

STUDENT SUCCESS, SELF-EFFICACY, DEGREE COMPLETION, DROPOUT, ATTAINMENT, AND SWOT ANALYSIS FOR THE UNIVERSITY OF LA LAGUNA QUALITY SYSTEM

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ABSTRACT

Introduction. The aim of the University of La Laguna (ULL) is to establish appropriate levels of success, efficiency, completeness, dropout and attainment rates of students that would allow comparison of branches of knowledge, and to conduct a SWOT analysis to developed a full awareness of all the factors involved in management decisions. That is a need set up by the university community, the national quality agency (ANECA) and the general public. Methodology. We have used two related method approaches (statistical process control and SWOT analysis) to accommodate different ULL aims, as suggested by URASHE (European Association of Institutions in Higher Education). In the research phase one, a Commission Expert Group (CEG) had defined a set of synthetic indicators to facilitate comparison of rates disaggregated by branches of knowledge and degrees, as part of the Pact for Learning and Performance at the University of La Laguna (PARULL) project. In phase two, SWOT framework allowed future proposals for institutional planning and improvement. Results. Five figures display indicators for all branches of knowledge: Health Sciences, Social and Legal Sciences, Arts and Humanities, Sciences, and Engineering and Architecture. Also, average rate comparisons appraise some academic grades. Besides, EGC identified six quality characteristics involved in some degrees of the five branches of knowledge to be evaluated: students, teachers, training program, resources and infrastructure, and institutional. Afterward, they focused the main weaknesses and threads (external analysis) and strengths and opportunities (internal analysis) of the six features in some academic grades of the branches of knowledge. Discussion. Branches of knowledge comparisons and SWOT analyses have led to propose a new plan for student achievement, that is known as the First Year Experience Program.

Keywords: student success, efficiency, completion, dropout, attainment, SWOT framework

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SELECTIVE GLOSSARY OF ABBREVIATIONS AND ACRONYMS

ANECA	Agencia Nacional de Evaluación de la Calidad y Acreditación (National Agency for Assessment and Accreditation)
CEG	Commission Expert Group
CI	Cohort Input
D	Degree
GC	Graduation Cohort
GS	Graduate Students
ISSUE	Synthetic Indicators of the Spanish University System
IVIE	Valencian Institute of Economic Research
PARULL	Pacto por el Aprendizaje y el Rendimiento en la Universidad de La Laguna (Pact for Learning and Performance at the University of La Laguna)
QC	Quality Committees
SWOT	Strengths, Weaknesses, Opportunities, and Threats
U	University
ULL	University of La Laguna

INTRODUCTION

Calls for improved reorganization have come from within university campuses. As part of its plan, the University of La Laguna (ULL) reports measurements associated with five strategic rates: (a) explains student success; (b) describes a student efficiency process; (c) clarifies student completion rates; (d) elucidates student dropout; and (e) conceptualizes student attainment. Besides, researchers and administrators uncovered ULL internal strengths and weaknesses and external opportunities and threats, following the SWOT framework, to allow future proposals for institutional planning and improvement.

THEORETICAL FRAMEWORK

Academic change culture: is this a new paradigm for the ULL higher education studies? Realizing a successful general education has been agreed by society to be a substantial investment to attaining higher education's various purposes. Assumptions regarding the purposes of higher education are diverse and enormous. University learning exposes individuals to a diversity of ideas, people, and experiences inside and outside the classroom. At the same time, much of the wider admonition facing higher education revolves around to the question of quality meaning. People pronounce concerns regarding a disconnected context between the academy and the society. University administrators implicate in educational policy debates about identifying and measuring standards for improving higher education ethos and life. Due to national and regional government pressures (that is, student performance-oriented goals, indicator-based measurement approach and other formula-linked

methods of funding universities), the ULL is searching for expanding its educational scope and improving quality individual and societal returns on higher education (Schejbal 2012). Specifically, those programmatic ULL changes are partially due to the harmonization of educational European public policy of quality assurance structures and internal processes of strategic management. Besides, accrediting agencies, such as the National Agency for Quality and Accreditation Assessment (ANECA), are pressuring all Spanish universities in general, and the governing bodies, in particular, to accredit all academic degrees, involving private managers and executives, and external stakeholders. Higher education in Spanish universities requests curriculum change and suffers unrest because of social and political forces. Consequently, the ULL measurable educational outputs, quantitative and qualitative, were intentionally tracked, such as student success, efficiency, enrollment, retention, graduation, placement, dropout, etc.

