

Estudio socioeducativo de estudiantes de dos cohortes de la Carrera de Ingeniería Agronómica de la Facultad de Ciencias Agrarias de la UNNE. Argentina. Corrientes

Socio Study of Two Cohorts of Students of the Agricultural Engineering Career, Faculty of Agricultural Sciences UNNE. Argentina. Corrientes

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Resumen

El objetivo de este estudio fue identificar y describir las características socio-educativas de los estudiantes y la relación con el desempeño académico en la carrera Ingeniería Agronómica. Para ello se caracterizó a los estudiantes en función de su trayectoria educativa en el nivel secundario mediante dimensiones claves; ocupación y nivel de escolarización de sus padres. Las cohortes en estudio fueron la 2005 y 2006. Se relevó información de fuentes secundaria y primaria. Del análisis de los datos surge que el porcentaje de regularización en 1er año es entre el 50% y el 97%. El desgranamiento durante 1er año oscila entre el 64% (2006) y del 37% (2005), en las dos materias con mayor y menor exigencia en correlatividades. Los estudiantes entrevistados (64) el 17% posee título de polimodal en ciencias naturales y otro 17% título de técnico secundario. El 100% son argentinos, solteros y provenientes de las provincias de Corrientes (39%) y Chaco (38%). El nivel educativo predominante de los padres es nivel primario y secundario completo mientras que el de las madres es nivel secundario y terciario. La caracterización socioeducativa de los estudiantes y su

relación con desempeño académico se utiliza para definir estrategias de gestión curricular e institucional.

Palabras Clave: Trayecto educativo del nivel secundario, desempeño académico

Abstract

The aim of this study was to identify and describe the socio-educational characteristics of students and the relationship to academic performance in the race Agricultural Engineering. This was characterized to students depending on their educational path at the secondary level by key dimensions, occupation and level of education of their parents. The cohorts studied were the 2005 and 2006. They gathered information from primary and secondary sources. Analysis of the data shows that the percentage of regularization in 1st year is between 50% and 97%. The shelling during 1st year ranges from 64% (2006) and 37% (2005), in the two subjects with higher and lower demand on correlative. Students interviewed (64) 17% polymodal title has natural sciences and another 17% secondary technical degree. 100% are Argentine, single and from the provinces of Corrientes (39%) and Chaco (38%). The educational level of parents is predominantly primary and high school, whereas that of mothers is secondary and tertiary level. Socio characterization of students and its relationship to academic performance is used to define management strategies and institutional curriculum.

Key words: Journey secondary level education, academic performance.

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Introduction

The Faculty of Agriculture has proposed to start identifying associated institutional and curricular conditions relating to shelling and possible defection of the students of the School of Agricultural Engineering factors.

This project aims to advance knowledge of the variables and indicators related to quality retention, detect and analyze the associated factors affecting more importance in the separation and attrition of students. The purpose is to have a certain vision about student

traffic throughout the race, as information of real value to decision making and to advance action to overcome these situations and enable, motivate, retain and promote quality their students.

Since 1993 the School of Agricultural Engineering, Faculty of Agricultural Sciences UNNE has undertaken several studies on the academic performance of students through cohort analysis and the study of rates of adoption of final exams. The processes of institutional self-evaluation, national and regional accreditation and external evaluation UNNE yielding information on deficiencies in the percentage of students who regularized and approved courses in the curriculum for the prescribed time and therefore the consequent prolongation in actual duration of the race.

The self-evaluation reports 1995 and 1998 identified critical points such as:

- Significant percentage of shelled students, especially at the end of the 1st. Year 1st Semester.
- Actual duration considerably higher than the theoretical duration career.
- Excessive time between completed of matter and the submission to final exam.

This, among others, led to the review and revision of the curriculum of the race Agricultural Engineering.

In 2002 the implementation of a new Curriculum and simultaneously started the program monitoring and evaluation thereof is designed. Monitoring showed, among other results, information on student performance. It was observed that the percentage of students who regularized the relevant subjects quarter- each of the first two years of the career-is equal to or greater than the percentage of subjects with regularized Plan completed previous studies, difficulties persist in the presentation and approval of final exams.

