a technical career, 18% a technological career, 78% a professional career, and 2% a military career. Twenty-five percent plan to reside in the municipality after completing high school, while 58% plan to leave for educational purposes and 17% for other reasons. On average, the 1.68 people in the students' households share the same room. Twenty percent have no access to the internet, 47% use mobile internet, and 33% have a Wi-Fi connection. Additionally, we collected information on parental occupations, revealing that 46% of mothers are engaged in unpaid work, while 43% of fathers are self-employed. Table A.1 in the Appendix, validates that the assignment of conditions is balanced in these observable characteristics but not in the proportion of people who repeat grades or drop out, so we analyze this variable in the section 4.3.

Regarding the occupational pathways, Table 1 presents the frequency distribution of *knowledge fields* corresponding to students' ideal occupations, categorized by gender. The most common fields include Social Sciences, Health Sciences, Engineering, and Agriculture. The most popular field among women is Health (32.49%), and Eng (39.33%) among men. Specifically, Medicine stands out as the top *cores* among women (16.88%), whereas men prefer Mechanical Engineering and related occupations.

Regarding the educational pathways, Table A.3 presents self-efficacy beliefs related to four types of careers: technical, professional, military, and self-employment. On average, students express high confidence in their abilities to pursue technical and professional careers, as well as

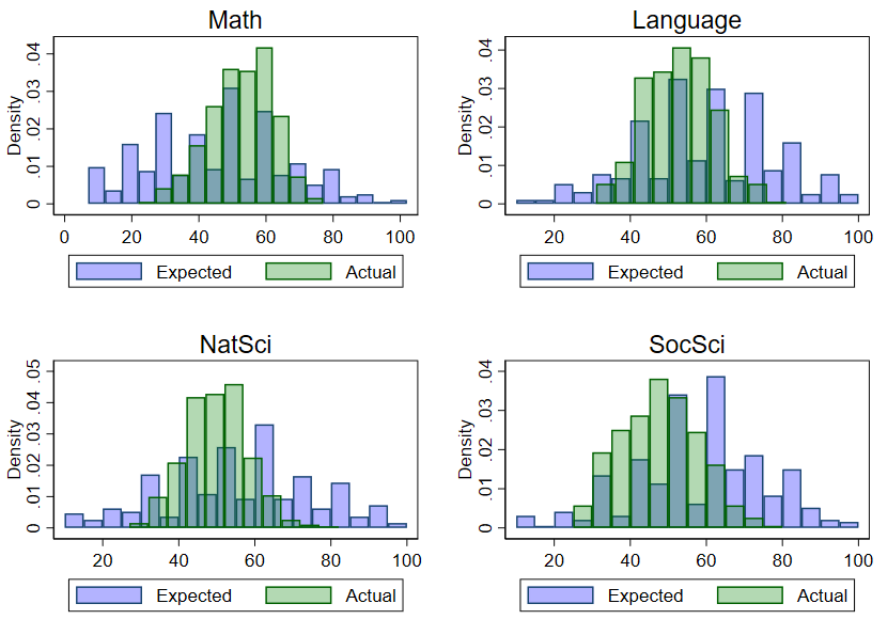

Figure 2: Expected scores and actual scores in the exam sections: Math, Language, Natural sciences and Social sciences

to start their own business (around 80%). However, confidence levels are significantly lower for military career skills (37%;40%). It's important to note that self-efficacy beliefs do not necessarily align with objectively assessed skills (Lent et al., 1994). Therefore, we also analyze the expected and actual scores in the exam. Figure 2 illustrates that the distribution of actual scores is more compact than that of expected scores. Interestingly, students tend to be pessimistic about their Math scores while being optimistic about their scores in Language, Natural sciences, and Social sciences. [8]

4.2 A career test and occupational aspirations

In this section, we investigate the relationship between the occupational aspirations reported by the students and the suggestions provided by the career test. Firstly, we examine the frequencies of *fields* and *cores* corresponding to the students' favorite occupation post-treatment. Secondly, we analyze the extent of changes in the reported occupational aspirations attributed to receiving *suggestions*.

We examine differences in the most preferred occupation by treatment condition, with the *field* and *core* corresponding to the students' most preferred occupation as the dependent variable.

[8] Table A.2 shows that despite being incentivized, the correlation between the actual and expected scores in the experiment (before the exam) is lower than that in the survey (after the exam).

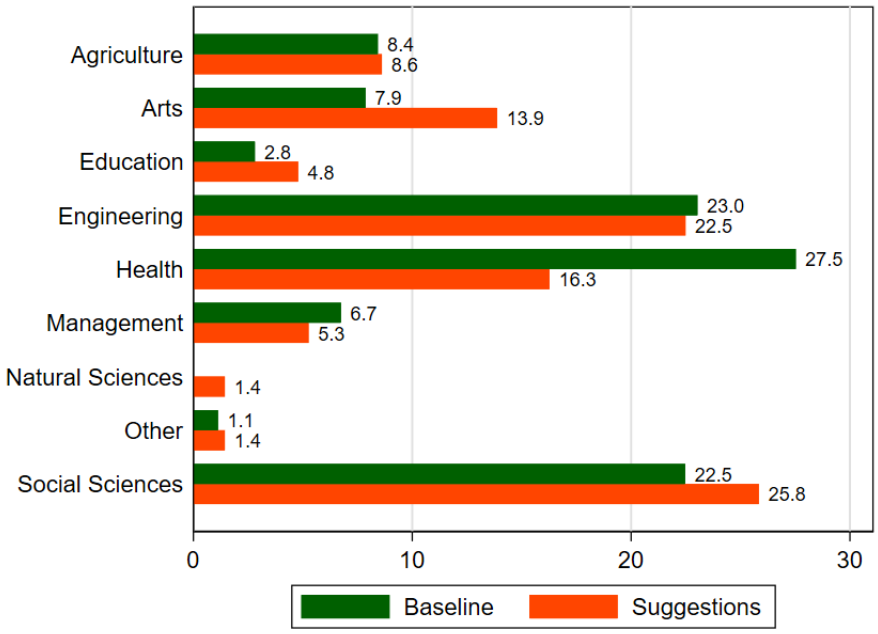

Figure 3: Frequencies of Fields of Knowledge by treatment conditions

Figure 3 shows the distribution of *fields* frequencies post-treatment. There is no evidence of differences in the *fields* distribution of frequencies between students in the *baseline* group and those given *suggestions* (Chi-squared test, p-value 0.104). Nevertheless, the differences in the *cores* distribution are statistically significant (Chi-squared test, p-value 0.041). Table A.5 in the Appendix shows the distributions of *core* frequencies after the treatment. [9]

We also analyze the difference in the ranking of *fields* and *cores* before and after the treatment. These changes can be categorized as follows: (i) remaining in the *same* position in the ranking, (ii) moving to a *different* position in the ranking, or (iii) *left* the ranking. Eighty-two percent of students report an occupation from the same *field* and seventy-three percent report an occupation from the same *core* before and after the treatment, indicating that the *field* and *core* remains in the *same* ranking. Additionally, 9 % (9.3%) move their favorite field (core) to a *different* position, while 9.3 % (17.31%) *left* the ranking.

The difference in the distributions of ranking changes of the favorite field and core between the *baseline* and the *suggestions* conditions is statistically significant (Chi-squared test, p-values 0,095, 0.012). Table 2 shows that the movement of the favorite *field* and *core* from the ranking's top to a different position is more frequent when students receive career *suggestions* than in the *baseline* condition.

[9] Comparing the distributions of *fields* and *cores* before the treatment, there is no significant difference in the frequency distributions between the students in the *baseline* condition and those who received *suggestions* (Chi-squared test, p-values 0.555, 0.324, respectively)

Table 2: Favorite *field* and *core* ranking changes by treatment condition

Ranking	Knowledge field			Knowledge core		
	Baseline	Suggestions	Total	Baseline	Suggestions	Total
Same	85.96	77.99	81.65	79.78	67.94	73.39
Different	7.87	10.05	9.04	8.99	9.57	9.3
Left	6.18	11.96	9.3	11.24	22.49	17.31

Summing up, we find no differences in the *fields* related with the favorite occupation after the treatment but there are differences in the *cores*, however, more than 68 % of the students report the same *field* and *core* in the occupational ranking top. In line with these findings, we explore the changes of *fields* and cores related in the three different levels of preference (ranking position) using an OLS model. This serves as a "hard" consistency measurement since we compare the responses at the same level before and after the treatment. The dependent variable in this analysis is an indicator of whether the two responses are different in the *area* or the *core* levels. Table A.4, in the Appendix, reports the coefficients of this regression. We confirm that receiving *Suggestions* increases the probability of reporting different *fields* and *cores*, before and after the treatment, but the magnitude of the effect depends on the level of preference. These align with theories on occupational aspirations stability, suggesting that patterns of likes, dislikes and indifference regarding career-relevant activities and occupations tend to stabilize during late adolescence or early adulthood and may take very compelling experiences to provoke a fundamental reappraisal of career self-efficacy and outcomes beliefs (Gati and Gutentag, 2015).

4.3 A career test and skills

We conducted an OLS analysis to examine the effect of the career test on educational expectations and self-efficacy. We used two sets of dependent variables: variables related to skills (the scores in the exam) and variables related to beliefs about the skills (self-efficacy).

Table 3: OLS results for the determinants of the expected and actual scores in the national exam

	Score in each section of the national exam: 0-100							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Expected scores				Actual scores			
VARIABLES	Math	Language	NatSci	SocSci	Math	Language	NatSci	SocSci
Treatment	1.949	1.393	1.736	0.635	-0.889	0.828	0.052	0.732
	(1.718)	(1.756)	(1.839)	(1.756)	(0.867)	(0.937)	(0.878)	(1.071)
Preference	3.124***	2.210**	3.249***	1.416	0.583	-0.327	0.798*	-0.071
	(0.966)	(0.991)	(1.087)	(0.934)	(0.421)	(0.455)	(0.449)	(0.587)
Bet amount	1.545***	1.281***	1.374***	1.358***	0.277***	-0.013	-0.078	0.261**
	(0.202)	(0.210)	(0.226)	(0.200)	(0.082)	(0.101)	(0.089)	(0.126)
Higher Education	0.076	0.049	0.048	0.112**	0.001	-0.041*	-0.026	-0.031
	(0.048)	(0.048)	(0.051)	(0.050)	(0.025)	(0.023)	(0.023)	(0.027)
Female	-2.058	1.373	-2.512	-2.040	-3.327***	-1.379	-3.262***	-2.851***
	(1.803)	(1.788)	(1.900)	(1.732)	(0.942)	(0.945)	(0.862)	(1.070)
Age (norm.)	-0.591	-1.997**	-1.603	-1.638	-1.331***	-1.244**	-0.942*	-0.281
	(0.987)	(0.985)	(1.221)	(1.055)	(0.484)	(0.502)	(0.484)	(0.549)
Workers	-0.052	-0.607	0.323	1.124	-0.893	-1.677*	-1.276	-0.720
	(1.748)	(1.685)	(1.841)	(1.701)	(0.884)	(0.911)	(0.848)	(1.031)
Care	0.332	1.187	1.950	-0.582	-1.999**	-0.842	-2.751***	-2.324**
	(1.717)	(1.671)	(1.792)	(1.678)	(0.860)	(0.889)	(0.809)	(1.022)
Migration: education	1.162	-3.253	-0.998	-1.363	2.525**	2.938***	1.639*	3.951***
	(2.261)	(2.187)	(2.288)	(2.354)	(1.056)	(1.116)	(0.982)	(1.249)
Migration: other	1.295	-3.277	0.255	-1.474	0.129	-0.343	-0.855	0.192
	(2.829)	(2.924)	(3.085)	(3.139)	(1.388)	(1.445)	(1.353)	(1.724)
Constant	13.226*	23.895***	20.203***	24.122***	57.784***	60.367***	54.985***	47.262***
	(7.001)	(7.129)	(6.960)	(7.387)	(3.492)	(3.712)	(3.160)	(4.245)
Observations	387	387	387	387	383	383	383	383
R-squared	0.427	0.266	0.304	0.222	0.306	0.196	0.219	0.201
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Additional controls in all models: indicator of participation in vocational activities, dropout and repeater indicator, career type, people per room at home, internet connection, risk and patience preference and parental occupation. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 4: OLS results for the determinants of change in the Field and Core of Knowledge related with the occupations reported before and after the treatment

