

## **The Identity and Pathways of Argentine Undergraduates. Research Contributions to Improvements in Quality.**

**Miriam Aparicio**

Consejo Nacional de Investigaciones Científicas y Técnicas. UNCuyo, Argentina

E.mail: maparici@satlink.com.ar; miriamapar@yahoo.com

a National Council of Scientific Research (CONICET)

Parque General San Martín - CCT

Mendoza, 5500

b National University of Cuyo

Centro Universitario, Mendoza, M5502JMA

ARGENTINA

Author: Email: miriamapar@yahoo.com

Telephone: +54 261 4251901 / +54 261 4542284

### **Abstract**

*The “evaluation” of university quality is a key part of the political-educational agenda. Nevertheless, though statistics regarding systems abound, very little empirical research covering wide ranges of space and time and demonstrating the most important problems in order to effect improvements exists. Since 1994, the author has carried out complementary studies in this line of research. Here, she presents two studies carried out with both graduates and individuals who extend their studies. The objective of this work was to both describe and/or explain (quantitative level) and to understand (qualitative level) the “reasons” or “psychosocial processes” that underlie the education system’s “figures” related to quality (graduation rates, dropout rates, etc.). The theoretical-epistemological base is developed, the particular methodology adopted with its three levels of analysis (societal, institutional and individual, interacting in accordance with the author’s theory) is described and results showing factors that impact university achievement, professional pathways and professional/institutional identity are presented.*

**Key words:** pathways, identities, undergraduates, Argentina

### **Introduction**

Results from two research studies carried out with undergraduates from two national universities beginning in 1980 are presented here. These studies were completed within the fields of Education and Work and Organization Psychology and were implemented within the framework of an issue that has become central to the university agenda in Argentina over the last decade: the Evaluation of University Quality.

Said evaluation, at both the national and international level, is frequently reduced to a question of statistics (dropout rates, graduation rates, extended study rates, infrastructure, etc.). *Inputs* and *outputs* are calculated; however, the “human processes” that these figures measure are not addressed as part of this evaluation. Likewise, if we take into account the criteria for quality, the majority of research deals with efficacy and, to a lesser degree, efficiency and political effectiveness; on the other hand, the pertinence/relevance or university response to contextual/community needs is the criteria least dealt with (Sander, 1990).

The panorama discovered after an exhaustive analysis of the state of the field begged us to delve into psychosocial/human processes – forever locked away in a “black box” – and the adoption of pertinence criteria. Within this framework, University Quality is not analyzed in a vacuum but rather as it relates to social and productive contexts and current demands, demands that require a supra-disciplinary education not always attained. This endangers employability and professional and institutional development in its sustained feedback. This analysis is the product of the construction of a systemism *sui generis*, far from the biological or administrative.

After thirty years of research as part of the National Council of Scientific Research (Argentina), the author establishes, in effect, her systemic theory known as “The Three Dimensional Spiral of Sense” (Aparicio, 2008; 2015 a, b, c). This theory allows us not only to describe or explain, but also to understand the “roots” of the issue related to University and Workplace Achievement as they are interconnected (recurrent processes of self-sustainment between individuals and their contexts: meso institutional or organizational), within a macro context of abrupt changes that also condition achievement, impacting on the two aforementioned levels: micro and meso.

Our findings bring to light the fact that results related to the same variable are associated with particular spaces and times within each system and subsystem. No true or false paradigm exists, rather more or less *pertinent* paradigms exist depending on the phenomenon, social occurrence or practice that we seek to describe, explain and/or understand (Boudon, 1977). Our findings also show that the combination of quantitative and qualitative methodologies – when pertinent and necessary – and multi-referential interdisciplinary analyses helps to clarify the reasons that underlie current realities.

We will now look at these studies’ lines of research.