Strengthen Higher Education Student Success Rates

Student success has implications for university curricular policy. It is important because it can avoid the student abandonment of credit-based courses and competency-based degrees, and also uses a way to evaluate the effectiveness of faculty (Howell and Buck 2012). When there is congruence between university factors of space, time, facilities and economic investment, the students meet their needs, and preferences, and satisfaction, and career success are more apparently obtained (Bowman 2014). Additionally, intrinsic success encompassed an active sense of fulfillment. Certainly, intrinsic satisfaction is an important data in how alumni recognize their college career success (Dumford and Miller 2015). The insistence from the society and ANECA that the ULL specify their curriculum goals and document the student success impacts their daily practice.

Encourage College Student Self-Efficacy

The movement toward greater university responsibility also demands proper answers about student self-efficacy. This concept of college self-efficacy is made specifically intricate by the various lenses and scales that advocates and opponents alike have used to framework its meaning. Thus, the instrument *College Academic Self-Efficacy Scale* consists of 26 items related to three subscales: (a) technical skills, (b) social situations and (c) cognitive operations (Hen and Goroshit, 2014, 118). As such, student self-efficacy is an organizing concept that encompasses academic and social support, and personal growth initiatives. Providing this consensus, Çelik (2015, 107) agreed with the following definition of self-efficacy: “one’s self perceived confidence to successfully perform a particular academic task.” One often-articulated idea of the prospective role of university self-efficacy is that there is some set of things that first-year students should have in common, such as learning persistence and academic success (Wright, Jenkins-Guarnieri, and Murdock 2012). Some university leaders agree that college students efficiently have to complete their degrees, acquire professional competencies to participate in the economic improvement of the country, and develop a better future for families and communities (Morris 2012). Still, other researchers associate academic success with higher levels of student anxiety, stress and illness; moreover, college deferral

studies reflect a formidable challenge of university renewal. Across these terms, Hen and Goroshit's (2014, 116) assertion that "academic procrastination has been seen as an impediment to students' academic success" remains accurate today. At the same time, student self-efficacy comprises a variety of psychological standpoints at the intragroup level in online teaching programs. According to Vayre and Vonthron (2016), student self-efficacy matters for how one frames learners' engagement and pursues the effective preparation of successful online learning. It also matters as one considers the contribution of social support by faculty to the aims of academic engagement.

Student University Degree Completion

What is the best way to get students to complete their studies in higher education? Improved high school and college completion rates are critical for the future of any country. Moreover, the cost-effectiveness in the achievement distribution of degree completers is a major policy concern. The present-day student completion situation is a minefield of various understandings around the idea of seeking employment. College studies renewal in the current context raises the same questions that high school has always been asking: What is a student's role in college persistence? That is a query that each social context and university must consider anew because college completion rates including rates of bachelor's degree completion are falling today. Consequently, reversing the current trend and increasing college completion is seen as a top priority for the new knowledge of an economy and many European and American policy-makers. University students are more likely to complete a degree in a timely way if they select a level and develop an educational strategy early on, have a well-defined itinerary of the credits they require to take to complete a degree and receive supervision and encouragement to assist them in staying on a degree. In fact, policy makers and researchers identify and respond to concerns regarding college completion rates, because "30% of individuals regret their study program 5 years after graduation" (Kucel and Vilalta-Buf 2013, 576). A crucial contribution of a college education is the integration of curricular experiences. In this sense, the Swedish researchers Borgen and Borgen (2016, 521) concluded: "While a folk¹ High school education does not appear to help students make informed choices; it does make students complete an undergraduate education more efficiently." Students' engagement may occur when they participate in various out-of-class experiences, including occupation on or off campus, residence hall involvements, as well as associations and societies. Correspondingly, Hu (2011, 105) found: "The relationship between student engagement and persistence in college revealed in this study has substantial implications for research on college students and institutional policy and practice." Similarly, Elliott (2016, 427) concluded: "Results also demonstrated that students at highly selective colleges with greater academic self-efficacy perceptions were more likely to be retained." Another aspect that deserves attention is the increased time to have a degree that associates with a slower accumulation of degree credits. In a Spanish research study, working-class students tend to select university degrees that are easier to complete and with specific and appropriate professional opportunities for graduates (Troiano and Elias 2014). This reasoning seems to prove that students are accruing degrees more slowly. Thus, the argumentation