	Self-efficacy rate: 0-100			
	(1)	(2)	(3)	(4)
	Studying		Working	
VARIABLES	Tech	Uni	Military	Self-employed
Treatment	-5.638***	-0.539	-1.326	-1.316
	(2.093)	(1.423)	(3.400)	(2.032)
Income	0.109***	0.094***	0.365***	0.184***
	(0.042)	(0.029)	(0.061)	(0.035)
Higher Education	0.230***	0.341***	-0.055	0.219***
	(0.062)	(0.052)	(0.097)	(0.062)
Female	3.412	1.793	-6.800*	0.643
	(2.234)	(1.527)	(3.595)	(2.111)
Age (norm.)	-0.701	0.357	-0.504	-0.533
	(1.273)	(1.039)	(2.082)	(1.277)
Workers	1.735	1.707	6.213*	7.627***
	(2.143)	(1.431)	(3.536)	(2.189)
Care	-3.536*	-0.599	-1.686	-1.620
	(2.046)	(1.471)	(3.380)	(2.047)
Migration: education	-0.572	2.665	1.890	-3.516
	(2.848)	(1.963)	(4.281)	(2.528)
Migration: other	1.253	2.583	3.960	0.946
	(3.313)	(2.535)	(5.009)	(3.213)
Constant	75.945***	56.015***	40.296***	55.615***
	(8.048)	(6.582)	(12.535)	(7.399)
Observations	387	387	387	387
R-squared	0.182	0.317	0.168	0.190
Individual Controls	Yes	Yes	Yes	Yes

Additional controls in all models: indicator of participation in vocational activities, dropout and repeater indicator, career type, people per room at home, internet connection, risk and patience preference and parental occupation. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

In our first analysis, the expected and actual scores in the exam were the dependent variables, explained by our treatment and other covariates listed in Table 3. We reported the results for each

test separately, with columns 1-4 displaying the coefficients for the expected scores and columns 5-8 reporting the coefficients for the actual scores.

The Expected and Actual scores between students in the *Baseline* and those who also received *Suggestions* are not statistically different. Moreover, we confirm that stronger preferences and higher bets are associated with higher expected scores in almost all the tests. Furthermore, higher actual scores are associated with males, younger individuals, and students who aspire to study in other cities. Reporting that helping at home hinders the learning process is negatively correlated with exam performance. Higher bets are linked to higher actual scores in the Math and Social Sciences tests.

In the second analysis, we examined the students' self-assessment of their skills. We found that receiving *Suggestions* resulted in a 6% decrease in self-efficacy for achieving a technical degree, compared with only answering the questions of the career test in the *Baseline* group. However, we found no effect of the differences between our treatment conditions on the other measures of self-efficacy. Additionally, we observed a positive correlation between higher expectations for entering higher education and stronger beliefs in one's ability to obtain a degree and pursue a self-employment career that is not related to pursuing a military career. Students who reported working also expressed stronger beliefs in their ability to pursue a self-employment career. We also confirmed a positive correlation between salary expectations and the students' self-assessment of their skills.

Summing up, we find weak evidence for H1 and H2. Regarding H1, there's no statistical difference in the score expectations between students who receive career suggestions compared to those who only answered the questions of the career test. Regarding H2, receiving career suggestions from the test reduces the students' beliefs about their capabilities to achieve a technical degree, despite the test feedback includes only basic knowledge cores rather than specific careers. Self-efficacy is postulated as helping to determine one's choice of activities and environments and one's effort expenditures when confronted by challenges (Lent et al., 1994). Regarding H3, given that career suggestions have no statistically significant effect on expected scores or actual scores, then we cannot discuss the effect of recommendations on the accuracy of the skills self-assessments.

4.4 Robustness checks and additional results

Occupational aspirations in the Survey

We mention in Section 4.2 differences in the most preferred occupation by treatment condition. Furthermore, we find that more than sixty-eight percent of the participants report the same *field* and *core* before and after the treatment (Table A.6).[10] We also compare the most preferred occupation in the after-treatment ranking and the survey ranking (Table A.7). Upon considering only participants who took part in both the experiment and the survey, we find no differences in the distributions of ranking changes in the favorite field and core between the *baseline* and the *suggestions* conditions (Chi-squared test, p-values 0,594, 0.314, 0.484, 0.160).

Table A.8 in the Appendix displays the frequency of career suggestions in the after-treatment

[10] 325 students report their ranking of three ideal occupations in the survey

ranking and the survey ranking of the students. Fifty-one percent mentioned the same number of suggestions in both rankings (along the main diagonal) [11], 42% mentioned fewer suggestions in the survey ranking compared to the after-treatment ranking (below the main diagonal), and 7% mentioned more suggestions in the survey ranking compared to the after-treatment ranking (above the main diagonal). These results show that students consider some career suggestions but over time the effect becomes weaker.

Measuring the effect on the practice task

In Section 4.3, we found no differences in the expected or actual scores between students in the *baseline* group and those who received career *suggestions*. A complementary question is how career *suggestions* affect performance in the short-term academic performance. We measure academic performance using a quiz with 8-questions from previous exams. We include two questions from each exam section: Math, Language, Natural Sciences, and Social Sciences. As in the exam, students must complete the quiz as part of the activity, but no rewards are given for correct answers. On average, students got 2.35 questions right (std. dev. 1.26), with the most correct answers in Social Sciences (0.88) and the fewest in Math (0.29). Students who received career *suggestions* scored 0.08 points higher than those in the *baseline* group. Table A.9 in the Appendix reports the coefficients for the regression of the score in each quiz section explained by the treatment conditions. Qualitatively, the results are similar to Table 3, but some variables lost statistical significance due to the reduced magnitude of the effect. We argue that our findings apply to short-term academic performance. The weaker effect in math may be due to the placement of these questions in the first part of the quiz or the low performance in this section.

A career test and the expected transitions

Figure A.1 illustrates the transition probabilities from school to six occupational groups, contingent upon students' expected score levels in the exam. Higher exam scores correspond to an increased likelihood of transitioning from high school to higher education, while the probability of moving to other types of occupations decreases. This result shows that students' reported likelihood of pursuing further studies is conditioned by their expected exam scores. However, Table 3 shows that career *suggestions* do not seem to be motivating students to expect higher exam scores. These findings can be partially explained by the high level of education the students desire to achieve (78% aspire to pursue a professional career) and their optimism about their scores on the exam (Figure 2). In other words, career *suggestions* are helping students adjust their occupational aspirations, but not their desired educational level or the perceived barriers to these aspirations (Table A.10). Very high aspirations among adolescents had been documented in other low-and middle-income contexts (Ross, 2019; Janzen et al., 2017).

[11] Thirty percent of the participants who received suggestions did not mention any of the five suggestions in the rankings

5 Conclusions

We designed and conducted a lab-in-the-field experiment in which participants answered questions about self-awareness, education, and the labor market as part of an official career test. Students in the *baseline* group only answered test questions, while the other group also received five career *suggestions*. We study how the effect of career suggestions on students' occupational aspirations and educational expectations. For occupational aspirations, students were asked to list their ranking of three ideal occupations before and after the treatment, and in a survey (after the national exam and before the publication of students' results). For educational expectations, we designed an incentivized table to elicit students' expected scores in the four sections of the exam, and we also asked about these expectations without monetary incentives in the survey. We also asked the participants to report the self-assessment of their skills for pursuing two types of higher education programs, technical or undergraduate, and two careers, military or self-employed.

We find that occupational aspirations are affected by career suggestions. The impact of career suggestions varies depending on the level of preference and tends to weaken over time. However, more than 68 % of the students report the same *field* and *core* of knowledge in their occupational ranking top after the treatment. Moreover, we found no differences in the expected or actual scores between students in the *baseline* group and those who received career *suggestions*. We argue that career suggestions are helping students adjust their occupational aspirations but not their educational expectations for two reasons. First, students are optimistic about their exam scores, and the correlation between their anticipated and actual scores is less than 0.3. Secondly, students have high expectations for higher education, particularly in pursuing a professional career. This last reason is related to the finding that receiving career suggestions reduces the students' beliefs about their capabilities to achieve a technical degree.

The evident following question is how these results are informative outside the controlled environment offered by the laboratory. Perhaps the most important conclusion from our experiment is that receiving career suggestions could affect the set of occupational aspirations but not the level of education aspirations the students desire to achieve. If occupational aspirations partly explain the transition from school to work, interventions that aim to reduce the aspiration bias are fundamental to promote students' well-being (Agasisti and Maragkou, 2023). Too high aspirations may lead to frustration and a decreased willingness to consider alternative educational paths (i.e., technical careers).

Our career test was useful for studying the impact of career suggestions on self-efficacy beliefs, outcome expectations, and occupational aspirations. In addition, we learned about the stability of occupational aspirations and the high expectations for higher education. However, the use of this official career test comes at the cost that we cannot control if students accessed the Ministry of Education website before or after the experiment (and received suggestions). Future studies may explore the introduction of new e-mentoring or online career counseling services. For instance, career tests whose suggestions are based on incentive-compatible measurements of skills, expectations, and preferences, while also enabling students to access information about different careers that vary in their level of schooling.

In this chapter, we focus on the career suggestions provided by a public career test, leaving

aside the study of career suggestions given by humans. These human career suggestions have been explored in related and broader literature about role-model interventions. Future experiments may combine human and career test suggestions. For instance, to explore whether the same career suggestions provided by a computer, a family member, a teacher, or a counselor have the same effect on occupational aspirations, self-efficacy beliefs, and outcome expectations. Given that students may have stable occupational aspirations over time, it could be important to track them as they transition from school to work. This could be useful for two reasons. First, to understand how career recommendations influence students' decisions regarding pursuing higher education or entering the workforce after completing high school. Second, to examine the relationship between preferred careers, suggested careers, and actual careers.

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Appendix

A Additional Tables

Table A.1: Balance between treatments: Baseline and Suggestions conditions

	(1) Obs.	(2) Mean	(3) Std. Dev	(4) Mean Questions	(5) Mean Feedback	(6) p-value Diffs. (4) vs (5)
Age	387	16.80	1.06	16.92	16.69	0.04
Female	387	0.61	0.49	0.62	0.60	0.68
Vocational	387	0.49	0.50	0.50	0.48	0.74
Workers	387	0.46	0.50	0.46	0.46	0.93
Care	387	0.51	0.50	0.50	0.53	0.61
Repeaters	387	0.36	0.48	0.44	0.29	0.00
Dropout	387	0.12	0.33	0.16	0.09	0.02
Migration	387					0.46
No		0.25	0.43	0.24	0.26	
Yes, education		0.58	0.49	0.57	0.60	
Yes, other		0.17	0.37	0.19	0.14	
People per room	387	1.68	0.65	1.71	1.66	0.45
Internet connection	387					0.21
No		0.20	0.40	0.22	0.17	
Mobile		0.47	0.50	0.48	0.46	
Wi-Fi		0.33	0.47	0.29	0.37	
Mother Occupation	387					0.78
Employee		0.16	0.37	0.14	0.18	
Self-employed		0.19	0.39	0.17	0.20	
Unpaid-work		0.46	0.50	0.48	0.44	
Unemployed		0.05	0.22	0.06	0.05	
Other		0.14	0.35	0.15	0.13	
Father Occupation	387					0.21
Employee		0.18	0.39	0.22	0.01	
Self-employed		0.43	0.50	0.44	0.42	
Unpaid-work		0.03	0.17	0.04	0.02	
Unemployed		0.07	0.25	0.10	0.04	
Other		0.29	0.46	0.20	0.37	

Table A.2: Correlations between the actual and the expected scores in the Experiment and in the Survey

Section	Experiment	Survey
Math	0.28	0.27
Language	0.07	0.20
NatSci	0.11	0.20
SocSci	0.14	0.29

Table A.3: Self-efficacy by gender

Self-efficacy	Men		Women	
Technical	80.553	(21.003)	85.646	(20.805)
Professional	85.580	(17.309)	90.418	(14.586)
Military	40.473	(32.795)	36.776	(33.491)
Self-employed	80.340	(18.691)	80.304	(21.837)

Standard deviations in parentheses.

