

## University and new students: (dis)agreements in the relations with knowledge

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### Abstract

*In this article we will present some key analysis of the problem of entering first-year students the Argentine university. For this purpose, the Argentine university system will be characterized first. Then, it will be justified and substantiated how the entrance to the university has become a political and academic problem. Finally, based on some results of an investigation that we carried out at the National University of Rio Negro that give account of this problem, we will argue the hypothesis of certain (dis)agreements between the relations with the knowledge promoted by the university and that the new registrants. We consider it relevant a fertile explanatory path for the understanding of this problem.*

### Keywords

*First-year students, relation with the knowledge, university system.*

### Résumé

*Dans cet article, nous présenterons quelques clés d'analyse du problème de l'entrée dans l'université argentine. À cette fin, d'abord sera caractérisé le système universitaire argentin. Ensuite, la manière dont l'entrée à l'université est devenue un problème politique et académique sera explicitée et fondée du point de vue théorique. Enfin, sur la base des résultats d'une enquête que nous menons à l'Université nationale de Rio Negro et qui rend compte de ce problème, nous avancerons l'hypothèse qu'existent certains désaccords entre les rapports au savoir que promeut l'université et ceux que les nouveaux étudiants de première année tiennent pour pertinents. De sorte que l'analyse de ces rapports peut être un chemin d'explication fertile pour la compréhension de ce problème.*

### Mots clés

*Entrée dans l'université, rapports au savoir, système universitaire.*

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## **Introduction**

In Argentina, the enrollment of higher education has expanded at a high rate throughout the 20th<sup>2</sup> century and the beginning of the 21st, with an average growth rate of 22% in the 2004-2014 decade. This has resulted in one of the higher gross university education rates in Latin America corresponding to 54.5% of young people between 18 and 24 years of age in 2015.

This trend implies the transit of an elite university to a model of mass access, a transit that on the other hand has promoted the democratization of the university, since it facilitated the incorporation of traditionally excluded sectors. But at the same time, this positive growth in access to higher education does not necessarily result in inclusion, the income and exit indicators demonstrate this. And the high desertion in the first year of university careers denounce that unrestricted access- characteristic access hallmark of the Argentine university - by itself, it is not enough.

In this article we will present some key analysis of the problem of entering first-year students the Argentine university. For this purpose, the Argentine university system will be characterized first. Then, it will be justified and substantiated how the entrance to the university has become a political and academic problem. Finally, based on some results of an investigation that we carried out at the National University of Río Negro that give account of this problem, we will argue the hypothesis of certain (dis)agreements between the relations with the knowledge promoted by the university and that the new registrants. We consider it relevant a fertile explanatory path for the understanding of this problem.

## **The Argentine university system**

The Argentine university education system has antecedents prior to the constitution of the national state (1853): the National University of Córdoba was created in 1612 by the Kingdom of Spain and the University of Buenos Aires in 1821 by the government of the province of the same name.

By 2017, the last year with official university statistics from the Ministry of Education of the Nation (2017), the student enrollment distributed according to Table 1, just over 1,900,000 registered.

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<sup>2</sup> With three important waves: after issuing decree 29337 of 1949 that imposed free university education, starting in 1984, with the return of democracy and at the beginning of the 1990s with the creation of national universities in the province of Buenos Aires.

Table 1. Argentine University Registration (2017)

<b>Undergraduate / Grade Students</b>	<b>Students</b>	<b>% by type</b>	<b>Graduates</b>	<b>% by type</b>
States Universities	1.519.797	78,36	82.731	66,36
Privates Universities	419.622	21,64	41.943	33,64
<b>TOTAL</b>	<b>1.939.419</b>		<b>124.674</b>	

<b>Posgraduate</b>	<b>Students</b>	<b>% by type</b>	<b>Graduates</b>	<b>% by type</b>
States Universities	122.550	79,68	10.458	69,41
Privates Universities	31.203	20,29	4.575	30,36
Foreign students	54	0,04	35	0,23
<b>TOTAL</b>	<b>153.807</b>		<b>15.068</b>	

Source: Own elaboration based on statistics from the Ministry of Education (2017)

Even though the proportion of the population between 25 and 65 years of age with an university degree is low, since it reaches 10% of the total of that age group (National Institute of Statistics and Censuses, 2010). The coverage of higher education<sup>3</sup> is one of the highest in Latin America then, while for the subcontinent it is around 44%, in Argentina it reaches 57.8% (Chiroleu, 2018).

Although the university system is composed of a similar number of state and private institutions<sup>4</sup> (See Table 2), the state sector concentrates 78.36% of the student enrollment. Likewise, national universities are distributed throughout the Argentine territory (2,800,000,000 continental square kilometers), so that at least one national university is located in each province. In the case of the province of Córdoba there are three of them and about 20 in the province of Buenos Aires. Private universities and institutes, on the other hand, concentrate their offer in big cities: Buenos Aires, Córdoba, Rosario and Mendoza.

<sup>3</sup> The coverage rate is considered as the proportion of people between 18 and 25 years of age who, having completed the high school cycle, attend the University.

<sup>4</sup> In the taxonomy of institutions, Universities are distinguished from University Institutes. These are dedicated to a group of careers of the same discipline, for example, the Technological Institute of Buenos Aires (ITBA), the University Institute of Health (ISALUD), among others.

Table 2. Distribution of University Institutions (2017)

	Universities	Institutes
State	55	7
Privates	49	13
Foreigners	1	1

Source: Own elaboration based on statistics from the Ministry of Education (2017)

Grade and undergraduate student enrollment is also concentrated in only six national universities (Buenos Aires, Córdoba, La Plata, Rosario, Tecnológica Nacional and Tucumán) where, in 2015 had studied 49% of them (García de Fanelli, 2018). This is despite the fact that since the 60s the different governments have developed policies of decentralization of the system with the creation of new universities. Thus, from 1990s until 2015, the number grew up from about 80 to 125 institutions of higher education. The new universities have been created in the provinces and in the Buenos Aires suburbs (geographical areas adjacent to the city of Buenos Aires, with a high population concentration).

