

# On the Path to Success: Incoming Student Surveys as a Launching Point for Educational Innovation — A Case Study From the School of Economic Science at the National University of Salta

Teodelina Inés Zuviría (Universidad Nacional de Salta, Argentina)

Abstract: The success of any educational innovation depends not only on the type of strategy that we may put into action, or its intrinsic advantages; it must also be conditioned by the extent to which said innovations produce appropriate results for its intended subjects. Along these lines, a key precondition for any innovative program or proposal is an in-depth analysis of the universe of individuals with which we will be working; only by recognizing their characteristics we will be in a position to validate certain strategies while discarding others, leading to greater effectiveness when opting for specific strategies. The focus of this effort is oriented toward reconstructing the profile of incoming students entering the School of Economic, Legal and Social Sciences of the National University of Salta for the 2016 academic year, students who, in line with the course work laid out in our Study Plan, are currently in the third year of their respective degree programs. Identifying the most relevant characteristics of this group of students was the launching point for the subsequent development of a concrete proposal for innovation to boost the likelihood of academic success. We see how issues related to students' actual motivations, their prior development of specific skills, or socio-economic situations possess a significant weight as factors that shape their profile; they also exert an influence on any attempt to put innovative strategies into practice. Shedding light on these issues is a necessary condition for carrying out scientifically serious work in this field of activity.

**Key words:** educational innovation; strategies and subjects; initial conditions

JEL code: A220

### 1. Introduction

With any new approach to education, or any educational innovation put into practice, it becomes crucial to be aware of two disparate but mutually binding aspects: the innovative strategy in and of itself, and the universe of subjects with whom the strategy is working. In other words, since strategies for innovation are never independent of the subjects under study, we must, as a precondition to the implementation of said strategies, analyze the social dimension while also including the singularity of the referent in question. Such an analysis allows us to

Teodelina Inés Zuviría, Bachelor of Science in Economics, University of Buenos Aires, Specialist in University Teaching, National University of Salta (UNSa); Researcher at the Institute for Labor Studies and Economic Development of the School of Economic, Legal and Social Sciences, UNSa. Senior Researcher at the Economic Research Institute of the School of Economic, Legal and Social Sciences, UNSa; research area: education-poverty. E-mail: teodezuviria@yahoo.com.ar.

reconstruct the individual profile of the subject under study, while simultaneously making it possible to grasp the existing links between the deterministic factors of the individual's psyche and those related to the objectifications that each subject creates relative to their position in the social environment in which they are developing. In this sense, it becomes crucial to work under the perspective of the "total man" proposed by Marcel Mauss (Mauss, 1950), understood as the view of man based on the conjugation of his actions with those institutions that transcend him (e.g., legal, cultural, economic, religious, political institutions, etc.).

It is this wide-reaching and multi-referential perspective that allows us to comprehend the dynamic co-determination that exists between the individual and society, one that highlights the complexity of the object of our investigation, and obliges us to reach across those interdisciplinary barriers that frequently give rise to the suspicions and the bunker mentality of the disparate branches of science. The point of departure for any "educational innovation" will ultimately remain anchored in the analysis of the relationships that can develop between the different levels of social action, spanning from the individual to the macro-social, cutting across the domain of the organizations as well.

Below, we will present an original research effort whose reference group is made up of 274 individuals sampled randomly from the population of 1,500 incoming students enrolled in "Economics 1" during 2016, a mandatory subject in the first year of the undergraduate degrees in Economics, Administration and National Public Accounting at the School of Economic, Legal and Social Sciences at the National University of Salta, Argentina. The central purpose of the study is to identify those dimensions that allow us to reconstruct the profile of incoming students entering our faculty during that year (students who today are midway through their degree programs), so that later, in light of the information obtained, we might pursue a greater understanding of the findings that emerge, and develop an action plan that brings about future improvements in students' performance.