Table A.4: OLS results for the determinants of change in the Field and Core of Knowledge related with the occupations reported before and after the treatment

	Indicator of changes in the Field and Core of Knowledge					
	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	Field 1	Field 2	Field 3	Core 1	Core 2	Core 3
Treatment	0.109**	0.171***	0.199***	0.141***	0.221***	0.223***
	(0.042)	(0.049)	(0.051)	(0.047)	(0.052)	(0.052)
Higher Education	-0.000	-0.000	-0.001	-0.001	-0.002	-0.002
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Female	0.034	0.065	0.069	0.081*	0.057	0.050
	(0.043)	(0.051)	(0.054)	(0.048)	(0.054)	(0.054)
Age (norm.)	-0.025	-0.023	0.013	-0.021	-0.020	-0.016
	(0.023)	(0.030)	(0.032)	(0.028)	(0.029)	(0.033)
Workers	-0.014	-0.075	-0.025	-0.035	-0.062	-0.099*
	(0.041)	(0.048)	(0.052)	(0.047)	(0.054)	(0.055)
Care	0.156***	0.079	0.024	0.141***	0.071	0.070
	(0.039)	(0.048)	(0.051)	(0.046)	(0.052)	(0.053)
Migration: education	-0.012	0.112*	0.106*	-0.003	0.145**	0.122*
	(0.050)	(0.059)	(0.063)	(0.058)	(0.064)	(0.066)
Migration: other	0.027	0.185**	0.058	0.015	0.194**	0.060
	(0.065)	(0.078)	(0.079)	(0.072)	(0.082)	(0.082)
Constant	-0.123	0.123	0.112	-0.045	0.245	0.144
	(0.153)	(0.174)	(0.186)	(0.168)	(0.185)	(0.188)
Observations	387	387	387	387	387	387
R-squared	0.133	0.090	0.085	0.100	0.091	0.110
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes

Additional controls in all models: indicator of participation in vocational activities, dropout and repeater indicator, career type, people per room at home, internet connection, risk and patience preference and parental occupation. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table A.5: Frequencies of Cores of Knowledge by treatment conditions

Core	Baseline	Suggestions	Total	Core	Baseline	Suggestions	Total
Medicine	16.85	9.09	12.66	Political Science	0	2.39	1.29
Veterinary Medicine	7.3	8.13	7.75	Uncategorized	1.12	1.44	1.29
Sports Education	6.18	3.83	4.91	Advertising	0	1.91	1.03
Management	5.06	3.83	4.39	Bacteriology	0.56	1.44	1.03
Mechanical Engineering	5.06	3.35	4.13	Dentistry	1.12	0.96	1.03
Modern Languages	6.74	1.91	4.13	Accounting	1.12	0.48	0.78
Psychology	2.81	5.26	4.13	Economics	0.56	0.96	0.78
Architecture	2.81	4.78	3.88	Electronic Engineering	0.56	0.96	0.78
Education	2.81	4.78	3.88	Mining Engineering	0.56	0.96	0.78
Systems Engineering	4.49	2.87	3.62	Agronomy	0.56	0.48	0.52
Civil Engineering	5.06	1.91	3.36	Electrical Engineering	0.56	0.48	0.52
Fine Arts	2.81	3.35	3.1	Sociology	0	0.96	0.52
Journalism	3.37	2.87	3.1	Agricultural Engineering	0	0.48	0.26
Military Training	1.12	4.31	2.84	Agronomic Engineering	0	0.48	0.26
Law	1.69	3.35	2.58	Animal Science	0.56	0	0.26
Design	3.37	1.44	2.33	Biology	0	0.48	0.26
Visual Arts	0	4.31	2.33	Biomedical Engineering	0.56	0	0.26
Performing Arts	1.12	2.87	2.07	Chemistry	0	0.48	0.26
Nursing	2.25	1.44	1.81	Food Engineering	0	0.48	0.26
Nutrition	2.81	0.96	1.81	Geology	0	0.48	0.26
Other Engineering Programs	2.25	1.44	1.81	Library Science	0	0.48	0.26
Environmental Engineering	1.12	1.91	1.55	Music	0.56	0	0.26
Therapies	1.69	1.44	1.55	Philosophy	0	0.48	0.26
Administrative Engineering	0	2.39	1.29	Physics	0.56	0	0.26
Optometry	2.25	0.48	1.29	Surgical Instrumentation	0	0.48	0.26

Table A.6: Favorite *field* and *core* ranking changes by treatment condition (survey participants: before and after treatment)

Ranking	Knowledge field			Knowledge core		
	Baseline	Suggestions	Total	Baseline	Suggestions	Total
Same	83.22	79.67	81.23	76.92	70.33	73.23
Different	9.09	9.34	9.23	9.09	9.34	9.23
Left	7.69	10.99	9.54	13.99	20.33	17.54

Table A.7: Favorite *field* and *core* ranking changes by treatment condition (survey participants: after treatment and survey)

Ranking	Knowledge field			Knowledge core		
	Baseline	Suggestions	Total	Baseline	Suggestions	Total
Same	69.23	63.19	65.85	53.85	43.96	48.31
Different	16.78	18.68	17.85	20.28	21.43	20.92
Left	13.99	18.13	16.31	25.87	34.62	30.77

Table A.8: Number of *core* suggestions included in the *After-treatment* Ranking and the *Survey* Ranking

After-treatment	Survey				Total
	0	1	2	3	
0	29.67	5.49	0	0	35.16
1	12.09	17.03	1.1	0	30.22
2	6.59	6.04	3.85	0.55	17.03
3	4.95	10.44	2.2	0	17.58
Total	53.3	39.01	7.14	0.55	100

Table A.9: OLS results for the determinants of the scores in the quiz

	Score in the quiz: 0-2			
	(1)	(2)	(3)	(4)
VARIABLES	Mat	Len	NatSci	SocSci
Treatment	0.084*	0.120	-0.074	0.028
	(0.051)	(0.073)	(0.078)	(0.061)
Higher Education	0.001	-0.004**	-0.003	0.001
	(0.001)	(0.002)	(0.002)	(0.002)
Female	-0.069	0.062	-0.089	-0.142**
	(0.058)	(0.078)	(0.080)	(0.069)
Age (norm.)	-0.030	-0.017	-0.031	0.009
	(0.028)	(0.044)	(0.043)	(0.038)
Workers	0.025	-0.041	-0.084	0.042
	(0.055)	(0.078)	(0.082)	(0.065)
Care	0.095*	-0.093	0.023	-0.066
	(0.052)	(0.072)	(0.077)	(0.061)
Migration: education	-0.057	0.055	0.034	0.016
	(0.069)	(0.085)	(0.097)	(0.081)
Migration: other	-0.054	0.123	-0.086	0.189*
	(0.084)	(0.110)	(0.121)	(0.105)
Constant	0.193	1.384***	1.150***	0.575**
	(0.176)	(0.279)	(0.272)	(0.244)
Observations	387	387	387	387
R-squared	0.083	0.091	0.062	0.075
Individual Controls	Yes	Yes	Yes	Yes

Additional controls in all models: indicator of participation in vocational activities, dropout and repeater indicator, career type, people per room at home, internet connection, risk and patience preference and parental occupation. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Table A.10: OLS results for the determinants of the perceived barriers to educational aspirations.

VARIABLES	(1) Loans	(2) Parents	(3) Work	(4) Stereotypes	(5) Distance	(6) Family	(7) Admission
Treatment	0.579	0.443	1.894	-0.099	-1.522	-0.444	-2.942
	(2.838)	(3.639)	(3.029)	(2.874)	(3.135)	(3.447)	(2.995)
Higher Education	0.023	0.113	-0.192**	-0.031	-0.143	-0.032	-0.037
	(0.085)	(0.100)	(0.086)	(0.086)	(0.087)	(0.097)	(0.084)
Female	2.426	10.389***	0.683	10.530***	1.330	5.801	3.833
	(3.175)	(3.825)	(3.123)	(3.175)	(3.375)	(3.538)	(3.072)
Age (norm.)	1.498	-2.577	1.278	1.623	3.579*	2.345	0.869
	(1.733)	(2.256)	(1.993)	(2.006)	(2.129)	(2.145)	(2.030)
Workers	-3.131	-2.012	1.690	5.110*	-2.928	5.510	-5.010*
	(2.980)	(3.764)	(3.084)	(3.073)	(3.109)	(3.635)	(3.033)
Care	4.672	7.706**	6.583**	6.090**	6.085**	6.274*	8.093***
	(2.856)	(3.577)	(2.871)	(2.949)	(2.976)	(3.418)	(2.835)
Migration: education	0.921	0.538	-3.948	-3.527	0.128	1.859	6.414
	(3.539)	(4.737)	(3.816)	(3.425)	(3.901)	(4.021)	(3.918)
Migration: other	7.203	0.256	-1.201	2.314	2.630	0.480	0.986
	(4.739)	(5.566)	(4.933)	(4.808)	(5.177)	(4.987)	(4.654)
Constant	35.291***	11.667	48.804***	9.378	39.729***	14.916	39.696***
	(11.920)	(13.115)	(11.811)	(11.192)	(11.681)	(12.063)	(11.228)
Observations	387	387	387	387	387	387	387
R-squared	0.085	0.072	0.104	0.103	0.077	0.109	0.072
Individual Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Questions are worded as: "Do you think the following barriers could be an obstacle in the achievement of your educational aims?" (Options: (1) Access to loans or economic resources; (2) Parental plans; (3) The needs of work; (4) Gender stereotypes; (5) Proximity to educational institution; (6) Family plans related to children or marriage; (7) Not feeling up to the admission requirements). Answers in this module also range from 0 (Nothing) to 100 (Completely).
Additional controls in all models: indicator of participation in vocational activities, dropout and repeater indicator, career type, people per room at home, internet connection, risk and patience preference and parental occupation. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