Law No. 27,204 states that "all persons who have completed Secondary Education may enter the Higher Education Level freely and unrestrictedly". By law there should be no selection mechanisms. In general, a number of applicants to enter through the establishment of vacancies or maximum quotas per career are not usually established. There aren't aptitude or knowledge tests implemented at the end of high school for university access. In a few careers, there are selective exams, with quotas. These are the careers corresponding to professions regulated by the State because their practice compromises the public interest, putting at risk the health, safety, rights, assets or training of the inhabitants, such is the case of medical careers, architecture and engineering, among others. Notwithstanding this, a large number of universities implement a series of teaching-learning activities upon admission, which are transformed into university admission systems. We will get back to this point later.

State university institutions do not charge fees for grade careers. The National State finances universities, assigned an annual global budget to each one. In 2018, the investment made by the National State in the UUNN was 0.76% of GDP (IEC CONADU, 2018). As García de Fanelli and Adrogué (2019) point out, "gratuity, and the assumption of institutional homogeneity that reigns among Argentine state universities, thus contribute to the social perception of equal opportunities" (p.22).

Nevertheless, academic sectors and international organizations warn that access, by itself, is not enough. “Higher education must try to simultaneously achieve the objectives of equity, relevance and quality. Equity is not just a matter of access - the objective must be the participation and successful conclusion of the studies, while ensuring the welfare of the student” (UNESCO, 2009, p. 03). And the retention indicators in the first year of university careers show this: only 30% of new registrants maintain the regularity after the first year (UNRN, 2018).

These indicators have installed Argentine college admission in the political and academic agenda in the last decade.

### **University entrance as a political and academic problem**

In the last 10 years, national universities and higher-level policies assume that problematizing the issue of entering university implies transcending the access indicator, to think about how the whole institution assists the student who arrives and ensures their permanence and achievements of learning. This accompaniment goes beyond the concept of inclusion in terms of opportunity to think of it as a pedagogical and political commitment within each institutional space. In this framework, the institutions generate different strategies: from student support systems (scholarships, tutorials) to teaching-learning devices that predate the beginning of the academic cycle or in the initial months that students must complete. These strategies became - in fact - in admission systems (Perez Rasetti and Márquez, 2015; Lamarra et al, 2018, Nicolletti, 2010 and Juarrós, 2006).

Thus, recent studies indicate that 62% of national universities have incorporated non-direct admission systems, which require the completion and / or approval of activities prior to the effective entry into the university degree (Perez Rasetti and Márquez, 2015). Such systems are heterogeneous in their objectives and design (Nicolletti, 2010). The most common are the proposals for articulation with the medium level, socialization, orientation and leveling of the entrants (Perez Rasetti and Márquez, 2015).

Fernández Lamarra et al (2018), classifies these access systems into two large groups, *admission without exams*, in which all students who carry out the corresponding administrative registration process have access to the institution even if they must take mandatory or optional courses or comply with other internal instances, for example, tutorials, or none of them. And *admission with exams*, in which access to institutions

occurs after the approval of some type of evaluation instance. The courses are characterized by combining subjects related to the chosen career and university setting courses, with strong primacy of general training courses (Lamarra et al, 2018)

The analysis of the types of admission systems allows making visible “the discussion about higher education as a right or as a privilege, that means, if these enforceable requirements are materialized in the sole accreditation of the approval of the middle level or if these enforceable requirements are materialized in the overcoming of certain selection devices” (Jurrós, 2006, p.3). However, in the case of universities with unrestricted admission systems, the literature explains the processes of social selectivity which operate in the period of transition between the middle level and higher education (Gluz et al 2011)

This vast field of problems that constitutes the entrance and transit for the first year of university studies has entered the educational research agenda giving rise to abundant literature that explores this problem (Baldino et al, 2016; Cambours de Donini and Gorostiaga, 2016; Carli, 2012; Carlino 2003a, 2003b; Chiecher, Ficco, Paoloni, García, 2016; Chiroleau, 1998, 2015; Convert, 2005; Coschiza, Martín Fernández, Gapel, Nievas and Ruiz, 2016; De Gatica, Bort, Romero, Gatica, 2019; Di Gresia et al., 2002; DiGiusti et al, 2003; Ezcurra, 2004; Fazio, 2004; Fernández Lamarra, 2018; Formia et al, 2013; García de Fanelli, 2014, 2015; García de Fanelli, Adrogué, 2015; Gluz, 2011; Gluz, Grandolfi, 2010; Gvirtz and Camou, 2009; Kisilevsky and Veleda, 2002; Kisilevsky, 2005; Linne, 2018; Marquina, 2011; Ortega, 1996, 2011; Parrino, 2014; Pérez Rasetti and Márquez, Pierella, 2014; Porcel et al, 2010; Porto and Di Gresia, 2001; Said Rucker; Chiapello; Espíndola de Markowsk and; 2009; Sigla, 1993). Although the perspectives of analysis are varied and account for the diversity of factors (cultural, social, political-institutional, didactic and subjective) that converge in the success or failure in the entrance to university, an argument that stands out in the characteristics or social, cultural and economic conditions of the students as factors of success or failure or in their deficits: lack of prior knowledge, of certain necessary cultural capital, motivation, family references, in the appropriation of education codes superior (linguistic, institutional), study habits, time, vocational clarity, information on the operation of the university, etc.

A body of work focuses on the devices generated for the admission of students, their scope, limitations and effects (Pérez Rasetti and Márquez, Fernández Lamarra, 2018; García de Fanelli, Adrogué, 2015; García de Fanelli, 2015; Marquina, 2011 ; Gluz,

Grandolfi, 2010; De Gatica, Bort, Romero, Gatica, 2019, among others). Other organizational factors investigated are academic policies, curricula and human resources, equipment and infrastructure, financial and management (García de Fanelli, 2014).

Finally, the role of teachers and the link between this figure and the income problem are addressed by Ezcurra (2004), De Gatica, Bort, Romero, Gatica (2019), Marquina (2011) and Pierella (2014), among others. Among those who focus on teaching conditions, the contribution of "academic literacy or academic reading and writing" research, which contributed to show the specificity of teaching and learning of disciplinary and academic discourse (Carlino 2003a, 2003b).

### **Our investigation**

The National University of Río Negro, located in the Northern Patagonia of Argentina and where we work as teachers and researchers, is concerned by this situation described above. In its 2015 Report<sup>5</sup>, the institution recognizes as one of the "situations that were inflection points or obstacles, as seen, for the university: [...] the performance of the students in the first year of study [which] continues being deficient. More than 50% of the entrants leave their studies early" (UNRN, 2016, p. 11).