# 2. Identifying the Problem

When we speak of "educational innovation", we are referring to the implementation of a significant change in the processes of teaching and learning, one involving aspects that range from the incorporation of new technologies, modifications in teaching practices, or the incorporation of new educational strategies, to name only a few. Since all of these innovative strategies have in common the subject with which one is working, their chances of success can only be configured around a prior recognition of this individual subject, and their ties within the social environment in which they are developing.

### 2.1 Objectives of the Research Effort

- Characterize the group of incoming students entering the School of Economic, Legal and Social Sciences in 2016, by means of a random sample extracted from the full population of incoming students enrolled in "Economics 1" during the same year.
- Identify those dimensions that allow us to reconstruct the profile of the reference population in order to
  later classify this population into groups with their own identity and work on an understanding of the
  information emerging from said analysis.
- Develop a concrete innovative strategy that is compatible with the aforementioned group of students.

### 2.2 Scope of the Research

• Shed light on some of the dimensions that allow us to reconstruct the profile of the incoming students

enrolled in the School of Economic, Legal and Social Sciences, in such a way that we are able to make various estimations about those aspects that become consolidated as conditioning factors for said students.

- Provide useful and relevant information that allows us to ground any innovative teaching strategy in the
  knowledge of the concrete dynamics that emerged from the research, and in doing so, ensure that the
  new mechanisms for intervention have a higher likelihood of success.
- Share the findings of this research effort with the administrative body of the School of Economic Sciences at the National University of Salta, so that they may illuminate certain courses of action at the macro level.

# 2.3 Theoretical Perspective Adopted for This Effort

### 2.3.1 On the Practice of Teaching as a Situated Action and Institutionalized Learning

The importance of a concrete and effective identification of the group that we will be working with lies in the singularity of the group, its members and interactions, as well as the configuration and transformation of the ties between them as the teaching-learning process develops (Entwistle, 1988). This singularity will demand of us a particular way of intervening, differentiated strategies for action as well as an on-going and systematic review of our actions (Palou de Maté, 1999), to encourage students' potential, reduce the possibility for conflicts, exclusions and disputes, and create an ideal space that helps students to learn in a meaningful way, effectively activating the "groupality" — the real and genuine transformation of the component singularities into a shared collective (Basabe & Cols, 2007).

It will be necessary, therefore, to consider how the individuals construct their "legitimate peripheral participation" (Lave & Wegner, 1991), namely, the process through which they become part of a community of practice, staying committed to its goals, and configuring the meaning that these individuals give to the learning process. The way we understand learning from the perspective of "legitimate peripheral participation" is by considering it as an integral part of the generative social practice of the lived-in world, where the analytical focus shifts from the individual as learner, toward learning as participation in the social world — more as a social practice *per se* than merely a concept of the cognitive process.

### 2.3.2 On the Characteristics That Define Teaching Practices

Today we are living an undeniable generational gap — one spanning generations born and raised in light of the Guttenberg printing press and a new generation of digital natives. This digitally literate generation communicates and learns in ways that are substantially distinct from previous generations; this difference is evident in view of the wide-spread incorporation of new technologies across the full spectrum of social spaces, including among these, the academic space. Likewise, the traditional concepts of space and time are changing, with the classroom walls and the chronological clock beginning to vanish, a "fusion of physical spaces with virtual spaces, reinforcing the idea that one can learn at any moment and in any place," and with this, the idea that learning is ubiquitous.

Here, we can point out that the immediate consequence of these changes is the "re-definition" of the traditional notions of *field* and *capital* proposed by sociologist Pierre Bourdieu (1995). If we look to our own practices for the true meaning of the *capital in play*, we will find that said meaning has undergone a major shift. What was previously valued above all else — possessing a *set of knowledge* — is no longer the case; the true value of this capital in play, one which gives meaning to the endeavor, is possessing the *aptitudes necessary for* 

acquiring the knowledge of today, or any other knowledge available to us in the future. With this it becomes manifest that, along with the re-definition of the capital in play, the positions of power within the field have also changed, in at least two senses:

- On the one hand, because the relative weight of *being the keeper of knowledge* within the game has changed. Traditionally, the teacher as repository of knowledge held an asymmetrical and advantageous position of power within the field of education. Today, however, this possession of knowledge *per se* does not equate with authority.
- And, on the other hand, because today's students represent a generation of digital natives with a certain
  power over their teachers when it comes to the mastery of these digital tools, indisputable mediators of
  the teaching process.