### ***Key Research on Undergraduates within the Framework of Quality Evaluation***

Due to space constraints, we are unable to make reference to the notions of Quality and Evaluation – issues central to our work here – nor to related aspects (paradigms, models, criteria) (Sander, 1990; Edwards Risopatrón, 1991). We are also unable to reference all research carried out with undergraduate students since 1994 at two national universities (National University of Cuyo, UNCuyo and the National Technological University, UTN) or complementary studies<sup>1</sup>.

It is essential to acknowledge that key research is part of the field of Evaluation, Quality and University, considered as it relates to the productive system. This research is original at the theoretical, methodological and applied levels and has had effective consequences for improvements to Quality at the institutions mentioned. Four key research projects are detailed below, with a more thorough analysis of two of these to follow<sup>2</sup>.

**Key research #1:** carried out with university *graduates* who entered the National University of Cuyo from 1980 to 1993 and who were part of 18 degree programs. Data collection then continued until 2014. Conditions for achievement were analyzed at the academic and professional levels and conditions for related socio-professional mobility were also studied<sup>3</sup>. The sampling was stratified with the start, random, confidence interval taken at 95% and error margin at 4%.

**Key research #2:** carried out with *dropouts* from the same cohorts as the graduates. Contrasting achievement profiles from both groups allowed for a clearer explanation of the factors most important to this issue<sup>4</sup>. The sample was made up of dropouts (N=447) from eighteen degree programs at the National University of Cuyo (Argentina).

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<sup>1</sup> These studies were carried out with different populations (professor-researchers, PhDs, high school teachers and university professors, university graduates working for the State, judges, and doctors, among others).

<sup>2</sup> The author’s publications are referred to in each study. A summary of the notions of University Quality and Quality Evaluation, as well as study findings with UTN graduates, can be found in Aparicio, 2009 c (595 pages). There, each independent variable or factor (base, sociocultural or institutional) together with the intervening variables (psychosocial) are analyzed in detail as they relate to the dependent variables of academic and professional achievement in sustained interaction. See also Aparicio, 2003.

<sup>3</sup> This research received the UNCuyo Foundation Award. A summary can be found in Aparicio, 2007 a and b; 2009 c.

<sup>4</sup> This research received the Office of University Policy’s National Award (Aparicio, 2008. Also Aparicio 2014).

**Key research # 3:** carried out with UTN graduates from the Mendoza site (1985-2002). The historic crisis affecting the country allowed for the hypothesis that structural changes could have effects on university and socio-professional achievement levels. Additionally, comparing these findings with those of the UNCuyo graduates made it possible to understand the weight of psychosocial, sociocultural, pedagogical-institutional and structural factors as they interact (Aparicio, 2003; 2005, 2009 c).

**Key research #4:** carried out with individuals who extended their studies at the UNCuyo (1987-2002), at the request of University authorities concerned by the high number of students falling into the “delayed” category. Focused was placed on determining factors and dimensions that could explain and contribute to an understanding of so-called “negative performance” (Aparicio, 2009 a and b; 2016 a and b).

### **Research object of analysis**

Of the research cited, we will delve further into only two (#3 and #4) for the following reasons:

- They show a *different way of addressing the processes and factors* that affect the *issue of academic and professional achievement* and, indirectly, the *quality of institutions and their actors*. For each one, we will highlight its original contribution (combination of methodologies and strategies, temporal-spatial coverage, etc.) We attempt to demonstrate how the interrelation founded on empirical referents, not on artificial samples, operates; that is, to recover the dynamic interplay between socio-economic and cultural contexts (societal level), university organizations and the professional world (institutional level) and individuals who passed through University, reaching varying levels of achievement.

- We must note that such an analysis, bringing together three levels (the author’s three-level theory, *The Theory of the Three Dimensional Spiral of Sense*, Aparicio, 2015 a and b), was possible because the research spanned twenty years of university life at two national universities in Argentina. Therefore, to take one example, it was possible to study differences in achievement between older graduates, who were part of university life in a different historical moment and who saw their aspirations better materialize, and recent graduates affected by the macro-crisis. The “going and coming” of the individual/structure system is here made evident (micro-psychological individual level / meso institutional level and macro national socio-political and economic level) (Aparicio, 2015 a, b).