B Additional Figures

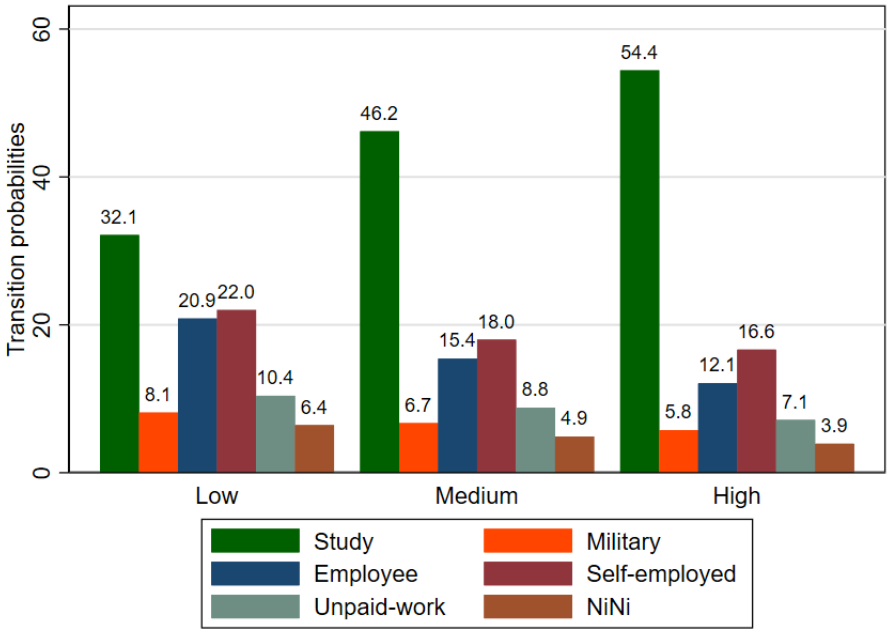
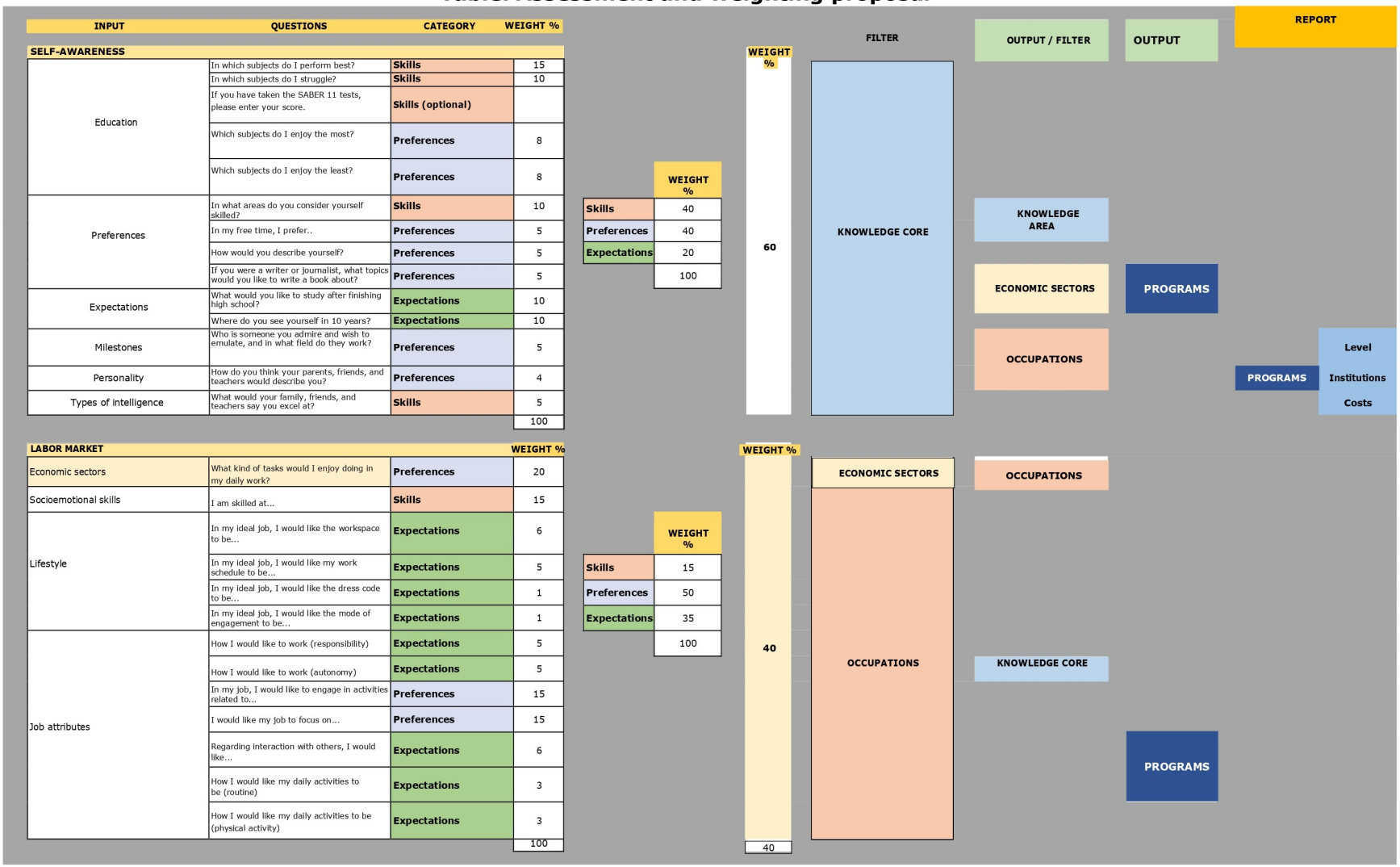


Figure A.1: Transition probabilities and the expected score level in the exam

Table. Assessment and weighting proposal



INPUT	QUESTIONS	CATEGORY	WEIGHT %
SELF-AWARENESS			
Education	In which subjects do I perform best?	Skills	15
	In which subjects do I struggle?	Skills	10
	If you have taken the SABER 11 tests, please enter your score.	Skills (optional)	
	Which subjects do I enjoy the most?	Preferences	8
	Which subjects do I enjoy the least?	Preferences	8
Preferences	In what areas do you consider yourself skilled?	Skills	10
	In my free time, I prefer..	Preferences	5
	How would you describe yourself?	Preferences	5
	If you were a writer or journalist, what topics would you like to write a book about?	Preferences	5
Expectations	What would you like to study after finishing high school?	Expectations	10
	Where do you see yourself in 10 years?	Expectations	10
Milestones	Who is someone you admire and wish to emulate, and in what field do they work?	Preferences	5
Personality	How do you think your parents, friends, and teachers would describe you?	Preferences	4
Types of intelligence	What would your family, friends, and teachers say you excel at?	Skills	5
			100
LABOR MARKET			**WEIGHT %**
Economic sectors	What kind of tasks would I enjoy doing in my daily work?	Preferences	20
Socioemotional skills	I am skilled at...	Skills	15
Lifestyle	In my ideal job, I would like the workspace to be...	Expectations	6
	In my ideal job, I would like my work schedule to be...	Expectations	5
	In my ideal job, I would like the dress code to be...	Expectations	1
	In my ideal job, I would like the mode of engagement to be...	Expectations	1
Job attributes	How I would like to work (responsibility)	Expectations	5
	How I would like to work (autonomy)	Expectations	5
	In my job, I would like to engage in activities related to...	Preferences	15
	I would like my job to focus on...	Preferences	15
	Regarding interaction with others, I would like...	Expectations	6
	How I would like my daily activities to be (routine)	Expectations	3
	How I would like my daily activities to be (physical activity)	Expectations	3
			100

	WEIGHT %
Skills	40
Preferences	40
Expectations	20
	100

	WEIGHT %
Skills	15
Preferences	50
Expectations	35
	100

Figure A.2: Technical sheet of the career test

C Career suggestions classification

Knowledge fields

Groups of academic programs consider certain affinity in the contents, in specific areas of knowledge, in the areas of action of higher education whose training purposes lead to research or the performance of occupations, professions, and disciplines. The fields of knowledge are eight:

1. Agricultural: Agronomy, Veterinary, and related fields.
2. Social Sciences: Social Sciences and Humanities
3. Arts: Fine Arts
4. Management: Economics, Administration, Accounting, and related fields
5. Education: Education Sciences
6. Engineering: Engineering, Architecture, Urbanism, and related fields
7. Health: Health Sciences
8. Natural Sciences: Mathematics and Natural Sciences

Knowledge cores

Division or classification of a field of knowledge into its essential fields, disciplines, or professions. There are 55 knowledge cores.

Agricultural

1. Agronomy
2. Animal Husbandry
3. Veterinary Medicine

Social Sciences

1. Anthropology, Liberal Arts
2. Library Science, others in social sciences and humanities
3. Political Science, International Relations
4. Social Communication, Journalism, and related occupations
5. Sports, Physical Education, and Recreation

6. Law and related occupations
7. Training related to the military or police sector
8. Geography, History
9. Modern Languages, Literature, Linguistics, and related occupations
10. Psychology
11. Philosophy, Theology, and Related Occupations
12. Sociology, Social Work, and Related Occupations

Arts

1. Plastic and Visual Arts and related occupations
2. Performing Arts
3. Advertising and related occupations
4. Design
5. Music
6. Other programs associated with fine arts

Management

1. Management
2. Economics
3. Public Accounting

Education

1. Education

Engineering

1. Architecture
2. Biomedical Engineering and related occupations
3. Environmental Engineering, Sanitary Engineering, and related occupations
4. Administrative Engineering and related occupations

5. Agricultural Engineering, Forestry, and related occupations
6. Agroindustrial Engineering, Food, and related occupations
7. Agronomic, Livestock Engineering, and related occupations
8. Civil Engineering and related occupations
9. Mining Engineering, Metallurgy, and related occupations
10. Systems Engineering, Telematics, and related occupations
11. Electrical Engineering and related occupations
12. Electronics Engineering, Telecommunications, and related occupations
13. Industrial Engineering and related occupations
14. Mechanical Engineering and related occupations
15. Chemical Engineering and related occupations
16. Other engineering disciplines

Health

1. Bacteriology
2. Nursing
3. Therapies
4. Surgical Instrumentation
5. Medicine
6. Nutrition and Dietetics
7. Dentistry
8. Optometry, other health sciences occupations
9. Public Health

Natural Sciences

1. Biology, Microbiology, and related occupations
2. Physics
3. Geology and other programs in natural sciences
4. Mathematics, Statistics, and related occupations
5. Chemistry and related occupations

D Experimental Protocol: Translated Version

- **Career Test:** We use *purple* for the condition where students respond to *Questions*, *teal* for the condition where they receive *Suggestions*.
- **Expected Score on the Exam:** We use *gray* for the condition where students expect a *Low* score, *brown* for *Medium*, and *orange* for the condition *High*.

General Instructions

In this activity, you will answer some questions about your educational aspirations and the *Saber 11 – ICFES* exam. Payments associated with questions about the expected results on the *Saber 11* will be given to you in an activity after the publication of individual results by ICFES.

This activity is individual. Please do not talk or try to look at other participants' answers. If there's something you don't understand, please raise your hand, and one of the monitors will approach you and try to help you individually.

Participant Code

You received a participant code with your invitation to participate; this is your identification throughout the activity. We will never ask for your name or ID number. Please do not lose or give away your participant code; you will need it to claim your payment.

Your participant code consists of the initial letters of your first name and last name, followed by your birth date. For instance, if your name is Lina Rıos and you were born on 11 February 1995, you will have to type LR11021995. To begin the activity, please enter your code, write everything in uppercase. This code is important to ensure your participation in the rest of the activity and the payment assignment. [Participant Code]

Payment

Presenting your participant code will grant you your payments in cash. The people in charge of the payments will not know your answers or how they were generated, only how much they need to pay you.

Initial Question

Please list 3 *professions*, *occupations*, or *trades* that you consider ideal for you. Write them in order of importance, where **1** means "what I would most like to do" and **3** means "what I would least like to do":

Click on each box to activate it and write your response. After entering the response, you will NOT be able to modify it, so think carefully. Fill in the boxes in order.

1. Occupation 1

2. Occupation 2
3. Occupation 3

Section for *Questions* Condition

Answer the following questions [1]

Section for *Suggestions* Condition

1. Click on the link below to access the QUESTIONS. Once there, answer the questions until you reach the "Results" section.

QUESTIONS

2. After reaching the "Results," please return and write down the five knowledge cores with which you have the greatest affinity according to the "Results."

Click on each box to activate it and write your response. After entering it, you will NOT be able to modify it, so think carefully. Fill them in order.

1. Suggestion 1
2. Suggestion 2
3. Suggestion 3
4. Suggestion 4
5. Suggestion 5

[1] Screenshots of the questions from the Ministry's website

Occupational Aspirations

Taking into account the previous activity, please list again 3 professions, trades, or occupations that you consider ideal for yourself. Write them in order of importance, where **1** means "it is what I would most like to do" and **3** means "it is what I would least like to do":

Click on each box to activate it and write your response. After entering the response, you will NOT be able toInstitute, so think carefully. You must fill in the boxes in order.

1. Occupation 1
2. Occupation 2
3. Occupation 3

Occupational Aspirations

What type of career do you consider necessary to do what you would like the most?:

- Technical
- Technological
- Professional
- Military
- None

Write the name of the educational institution where you would like to study. You can also write "I DON'T KNOW".

Institute 1

Do you have a second option? If so, write the name of the educational institution where you would also like to study. You can write **"I DON'T KNOW" or "I HAVE NO SECOND OPTION"**:

Institute 2

Saber 11 – ICFES Expectations

Now you are going to fill out a table where you will predict your score on the *Saber 11* exam as if you were placing a bet. We will deliver the winnings on a second visit to the school, after the publication of the exam results by ICFES.

The rules of the bet are as follows:

1. The exam has four sections: Math, Language, Social Sciences, and Natural Sciences. Each section is scored from **0** (lowest score) to **100** (highest score).
2. You should rank the section according to the degree of *confidence* you have in the expected scores.

   Place the section you are most confident about your score in the first row (which pays 20,000 if correct).