¹ A Swedish Folk High School (Folkhögskola) is based on the students' needs, previous knowledge, and experience.

connotes the reductions in the availability of university-educated workers in the labor market. In another context, the study of Contreras and Contreras (2015) insinuated that Latino student and their peers showed lower college completions rates perhaps due to inappropriate measures of success.

Student Dropout in Higher Education

University students who have completed four-year degrees have invested considerable time, effort and financial resources in their personal education. But many of them do not succeed and withdraws from the college without finishing the grades in with they were registered. Some recent Spanish university research studies have tried to understand the dropout phenomenon. In the case of the University of Málaga, Lassibille and Navarro-Gómez (2008, 103) applied a survival analysis and concluded: “students who delay entry into higher education, as well as students who did not get into the course they wanted, are at increased risk of leaving the program.” According to the document “Basic data of the Spanish university system” (Spanish Government. Ministerio de Educación, Cultura y Deporte, 2013), the dropout rate in the Arts and Humanities disciplines is much higher, compared to the other scientific areas, and “one out of five students drop out from college” (Arce, Crespo and Míguez-Álvarez 2015, 262). Therefore, dropout indicator is envisioned as very significant to study other signs that take into account those alumni who start but who do not end their academic studies. According to certain German studies, “the strategies for supporting academic success concentrate on particular types of drop-outs only. They do not take into account the empirical finding that there is not one dominant type of drop-out, but several that are of similar importance” (Heublein 2014, 511). Consequently, which university students are most expected to drop out of college degrees or disengaging from their studies? Some elements correlate with degree completion. Donhardt (2013) has reviewed and considered this problem and has found certain factors, such as “stopping out, taking developmental classes, receiving an F, dropping to part time, and withdrawing from classes.” Meanwhile, Arce, Crespo and Míguez-Álvarez (2015, 262) resume the motives students abandon university studies found in other research studies: “incompatibility with work, economy, university (environment, teachers, and difficulties) and so on.” Although limited to community colleges in the United States, Fong, Davis, Kim, Kim, Marriott, and Kim (2016, 24) have meta-analyzed the relationship between psychosocial factors (motivation, self-perceptions, attributions, self-regulation, and anxiety), and student academic persistence or students successfully completing a course (two variations of success) from multiple studies. The authors concluded, “psychosocial factors are positively related to community college student success.”

Student Attainment in University Education

The quantitative analysis offers several variables (grades, persistence, satisfaction, etc.) in explaining the causes that might lead to drastically divergences in students’ educational attainment and realizations. While Mihaljevic (2008) research results indicated that peer stimulus and student work levels have a positive and statistically significant weight on student

achievement, Raynor (2016) challenges the usually accepted discussion that good grades and desperate effort are the most important features in accomplishing higher educational attainment. The literature review provides descriptive, correlational and causal examples of unequal breadth and depth. Thus researchers have made associations between higher-order thinking skills and self-monitoring contributing to student attainment (Ghanizadeh 2016). Other studies of related nature have indicated a strong correlation between attendance and achievement (Burd and Hodgson 2016). According to Pike, Hansen, and Childress (2014), many measures of student features, high school practices, college beliefs, and initial matriculation characteristics relates to degree attainment. Thus, one student characteristic is an ethnic group. At United Kingdom institutions of higher education, the level of education of White students tends to be superior to that of students from other cultural populations (Stevenson 2012; Richardson 2012). If engagement in educationally purposeful activities is one cornerstone of student attainment, then the university government has to measure the standard of student implication and alumni performance (Nelson, Quinn, Marrington, and Clarke 2012). These pieces of research results on students' academic variables dissected the psychological and social factors that lead to unequal university attainment.