- In addition, the ability to work in the *same organizational contexts* – though data was collected at different historical, economic, social and educational moments – allowed for an understanding of the influence that societal context had at the institutional and individual levels. At the same time, we were able to observe the impact that times of national prosperity and crisis had on psychosocial aspects. On the one hand, these “psychosocial” factors greatly impacted the achievement levels of graduates. On the other hand – keeping in mind that both educational institutions and professional organizations are not constructs; rather they are made up of individuals who do or do not contribute to institutional quality –, the influence of factors (quantitative) and/or dimensions (qualitative) addressed in our research is given in the institution identity profile. In effect, each micro-institution (degree program, College) has an “institutional identity” that characterizes it and possesses differing levels of quality.

- Finally, working with different degree programs/disciplinary fields in the *same institutional and/or disciplinary context* (university, student population, professor population, researcher population) allowed us: a) to identify similarities and differences in attitudes, beliefs, ideologies, values, social and collective competencies, and abilities; that is, to capture personal, professional and institutional “identities” as well as identity strategies utilized by universities to cope with difficulties; b) to observe different levels of interaction between educational offers and contextual demands; c) to appreciate both the existence of a certain organizational and disciplinary homogenization, as well as the strength of institutional selection and self-selection processes (Aparicio, 2007).

In effect, **research #3** – UTN graduates (1987-2002) –, using particularly *quantitative* methodologies, addresses the relationship between graduates’ academic excellence and their levels of *objective and subjective* achievement in the world of work, within a context of diploma devaluation and employment crisis.

This *quantitative* approach portrays:

a) the predictive base, sociocultural, pedagogical-institutional, psychosocial and structural factors linked to graduates’ professional achievement;

- b) the marked gap between university education and achievement, analyzed based on performance, and professional achievement and its interaction;
- c) the weight psychosocial, relational and competency factors have relative to “knowing how to act” and “knowing how to interact” as part of achievement profiles and in relation to other more strident factors (sociocultural, economic, etc); factors upon which failure is frequently said to depend.

In **research #4** – delayed students at UNCuyo (1987-2002) – the focus is on contributions that the application of a *qualitative* methodology, complementary to the quantitative methodology, may make. Added to the strategies used in the previous study is lexicometric analysis (Aparicio, 2009 a and b). This use of combined strategies (triangulation) allowed us to demonstrate:

- a) Findings in the line of systemic feedback of individuals and structures (here, the relationship between problems inherent to delayed students and their degree programs offering different parameters of quality, regulations, demands, etc.) (Aparicio, 2016 a and b).
- b) Institutional similarities and differences in central nodes related to the education system (actors, management, etc.). These help us explain (quantitative analysis) and comprehend the roots of the situations observed in different degree programs (qualitative analysis) and that underlie the low levels of relative achievement reached by these students.
- c) The interwoven nature of individual/institution/individual (feedback).
- d) The weight that psychosocial factors of achievement have in relation to other factors which have had greater presence in the media and in international literature, such as sociocultural factors (reproductivist paradigms, neo-Weberian paradigms, etc.) (Bourdieu & Passeron, 1970)<sup>5</sup>. Said weight presents a challenge to institutions. In effect, according to our results, achievement is not only associated with the disciplinary level: learning is mediated by the quality of human interaction. In other words, the disciplinary level is mediated by relationships, the interpersonal, by multiple aspects that involve professors and students, graduates and businessmen and women or leaders of organizations, and that have to do with the domain of collective or interpersonal competencies.

For these reasons we have selected these two research studies.

### ***Research 1. Academic and socio-professional achievement of university graduates. An analysis of its determinants and effects. (1980-2002)***

We have already established the theoretical framework, shared by both studies. We now proceed to outline some of its methodological aspects (Aparicio, 2003; 2005, 2009 c).