These changes with respect to the *capital in play* and the *positions of power* for each of the actors that participate therein, no doubt necessitate a revision of the rules, causing us to question ourselves as to the actual conditions in which we practice as teachers today; it may be that by "playing the game" we can glimpse these new rules taking shape, thus gaining a new appreciation of the role of practice as a wellspring of theory.

# 3. Methodological Framework

The existence of two opposite and antagonistic traditions in the field of research in Social Science can be explained by their historical backgrounds. The "positive" paradigms, on the one hand, and the "qualitative" paradigms on the other (Bericat, 1998) have been at odds with each other since the very beginnings of research processes in these areas, assuming either points of departure or divergent principles. Such principles, represented as a set of beliefs and attitudes inherent to each vision, have given validity to a working methodology that has somehow frustrated the possibility of a shared, mutual approach.

Positivism, erected upon the empirical assumptions of eminent theoreticians such as Comte and Hume (to name a few), understands the world as a set of concrete events that have an existence of their own, governed by laws that, due to being naturally inherent to the world, can be duly discovered, described in an objective fashion, and thus obtaining a validity that becomes universal — in other words, for all space and time. Contrarily, the qualitative paradigm encompasses a number of interpretive currents that seek to supplant the positivist paradigm's notions of explanations and prediction with the notions of comprehension and interpretation central to the personal world of the analyzed subjects. Within the latter focus, there is no intention of establish general laws, but rather, to analyze and understand what is unique and singular in each subject, in each particular situation.

Within the present thesis, we have adhered to the possibility of cooperation between both approaches, attempting to identify and construct channels of communication between them, and thus permitting a certain kind of integration. We have incorporated the assumptions of the interpretive paradigm, inasmuch as they concern the reality under study, one which we consider to be situated and singular (Arnal, Del Rincon, & Latorre, 1992). However, we also trust in the use of statistical tools associated with the analytical-quantitative perspective, with the aim of being able to extract characterizations about the group, as well as possible estimations of a more general nature. Alongside this quantitative footing, the interview technique allows us to recover the individuality of each interviewee and gain a more nuanced understanding of the phenomena taking place in the classroom Cochran-Smith & Lytle, 2003).

### 3.1 Selected Data Collection Instruments

In order to remain coherent with the above-mentioned methodological framework, one allowing us to create a possible fusion of two visions — the analytical-quantitative and the interpretive (Sautu, 2000) — our methodology involved the use of two complementary instruments. On the one hand, following the logic of the analytical-quantitative approach, a survey was administered to the reference population, with the objective of identifying the key attributes of each of the interviewed subjects. The primary utility of the survey lies in providing useful data that help us make generalizations about the universe of students; it also creates an opportunity for gathering students' opinions regarding teaching practices. After creating the "data matrix" derived from the survey, the data was processed statistically in order to identify the primary dimensions or latent variables that account for the variability in the reference population data. Following this, we attempted to detect the existence of certain particular subgroups, identifying their most salient features.

The virtues of using this statistical technique are linked with the possibility of establishing certain generalizations; its downside lies with its inability to reveal the motives behind students' behavior. Thus, the statistical analysis was complemented by administering a number of semi-structured interviews to a voluntary sample of students (approximately 10% of the total population). Using these interviews, we sought to extract greater detail regarding the motives behind certain responses to the initial survey, with the aim of obtaining more complete information, and by doing so, gaining a clearer picture of the situation under analysis. In this sense, we sought to delve deeper into the motivations of the incoming university students — motivations that define the subjects' classroom participation, their frequency of attendance, as well as the way they view teaching practices, among other aspects.