As a concluding remark, although a high proportion of students in higher education are efficiently finishing their courses and degrees, alumni maintenance could be augmented further with university complementary policies and practices to support students academically and socially (El Hassan 2014).

CONTEXT AND METHODS OF OUR RESEARCH

Longitudinal Data University System

The analyses are based on administrative data assembled as part of the project *Pact for Learning and Performance at the University of La Laguna (PARULL)*. Researchers conducted the study at the ULL, which is the only state higher education institution in Tenerife. The ULL was founded in 1.701, and during the course 2015-2016, 18.278 students enrolled in formal undergraduate academic studies. Besides, 964 students registered in masters' degrees. The ULL had 1.686 faculties of various titles (emeritus faculty, professors, and specialists above scale, non-tenure full-time or part-time level positions, lecturers, etc.) and 851 Academic Administrators during the college year 2014-2015. It was composed of 23 four-year university schools and three university associated centers. It awarded 45 undergraduate degrees, 64 master's degrees in the academic year of 2014-2015, and 52 doctoral programs and 25 minor degrees (experts, specialists, diplomas, etc.) for grade level and graduate students.

The administrative data from the ULL included an applicant file, which contained records of all enrollees. The file included for all candidates basic demographic information, test scores, academic performance, enrollment status, and graduation date. In what follows, we summary the tasks we have practiced in developing the exploration agenda. The PARULL project developed a shared decision-making process in which cross-disciplinary academic faculties as partners had equal power to analyze and work toward the shared university quality objectives.

The Role of the Commission Expert Group (CEG)

The ULL Governing Body named a sharing Commission Expert Group (CEG). The CEG is a community of higher education assessing specialists that provided its members with the knowledge to propose institutional planning goals for University degrees within the context of assessment practices and evolving tendencies. CEG identified PARULL as a significant university development compromise to select variables, manage and homogenize various indicators so that magnitudes were comparable. In this sense, CEG had similarities with the *Synthetic Indicators of the Spanish University System* (ISSUE) approach developed by the Valencian Institute of Economic Research (IVIE) (Pérez, Aldás, Aragón and Zaera 2016).

Thus, enhanced collaboration pursued the following top priorities:

- Create a set of synthetic indicators to facilitate comparison of results disaggregated by branches (areas) of knowledge and degrees.
- Encourage traditional meaningful university quality culture.
- Provide a proper method of implementation of the new academic degrees and postgraduate certificates or diplomas.
- Increase student participation in classroom teaching activities.
- Improve the quality of teaching.
- Ensure that all qualifications and assessment meet high-quality standards.
- Certificate the achievement of learning outcomes.

We performed two types of analyses. The first phase of this process involved a review of all indicators used in each university program of study that led to a degree: percentage of students for each academic year success rate, efficiency rate, completion rate, dropout rate, and attainment rate. Researchers studied all indicators and rates data reports offered to the on-campus central offices.

The second and last phase scrutinized data following the Strengths, Weaknesses, Opportunities, and Threats (SWOT) framework. The model identifies the positives and negatives inside and outside of degree courses, although “the fundamental issue with SWOT analysis is that it emerged from practice and lacks a theoretical foundation” (Thomas, Chie, Abraham, Raj, and Beh 2014, 115). The procedure followed by the CEG for conducting the SWOT analysis was simple and clear-cut:

- Identification of Quality Committees (QC) for each of the 23 University school degrees.
- Illuminate the purpose and object of the activity.
- Select a recorder.
- Use of a flip chart in round-robin document arrangement. Each QC participant identified and examined gathered data, suggesting strengths, illuminating and classifying the main forces, and summarizing the strengths. Researchers followed the same procedure for weaknesses, opportunities, and threats, and

- Drafting of an act with the structural and pragmatic SWOT passages available, containing: date and time, place, participants, content, improvements, synthesis, and agreements.
- The content analysis uses and interprets selected transcribed passages, and processed data (Denzin and Lincoln 2011).