### ***Methodology***

**Population:** university graduates entering the institution in 1980 and graduating until 2002, from five Engineering programs: Mechanical, Electronic, Civil, Industrial and Systems.

**Model:** made up of base, sociocultural, institutional and psychosocial variables (independent variables/intervening variables, IV) with two dependent variables (DV), University Achievement by College/Program (UA) and Workplace Achievement (WA). Five subfactors were established: a) Objective professional achievement; b) Career upward mobility; c) Subjective achievement (professional satisfaction); d) Socio-professional status reached; and e) Socio-economic level.

**Tools:** Many research tools were utilized. To determine Career Mobility, a summative index was constructed with the participation of HR consultants from the companies where graduates worked; to measure University Achievement, a compound index was created, taking into account our own parameters and those used internationally (Astin, 1991; Cabrera y Nora, 1994; Kuh y Hu, 2001; Pascarella y Terenzini, 2005).

Psychosocial variables – n-Ach, Satisfaction, Aspirations, Internality/Alignment and Social Representations of the value of effort<sup>6</sup>– were measured using a semi-structured survey, specific questionnaires and techniques such as

<sup>5</sup> In all cases, we refer to “founding fathers”.

<sup>6</sup> This aspect is very characteristic of and important to Argentine society, a society of immigrants, new and open, which over the last century allowed for immigrant insertion into free universities and as such allowed for relatively high economic status in a short time. Nevertheless, the structural situation has

self-presentation (Jellison & Green, 1981; McClelland, 1961; Gangloff, 2002; Beauvais, 1981, 1984, 1991; Louche; 1998; Moscovici, 1961). The impact of sociocultural factors was also analyzed (Social origin, Sociocultural origin). A bivariate and multivariate analysis followed.

These were accompanied by the application of qualitative techniques. Specifically, interviews were carried out in order to observe, on the one hand, social representations “shared” by graduates according to degree program and, on the other hand, valuation given to other current issues, especially: a) institutional issues or those related to the University (for example, conformism or non-conformism with market demands or education received regarding research, innovation, critical thinking, problem resolution, autonomy, procedures and transversal competencies); b) macro-structural issues as well as their impact in terms of Fatalism, Future Perspectives and Professional Projects, among other dimensions.

**Data collection procedures:** As graduates are now outside of the university context, research was carried out at graduate homes using institutional address listings provided.

**Data analysis:** The analysis was carried out in two instances: static and dynamic.

During the quantitative instance (static), base factors (Age, Sex, ...); sociocultural factors (Social Status, Intergenerational educational mobility of families<sup>7</sup>, ...) and psychosocial factors were observed as they influence Academic Achievement and Professional Achievement.

During the dynamic instance, related to an *understanding* of these factors within the realm of feedback (positive or negative), an interpretation breaking with linearity was established (qualitative methodology). Using the graduates’ information as a base, Nodes were generated. These Nodes were categories and subcategories regarding personal, organizational-institutional and macro-social dimensions that graduates associated with achievement.

### **Results and Discussion**

a) Generally, our results show the *interrelation and complexity* between individual achievement (micro level) and the institutions involved (meso level, the University, Degree Programs, Entrance Systems, Evaluation Systems; aspects that registered notable changes during the time period studied). All of this happens within macro-national contexts. The interplay of these levels and the variables addressed influence graduates’ achievement levels.

b) There are no “recipes”: each institutional/micro situation (colleges) is different, presenting its own unstable aspects and strengths. Consequently, each requires *different, “situated” responses if improving institutional quality and actors’ achievement is the goal.*

To summarize:

- *Psychosocial* factors (n-Ach, Internality/Alignment, Satisfaction, Social Representations, ...) predict *Professional Achievement* for the five sub-factors measured. This is not the case for Academic Achievement.
- *Sociocultural* factors, however, predict *Academic Achievement* and do not have an effect on levels of Professional Achievement.