To address this issue since 2017 we have developed a research project<sup>6</sup> that seeks to contribute to the knowledge about entering first-year students to the UNRN and its relationship with university knowledge. In this context, we first characterized in the socio-educational terms the entrants and identified what type of intellectual activities are demanded from the entering first-years students and to which they assign greater significance.

Entering first-year students are those subjects who complete the registration requirements for any of these careers and enroll in at least one commission. The quality of entering first-year students ends when the student enrolls, at the end of his first year or academic year, in the university's student management system for a subject, whether this is the first year (recurring) or the second year of the Curriculum.

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<sup>5</sup> Since its normalization, the UNRN formulates every year an evaluation document of the institutional exercise called Memory

<sup>6</sup> It is PI 40-C-481: The relationship with the knowledge of the students of applied sciences of the UNRN. Team consisting of: Soledad Vercellino (Director), Martín Goin, Tatiana Gibelli, Bibiana Misischia (researchers); Ailiñ Gallo (CONICET Scholar), Juan Manuel Chironi (professional technical member), Marina Alejandra Hernández, Ailen Morales (student scholars).

Eighteen (18) careers of the branch of applied sciences are taught at the UNRN. They are distributed in 8 locations in the province of Río Negro. Within the careers of applied sciences there are very diverse disciplinary fields: from Architecture and Design, to Agricultural, Land and Industrial Sciences; Computer and Engineering. According to data from the UNRN (2019), in 2018 these careers had 1131 entrants.

This research focuses on these careers because of the quantitative relevance they have in the Argentine university system and in the UNRN<sup>7</sup>. Also for its qualitative significance: they are careers that transmit technological knowledge with the consequent epistemological and didactic particularities; they integrate mostly the so-called priority careers for the Nation and are strongly oriented towards the productive and development needs of the region.

The research combines samples of statistical representativeness with others of intentional and theoretical type and is organized into three studies. In this communication we will give an account of the results of the first two, because we are collecting data from the third party.

*Study N ° 1: Survey of the universe of entrants to the applied science careers of the UNRN:* This study allowed characterizing the entering first-year students, knowing their objective social origin: personal data (with special attention to the gender dimension), socioeconomic data and educational-cultural of their families and nearby environments, previous school career, among other indicators. Beyond the contribution of this first study in itself, it was necessary to have reference data on the objective social position (Charlot, 2008b) of the entrants, which will allow sampling decisions to be taken in subsequent studies and serves as a reference for Reading the results. The questionnaire was implemented in all the applied science courses that are dictated in the three Headquarters of the UNRN, under the face-to-face modality. The INFOSTAT statistical package software is used to analyze the data.

*Study N ° 2: Study of the intellectual activities that are demanded to the entrants in the applied science careers and to which they assign greater significance:* in this study, multiple sources and data collection techniques were used. First, the curricula of all the careers that make up the sample were analyzed. Then, the narrative of the students was recovered. The data collection techniques in this case the "balance of knowledge". This

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<sup>7</sup> 21.9% of new entrants to the Argentine university system opt for careers in the Applied Sciences branch, being the most chosen, after Social Sciences (SPU 2015). In the case of the UNRN, the Applied Sciences careers are the most chosen, representing 32.84% of the enrolled students in the 2015 academic year (UNRN, 2016).

technique developed by B. Charlot over a decade ago and applied in multiple international researches at different educational levels, involves asking students for written stories about their history and current situation as learners, which provides valuable information on what students have sense. This is done through evocations, which must be interpreted by the researcher. For this, the information collected is grouped, categorized and organized according to the research needs. This technique was applied to a statistically representative sample of the universe of entrants to applied science careers of the UNRN, which is estimated not less than 25% of the entrants.

*Study N ° 3: Reconstruct the singular processes of relation with the knowledge of the entrants to applied science careers, focusing on those that register paradoxical successes or failures:* From the results of Studies 1 and 2, a small sample will be formed, intensive, of entrants who constitute exceptional or atypical cases, what Charlot (2008 b), calls paradoxical successes and failures: students from disadvantaged sectors who succeed in entering university or middle or upper class students, who fail in that transit. It is a non-random sample, of no more than 6 students, in which case selection is made deliberately (intentional sample) according to theoretical and strategic criteria. The data collection technique is the in-depth interview. Here the individual history of each student is investigated, as his learning experience at the university is articulated with those he has learned throughout his previous schooling and in daily life, with the relations maintained with others in the situation of learning and with the ways in which the image of oneself is modified as a learner. It is deepened in what mobilizes him to learn, what kind of learning or intellectual activities he develops, which he considers necessary for a successful transit through the university.

#### *Characterization of the entrants.*

Within the framework of Study 1, we design and implement a survey. The instrument consists of three parts: a) Sociodemographic and Economic Block, which contains 43 questions; b) - Academic-Educational-Cultural Block, with 35 items to investigate and c) Block s / link with the University and career and self-perception as a student, consisting of 05 questions.

The survey contains open, closed and scale questions, and it has been elaborated considering related instruments<sup>8</sup> proposed by the literature for its comparability<sup>9</sup> and some form of the UNRN for its potential transfer and applicability.

The surveys were undertaken between the months of May / June 2018 and were applied to students present in the class of any of the first year subjects. The selection of the subject was made in agreement with the Directors of Career, as the case may be, considering as criteria those in which there were a greater number of entrants attending it. The survey was self-administered with assistance / advice from members of the research team and was conducted in the class schedule and space.

We surveyed 407 students. According to data provided by the Office of Quality Assurance of the UNRN (OAC), at the beginning of the 2nd semester in August, 499 new students of applied science careers recorded some type of academic activity in the University Information System (SIU) Guaraní (that means, they were new subscribers to the second semester). This indicates that the population surveyed is equivalent to 81.46% of the students who registered academic activity at the beginning of the second four-month period of 2018.