### 3.2 Identifying the Key Dimensions to be Analyzed

The questions included in the interview were chosen to shed light on the different dimensions that were of central interest to the analysis. Following a broad review of the existing literature on the subject in question, and considering the works of Abarca Rodriquez & Sanchez Vindas (2005), Ferreyra (2006), Guerra, Vega & Rivera (2007), Porto & Digresia (2001), we ultimately decided to utilize the classifications proposed by Tejedor Tejedor (2003). The authors of this latter work contemplated a number of dimensions, among which we find notably: a psychological dimension incorporating variables related to motivation, aptitudes for studying, study habits, etc.; an academic dimension that includes variables such as performance during high-school, credits completed with passing grades in the first semester, each student's former school, etc.; a pedagogical dimension that refers to variables such the teaching modality, assessment methods, the didactic resources used by the teacher, etc.; and finally, a socio-familiar dimension containing variables related to the parents' highest level of schooling completed, the student's work life, and place of residence, among others.

### 4. A Sample of the Findings

Below, we will present an overview of some of the key findings that emerged from our original research design; these were the "takeaways" from our initial student surveys that directly shaped the format and the strategies behind our innovative proposal, an early intervention aimed at constructing the solid foundations for academic success among incoming students enrolled in the School of Economic Science (as further detailed below).

### 4.1 Finding No. 1

"43% of the sample of incoming students enrolled in the School of Economic, Legal and Social Sciences at the National University of Salta for the 2016 academic year stated that they came from households with incomes of less than \$10,000 pesos per month. When considered in light of the 2016 definitions provided by Argentina's National Institute of Statistics and Censuses (INDEC, according to its Spanish acronym) — namely, that households with monthly incomes below \$12,489 pesos are considered to be in a situation of income poverty — we can say that these 43% of interviewed students are officially living below the poverty line."

In this context, we can clearly see the massive role that public universities can play as a motor for social mobility, as well as the importance of the State's presence as a co-provider of education, one which guarantees education as a right for society as a whole.

It is important to note that the reality of poverty constructs a series of factors that can limit students in the following areas: a) the cognitive abilities that they were able to develop prior to their entry into university; b) their health and nutritional condition; c) their possibility of enjoying adequate rest during study periods; d) the availability of economic resources allowing them to purchase the suggested bibliographic materials; and e) access to technology and Wi-Fi within their homes. All of these issues must be taken into account when proposing any innovative strategy.

# 4.2 Finding No. 2

"If we consider income distribution according to the data provided by INDEC for northwest Argentina in 2016 (35.8% of the population lies below the poverty line) we can affirm that within the School of Economic Sciences there exists a greater concentration of income poverty than there is for the northwestern region of Argentina."

Three explanations could be responsible for these figures:

- 1) Among the lower-income population, there is a greater awareness of the importance of education as a means for improving one's economic condition. In this sense, whenever we put innovative programs into practice ones that can truly reach students and help them to stay in school we raise up another pillar of support in the effort to alleviate the future distributive deficiencies of our production systems, providing tools to enhance the development of human capital among young adults.
- 2) The higher-income student population has shifted from public universities to private universities, whether due to the declining academic prestige of the former, the broader educational offerings of the latter, or due to organizational reasons such as the guaranteed continuity of teacher attendance (e.g., the possibility of teacher strikes in public universities), among others.
- The higher-income population is emigrating toward larger urban centers such as Tucumán, Córdoba or Buenos Aires.

Once again, with these findings in mind, it is vitally important to be able to implement innovative strategies that truly help students consolidate their chances of completing their chosen paths of study in the higher education system, an indispensable vehicle for the progress of a nation.

### 4.3 Finding No. 3

"85% of incoming students in the School of Economic Science in 2016 are first-generation university students."

Among other things, this condition exerts a strong influence on students' reasons for entering university life, where the ability to improve one's "working future" emerges as a major priority for them. Thus, we can point out

that learning is here defined as a *means* for achieving this other predominantly economic objective, and not merely as an end *in and of itself*.