   Place the second section you are most confident about your score in the second row (which pays 15,000 if correct), and so on.
3. For each section, write your *EXPECTED SCORE* as a number between **0** and **100**. We will mark it as a hit, and you will receive the corresponding payment, *if the number you write as EXPECTED SCORE is within **10 numbers above or below** your REAL SCORE on the section of the exam.*
4. Tell us, based on your preferences for the content of each section, how you would organize them from least favorite, with the number **1**, to most favorite with the number **4**. You must drag a number to each box in the last column and numbers cannot be repeated.

Note: Note that the expected score in which you are most confident does not necessarily have to be assigned to your favorite section. For example, your favorite section may be *Math* (in which case you would assign it a 4 in the last column), but you are more confident in what score you think you will get in *Language* (in which case this score would go in the first row).

Table of answers, drag and write

Section	
	Math
	Language
	Social Sciences
	Natural Sciences
Preference Rating:	1 2 3 4

Table A.11: Bet Table

Amount of money for the bet	**Section**	**Expected Section Score** (Number from **0** to **100**)	**Rate Your Preference** (**1** least preferred and **4** most preferred)
20,000			
15,000			
10,000			
5,000			

Overall Score

When the results of the *Saber 11* exam are published, we will rank the students in YOUR CLASSROOM into (4) four groups according to the overall score in the section of the exam. Each group will have an equal number of people. *We also want to know your prediction*.

Which group do you think you will be classified into? If you guess the group you will be in, you will receive an additional **$5,000**.

Performance	**Low**	**Medium**	**High**	**Superior**
Select only **ONE** circle	O	O	O	O

Ability to hit

We want to know how confident you feel about guessing your section scores. How many sections do you think your *EXPECTED SCORE* will be within **10** points (above or below) of your *REAL SCORE*? Click on the line and then move the box to choose a number between 0 and 4

None All

Higher Education

On a scale of 0 to 100, where **0** is "I am not going to continue studying" and **100** is "I am definitely going to enroll in a Higher Education program", please tell us How likely are you to enroll in a Higher Education program next year? Click on the line and then move the box to choose a number between 0 and 100

I am not going to continue studying

I am definitely going to enroll in a Higher Education program

Skills

Regardless of your educational aspirations, but **thinking about your abilities**, on a scale of 0 to 100, where **0** is "I feel incapable of doing it at all", and **100** is "I feel highly confident I can do it", please tell us, How capable do you feel of doing the following things?

Click on the line and then move the box to choose a number between 0 and 100 *in each case*.

Obtaining a technical/technological degree:

Cannot do at all — Highly certain can do

Pursuing a military career:

Cannot do at all — Highly certain can do

Starting your own business:

Cannot do at all — Highly certain can do

Obtaining a professional degree:

Cannot do at all — Highly certain can do

Barriers

On a scale of 0 to 100, where **0** is "Does not affect my educational aspirations at all" and **100** is "Completely prevents the achievement of my educational aspirations," please tell us How much do you think the following barriers could be an obstacle in the achievement of your educational aspirations?

Click on the line and then move the box to choose a number between 0 and 100 *in each case*.

Access to educational loans or financing:

Does not affect at all — Completely prevents

Parents' desire for you NOT to continue studying:

Does not affect at all — Completely prevents

Need to start working:

Does not affect at all — Completely prevents

Gender prejudices associated with occupations:

Does not affect at all — Completely prevents

Geographical distance to the higher education institution of your interest:

Does not affect at all — Completely prevents

Your family plans (e.g., getting married, having children):

Does not affect at all — Completely prevents

Your ability to meet the admission requirements for a higher education program:

Does not affect at all — Completely prevents

Expected Income

Suppose you choose one of the following **types of careers** and graduate. How much do you think you would earn monthly in 5 years, at today's salaries?

Click on the line and then move the box to choose a number between 0 and $10,000,000$ *in each case*.

Technical/Technological:

$0 $10,000,000

Military Career:

$0 $10,000,000

Professional:

$0 $10,000,000

Not studying and starting your own business:

$0 $10,000,000

Not studying and starting to work:

$0 $10,000,000

From School to Work

The *Saber 11* results are classified into 3 ranges according to the score: HIGH, MEDIUM, LOW (See Table below).

In the following questions, please tell us how you think the *Saber 11* results will affect your occupational status next year, specifically in **JUNE 2023**.

LOW	MEDIUM	HIGH
Less than 250	Between 251 and 350	More than 350

How likely is it?

[

LOW (Suppose you stay here)	MEDIUM	HIGH
Less than 250	Between 251 and 350	More than 350

/

LOW	MEDIUM (Suppose you stay here)	HIGH
Less than 250	Between 251 and 350	More than 350

/

LOW	MEDIUM	HIGH (Suppose you stay here)
Less than 250	Between 251 and 350	More than 350

]

[Suppose you score **LOW** on the Saber 11 exam, meaning you score less than 250 points. Suppose you score **MEDIUM** on the Saber 11 exam, meaning you score between 251 and 350 points / Suppose you score **HIGH** on the Saber 11 exam, meaning you score more than 350 points.]

Please fill out the following Table with the likelihood that you will be doing each of these activities next year in JUNE:

Sum of probabilities **0**

Note: The sum of probabilities must be equal to 100

Table A.12: Transition Table

OCCUPATION	PROBABILITY
Not working or studying	
Working for a salary for an employer	
Working with relatives without pay	
Studying	
Performing military service	
Self-employed	

ICFES Questions

In the following questions, you will answer **8** questions similar to those included in the Saber 11 exam: **2** in Math, **2** in Language, **2** in Social Sciences, **2** in Natural Sciences.

In a subsequent activity, we will ask your parents beliefs about your performance on these 8 questions.

Click "Next" to begin.

Question 1: Math

A school needs to send 5 students as representatives to a forum on environmental pollution. It was decided that 2 students would be from grade 10 and 3 from grade 11.

In grade 10, five students are prepared for the forum, and in grade 11, there are 4. How many different groups can be formed to send to the forum?

A. 9
B. 14
C. 20
D. 40

Select only ONE answer:
A. **O** B. **O** C. **O** D. **O**

Question 2: Math

Among the 16 students in a classroom, a raffle will be held for a ticket to enter an amusement park. Each student must choose a number from 3 to 18. The raffle is conducted as follows: 6 balls are placed in an urn, each numbered from 1 to 6; a ball is drawn, the number is noted, and then the ball is placed back in the urn. The experiment is repeated 2 more times. The sum of the 3 scores obtained determines the winning number of the raffle. If the first draw in the raffle results in a 2, it is more likely that the student who chose the number 10 wins the raffle than the student with the number 7, because

A. The higher the chosen number, the higher the probability of winning.
B. The first student has one more chance to win than the second.
C. It is more likely to continue obtaining even numbers.
D. The difference between 10 and 18 is greater than between 2 and 7.

Select only ONE answer:
A. **O** B. **O** C. **O** D. **O**

ANSWER QUESTIONS 3 AND 4 ACCORDING TO THE FOLLOWING TEXT

One of the scenarios where vallenato began to mix with the music that the bourgeoisie listened to and danced to - waltzes, mazurkas, Neapolitan songs - was the *colitas*. This was the name given to the "colas" or end-of-party events of the wealthy class: weddings, baptisms, birthdays, religious festivities... During the sarao, while the gentlemen enjoyed the European music played by a makeshift provincial orchestra, the workers spent the party in the kitchen and sheds playing the accordion, guacharaca, and drum. After the orchestra was dismissed, those in the back were invited to come forward, and bosses and cowhands sat down to drink and sing together. There has been discussion about the role played by the *colitas* in this story. Some say that these end-of-party gatherings were the maternity ward of vallenato, as they combined European and native rhythms: together they gave birth to vallenato airs. "The *colitas* are the direct ancestor of modern vallenato", says Lopez Michelsen.

Nevertheless, it seems more accurate to think that the *colitas* did not help shape the genre but rather helped to spread it. To begin with, these kinds of improvised parties were not known throughout the region, but only in the Upar Valley area. In El Paso, there were no *colitas*. In many places along the river, there weren't either. Moreover, on the other hand, historians indicate that the *colitas* emerged at the beginning of the 20th century when vallenato had already begun to pick up steam with the classic instrumental trio. In contrast, the "piquerías" and retos did indeed constitute one of the most effective molds for the creation, propagation, and development of vallenato from the very beginning. The legend of Francisco el Hombre speaks of his challenge with the devil, whom he only manages to defeat when he sings the credo backwards. The great accordionists traveled for days to attend "piquerías," whether arranged in advance or through messengers, as "La gota fría" attests". Remember Moralitos that day / you were in Urumita / and you didn't want to stop."

Taken from: Samper, D. & Tafur M. (1997). *100 años de vallenato.* Bogotá: MTM Ediciones

Question 3: Critical Reading

The author introduces López Michelsen's quote in order to present the opinion of an expert in vallenato, and

A. Reinforce the main thesis of the text, according to which the *colitas* were promoters of the genre.

B. Indicate a debatable position regarding the role played by the *colitas* in the origin of the genre.

C. Legitimize the main thesis of the text, according to which the *colitas* originated modern vallenato.

D. Convince the reader that the *colitas* were the sole promoters of modern vallenato.

Select only ONE answer:
A. **O** B. **O** C. **O** D. **O**

Question 4: Critical Reading

The author quotes a verse from *La gota fría* to support the idea that accordion players traveled to attend different "piquerias," because in this verse there is a reference to

A. an accordion player who sang *colitas*, named Lorenzo Morales.
B. Urumita, a town famous for the realization of *colitas*.
C. an accordion player passing through a town.
D. Urumita, a town to which accordion players went.

Select only ONE answer:
A. **O** B. **O** C. **O** D. **O**

Question 5: Social Science

The Constitutional Court ruled in favor of a soldier who had filed a lawsuit claiming that the military institution did not respect his right to conscientious objection because his religion prohibits him from using weapons and participating in military practices. The basis of the ruling is the defense of the soldier's freedom of conscience.

Which of the following options is consistent with this ruling?

A. Order the army to hand over the soldier's military passbook to the soldier and his immediate disassociation from the institution.

B. Order the soldier to complete his mandatory military service with all assigned responsibilities.

C. Order the army that the soldier participates in training and only performs office tasks.

D. Order the soldier to participate only in military parades, proudly wearing military attire.

Select only ONE answer:
A. **O** B. **O** C. **O** D. **O**

Question 6: Social Studies and Citizenship

During the rainy seasons, many rural areas in Colombia experience school flooding and road interruptions to access these schools.

Which of the following options most violates the right to education?

A. Organizing transportation schemes for students to attend schools not affected by floods.

B. Adjusting the school calendar so that there are no classes during the flood season.

C. Broadcasting some classes through the local radio station to reduce the days students have to attend school.

D. Transporting children to non-flooded schools twice a week and reducing the number of class hours.

Select only ONE answer:

A. **O** B. **O** C. **O** D. **O**

Question 7: Natural Sciences

Ecosystems are considered open systems because the constant flow of matter and energy they exchange with their external environment is fundamental to their maintenance. According to this information, which of the following models precisely represents an open ecosystem?