Fifty two percent (52%) of new students enrolled in applied science careers of the UNRN who were surveyed in this study are male. This is opposed to the national trend, where the enrollment of women entering university (new enrollees) amounts to 57.5% (DNPeIU –SPU, 2016) and to the figures of the UNRN where the new registered women reach 56% of the enrollment (UNRN, 2017). Notwithstanding this, when discriminating by careers, a group of these is noticed whose enrollment is strongly feminized and another group, with preponderantly male enrollment. Thus, in the careers related to food, design and the environment, a high percentage of women completed the surveys (between 100% and 53%, depending on the career). While in the field of industry, hydrocarbons, telecommunications, systems and electronics, the participation of women is marginal.

Thirty four percent (34%) of the students are in the theoretical age of admission (18-19) and 76% are between 18 and 24 years old. The average is 22.9 years, with a moderate-high dispersion, registering extreme cases of up to 66 years.

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<sup>8</sup> As the National Survey on Social Structure of the Research Program on Contemporary Argentine Society and the instruments developed by the National Institute of Statistics and Censuses.

<sup>9</sup> The instruments developed by: Furno, G., Koegel, L. H., & Sagristá, R., 2000; Toer, M., Martínez Sameck, P., & Chávez Molina, E. 2003; Stasiejko, H., Pelayo Valente, J. L., & Rodenas, A. N. 2007; Parenti Bicalho, 2009 Vicente, 2014; Laino, Gomez and Barrale, 2015.

Only 3% of respondents are immigrants, with an average of 18 years of residence in Argentina. In addition, 3% of respondents recognize themselves as descendants of some indigenous people and only 1% say they belong to an original community or group. Only 2% of respondents report having a disability (visual decline, Down syndrome, Hearing Loss).

Ninety two percent (92.71%) are single. Only 6.73% have children and 0.86% are pregnant.

In relation to housing, more than half (55.56%) report living in the maternal / paternal home, while 18.77% do so in their own home.

Sixty four percent (64%) of students have some type of health coverage and 28% say they don't have it. Thirty five percent (35%) have a social work, 28% have a prepaid social work either by social work or by voluntary payment and 1% with a state program. The health coverage of those students exceeds 10 points percentage figures of the provincial population with health coverage in 2010 (42% of that age group had social work and 11% of those registered had a prepaid social work either by social work or by voluntary payment). The percentage of entrants without health coverage is significantly lower than the population value: in the last Census 44% did not have any type of coverage.

Seventy seven percent (77%) of students respond that the father is employed while 60% indicate that the mother works. A significant portion of the students (60%) is involved in some type of work activity. In the section on sources of income, 14% of students responded that they were users of some type of scholarship (program of the UNRN, the Ministry of Education of the Nation, Provincial, Municipal, Progress and other scholarships) which represents a 14% of the population surveyed.

Fifty five percent (55%) of respondents are graduates of state high schools, 29% of social management schools and 16% of private schools. It should be clarified that in 2017, 76.85% of students in 5th and 6th grade of secondary school attended state-run schools. These data could indicate that the number of students in the state secondary system who are pursuing university studies is much smaller than those in the non-state system. The number of students that comes from adult secondary education is marginal (2%), even though in the province 19.5% of the students enrolled attend adult high school (no official graduation data)

The majority (81%) have had standardized school trajectories, without registering repetitions.

Thirty four percent (34%) of the entrants (127 students) have completed other higher studies. Of them, 75% (95 students) had dropped out of those studies, 21% (27 students) had completed them and 3% (4 students) continued studying. Seventy six percent (76%) had developed these studies in state institutions, university-type (72%) and 34% in careers in the area of applied sciences.

If we compare these results with the factors that the literature establishes as predictors of failure in the university (Table N ° 3), we note that the modal student has favorable conditions for transit for the first year: he is young, single, without children, with previous normalized school trajectories, without unsatisfied basic needs, with parents with secondary and even tertiary education.

Table N ° 3: Socioeconomic Factors associated with success / failure in the university

Study	Socio-economic factors linked to success / failure in university
Porto y Di Gresia (2001)	The average number of parents education influences in a positive way, while the male sex and the age and the hours of work do it in a negative way. "The type of high school (public-private) and the place of origin of the student have no significant effect on performance [from an econometric analysis]." (p. 22)
Di Gresia et al. (2002)	[a] males have lower performance in studies than females (...). [b] Marital status is a statistically significant explanatory factor. [c] High school is a statistically significant explanatory factor of performance: students who come from private schools perform 0.10 more subjects per year than those in public schools. [d] If the student changes residence (moves) to attend college, that change has a positive effect on performance. On the other hand, the impact of having to travel between different jurisdictions (municipalities) to attend the Faculty is negative. (...) [F] Students who spend more hours studying, including classes, have higher performance. [g] Working students have higher performance. [h] (...) the highest performance corresponds to students who are financed with scholarship and family contribution, then those who have only a study grant, then personal work and family contribution and finally family contribution. (p. 32)
Fazio (2004)	a) The positive impact of the student's work is manifested only when the work implies a limited time dedication (up to 5 hours a day) and a certain degree of connection with the subjects of the career he is studying. b) Works without links to the subjects of study negatively affect the student's academic performance, whatever the level of hours worked.
Said Rucker; Chiapello; Espindola de Markowsky (2009)	The geographical displacement and the NBI were associated with the approval of the subject ( $p < 0.05$ and $p < 0.03$ ), and none of the students who worked approved it. The NBIs were associated with the student's work activity ( $p < 0.03$ )

García de Fanelli (2014)	Factors that literature places as the most influential in abandonment: a) gender: better performance of women. b) educational level of parents: better performance the higher the education of parents. c) number of hours worked, particularly at the beginning of the studies, negatively affects performance. d) previous academic training: it has a positive impact on performance, obtaining a good average in middle school and in some research, having studied in a private school or in a college run by an university. e) Age: younger students get better results. Similarly, those who allow more time to pass between the completion of middle school and university show worse performance levels.
Coschiza, Martín Fernández, Gapel, Nievas y Ruiz (2016)	The variables female sex, age, marital status and inactive employment status are associated with better academic performance, while the variables such number of children of the student, employment status occupied, unemployed employment status, absence of medical coverage and beneficiary of social plans are related to lower academic performance. In terms of gender, the most relevant finding is manifested in the results of female students with children, their performance is notoriously inferior to male students with children.