Incorporating strategies that can contribute toward valuing access to knowledge in a way that overcomes economic barriers, could add a value distinct from that instrumental sense that today's students attribute to their learning process.

### 4.4 Finding No. 4

"Only 33% of incoming students at the School of Economic Science in 2016 feel that their high school has provided them with the necessary tools for entering university and developing adequately as a university student."

This obliges teachers to reinforce their students' development of certain processes and cognitive abilities that the latter were unable to attain at a previous stage, thus fostering students' capacity for acquiring knowledge autonomously. This underdevelopment among students, one that presents *a priori* obstacles toward their success throughout the learning process, is associated with the lack of knowledge in certain subjects, but mainly with an absence of skills related to acquiring and interpreting knowledge, the possibility of forming meaningful links between different kinds of knowledge, or the impossibility of expressing themselves adequately using scientific language.

Along these lines, our innovative strategies should take these deficits into account, not only to propose alternatives focused on improvement in these concrete areas, but so that our proposals for innovation do not inadvertently rely on key elements that turn out to be absent, or ones that students have yet to develop, thus preventing us from reaching the goals we were setting out for.

The lack of recognition within universities regarding these deficits can lead to the failure of many innovative programs, particularly those that fail to take stock of the actual 'square one' from which the universe of students is about to set off.

### 4.5 Finding No. 5

"Only 30% of students enrolled in the course regularly attend the theoretical classes. Likewise, this finding appears to be recurrent in the majority of the subjects in which students are enrolled."

This fact limits professors' chances of acting as a mediator of their incoming students' learning process and properly constructing the triad of teacher-content-student.

It will be key to consider innovative strategies that take this absenteeism into account, incorporating the use of digital media that improve our chances of reaching the greatest possible number of beneficiaries; we must also be aware that any other proposal for innovation that leans solely on the physical space of the classroom will have a much more limited repercussion — it may have an impact on those students who happen to be present, but will fall short in terms of acting upon the reality of the full group.

# 4.6 Finding No. 6

"It becomes vitally important to reflect on the possible improvements that we can put into practice with respect to the tools employed for mediating the processes of teaching and learning. Students display a notable difficulty in approaching the suggested bibliographic texts, mainly due to the problems of comprehension or interpretation associated with their limited linguistic abilities. Only 51% of the students in this study indicated that they had consulted the teacher-suggested bibliography, while the remaining 49% found the material difficult to comprehend. For this reason, there is a growing trend to substitute the actual bibliographic texts for note sheets, whether these are photocopies of the slides used by the professors in the in-person classes or notes taken by the students themselves."

An **on-going review** of the suggested bibliography, recommending reading guides that assist in the interpretation of the texts, the use of different didactic resources that can accommodate students' varying abilities, a greater attention toward the use of technology, taking heed of the most prevalent criticisms of the way in which teachers use technology (only 50% of students report that the virtual platform is interesting and useful to them), proposals for improving the existing dynamic in both the physical and virtual spaces for interaction, are all indispensable for increasing the chances of success for any strategy we may propose.

# 4.7 Finding No. 7

"If we observe the relation that exists between the variable of a 'passing grade' in the first exam in Economics 1 and the variable 'subjects passed with acceptable grades in the previous semester', we can note that 83% of students that passed the first partial exam are students that passed 2-3 subjects with acceptable grades during the first semester (the number of subjects set out by the study plan for the three degree programs for the first semester of the first year, is three)."

As such, we can observe that a student's performance during the first semester of the first year is quite an efficient indicator of their potential performance in the same field of study, and possibly, for the other courses in which they are enrolled. Evidently, these statistics allow us to infer that the problems faced by students in passing a given subject are linked more to cognitive difficulties of a general nature than with the problem of understanding specific course contents. Therefore, any initial strategies for educational innovation should be oriented toward resolving these general kinds of deficits with the aim of reducing the high likelihood of subsequent failure as well as the high drop-out rate for students that are unable to overcome them.