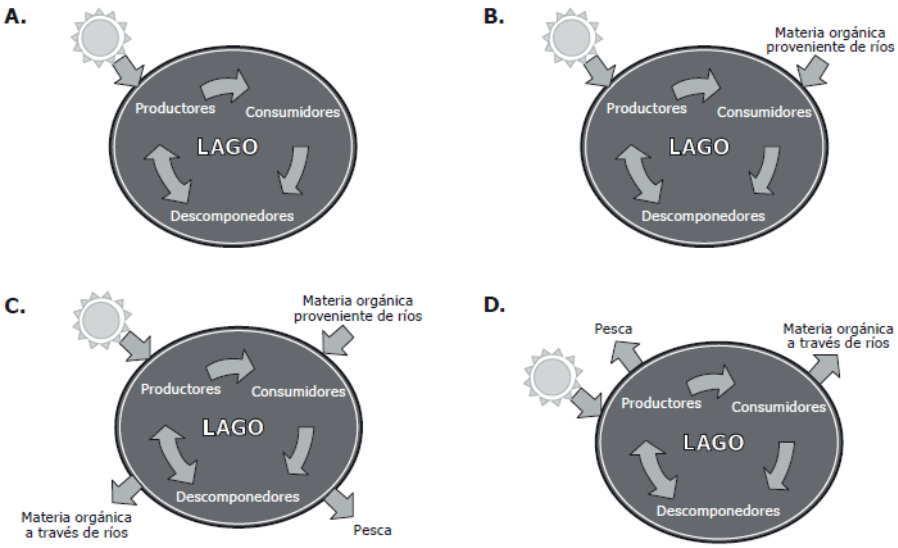


Figure A.3: Question 7

Select only ONE answer:

A. **O** B. **O** C. **O** D. **O**

Question 8: Natural Sciences

Proteins are formed from messenger RNA chains. In this process, for every three consecutive nucleotides of messenger RNA, one amino acid is coded. Below is a messenger RNA sequence:

AUGGCAAGAAACGACCACAUCUAGGUAUGC

The AUG nucleotides encode only to indicate the start of protein formation, and the UAG nucleotides encode only to indicate its termination. Based on this information, how many amino acids will form the protein?

A. 8
B. 18
C. 6
D. 10

Select only ONE answer:
A. **O** B. **O** C. **O** D. **O**

E Experimental Protocol: Original Version (Spanish)

Las variaciones en el protocolo están escritas en corchetes, y están codificadas por colores:

- **Test de Orientación Vocacional:** Usamos el color *púrpura* para la condición en la que los estudiantes responden *Preguntas*, *verde azulado* para la condición en la que reciben *Sugerencias*.
- **Puntaje esperado en el Exámen:** Usamos el color *gris* para la condición en la que los estudiantes esperan un puntaje *Bajo*, *pardo* para *Medio*, y *naranja* para la condición *Alto*.

Instrucciones Generales

En esta actividad responderá algunas preguntas sobre sus aspiraciones educativas y en el examen *Saber 11 – ICFES*. Los pagos asociados a las preguntas sobre los resultados esperados en el *Saber 11*, le serán entregados en una actividad posterior a la publicación de los resultados individuales que hace el ICFES.

La actividad es individual. Le pedimos que por favor no hable ni trate de mirar las respuestas de los demás participantes. Si hay algo que usted no entiende, por favor levante la mano, uno de los monitores se acercará y tratará de ayudarlo de manera individual.

Código de participante

Con su invitación a participar recibió un código de participante, esa es su identificación durante toda la actividad. Nunca le pediremos su nombre ni su número de documento de identidad. Por favor no pierda ni entregue su código de participante, lo necesitará para reclamar sus ganancias.

Su código está compuesto por las iniciales de su primer nombre y apellido seguido de su fecha de nacimiento. Por ejemplo, si usted se llama Lina Ríos y usted nació el 11 de febrero de 1995, debe ingresar LR11021995. Para iniciar por favor ingrese su código, escriba todo en mayúscula. Este código es importante para asegurar su participación en el resto de la actividad y la realización de los pagos. [Código de participante]

Pago

Presentando su código de participante le darán sus pagos en efectivo. La persona que hace los pagos no conocerá sus respuestas, ni cómo fueron generados, solamente cuanto tiene que pagarle.

Pregunta Inicial

Por favor haga una lista de 3 *profesiones*, *oficios* u *ocupaciones* que considere ideales para usted. Escríbalas en orden de importancia, donde **1** significa que "es lo que más me le gustaría hacer" y **3** significa que "es la que menos le gustaría hacer":

Haga clic encima de cada recuadro para poder activarlo y escribir su respuesta. Después de ingresada la respuesta NO podrá modificarla así que piénsela bien. Debe llenar los recuadros en orden.

1. Ocupación 1
2. Ocupación 2
3. Ocupación 3

Sección para la Condición *Preguntas*

Responda las siguientes preguntas. [2]

Sección para la Condición *Sugerencias*

1. Haga *clic* sobre el vínculo mostrado abajo para acceder a las PREGUNTAS. Una vez allí, responda las preguntas hasta llegar a los "Resultados".

   PREGUNTAS

2. Luego de llegar a los "Resultados" por favor regrese y escriba los 5 núcleos de conocimiento con los que tiene mayor afinidad según los "Resultados".

Haga *clic* encima de cada recuadro para poder activarlo y escribir su respuesta. Después de ingresada no puede modificarla así que piénsela bien. Debe llenarlos en orden.

1. Sugerencia 1
2. Sugerencia 2
3. Sugerencia 3

[2] Capturas de pantalla de las preguntas del sitio web del Ministerio de Educación

4. Sugerencia 4
5. Sugerencia 5

Aspiraciones ocupacionales

Teniendo en cuenta la actividad anterior por favor haga nuevamente una lista de 3 profesiones, oficios u ocupaciones que considere ideales para usted. Escríbalas en orden de importancia, donde **1** significa que "es lo queInstitucióngustaría hacer" y **3** significa que "es la que menos le gustaría hacer":

Haga *clic* encima de cada recuadro para poder activarlo y escribir su respuesta. Después de ingresada la respuesta NO podrá modificarla así que piénsela bien. Debe llenar los recuadros en orden.

1. Ocupación 1
2. Ocupación 2
3. Ocupación 3

Aspiraciones ocupacionales

¿Qué tipo de carrera considera necesaria para hacer lo que más le gustaría?:

- Técnica
- Tecnológica
- Profesional
- Militar
- Ninguna

Escriba el nombre de la institución educativa en la que desea estudiar. También puede escribir "NO SÉ".

Institución 1

¿Tiene una segunda opción? En caso de que sí, escriba el nombre de la institución educativa donde también le gustaría estudiar. Puede escribir **"NO SÉ" o "NO TENGO SEGUNDA OPCIÓN"**:

Institución 2

Expectativas Saber 11 – ICFES

Ahora va a llenar una tabla donde usted va a predecir su puntaje en el examen *Saber 11* como si estuviera haciendo una *apuesta*. Las ganancias las entregaremos en una segunda visita al colegio, luego de la publicación de los resultados del examen por parte del ICFES.

Las reglas de la apuesta son las siguientes:

1. El examen tiene cuatro pruebas: Matemáticas, Lectura Crítica, Sociales y Ciudadanas, Ciencias Naturales.

   Cada prueba se califica de **0** (puntaje más bajo) a **100** (puntaje más alto).

2. Usted debe ordenar las pruebas según qué tan *confiable* es su predicción sobre cómo le va a ir.

   En la que tenga más seguridad de su puntaje, póngala en la primera fila (que paga $20,000$ si acierta).

   En la segunda en la que tenga más seguridad de su puntaje, póngala en la segunda fila (que paga $15,000$ si acierta), y así sucesivamente.

3. Para cada prueba, escriba su *PUNTAJE ESPERADO* como un número entre **0** y **100**.

   Marcaremos como un acierto, y recibirá el pago correspondiente, *si el puntaje que usted escriba como PUNTAJE ESPERADO esté maximo **10 puntos por debajo o por encima** de su PUNTAJE REAL de la prueba.*

4. Cúentenos, de acuerdo a sus gustos por los contenidos de cada prueba, cómo las organizaría desde sus menos favorita, con el número **1** hasta la más favorita con el número **4**. Debe arrastrar un número a cada casilla de la última columna y no se pueden repetir números.

Nota: Tenga en cuenta que su predicción más confiable no necesariamente debe asignarse a su prueba favorita. Por ejemplo, puede que su prueba favorita sea *Matematicas* (en cuyo caso le asignaría un 4 en la última columna), pero tiene más confianza en cuál puntaje cree que sacará en *Lectura Critica* (en cuyo caso esta prueba iría en la primera fila).

Tabla de respuestas arrastre y escriba
Prueba

Matematicas
Lectura Critica

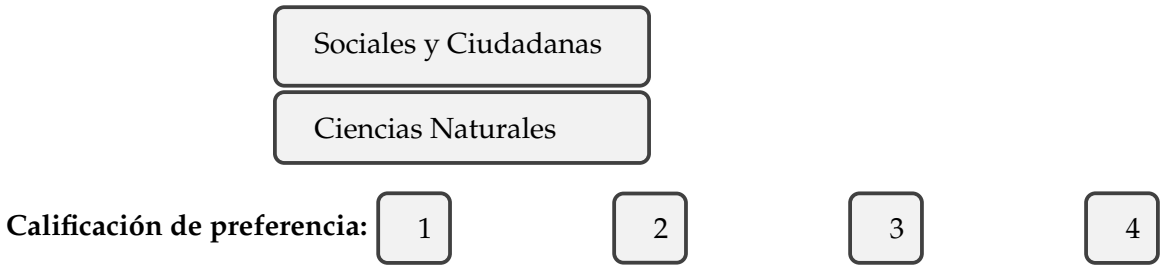


Table A.13: Tabla de Apuestas

Ganancia si acierta en el puntaje	**Prueba**	**Puntaje esperado prueba** (Número de **0** a **100**)	**Califique su preferencia** (**1** la menos preferida y **4** la más preferida)
20,000			
15,000			
10,000			
5,000			

Puntaje global

Cuando se publique los resultados del examen *Saber 11*, vamos a ordenar a los estudiantes de SU SALÓN en (4) cuatro grupos según el puntaje global en las pruebas. Cada grupo tendrá igual número de personas. *También queremos conocer su predicción*.

¿Usted en que grupo cree que será clasificado? Si acierta el grupo en el que quedará recibirá **$5,000** adicionales.

Desempeño	**Bajo**	**Basico**	**Alto**	**Superior**
seleccione solo **UN** círculo	O	O	O	O

Capacidad para acertar

Queremos saber qué tan capaz se siente de acertar en sus puntajes de las pruebas.

¿En cuántas pruebas cree que su *PUNTAJE ESPERADO* estará a menos de **10** puntos (por encima o por debajo) de su *PUNTAJE REAL*?

Haga *clic* sobre la linea y luego mueva el recuadro para elegir un número entre 0 y 4

Ninguna Todas

Educación Superior

En una escala del 0 al 100, donde **0** es "no voy a continuar estudiando" y **100** es "con toda seguridad voy a ingresar a un programa de Educación Superior", por favor díganos ¿Qué tan probable es que el próximo año ingrese a un programa de Educación Superior? Haga *clic* sobre la línea y luego mueva el recuadro para elegir un número entre 0 y 100

No voy a continuar estudiando

Con toda seguridad voy a ingresar a un programa de Educación superior

Habilidades

Independientemente de sus aspiraciones educativas, pero **pensando en sus habilidades**, en una escala del 0 al 100, donde **0** es "me siento totalmente incapaz de hacerlo", y **100** es "me siento totalmente capaz de hacerlo", por favor diganos, ¿Qué tan capaz se siente de hacer las cosas que se mencionan a continuación?

Haga *clic* sobre la línea y luego mueva el recuadro para elegir un número entre 0 y 100 *en cada caso*.

Tener un título técnico/tecnológico:

Totalmente Incapaz — Totalmente Capaz

Hacer una carrera militar:

Totalmente Incapaz — Totalmente Capaz

Tener su propio negocio:

Totalmente Incapaz — Totalmente Capaz

Tener un título profesional:

Totalmente Incapaz — Totalmente Capaz

Barreras

En una escala del 0 al 100, donde **0** es "No afecta en nada el logro de mis aspiraciones educativas" y **100** es "Impide completamente el logro de mis aspiraciones educativas", por favor díganos ¿Qué tanto cree que las siguientes barreras podrían ser un obstáculo en el logro de sus aspiraciones educativas?

Haga *clic* sobre la línea y luego mueva el recuadro para elegir un número entre 0 y 100 *en cada caso*.