When inquiring about their history as learners, most say they have not received support (85%) during their previous schooling. The support provided is scholarships (48%), private lessons (40%) and 10% of students indicate they have received support from friends and family. It is curious that school support from the educational institutions themselves is not registered, but rather that they are located in external actors.

On average, they say they study just over two hours a day, at night (38.3%), morning (36%) and afternoon (34.8%). They study primarily alone (83.5%) and the internet is the main resource (80.1%), followed by books (63.9%), notes (52.5%), class recordings (6.5%) and magazines (3.5). The summary is the main study technique (76.5%), followed by taking notes (52.5%), underlining (44.3%) and concept maps (25%).

Fifty percent (50%) of the students spend at least 1 hour per day, on average, to study or do practical homework, this exceeds 43.5% according to a study on CBC entrants of the UBA. Most of them do not talk to their teachers outside of class. Fifty percent (50.08%) spend more than 6 hours per week using social networks. Almost 22% do it more than 16 hours per week. Almost fifty-six percent (55.85%) do not work (UBA does not do 63.1%), and 13.9% work more than 4 hours per day (12.8% do so). Fifty-eight percent (58.39%) do not devote time to student union activities, and only 4.74% spend more than 10 hours per week.

Fifty-eight percent (58%) of students spend between 1 and 5 hours per week on home maintenance, and 33% more than 6 hours per week. While 75% of students spend less

than an hour per week in the care of a family member. Thirty-six percent (36%) spend between 1 and 5 hours per week in support of homework for a family member.

About 30% say they got bored frequently in class, and about 40% fell asleep sometime in class. These percentages are striking, although they do not show differences with other studies or between genders. They also stand out in the field of mood that about 50% of men and 65% of women report feeling depressed in the previous year, highlighting that 24% of women report feeling depressed frequently. In terms of feeling overwhelmed, the gender difference is even more marked, noting that 38% of the women responded that they felt frequently overwhelmed the previous year while the men did it by 17%. Men and 82% of women reported not having attended a mental health service.

When asked about the factors that influenced the career choice, the highest frequency of responses refer the interest aroused by the professional and work activity that enables the career. They also refer to vocational issues, the type of subjects of the curriculum and the self-perception of being good in subjects related to the disciplinary field. They also point out the influence of the family and the possibility of producing changes in society. In a second order, relegated motivations such as publicity, influence of friends and chance, among others.

*The analysis of the curricular definitions: knowledge and cognitive activities that are demanded*

We analyzed the curricula of the Applied Sciences careers. In Argentina, the curricular design is still subject to the conventional denomination of "Curriculum" or "Program". The Programming being that institutional-political instance for the selection, organization, distribution and transmission of knowledge (Which is taught), as well as the mode of the type of teaching (How it is taught). It is reflected in a written document in the form of a project or detailed teaching program that aims to develop in the students specific scopes and professional competences, that is, in that document certain relationships with the knowledge that will be promoted are explained.

An analysis of the subjects planned for the first year in these careers allows classifying them into four large groups:

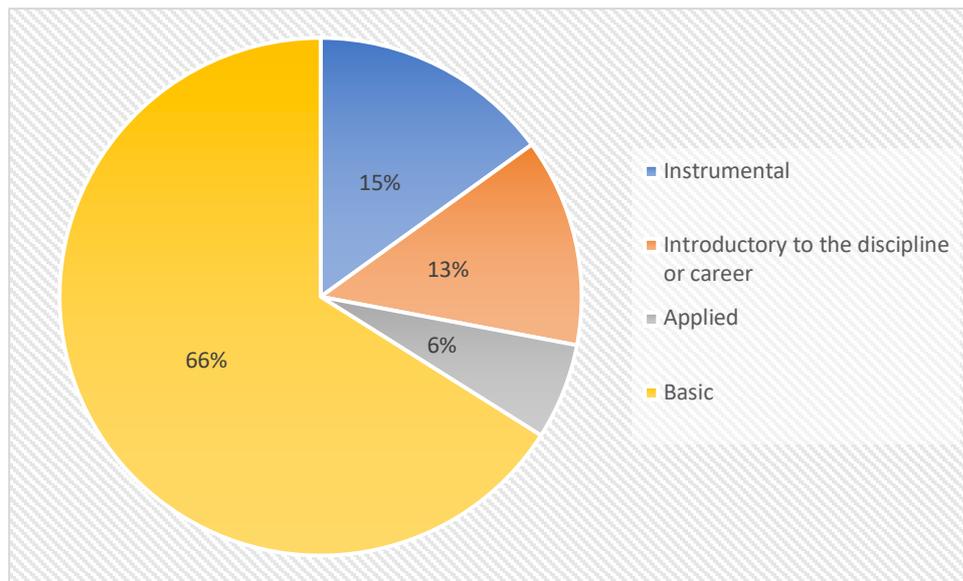
- a) Subjects of the field of basic sciences (Mathematics, Physics, Chemistry, Biology).
- b) Subjects of the field of applied sciences (Hydraulics, Mechanics, Economics and Petroleum Administration).

c) Subjects of introduction to the discipline.

d) Instrumental subjects (Academic Writing and Reading, Problem Solving, foreign language: English, Representation Systems).

The distribution of these subjects is not harmonious, as shown in Graph N ° 1:

Graph N ° 1: Distribution of subjects in the first year of the applied science careers of the UNRN.



Source: self-made.

As it is noticed, the entrance to the university in these careers implies to meet with knowledge of the basic sciences, which demand cognitive activities of objectification-denomination, and rationalization. All careers provide knowledge of the basic sciences, in a range from 08 subjects of this type (Food Engineering and Biotechnology), to 02 (Bachelor of Systems and Technique in Industrial Maintenance).

Most careers propose at least one introductory subject to discipline and other instrumental ones. It is recognized that training must include mastery of certain activities: academic reading and writing, forms of representation typical of the discipline, handling of a foreign language. On the other hand, the introductions to the discipline imply recognizing that entering the university career is entering a certain way of linking with the world, a relational device, a matrix of ontological, epistemological, methodological, ethical, aesthetic and shared political commitments. , to a particular way of using language, and to a certain way of problematization.

*Knowledge and cognitive activities that students consider relevant*

Finally, we inquire what knowledge and learning the students evoke as significant, to which places they refer these learnings and to whom they identify as their agents.