Likewise, institutional assessment reports under ARCUSUR 2009 Accreditation and National Accreditation 2009 features updated academic performance of students:

- the lowest pass rate was observed in the subjects of first year.
- the relationship Graduates - Registered for the years 2001-2008 was 20%

- the analysis of the 2003 cohort emerged that the retention rate in the passage from first to second year was 49%, from second to third in the 33%, from third to fourth was retained almost 99% and 45% in the passage through fifth grade.
- the observed shelling, was about 50%.
- An analysis of the relationship graduates - enrolled cohort of the last 10 years, it emerged that the graduation rate (0.48) for the 2002 cohort, which represented a slight increase over previous rates cohorts.
- The time spent by students in career was affected in recent years by the demand for agricultural professionals. Advanced students obtained employment contracts without completing the final graduation and even owe some subjects generating delay in discharge.
- The nominal duration of the race is 7.5 which gives a time value equal to 1.5 degree.
- The attendance rate at the kinds of practical work is over 80%, while attendance (not mandatory) in some subjects, lectures is approximately 30%.

In addition, the External Evaluation Report University (UNNE, 2009) peer evaluators noted: "Despite the available knowledge about pedagogy and didactics in the field of UNNE, requires a continued effort to resolve academic management specific problems arising from institutional growth; persistently high failure rates, shelling and neglect; output / input ratio low; lack of systematic diagnosis, enabling identification of individual and structural factors in each race; and difficulties in the management of teaching and learning."
"

Within the framework of these ideas the central questions that guide this study arise:

What are the characteristics of the academic progress of students in Agricultural Engineering?

What is the relationship and the extent to which partners influence factors: institutional, pedagogical and socio-educational academic performance?

What is the perception of teachers and students about potential factors involved in academic performance?

What initiatives can contribute to better student performance and thus impact the retention and graduation with equity and quality?

For this instance of the project objectives have been proposed to identify and describe the socio educational characteristics of students and the relationship with academic performance in the Carrera.

Content development about the selected topic

The cohort study were 2005 and 2006, whose students are taking classes even entire career. Secondary information from data and statistics obrante academic performance in the files of the institution, registration forms on the run and records the tutorials and obtained primary was surveyed using semi-structured interviews with students selected randomly sampled individual interviews stratified considering cohort = stratum, the sample size was determined with fixed allocation taking 32 and 32 students for cohorts 2005 and 2006 respectively.

In the present study the socio-educational profile of students in two cohorts 2005 and 2006 the race of Agricultural Engineering, Faculty of Agricultural Sciences based on some key dimensions related to personal characteristics, educational records of students described in the secondary level and college academic performance.

The dimensions selected were age, sex, place of origin, with whom he lives while pursuing race, and employment status. History of schooling is described in terms of the degree obtained at the secondary level, difficulties and facilities found on the route of schooling. The level of education of parents or relatives and occupation thereof .In relation to academic performance were also investigated regarding dimensions were prioritized: reasons for career choice and some habits. Moreover, the percentage of regularization of the subjects was analyzed and shelling in the passage from one quarter to another in 1st year and shelling from year to year was calculated.

Of the 64 students surveyed belonging to the cohorts 2005 and 2006, 100% of Argentina's nationality and marital status single. The highest percentage of the cohorts are male and 81% are between 18 and 20 years in the 2005 cohort and 83% in the 2006 cohort (Table 1).

Table 1: Age Distribution of students in 2005 and 2006 cohorts

COHORTE 2005			COHORTE 2006	
Edad	Cantidad de Estudiantes	Porcentaje	Cantidad de Estudiantes	Porcentaje
18	94	25,34%	86	26,63%
19	138	37,20%	121	37,46%
20	68	18,33%	61	18,89%
21	29	7,82%	22	6,81%
22	17	4,58%	13	4,02%
23	9	2,43%	8	2,48%
24	6	1,62%	8	2,48%
25	0	0,00%	2	0,62%
26	3	0,81%	2	0,62%
27	2	0,54%	323	100,00%
28	2	0,54%		
30	1	0,27%		
32	2	0,54%		
	371	100,00%		

26% live alone and the same percentage with his family, followed in importance by 16% living with brothers and you live with your spouse (Table 2).