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These findings invite us to:

a) Value “*social*” *competencies*, of utmost importance today for entrance and permanence in the workplace, market mobility (horizontal or vertical) or labor market exclusion (Aparicio, 2004).

b) Demonstrate that *disciplinary competencies* are now not enough to ensure *employability* with the current workplace circumstances and demands (Aubret & Gilbert, 1997; Perrenoud, 1997).

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now changed substantially, with limits on progress. It is important to remember that this research covers a period of prosperity followed by the largest major structural crisis in Argentine history, 2001-2002.

<sup>7</sup> It is important to note that these are the first comprehensive studies to address intergenerational educational and professional mobility over three generations: university graduates, their parents and grandparents.

Activate all knowledge (experience, action, methodological/procedural know-how,...) in addition to affect-emotional and cognitive aspects.

c) Likewise, these findings reveal the role that the university has in developing these competencies (qualitative-descriptive portion, analyzed through graduates' own self-perceptions or shared representations related to competencies developed and weaknesses identified). They also highlight the fact that the relationship between university excellence (UA) and workplace achievement levels (UA vs WA) and professional upward mobility is non-existent. In fact, there was no statistically significant correlation between Academic Achievement and Workplace Achievement for any of the five sub-factors studied.

This rupture or gap between Education and Work influences employability, a critical problem nowadays, and personal and professional identity. As such, insertion into the workforce, not always in accordance with one's education, fractures personal and professional identities, obligating graduates to utilize identity strategies to cope with new demands and a generalized lack of recognition (Goffman, 1963, Aparicio 2012, 2015 d).

d) Finally, some positive associations play out as hoped for, while others distance us from that which is sustained by various theories. To take one example: the "achievement needs/n-Achievement or n-Ach" factor. If *social representations of the value of education and effort* –belonging to the "cultural ethos" of Argentina, a country of immigrants experiencing intergenerational mobility and socio-economic growth due to education and employment – appear to be linked to greater professional achievement<sup>8</sup>, the same is not true for *Achievement Needs/n-Achievement*. This factor – which in international literature appears linked to both national and professional achievement – does not seem to be linked to such development in our research. This finding is interesting if we remember that the majority of these studies were carried out in the 1950s in the USA and northern developed countries (McClelland, 1961 and the functionalist school; Astin, 1985). In this moment, education was still an investment in progress (Consumption-Investment Theory: Becker, 1964; Eicher, 1973; Mingat & Rasera, 1981). It was "the gateway" to knowledge for day laborers, women and other individuals who had been excluded from educational circles. Nevertheless, this illusion would soon lose force. The democratization of teaching, followed by massification, was accompanied by a negative effect: the devaluation of diplomas in the labor market (Boudon, 1977).

Our data was gathered in 2002. By using institutional address listings, we were able to survey graduates who entered starting in 1980 in order to understand their history and pathway. The enormous structural change which happened in Argentina can be seen in graduates' representations, in their pessimistic perspectives and in a notable drop in aspirations, sense of effort and satisfaction. A structural/organizational system places limits on desires for development and professional promotion. However, it does not determine these desires. Opposite responses are also present.

The author's systemic perspective *sui generis* reveals that aspirations are now not enough to become something in the workplace and, even less, to grow. The individual/context relationship is clear in the structural unemployment statistics and in graduates' expressions loaded with hopelessness and pessimism (22% of our university population was unemployed at the time of data collection). (Cf. Aparicio, 2004). Individual and structure: both interact richly and sustainably within a complex, multidimensional framework with consequences that impact all three interactive levels.