Such inquiry has been carried out, as we have already described in the methodological chapter, through a technique developed by ESCOL (Charlot, 2009) called knowledge balances. It consists of asking the students for a written story or, in the case of students not yet literate, a graphic expression that is accompanied by an oral story, in which they recount their learning. What have they learned? With whom? What is the most important issue? What do they expect to learn? Therefore, we accessed what the subjects say they have learned or have expectations of learning at the time we ask the question and in the conditions in which the question is raised.

One hundred and five (105) knowledge balances were performed.

Students identify family figures (family in general, father, mother, brothers) as the fundamental teachers. The figures of the educational system (teachers and classmates) are indicated by less than a quarter of the students. On the other hand, educational institutions (from the initial level to the university) are indicated by half of the balances of knowing as the place of teaching par excellence. (See Tables N ° 4 and 5 and Graphs N ° 2 and 3).

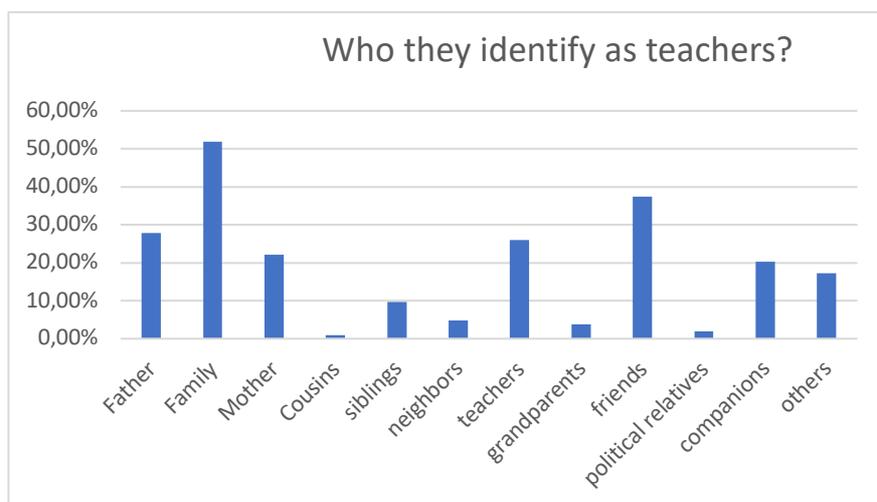
Table No. 4: Persons who the students identify as teachers

Father	27,90%
Family	51,90%
Mother	22,10%
Cousins	1%
Siblings	9,60%
Neighbors	4,80%
Teachers	26%
Grandparents	3,80%
Friends	37,50%
Political relatives	1,90%
Companions	20,20%
Others	17,30%

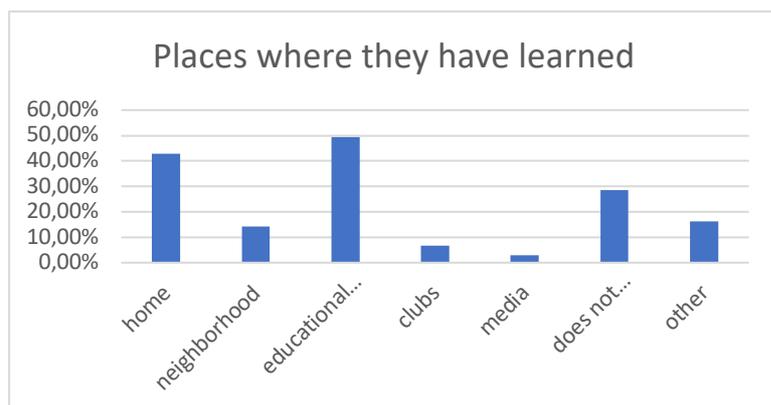
Table No. 5 Places where the students have learned

Home	42,90%
Neighborhood	14,30%
Educational institutions	49,50%
Clubs	6,70%
Media	2,90%
Does not respond	28,60%
Other	16,20%

**Graph No. 2. Persons who the students identify as teachers**



**Graph No. 3: Places where the students have learned**

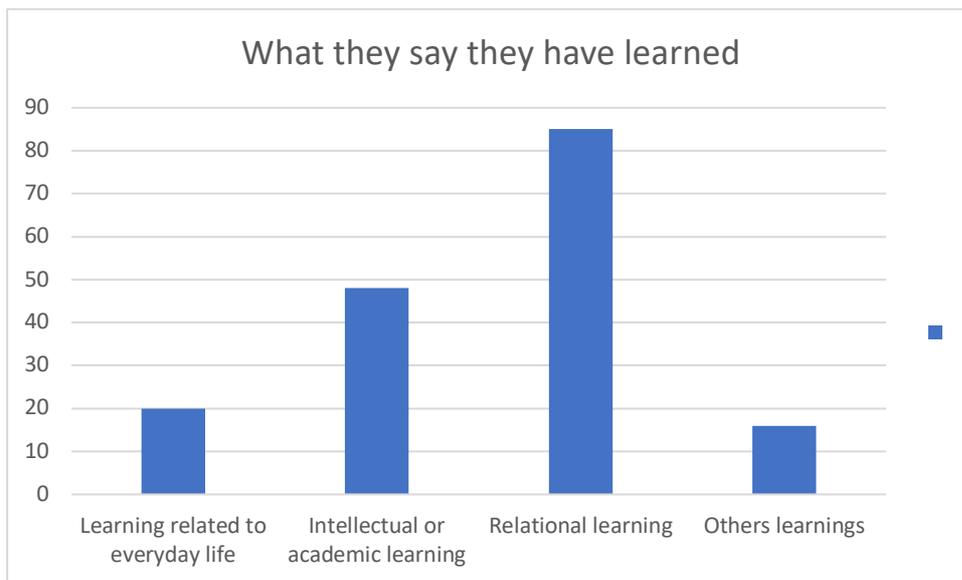


When asked about the inventory of their life's learning and about those they consider most important, they insist on the reference to relational learning, both referring to the relationship to authority and norms, the relationship with their peers and the relationship with themselves.