Table 2: Who lives during the race completed

Categorías	FA	FR
Abuela	1	0.02
Amigos	3	0.05
Cónyuge	1	0.02
Hermanos	10	0.16
No contesta	14	0.23
Padres y Hermanos	16	0.26
Solo	16	0.26

The highest percentage (39%) of students have studied as the source Corrientes Province and a similar percentage (38%) come from the province of Chaco. A smaller portion as the source of the NEA and other provinces Argentine Litoral. 59% of the respondents declared not work and 38% yes. When entering more than 99% of them did not work (Fig. 1). Those

who claim they do work in the same college and career-related activities (teaching assistants, research fellows and other scholarship).

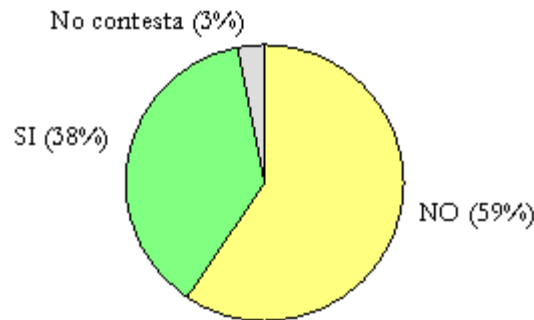


Fig 1:. Employment status of the students surveyed.

Some research of Latin American universities have studied the association between academic performance of students and academic and demographic conditions (Garzón et al., 2010). Other studies have been proposed to identify the factors responsible for successful academic performance. In the first phase sociodemographic variables, school records, self-rated reasons for admission and retention in school and expectations of professional integration of young entrants to the psychology and educational psychology from a comparative study of two cohorts were identified (2000 and 2001) and these factors with the effective yield at the end of the first year of studies (related Beguet et al., 2001). Meanwhile, Biggs (2006) identifies four conditions for quality learning at university student occurs: A well-structured knowledge base, an appropriate motivational context, from the student activity and interaction with others.

Regarding the secondary titles, respondents have 18 different titles, the most common is Polimodal Natural Sciences 17%, followed by Economics and Management of Organizations 14% Production of Goods and Services 13% 11% Bachelor, and technical college 11 %. The curricula of the high schools mentioned polymodal and are organized with subjects related to mathematics, natural sciences (biology, physics and chemistry) among others. Also secondary technical programs have indicated in their training development courses related to the fields of knowledge of the natural sciences.

From a cognitive conception of learning and meaningful learning specifically, charged fundamental importance prior knowledge of students. This means that the educational

process is important to consider what the individual already knows so establishing a substantial and not arbitrary relationship to what you should learn. This process takes place if the learner has in his cognitive structure concepts, ideas, proposals, stable and defined, with which new information can interact and function as a point of "anchor" to be learned significantly (Pozo, 1996).

The predominant educational level of parents is complete primary and secondary level while the mothers are secondary and tertiary levels. In Fig. 2 employment status of parents of students observe.

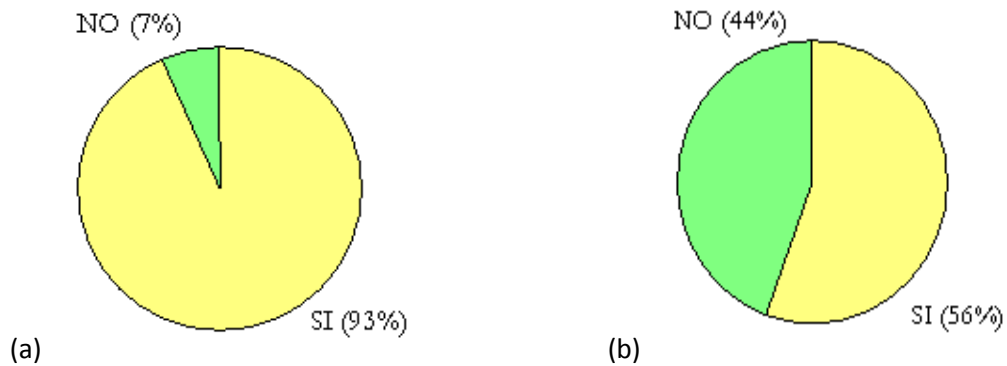


Fig 2.: Employment status of the parent (a) and stem (b)