### ***Research 2. An analysis of determinants of negative academic achievement for delayed students at the National University of Cuyo***

This issue is of utmost importance: graduation rates throughout the country do not exceed 17%, varying according to university; there is a marked degree of dropouts (close to 70%) and the number of years students remain in the system is extremely high. Despite enormous investments in education over the last two decades, these figures show no change and the quality of the education system is falling. This has economic consequences (cost/benefit theories), but also human consequences in terms of frustration and limits "experienced" related to the possibility for personal and profession development.

### ***Methodology***

This study is quanti-qualitative. The theoretical model includes base, sociocultural, pedagogical-institutional and structural factors, as well as new psychosocial factors related to achievement (Resilience, Intrinsic/Extrinsic Motivation, Coping Strategies and Attribute Styles) (Details provided in Aparicio, 2009 a, 2009 b).

<sup>8</sup> Significant associations were found for all five models constructed, despite the passage of three generations.

**Sample:** Made up of N=223 delayed students from five colleges (Engineering, Law, Philosophy, Medicine, Economics).

**Tools:** Quantitative tools were used (semi-structured surveys, institutional listings). The study was carried out at the descriptive and explanatory levels. Among the qualitative tools used were interviews and lexicometric analysis (number of words or frequency with which the graduate associated a situation or issue related to the delay with each of the established Nodes).

**Procedure:** Delayed students were located at their homes, a feat which implied substantial field work (these individuals are no longer within the university context, similar to graduates).

In an attempt to present a general overview of this research, the two questions that oriented the study were:

What factors/dimensions are given importance in terms of relative achievement or failure, studied here as delay?

Which theoretical concepts are dominant, related to the systemic perspective adopted?

We will respond in two sections – quantitative and qualitative – that is, analyzing factors that predict achievement on the one hand and analyzing the underlying “reasons” or “roots” of this issue on the other. Taken together, these reveal “identities”.

## **Results**

### 1.1. Explanatory section

Within the framework of *bivariate and multivariate analysis*, *psychosocial* factors emerge as fundamental “determinants” of extended studies, though some occupational factors also had an impact.

1.1.1. Psychosocial factors: among these, motivational factors stand out as they allow one to “cope with obstacles” (Resilience and Coping) and Alignment. Extending one’s studies is therefore related to:

- Low levels of motivation to learn and to stand out (Montero & Alonso Tapia, 1992; Dweck & Elliot, 1983)
- A strong fear of failure (inhibiting anxiety) (Montero & Alonso Tapia, 1992)
- A lack of development of coping strategies together with exaggerated efforts/inhibiting anxiety (Frydenberg & Lewis, 1996)
- A pessimistic explanatory style (Seligman, 1975)
- Weak alignment (Castrá, 1998)
- Low levels of resilience (exaggerated social bonds that make learning difficult (Henderson & Milstein, 2002).

1.1.2. Occupational factors: *Objective professional achievement* and *Workplace satisfaction*: these are positively associated with delaying studies. Just as had been expected in the hypothetical system, individuals who reach high levels of job satisfaction and an acceptable professional position choose to extend their studies. Differed gratification strategies (gratification patterns), and also psychosocial strategies, highlighted by economists such as Lévy-Garboua (1976), Mingat and Rasera (1981) or Jarousse (1984) decades ago, emerge in this dynamic interplay of factors related to achievement.

The role of choice and of freedom (though it does have structural limits) influences institutional and personal results (here, the number of individuals who decide to extend their studies). This issue is key for university authorities looking for improvements. In effect, they may change schedules, curricula or other aspects, but in the end, little will change if individuals’ decisions and objectives do not change: to advance, drop out or extend their studies.

1.1.3. Sociocultural factors: Social and Cultural Origin do not account for the extending of studies by *university* students, that is, by those who already overcame multiple obstacles to achievement (bivariate and multivariate level).

Reproduction? These findings – repeated over the course of thirty years of research on achievement with different university populations – allow us to question reproduction theory as a universal theory. In contrast, they show “situated contexts”: each college and each degree program presents different factors which predict achievement or allow for its understanding. These contexts also demand different strategies of education authorities if they seek to improve personal and professional development opportunities and institutional quality.