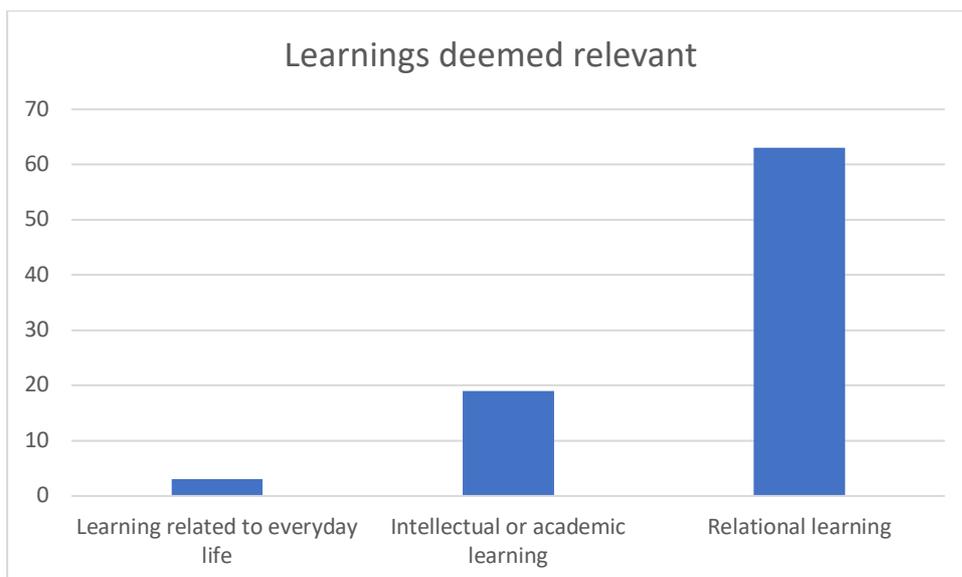
It is about the learning that involves entering certain relational devices, “appropriating an intersubjective form, ensuring certain control of your personal development, reflectively constructing an image of yourself” (Charlot, 2008a, p. 115). They emphasize having learned to bond with teachers and peers, to support others, to handle frustrations, to be supportive, understanding, to know oneself. It is about dominating a relationship: that of oneself with oneself, the relationship of oneself with others, and the relationship with oneself through the relationship with others and vice versa. Actions aimed at regulating this relationship and finding a good distance between themselves

and others, between themselves and themselves are put into play. "The epistemic subject is here the affective and relational subject, defined by feelings and emotions in situation and in act" (Charlot, 2008a, p.116). Here the product of learning cannot be autonomous, separated from the relationship in situation, however, all the ethical-moral and civic-political discourse (which strongly permeates the educational field) implies an effort to, from a reflective position, enunciate in the form of principles, rules that relational domain.

Graph No 4: What the students say they have learned



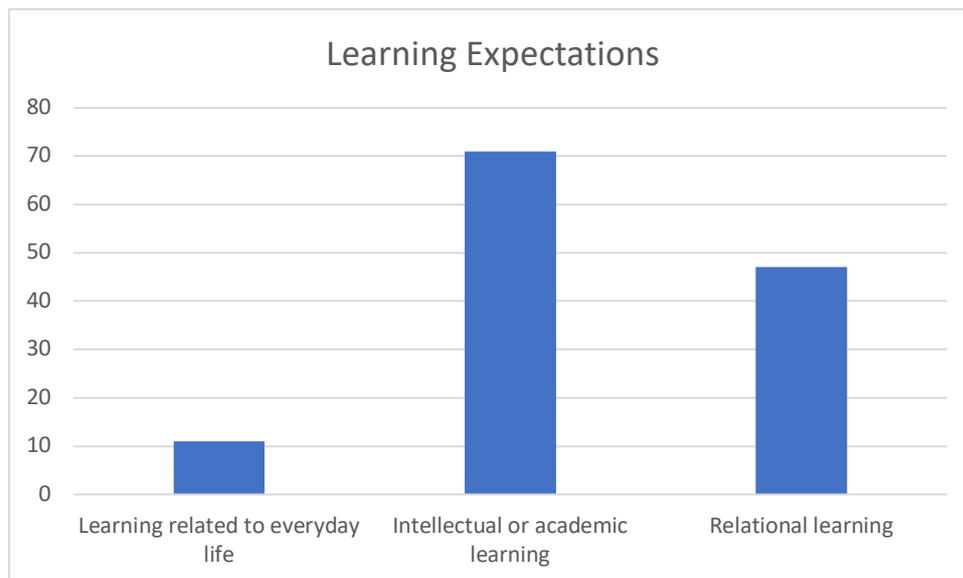
Graph No 5: Learnings students deemed relevant



The low frequency in the selection of intellectual or academic learning is surprising. That is, linked to initial literacy (literacy and calculus), generic and tautological expressions (I learned many things, of everything), the reference to school disciplines or to any of the contents of the same or to abilities related to them (solving exercises, to present orally, etc.) or to learnings of properly academic methodologies (learn to study, to organize the times, work disciplines, etc.). Nor have they referred to learning related to daily life (the basic ones such as talking and walking, housework and care, specific knowledge such as swimming, cycling, leisure, games or sports and life-related knowledge in nature).