The occupation of parents (Fig. 3) is distributed to agricultural activity (32.81%), employed (29.69%), professionals (12.5%), and no answer (25%) and mothers among teachers (29.69%), housewife (21.88%), employed (14.06%), professionals (4.69%), farming (1.56%), other (9.38%) and no answer (18.75%)

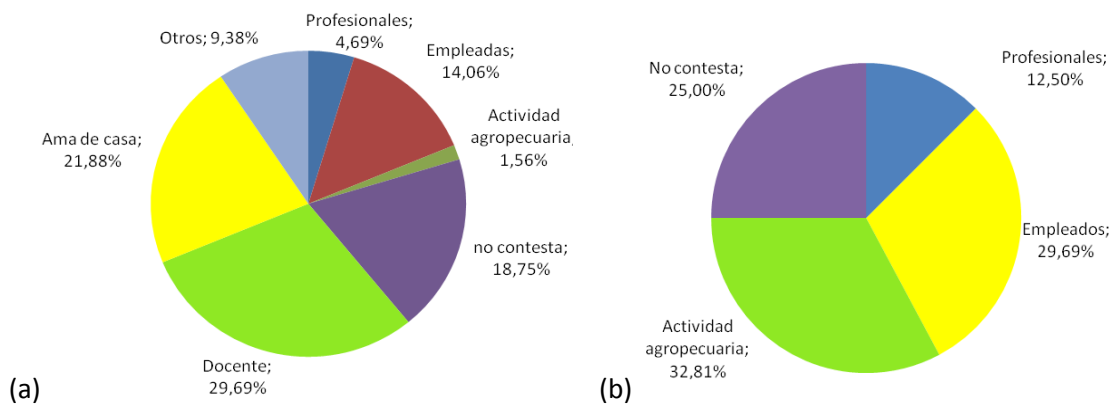


Fig 3:. Parental occupation type (a) and stem (b)

81% of students found no significant difficulties in secondary level education path, considering that for that level of education a condition for promotion to the next grade and does not take more than two previous materials, otherwise repeat. Students questioned claimed to have had such difficulties (Fig. 4).

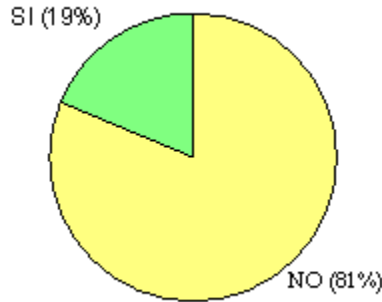
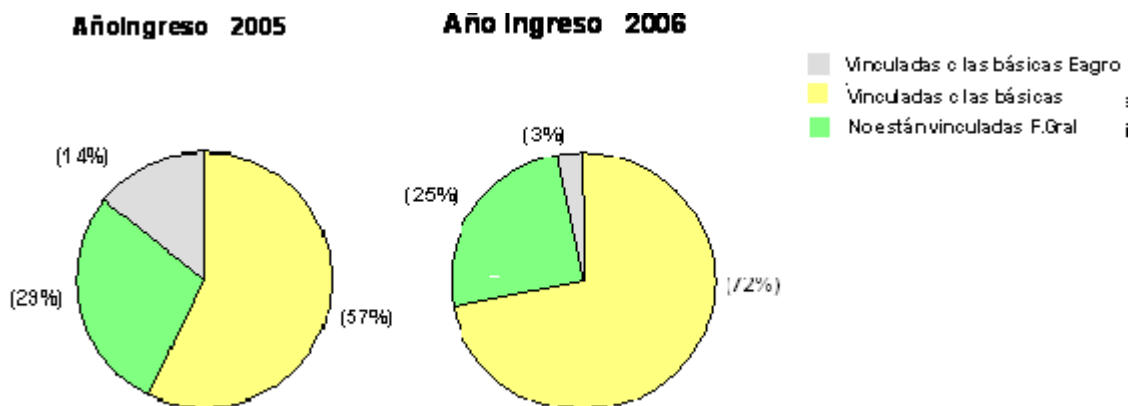


Fig 4:. Percentage of surveyed students and previous material during the secondary level.

The difficulties encountered during the course of the secondary school level occur more frequently in subjects in the field of social sciences, and are related to the lack of interest or taste for them (Fig 5). It can be inferred that the difficulties do not respond to aspects of understanding of content, but linked to motivational issues.