To sum up, the delayed studies model portrays the psychosocial dimensions expected according to the theory: Resilience (especially the lack of opportunities for participation and weak bonds); the quasi-absence of Coping Strategies; and low Alignment. Age and acceptable job position (Job Status) also affect “negative achievement”, albeit positively.

In essence, institutional-cultural and organizational identities emerge (Universities, Colleges, Degree Programs, Disciplinary Fields).

## 1.2. Qualitative section

Associated with negative achievement – parameter that speaks to the low quality of the university system – urgent *recurring* issues emerge, once again tied to psychosocial and organizational factors.

The results are interesting in terms of the framework that encompasses this research – Quality and Evaluation of Quality – and offer two positive notions: a) factors affecting achievement are not “pre-determined” factors, one is not “born” with them as reductionist theories claim: hyperculturalism, holism, naturalism,...). On the contrary, these factors “are generated” through socialization, including the entire educational system (*theoretical level*). b) On the other hand, this unmasks the responsibility that our educational institutions have. If problems identified by the research are not acted upon, comprehensive statistics (permanence, graduation rates, etc.) for universities or degree programs will not improve (*applied level*).

Our research, therefore, provides information for decision-making looking towards improvements of a complex system, allowing us to move from the individual to the institutional level and to overcome “generalizations” (college and/or program issues) thanks to the use of qualitative methodologies. In this sense, the interviews of delayed students were particularly important. They allowed us to understand how one arrives at the problem situation analyzed; to capture the recurring mechanisms/processes at the heart of the university or socio-professional issue; to comprehend “why” students delay and “how” – in their perspective – they obtain job positions; the “reasons” that influence job market promotion/mobility.

Below, we offer some of the aspects studied and “named” by students from each micro-institution more or less frequently, demonstrating different issues or institutional “identities” related to the different aspects.

- Professors and students: problems with relationships, communication, support, adaptation to university life, interaction, lack of participation and commitment emerge. This implies that education on competencies needed to act in social situations, to “coexist” and to cope with difficulties is lacking.
- There are problems with acceptance of current “regulations” (explicit and implicit), as well as with the demands of the different degree programs (grading and evaluation systems, etc.).
- Strategies needed to deal with obstacles are also lacking and education in competencies needed for professional life is weak, as are study habits and techniques.

The following aspects vary according to micro-institution:

- Objectives, aspirations, concerns, frustrations; beliefs (feelings of self-efficacy), expectations, hopes, public interest.
- Representations of the value of a diploma and the value of work; values given priority in life and in relation to academics.
- Valuation of knowledge and of competencies developed by the university *versus* those demanded by the labor market.
- Levels of optimism/fatalism and conformism/rebellion (alignment, freely consensual submission (Beauvais, 1981, 1984).

To sum up, **psychosocial aspects** (“social” competencies) have had a very marked influence on extending one’s studies, as was expected at the moment of developing our hypothesis and central questions.



Nevertheless – relevant to the framework of the issues of Quality, its Evaluation and the current tendency to establish common parameters – the aspects considered have had different influences on different degree programs. Identity/identities. Faced with homogenization, we find: a) the need to belong; b) the need to respect diversity if we seek to make tangible improvements to “tangible” “live” systems; c) the need to abandon the quasi-exclusivity of disciplinary logic (with a strong stamp on institutional logic and culture) to interdisciplinary logic; in sum, the conjunction of knowledge and competencies related to various disciplines and methods in order to favor Organizational Quality (university and workplace) and safeguard employability.

### Conclusion

What does this last research study contribute to pathways and identities?