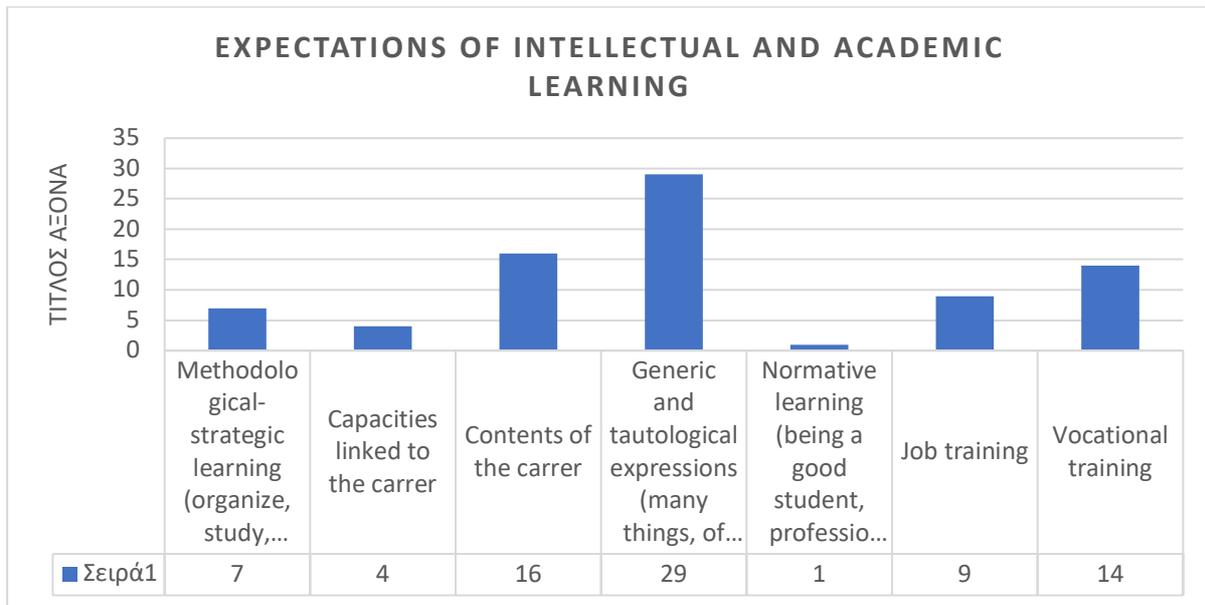
However, when asked about what they hope to learn at this university stage, the hierarchy of these learnings is subverted, the selection of intellectual or academic learning being hegemonic, followed by relational learning and finally those linked to everyday life (Graph No. 6).

Graph No 6: Students' learning expectations



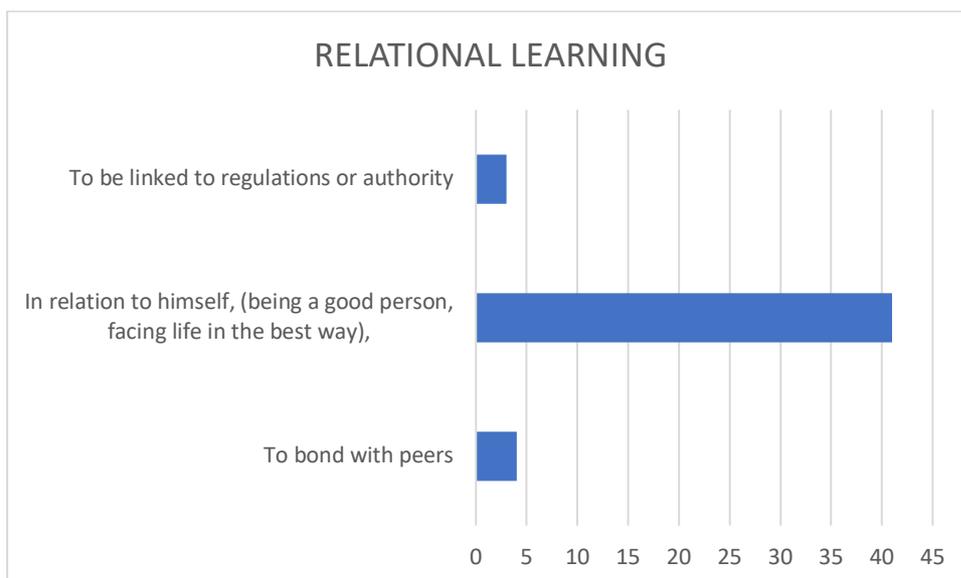
Among the outstanding intellectual and academic learning, generic and tautological expressions (many things, of everything) are prioritized. Also noted: methodological-strategic learning (organize, study, make decisions), capacities linked to the carrer, contents of the carrer, normative learning (being a good student, professional), job training and vocational training (Graph No 7).

Graph No 7: Expectations of intellectual and academic learning.



Students hope to learn relational devices fundamentally linked to the relationship with themselves: to be good people, to live life in the best way, etc. To a lesser extent, they refer to learning related to authority and regulations and to the link with peers, which do have a preponderance in previous learning (Graph No. 8).

Graph No. 8: Expectations of relational learning



## **Conclusions**

We have presented some arguments that arose from the description of the institutional political conditions that Argentine higher education, from the revision of the powerful literature generated around the problem of university admission and the data produced by our own research.

In these arguments, we argue that due to its multidimensionality, the problem of entry to university cannot be explained by resorting only to factors or characteristics of the students or those of the institutional devices. The entrance to the university puts into play a diversity of knowledge, which is presented as objectified intellectual contents but also as full-understanding activities and ways of relating to others. It is a critical moment that challenges both, the learning subject in this condition and the teachers in their proposals.

The differences between the learnings that are offered and prioritized in the first year and those we have relieved from the analysis of the curricula, the learnings built in their history as learners by the entrants, (whose traces appear both in some responses of the surveys as in the balances of knowledge) and the learning that they hope to learn in the university, show a certain disagreement. Disencounter between intellectual activities privileged by academia and those mobilized by students.

We reaffirm the power to address the problem of entering university from the analysis of the vicissitudes of the learning processes of the entrants deepening the study of a notion that has begun to expand in the field of human sciences, and that is fertile to the understanding of this phenomenon: the student's relationship with knowledge (Charlot, 2006, 2008, 2016; Beillerot, Blanchard Laville, 1998, Vercellino, 2014, Vercellino, et al, 2015).

The analysis of the relationship with the students' knowledge implies a "positive" reading of this phenomenon, "seeks to understand how a student situation that fails in learning is constructed and not, what is missing in this situation to be a student that achieves success" (Charlot, 2006: 51). It also involves a critical analysis of the sociological theories of reproduction. Without denying that the correlation between "social origin" and "academic success" is one of the strongest acquisitions of the sociology of education, it is also interesting to identify the mediations between these variables, to realize how reproduction occurs in each singularity.

Likewise, it implies analyzing the set of meanings that around that knowledge the student builds, holding the conjecture that “a knowledge has no meaning and value more than in reference to the relations it supposes and produces with the world, with itself, with the others ”(Charlot, 2008: 105). In addition, such sense comes from the articulation the subject generates among knowledge with which he has learned throughout his previous schooling and in daily life, with the relations maintained with others in the learning situation and with the ways in which that the self-image (identity dimension) is modified as a learner.

That is why we are currently working on reconstruction strategies of the singular processes related to the knowledge of the entrants to applied science careers, focusing on those who register successes or paradoxical failures.

However, that will be the reason for future communications.

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