The Fig. 5 further shows the differences in the two cohorts in relation to the subjects with better performance (a) and the subjects were presented difficulties (b).

(A)



(B)

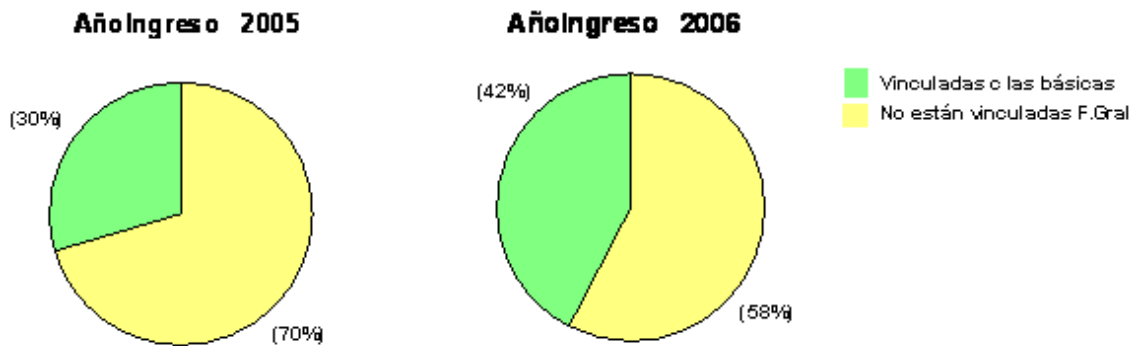


Fig 5.: Matter had better performance in (a) and difficulty (b) in the course of the secondary school (cohorts 2005-2006).

Regarding habits studies consulted by 81% of students have a place to study and has only 17% sometimes. 52% have established a study schedule and 33% mentioned that sometimes, and 81% say they usually meet the schedule and 55% considered sufficient to meet the demands of study subjects. The majority (67%) said studying with a partner. Reveals 39% have resorted to private tutors in the early years of the race. Regarding personal characteristics of order and responsibility in the study recognized 67% and 89% ordered responsible.

When asked about the reasons for career choice, 87% said having chosen first choice because "is interested in farming" and 74% chose the second choice because the profession has "good job prospects" and because "has to take care of family property" (16%).

Analysis of the cohort study shows that the percentage of regularization for 1st year ranges from a little over 50% when the subjects have as a requirement to regularize the partial approval and 97% in the subject which is regularized with 80% attendance.

Desgranamiento one you care for these two cohorts of all students enrolled in the first course 1st is observed. year two subjects reaching the 3rd quarter, slightly more than 35% of them (the more demanding correlative) and about 50% for the less demanding correlative for the 2006 cohort; in the 2005 cohort, the retention values for the same situation to reach 49% and 63%, respectively.

Of all the entrants of both cohorts, came to attend the 5th year of the race, whose theoretical duration is 5 (five) years, only 6.3% in the 6th. Year from your income for the 2005 cohort and 4.3% for 2006.

There are international studies showing a lack of association between socioeconomic status and academic performance of students, however in other studies (Toer et al, 1998;. Lizasoain et al, 2006;. Velez et al, 1994;. González Coral Barbera, 2003; Hernández Urbina, 2005), especially compared to previous studies in the same institution where he had been found a clear trend of socioeconomic indicators on academic performance, particularly the level of education of the mother (Gregorat et al, 2007).

Conclusion

Students in both cohorts analyzed are mostly men, come from the province in which the race takes place and the neighboring province. They have recently completed the secondary level, they have not had major difficulties completed that level, they chose the career of first choice university study prioritizing taste for farming factor.

Given the level of education of their parents is probably the first university in the family. Half of them live with the family or with the brothers, who are also students, completed during the race.

More than half recognize positive attitudes towards the study.

The academic performance of students in study reveals regularization acceptable percentages of the subjects, however this is not the shelling is very important to consider the values from first to fifth year of the race.

With the methodology it was possible to perform a detailed characterization of the socio students currently used to review and define strategies for curricular and institutional management. Further study of the relationship between social and educational profile of students and their performance in college career will identify the factors associated with academic performance.

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