Its results clarify the weight of psychosocial factors related to achievement in the effective performance of university students from five colleges over the span of more than twenty years. It also unmasks (qualitative analysis) **institutional homogenization** (understood here as colleges) of pedagogical-institutional aspects, but also of social competencies, to the point of developing *quasi*-typologies. To give one example, university students in degree programs related to the “hard or natural sciences” positively value scientific aspects and academic rigor; in contrast, they give little importance to education in competencies for social and professional life. This might have had an impact on (according to delayed students’ self-perceptions) their relative failure (Aparicio, HDR 2007, 2016 c).

These findings – that emerge from both quantitative and qualitative analyses – reveal each institution’s strengths and the weaknesses upon which it must work in order to continually improve the university system and provide quality education. Without neglecting the disciplinary level and “disciplinary” content, this education must respond to diversity and recover the human dimension of “learning for life” in order to facilitate effective performance in personal and professional situations and as part of professional organizations. Knowledge, pure potential, is nothing if not crystallized in performance, in the respective field, in practice (Perrenoud, 1997).

Likewise, these findings establish that the central issues – going against the affirmations of spontaneous sociology – do not depend on questions of infrastructure, scheduling, programs of study or other related aspects. On the contrary, relational and communication problems between professors and students – according to students’ valuations – are those which are most strongly related to the relative failure observed. Asymmetrical power relations (authoritarianism/alignment) operate in the same fashion. By instituting differences between professors and students, they annul or interfere with fluid interaction, communication and support. It is, therefore, not a question of technological or material problems.

Within the context of Evaluation of University Quality, these findings are important. In effect, they imply a recovery of psychosocial factors/human processes within an efficientist framework that evaluates figures, inputs and outputs (here rates of graduation, dropout or delay), and neglects the fact that underlying these figures are human processes (decisions, life projects, differentiated achievement needs, belief systems, social competencies) (Edwards Risopatrón, 1991). Without taking these human factors into consideration and working with them as an institution, it will be near impossible to improve “figures” indicative of the quality of the university system.

In terms of pathways and identities, one common focus emerges: socialization, which results in marked homogenization within each subsystem; a homogenization that denotes the predominance of certain shared values and representations according to academic entity.

In this sense, we have observed:

a) Notable differences according to College/Degree Program concerning individual and group strategies. This implies a different type of education and a prioritizing of different logics at different institutions; b) the existence of spaces for the formation of resiliency and coping...; issues that compromise quality in different degree programs; c) the existence of organizational cultures: cultural homogeneity? Each College/Degree Program, each organization, has its own culture, an incredible homogeneity. Saturation is clear in our research: problems and satisfactions are recurrent. They repeat in one way or another according to the College/Degree Program. These similarities and differences, products of qualitative analysis, are precisely what allow us to overcome the “individual” level and move to “issues common to various academic entities”; issues that could lead to the implementation of programs for continuing improvement. This could result in greater quality of the group or of

the University (institutional/educational-social level) and, why not, also of various universities seeking to improve their own institutions and actors not only on the level of statistics (rates of ...).

d) Likewise, this reference homogenization denotes priorities and glaring weaknesses in social competencies (of knowing “how to act socially”), much more marked in some contexts than in others (particularly in programs related to the “hard” sciences, where the “sacred” core continues to be content knowledge and theory despite its dissociation with practice).

e) Different profiles (degree programs, for example) reveal a strong presence of self-selection and institutional selection processes; processes which are carried out by various means: recruiting/evaluation mechanisms, dominant epistemology, etc.

To conclude, the analysis of qualitative nodes (psychosocial and pedagogical-institutional) carried out portrays: a) the importance of context and values prioritized by the diverse university actors (students, graduates, professors). These priorities rework the old value system linked to disciplinary fields (“hard” and “soft” sciences): prestige, power, security, self-realization. b) the strength of values linked to disciplinary stratification, a homogenization of issues (pedagogical, organizational, psychosocial) with consequences at the level of performance, but also at the level of satisfaction.

This situation invites us to work even harder for improvements at the level of intervention between Quality, Evaluation, Research and Intervention: a circuit that should be strengthened to work towards institutional improvements.

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