El acceso a créditos educativos o financiación:

No afecta en nada — Impide completamente

El deseo de sus padres de que usted NO siga estudiando:

No afecta en nada — Impide completamente

La necesidad de empezar a trabajar:

No afecta en nada — Impide completamente

Los prejuicios de género asociado a las ocupaciones:

No afecta en nada — Impide completamente

La distancia geográfica a la institución de educación superior de su interés:

No afecta en nada — Impide completamente

Sus planes familiares (por ejemplo: casarse, tener hijos):Sus planes familiares (por ejemplo: casarse, tener hijos):

No afecta en nada — Impide completamente

Su capacidad para cumplir con los requisitos de admisión en un programa de educación superior:

No afecta en nada — Impide completamente

Ingresos esperados

Suponga que usted elige alguno de los siguientes **tipos de carreras** y se gradúa. ¿Cuánto cree que que usted ganaría mensualmente dentro de 5 años, a *salarios de hoy*?

Haga *clic* sobre la línea y luego mueva el recuadro para elegir un número entre 0 y 10,000,000 *en cada caso*.

Técnica/Tecnológica:

$0 — $10.000.000

Carrera Militar:

$0 — $10.000.000

Profesional:

$0 — $10.000.000

No estudia y crea su propio negocio:

$0 — $10.000.000

No estudia y empieza a trabajar:

$0 — $10.000.000

De la Escuela al Trabajo

Los resultados del Saber 11 se clasifican en 3 rangos según el puntaje: ALTO, MEDIO, BAJO (Ver Tabla abajo).

En las siguientes preguntas por favor díganos como cree que los resultados del saber 11 afectarán su ocupación el siguiente año, específicamente en **JUNIO de 2023**

BAJO	MEDIO	ALTO
Menos de 250	Entre 251 y 350	Más de 350

¿Qué tan probable es?
[

BAJO (Suponga queda acá)	MEDIO	ALTO
Menos de 250	Entre 251 y 350	Más de 350

/

BAJO	MEDIO (Suponga queda acá)	ALTO
Menos de 250	Entre 251 y 350	Más de 350

/

BAJO	MEDIO	ALTO (Suponga queda acá)
Menos de 250	Entre 251 y 350	Más de 350

]

[Suponga que usted obtiene un puntaje global **BAJO** en el *Saber 11*, es decir, obtiene menos de 250 puntos. Suponga que usted obtiene un puntaje global **MEDIO** en el *Saber 11*, es decir, obtiene entre 251 y 350 puntos / Suponga que usted obtiene un puntaje global **ALTO** en el *Saber 11*, es decir, obtiene más de 350 puntos.]

Llene por favor la siguiente tabla con las probabilidades de que esté haciendo cada una de estas actividades el siguiente año en JUNIO:

Suma de probabilidades **0**

Nota: La suma de las probabilides debe ser igual a 100%

Table A.14: Tabla de Transiciones

OCUPACIÓN	**PROBABILIDAD**
No este trabajando, ni estudiando	
Trabajando por un salario para un empleador	
Trabajando con familiares sin remuneración	
Estudiando	
Prestando servicio militar	
Trabajando por cuenta propia	

Preguntas ICFES

En las siguientes preguntas usted responderá **8** preguntas similares a las que se incluyen en el exámen *Saber 11*: **2** de Matemáticas, **2** de Lectura Crítica, **2** de Sociales y Ciudadanas, **2** de Ciencias Naturales. En una actividad posterior le preguntaremos a sus acudientes sobre cómo creen que fue su desempeño en estas 8 preguntas.

Haga *clic* en "Siguiente" para comenzar.

Pregunta 1: Matemáticas

Un colegio necesita enviar 5 estudiantes como representantes a un foro sobre la contaminación del medio ambiente. Se decidió que 2 estudiantes sean de grado décimo y 3 de grado undécimo.

En décimo hay 5 estudiantes preparados para el foro y en undécimo hay 4, ¿Cuántos grupos diferentes pueden formarse para enviar al foro?

A. 9
B. 14
C.20
D. 40

Seleccione solo UNA respuesta:
A. **O** B. **O** C. **O** D. **O**

Pregunta 2: Matemáticas

Entre los 16 estudiantes de un salón de clases se va a rifar una boleta para ingresar a un parque de diversiones. Cada estudiante debe escoger un número del 3 al 18. El sorteo se efectúa de la siguiente manera: se depositan 6 balotas en una urna, cada una numerada del 1 al 6; se extrae una balota, se mira el número y luego se vuelve a depositar en la urna. El experimento se repite 2 veces más. La suma de los 3 puntajes obtenidos determina el número ganador de la rifa. Si en la primera extracción del sorteo se obtuvo 2, es más probable que el estudiante que escogió el número 10 gane la rifa que la gane el estudiante con el número 7, porque

A. Al ser mayor el número escogido es mayor la probabilidad de ganar.
B. El primer estudiante tiene un posibilidad más de ganar que el segundo.
C. Es más probable seguir obteniendo números pares.
D. Es mayor la diferencia entre 10 y 18 que entre 2 y 7.

Seleccione solo UNA respuesta:
A. **O** B. **O** C. **O** D. **O**

RESPONDA LAS PREGUNTAS 3 Y 4 DE ACUERDO CON LA SIGUIENTE INFORMACIÓN

Uno de los escenarios donde empezó a codearse el vallenato con la música que escuchaba y bailaba la burguesía - valses, mazurcas, canciones napolitanas- fue el de las *colitas*. Era este el nombre que recibían las "colas" o finales de fiesta de la clase adinerada: bodas, bautizos, cumpleaños, festejos religioso...Durante el sarao, mientras los señores se divertían con la música europea que interpretaba una precaria orquesta provinciana, los trabajadores pasaban la fiesta en la cocina y los galpones a punta de acordeón, guacharaca y caja. Despachada la orquesta, los de atrás eran invitados a pasar adelante, y patrones y vaqueros se sentaban a tomar y cantar juntos. Se ha discutido hacerca del papel que cumplieron las *colitas* en esta historia. Algunos dicen que estos remates de fiesta fueron el pavellón de maternidad del vallenato, pues convinaron ritmos europeos y nativos: entre ambos dieron a luz los aires vallenatos. "Las *colitas* son el ancestro directo del vallenato moderno", afirma Lopez Michelsen.

Pero parece más acertado pensar que las *colitas* no ayudaron a formar el género, sino a divulgarlo. Para empezar, esta clase de fiestas improvisadas no se conocieron en toda la región, sino tan sólo en la zona del Valle de Upar. En El Paso no hubo *colitas*. En muchos lugares del río tampoco. Y, por otra parte, los historiadores indican que las *colitas* surgieron a comienzos del siglo XX, cuando ya el vallenato había empezado a coger ritmo con el trío del instrumental clásico. En cambio, las piquerias y retos sí constituyeron desde el principio uno de los más efectivos moldes de creación, propagación y desarrollo del vallenato. La leyenda de Francisco el hombre habla de su desafio con el diablo, a quien únicamente logra derrotar cuando le canta el credo al revés. Los grandes acordeoneros viajaban durante días para acudir a piquerias, concertadas de antemano o a través de recados, como lo atestigua "La gota fría". "Acordate Moralitos de aquel día / que estuviste en Urumita / y no quisiste hacer parada".

Tomado de : Samper, D. y Tafur M.(1997).*100 años de vallenato.* Bogotá: MTM Ediciones

Pregunta 3: Lectura Crítica

El autor introduce la cita de López Michelsen con el fin de presentar la opinión de un conocedor del vallenato y

A. Reforzar la tesis principal del texto, según la cual las *colitas* fueron divulgadoras del género.
B. Señalar una posición discutible sobre el papel que desempeñaron las *colitas* en el origen del género.

C. Legitimizar la tesis principal del texto,según la cual las *colitas* originaron el vallenato moderno.

D. Convencer al lector de que las *colitas fueron las únicas divulgadoras del vallenato moderno*.

Seleccione solo UNA respuesta:
A. **O** B. **O** C. **O** D. **O**

Pregunta 4: Lectura Crítica

El autor cita el verso de *La gota fría* para apoyar la idea de que los acordeoneros viajaban para asistir a diferentes pirquerias, porque en este se hace referencia a

A. un acordeonero que cantaba *colitas*, llamado Lorenzo Morales.
B. Urumita, un pueblo famoso por la realización de *colitas*.
C. un acordeonero que se encontraba de paso por un pueblo.
D. Urumita, un pueblo al cual iban los acordeoneros.

Seleccione solo UNA respuesta:
A. **O** B. **O** C. **O** D. **O**

Pregunta 5: Sociales y Ciudadanas

La Corte Constitucional falló a favor de un soldado que había interpuesto una tutela al considerar que la institución militar no le respetaba el derecho a la objeción de conciencia, porque su religión le prohíbe el uso de armas y las prácticas militares. El fundamento del fallo es la defensa de la libertad de conciencia del soldado.

¿Cuál de las siguientes opciones es coherente con este fallo?

A. Ordenarle al ejercito la entrega de la libreta militar al soldado y su inmediata desvinculación de la institución.

B. Ordenarle al soldado cumplir su servicio militar obligatorio con todas las responsabilidades asignadas.

C. Ordenarle al ejercito que el soldado participe de los entrenamientos y haga solo tareas de oficina.

D. Ordenarle al soldado participar únicamente en paradas militares, portando con orgullo la dotación militar.

Seleccione solo UNA respuesta:
A. **O** B. **O** C. **O** D. **O**

Pregunta 6: Sociales y Ciudadanas

Durante las épocas de lluvias, en muchas zonas rurales de Colombia se inundan escuelas y se interrumpen los caminos para llegar a estas.

¿Cuál de las siguientes opciones vulnera más el derecho a la educación?

A. Organizar esquemas de transporte para que los estudiantes vayan a clases en escuelas no afectadas por las inundaciones.

B. Ajustar el calendario escolar para que no haya clases en las época de inundación.

C. Darle una parte de las clases a través de la emisora de radio local, para reducir los días que tienen que asistir al colegio.

D. Trasladar a los niños a escuelas no inundadas dos veces por semana y reducir el número de horas de clases.

Seleccione solo UNA respuesta:

A. **O** B. **O** C. **O** D. **O**

Pregunta 7: Ciencias Naturales

Los ecosistemas se consideran sistemas abiertos porque en su mantenimiento es fundamental el flujo de materia y energía que intercambian de manera constante con su medio externo. De acuerdo con la información anterior, ¿cuál de los siguientes modelos representa precisamente un ecosistema abierto?

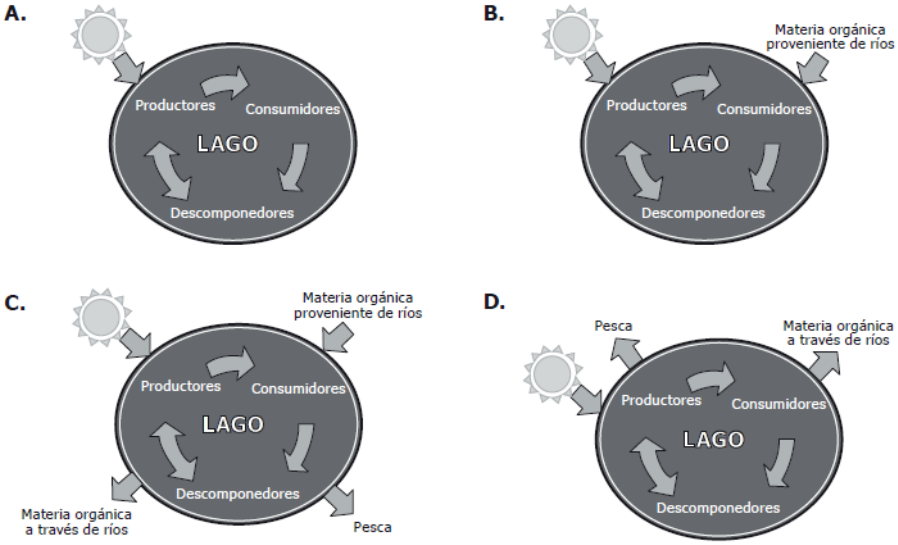


Figure A.4: Pregunta 7

Seleccione solo UNA respuesta:

A. **O** B. **O** C. **O** D. **O**

Pregunta 8: Ciencias Naturales

A partir de las cadenas de ARN mensajero se forman las proteínas. En este proceso, por cada tres nucleótidos consecutivos de ARN mensajero se codifica un aminoácido. A continuación se muestra una secuencia de ARN mensajero.