### 4.8 Finding No. 8

"It is crucially important to delve into the self-representations that students bring with them — the fruits of their previous academic histories — since these exert a strong influence on students' later performance and limit their modes and spaces for interaction."

In this sense, we can note students' limited participation in spaces for exchange as a result of their previous high school experiences of having been a "failure", including the latter's function as a disqualifier, and its senselessness as a means of building knowledge.

### 5. A Concrete Innovative Proposal

As was previously remarked, knowing the group of students with which one is working is a necessary condition — but not the only one — for selecting the most appropriate innovative strategies. It is also crucial to focus our efforts in such a way that our students can become autonomous learners who are capable of reflecting, who are aware of their mental processes and are even able to progress toward the self-regulation of their own learning processes (Mateos, 2001).

With this in mind, and in light of the above-mentioned findings — and among the diversity of innovative proposals that could be employed — we will describe the proposal which we considered without a doubt to be the *central opening strategy*: a Seminary-Workshop addressing "The Significance of Developing Critical Thought". It is this innovation as a point of departure that can provide the necessary fertile ground for the subsequent effectiveness of future alternatives.

This seminary-workshop, which was mandatory for students to attend, had the following main objectives:

- 1) Strengthen the students' capacity to think critically, with the aim of closing the gap between university and high school, a gap which, if not properly addressed, impedes students' ability to progress reasonably through their chosen degree program.
- 2) Contribute to a strengthening of those cognitive strategies that truly assist students in advancing academically, while adhering as closely as possible to the academic paths laid out in the study plans of the various degree programs.
- 3) Improve the indicators for students' long-term attendance at the university level, tackling the primary obstacles that prevent them from advancing academically and generating a propitious space for the consolidation of the University as an effective vehicle for social progress and upward mobility.

The Seminary was divided into four in-person sessions, held once per week, and focused on working on different skills, as detailed below:

- 1) "Knowing the operations of thought": The focus of this first session was to shed light on the meaning of each "thought operation," in such a way that the student is able to understand the meaning of analyzing, comparing, or summarizing, for example. Frequently, when students lack understanding of the meaning of a given thought operation, they fail to apply the specific skills required for each action. To help with this, students were introduced to different concrete tasks focused on putting each of these operations into practice, with the aim of clearly establishing the meaning of each thought operation, as well as the appropriate mechanisms for putting them to work.
- 2) "Knowing yourself": The aim of this second session was for students to visualize their own self-knowledge their awareness of themselves as thinkers and learners by recognizing their cognitive abilities and limitations, as well as other factors that could affect their academic performance. Here, students worked in groups using questionnaire guides or "self-administered questionnaires" that allowed them to produce this experience of introspection and become aware of their own personal manner of advancing through the learning process.
- 3) "Knowing the task": The focus of this session was for each student to develop the ability to recognize the objectives implicit in each task assigned to them, thus leading to an optimal choice of strategies for action. For this activity, students were assigned specific tasks with different objectives; later, the students reconvened to analyze the tasks as a group, in order to recognize the purpose of each task.
- 4) "Knowing your strategies": The aim of this final session was for students to gain a full understanding of the repertoire of alternative strategies at their disposal for completing each task, as well as the conditions in which each strategy becomes most effective. As an initial activity, students worked on enumerating the strategies, and were then introduced to the idea of using various strategies simultaneously, with the goal of being able to recognize the circumstances in which each strategy was most effective.

As a whole, the Seminary-Workshop set out to be an innovative strategy that would allow each student to attain a certain understanding of their own learning, helping them in their process of metacognition and strengthening their previous shortcomings, with the objective of contributing to their long-term commitment as university students.

### 6. Conclusions

Reconstructing the profile of the students with which we work with on a daily basis is a necessary process if we wish to optimize the dynamics that define the actions of teachers and students in the field of knowledge, in a defined spatial-temporal context in which organizations overlap and give profiles to these links. This reconstruction — one arising singularly from a specific time and place — is a necessary condition for putting into practice any attempt at an educational innovation.

Nevertheless, when there are circumstances that impact a significant number of our students and completely exceed our ability to intervene, recognizing them allows us to take them into consideration as a point of departure from which we can lay the framework for our innovative activity.

The serious economic hardships that affect a high percentage of students in our Faculty, the underdevelopment of certain abilities necessary for solid performance as university students, the motivational conditions present in their environment, and the emerging characteristics of each student's chosen path of study, become consolidated as key characteristics to take into account when thinking about any strategy for educational innovation. Only by recognizing this were we able to realize an initiative for improvement that would not only guarantee a serious academic approach, but would also ensure ever greater chances for further improvement.

### References

Abarca Rodriguez A. and Sanchez Vindas M. A. (2005). "La deserción estudiantil en la educación superior: El caso de la Universidad de Costa Rica", *Revista electrónica: Actualidades Investigativas en Educación*, Vol. 5, pp. 1-22.

Angulo Rasco F. (1990). Innovación y Evaluación Educativa, Malaga: Universidad de Malaga. Secretariado de Publicaciones.

Arnal J., Del Rincon D. and Latorre A. (1992). "Naturaleza de la investigación educative", in: J. Arnal, D. Del Rincon, & A. Latorre, Investigación Educativa: Fundamentos y Metodología, Barcelona: Labor S.A., pp. 24-49.

Basabe L. and Cols E. (2007). "La Enseñanza", in: A. R. de Camilloni, El Saber Didáctico: Collección Cuestiones de Educación, Buenos Aires: Paidós.

Bericat E. (1998). La Integración de los Métodos Cuantitativos y Cualitativos en la Investigación Social, Capítulo I: "La doble pirámide de la investigación social", Barcelona: Editorial Ariel S.A.

Bourdieu P. and Wacquant L. (1995). Respuestas: Por Una Antropología Reflexiva (1st ed.), translated by Hélene Levesque Dion, Mexico, Grijalbo.

Bourdieu P. and Gros F. (1990). "Principios para una reflexion sobre los contenidos de la enseñanza", *Revista de Educación*, No. 292, pp. 417-423.

Cochran-Smith M. and Lytle S. (2003). "Más allá de la certidumbre: adoptar una actitud indagadora", in: A. Lieberman, & L. Miller, *La Indagación Como Base de la Formación del Profesorado y la Mejora de la Educación*, Spain: Octaedro, pp. 65-80.

Entwistle N. (1988). "La Comprensión del Aprendizaje en el Aula", Chap. 2, Buenos Aires: Paidos.

Ferreyra M. G. (2006). "Determinantes del desempeño universitario: Efectos heterogéneos en un modelo censurado", La Plata: master's thesis, master's degree in economics, Universidad Nacional de la Plata.

Guerra L., Vega N. and Rivera K. (2007). "Relación entre el objetivo declarado al estudiar y el rendimiento académico de un estudiante de la Educación Superior", Valparaíso, Chile: Department of Computer Science, Universidad Técnica Federico Santa María.

Lave J. and Wegner E. (1991). Situated Learning: Legitimate Peripheral Participation, New York: Cambridge University Press.

Mateos M. (2001). Metacognición y Educación, Buenos Aires: Aique.

Mauss M. (1950). Sociologie et Anthropologie, Paris: Presses Universitaires de France.

Porto A. and Digresia L. (2001). *Rendimiento de estudiantes universitarios y sus determinants*, La Plata: Departamento de Economía Universidad Nacional de la Plata.

Sautu R. (Abril de 2000). "Los métodos cuantitativos y cualitativos en la investigación educativa", *Boletín de la Academia Nacional de Educación*, No. 42, pp. 4-10.

Tejedor Tejedor J. (LXI nº 224, January-April 2003). "Poder explicativo de algunos determinantes del rendimiento en los estudios universitarios", *Revista Española de Pedagogía*, pp. 5-32.