AUGGCAAGAAACGACCACAUCUAGGUAUGC

Los nucleótidos AUG codifican únicamente para indicar el inicio de la formación de la proteína y los nucleótidos UAG codifican únicamente para indicar su terminación. Con base en esta información, ¿cuántos aminoácidos conformarán la proteína?

A. 8
B. 18
C. 6
D. 10

Seleccione solo UNA respuesta:
A. **O** B. **O** C. **O** D. **O**

F Survey Protocol: Translated Version

Municipality

1. During 2022, which of the following problems have occurred in your household?
    - Death of a household member.
    - Serious illness or accident of a household member.
    - Separation of spouses.
    - Economic problems (job loss, bankruptcy, or business closure).
    - Loss of crops or death (theft) of animals.
    - Loss of the home occupied by the household or loss of farms, lots, lands, or other buildings.
    - Robberies, extortion or attempted extortion, fights, and brawls.
    - Public order problems (clashes between armed groups, attacks).
    - Natural disasters (floods, landslides, fires, earthquakes).
2. Do you think that 2022, compared to 2021, regarding public order issues, has been?
    - Less violent
    - Equally violent
    - More violent
3. Use a scale of 1 to 5 to answer the following questions. **1** indicates "Not at all" and **5** "A lot".
    - How safe do you feel in the public roads of your municipality (streets and highways)?
    - How likely are you to be a victim of a crime in the next 12 months?
    - How much does the public force (Police, Army) contribute to the security of your neighborhood?
    - How justifiable is it to use violence to protect the family?
4. Use a scale of 1 to 5 to indicate how much you trust each of the following institutions in your municipality. **1** indicates "Complete distrust" and **5** "Complete trust".
    - Municipality
    - Municipal Council
    - Municipal Judges
    - Community Action Board
    - Municipal Social Organizations (for example, CUT, Joel Sierra)
    - National Navy

- National Army
- Colombian Air Force
- National Police
- Public Service Companies
- Hospital/Health Center
- Colombian Institute of Family Welfare

5. Use a scale of 1 to 5 to indicate how much you agree with the following actions. **1** indicates "Completely disagree" and **5** "Completely agree".

   - Altering SISBEN scores to receive subsidies
   - Not contributing to pensions, even when employed
   - Using physical violence to ensure children achieve better grades
   - Not reporting when being a victim or witness of a crime
   - Bullying or harassing classmates
   - Not supporting daughters to pursue further education after high school

6. We are interested in understanding the day-to-day experiences that may cause you distress or fear. It can be about anything, for example, your health, your safety, your family, your finances, your future. Can you describe an event that caused you fear during the week before the Saber 11 - ICFES exam? (The last week of August)

Aspirations

1. Now you are going to fill in a table where you will predict your score on the *Saber 11* exam as if you were making a prediction. The predictions will be compared with the scores obtained and the bets made in August. This will be done after the publication of the exam results by ICFES.

   The rules of the prediction are as follows:

   (a) The exam has four tests: Math, Language, Social Sciences, and Natural Sciences. Each test is scored from **0** (lowest score) to **100** (highest score).

   (b) You should rank the tests according to the degree of *confident* you have in the prediction of your performance.

   Place the test you are most confident about your score in the first row.

   Place the second test you are most confident about your score in the second row, and so on.

   Additionally, in the first column use a number from **0** to **100** to say How confident are you in your prediction?

   (c) For each test, write your *EXPECTED SCORE* as a number between **0** and **100**.

(d) Tell us, based on your preferences for the contents of each test, how you would organize them from your least favorite, with the number **1** to the most favorite with the number **4**.

Note: Note that your most reliable prediction does not necessarily have to be assigned to your favorite test. For example, your favorite test may be *Math* (in which case you would assign it a 4 in the last column), but you are more confident in what score you think you will get in *Language* (in which case this test would go in the first row).

Test	Math	Language	Social Sciences	Natural Sciences
Preference Rating	1	2	3	4

Table A.15: Bet Table

How confident are you in your prediction? Number from 0 to 100	**Test**	**Expected Test Score** (Number from **0** to **100**)	**Rate your preference** (**1** the least preferred to **4** the most preferred)

2. We want to know how capable you feel of getting your test scores right. How many tests do you think your EXPECTED SCORE will be less than 10 points (above or below) from your ACTUAL SCORE?

   - None
   - One
   - Two
   - Three
   - All

3. Please make a list of 3 **professions, trades, or occupations** that you consider ideal for you. Write them in order of importance, where 1 means "it's what I would most like to do":

   - Occupation 1
   - Occupation 2
   - Occupation 3

4. What type of career do you consider necessary to do what you would most like?
   - I don't know
   - Technical
   - Technological
   - Professional
   - Military
   - None
5. On a scale from 0 to 100, where **0** is "I am not going to continue studying" and **100** is "I am definitely going to enroll in a Higher Education program", please tell us How likely you are to enroll in a Higher Education program next year?

   [ ]
6. Please fill in the following Table with the likelihood that you will be doing each of these activities next year in JUNE: 2023. Consider your expected scores on the Saber 11.

   Note: The sum of probabilities must be equal to 100%

Table A.16: Transition Table

OCCUPATION	**PROBABILITY**
Not working or studying	
Working for a salary for an employer	
Working with relatives without pay	
Studying	
Performing military service	
Working for yourself	
Sum of probabilities	(Write the result of the sum)

G Survey Protocol: Original Version (Spanish)

Municipio

1. Durante el 2022, ¿Cuáles de los siguientes problemas se han presentado en su hogar?

    - Muerte de algún miembro del hogar.
    - Enfermedad o accidente grave de algún miembro del hogar.
    - Separación de los cónyuges.
    - Problemas económicos (perdida del empleo, quiebra o cierre de negocio).
    - Perdida de cosechas o muerte (robo) de animales.
    - Perdida de la vivienda que ocupaba el hogar o perdida de fincas, lotes, tierras u otras edificaciones.
    - Atracos, extorsión o intento de extorsión, riñas y peleas.
    - Problemas de orden público (enfrentamientos entre grupos armados, atentados)
    - Desastres naturales (Inundaciones, deslizamientos, incendios, terremotos)

2. ¿Usted cree que el 2022, comparado con el 2021, respecto a problemas de orden público ha sido?

    - Menos violento
    - Igual de violento
    - Mas violento

3. Use una escala de 1 a 5 para responder las siguientes preguntas. **1** indica "Nada" y **5** "Mucho".

    - ¿Qué tan seguro se siente en la vía pública de su municipío (calles y carreteras)?
    - ¿Qué tan posible es que usted sea víctima de algún delito en los próximos 12 meses?
    - ¿Qué tanto aporta la fuerza pública (Policía, Ejercito) a la seguridad de su barrio/vereda?
    - ¿Qué tan justificable es usar la violencia para cuidar a la familia?

4. Use una escala de 1 a 5 para indicar cuánto confía usted en cada una de las siguientes instituciones de su municipio. **1** indica "Absoluta desconfianza" y **5** "Absoluta confianza".

    - Alcaldía
    - Concejo Municipal
    - Jueces Municipales
    - Junta de Acción Comunal
    - Organizaciones Sociales Municipales (por ejemplo, CUT, Joel Sierra)

- Armada Nacional
- Ejército Nacional
- Fuerza Aérea Colombiana
- Policía Nacional
- Empresas de Servicios Públicos
- Hospital/Puesto de Salud
- Instituto Colombiano de Bienestar Familiar

5. Use una escala de 1 a 5 para indicar qué tan de acuerdo está con las siguientes acciones. **1** indica "Completamente en desacuerdo" y **5** "Completamente de acuerdo".

   - Alterar los puntajes del SISBEN para recibir subsidios
   - No contribuir a pensiones, aunque se esté trabajando
   - Usar la violencia física para que los hijos saquen mejores calificaciones
   - No presentar denuncias cuando se es víctima o testigo de un delito
   - Acosar o hacer matoneo a los compañeros de clase
   - No apoyar a las *hijas* para que puedan estudiar después del colegio

6. Estamos interesados en entender las experiencias del día a día que pueden causarle angustia o miedo. Puede ser sobre cualquier cosa, por ejemplo, sobre su salud, su seguridad, su familia, sus finanzas, su futuro. ¿Puede describir un evento que le causó miedo durante la semana previa a la presentación del examen Saber 11 – ICFES? (La última semana de Agosto)

   Use como considere el resto de la hoja

Aspiraciones

1. Ahora va a llenar una tabla donde usted va a predecir su puntaje en el examen *Saber 11* como si estuviera haciendo una predicción. Las predicciones las compararemos con los puntajes obtenidos, y las apuestas que hizo en Agosto. Esto se hará luego de la publicación de los resultados del examen por parte del ICFES.

   Las reglas de la predicción son las siguientes:

   (a) El examen tiene cuatro pruebas: Matemáticas, Lectura Crítica, Sociales y Ciudadanas, Ciencias Naturales.

   Cada prueba se califica de **0** (puntaje más bajo) a **100** (puntaje más alto).

   (b) Usted debe ordenar las pruebas según qué tan *confiable* es su predicción sobre cómo cree que le fue.

   En la que tenga más seguridad de su puntaje, póngala en la primera fila.

   En la segunda en la que tenga más seguridad sobre su puntaje, póngala en la segunda fila, y así sucesivamente.

Adicionalmente, en la primera columna use un número de **0** a **100** para decir ¿Qué tan seguro está de su predicción?

(c) Para cada prueba, escriba su *PUNTAJE ESPERADO* como un número entre **0** y **100**.

(d) Cúentenos, de acuerdo a sus gustos por los contenidos de cada prueba, cómo las organizaría desde sus menos favorita, con el número **1** hasta la más favorita con el número **4**.

Nota: Tenga en cuenta que su predicción más confiable no necesariamente debe asignarse a su prueba favorita. Por ejemplo, puede que su prueba favorita sea *Matematicas* (en cuyo caso le asignaría un 4 en la última columna), pero tiene más confianza en cuál puntaje cree que sacará en *Lectura Critica* (en cuyo caso esta prueba iría en la primera fila).

Prueba	Matemáticas	Lectura Crítica	Sociales y Ciudadanas	Ciencias Naturales
Calificación de Preferencia	1	2	3	4

Table A.17: Tabla de Apuestas

¿Qué tan seguro (a) está de su predicción? Número de 0 a 100	**Prueba**	**Puntaje esperado Prueba** (Número de **0** a **100**)	**Califique su preferencia** (**1** la menos preferida y **4** la más preferida)

2. Queremos saber qué tan capaz se siente de acertar en sus puntajes de las pruebas. ¿En cuántas pruebas cree que su PUNTAJE ESPERADO estará a menos de 10 puntos (por encima o por debajo) de su PUNTAJE REAL?

   - Ninguna
   - Una
   - Dos
   - Tres
   - Todas

3. Por favor haga una lista de 3 **profesiones, oficios u ocupaciones** que considere ideales para usted. Escríbalas en orden de importancia, donde 1 significa que "es lo que más me le gustaría hacer":

- Ocupación 1
- Ocupación 2
- Ocupación 3

4. ¿Qué tipo de carrera considera necesaria para hacer lo que más le gustaría?:
   - No sé
   - Técnica
   - Tecnológica
   - Profesional
   - Militar
   - Ninguna
5. En una escala del 0 al 100, donde **0** es ”no voy a continuar estudiando” y **100** es ”con toda seguridad voy a ingresar a un programa de Educación Superior”, por favor díganos ¿Qué tan probable es que el próximo año ingrese a un programa de Educación Superior?

   Escriba un número entre 0 y 100:
6. Llene por favor la siguiente tabla con las probabilidades de que esté haciendo cada una de estas actividades el siguiente año en JUNIO de 2023. Tenga en cuenta sus puntajes esperados en el Saber 11.

   Nota: La suma de las probabilides debe ser igual a 100%

Table A.18: Tabla de Transiciones

OCUPACIÓN	**PROBABILIDAD**
No este trabajando, ni estudiando	
Trabajando por un salario para un empleador	
Trabajando con familiares sin remuneración	
Estudiando	
Prestando servicio militar	
Trabajando por cuenta propia	
Suma de probabilidades	(Escriba el resultado de la suma)