Analytic Research Strategies

In the first phase of the process EGC defined the following rates for the indicators:

- *The success* rate for degrees: the ratio between the total number of credits earned by students enrolled in an academic course and the total number of credits submitted for exam consideration during the college year (excluding adapted, validated, recognized, transferred credits, etc.). The success rate for subjects: the ratio between the number of students who pass the matter in a given academic year, based on the total number of students presented for examination in at least one of the calls of the course.
- *Efficiency* rate. The ratio between the total number of credits in which graduate students (GS) from a graduation cohort (GC) should have enrolled to overcome a degree (D) in a University (U) and the total credits in which effectively GS from a GC have enrolled in a D at U.
- *Completion* rate. The ratio between students of a cohort input (CI) exceeding in the allotted time plus one-year credits leading to a degree (D) at a University (U) and the total number of new students from the same cohort CI in identical D at U.
- *Dropout* rate. Three-year degrees. The ratio between students of a cohort input (CI) enrolled in degree (D) at University (U) in the academic year (X). It means D in the X + 1 and X + 2 courses, and the total number of students in such CI who accessed the D in X. Extinguishing Degrees. The ratio between the total number of students in a cohort input (CI), and the total number of students in such CI, who should get the D the previous college year, and have not been registered either in that school year or the previous one.
- *Attainment* rate. For a college year (X), the ratio between the number of credits in a degree (D) at a university (U) by a new students cohort input (CI) and the total number of credits registered on the title D at U for that X CI.

In the second and last phase, the CEG used the SWOT analysis for including descriptions of various disciplinary teaching programs. SWOT analyzed each University school degree from an internal perspective (strengths and weaknesses) as well as one external viewpoint (opportunities and threats). Subsequent analysis also showed internalized University policy principles such as professionalism and accountability, as well as apparent attitude change towards possible areas of growth, such as innovations in technology, and events that were detrimental to degree completion, such as the challenge of course accreditation and precarious funding.

RESULTS

First Stage. Selected Indicators and Rates for the ULL Quality Assessment

This section focuses on indicators and rates disaggregated by branches of knowledge. The results display five sets of figures organized by signs (success rate, efficiency rate, completion rate, dropout rate, and attainment rate). In this sense, means are the average rate for all academic degrees of each branch of knowledge.

1. Student success rate. According to the Spanish Ministry of Education, Culture and Sport, the success rate is the “percentage ratio between the number of credits obtained and some registered credits.” The general success rate for students enrolled at the ULL was 86,55 percent of the academic course of 2013-2014. Moreover, women had a higher average rate (88,18%) than men (84,12%) (Ministry of Education, Culture and Sport 2016). Figure 1 shows an evolution of branches of knowledge within four years (from 2008-2009 to 2011-2012). Health Sciences includes six degrees² widespread on eight College centers. Health Sciences is the only branch of knowledge that is improving in three years. Students who finished Health Sciences courses in fall 2010 were 87.70 percent, while students who completed courses in 2012 were 89.94 percent. Comparing mean scores across the two years revealed improvement in successful practice. In other words, just university students were more successfully degree earners two percentage points. Physical Therapy degree had the highest favorable rate (96,13%) and Pharmacy degree the lowest success average rate (78,16%) in the academic year of 2011-2012. Meanwhile, the national average rate for that branch of knowledge was 88,30 percent in the academic course 2010-2011. Contrary, Social and Legal Sciences as a major category of 12 academic degrees, outspread in 14 College centers³, goes down by ten points in four academic years. The student success average rate for the ULL Social and Legal Sciences was 81,67 percent in 2010-2011, while the national average rate was 82,58 percent in the same academic year. Sociology degree had the lowest average rate (57,01%), and Journalism degree the highest average rate (96,41%) in the ULL.

2. Student efficiency rate. Figure 2 shows the downward trend from the academic year 2005-2006 to 2010-2011 for all branches of knowledge. This negative set of data suggests a type of inefficient productivity pattern. However, Social and Legal Sciences and Engineering and Architecture, which integrates ten degrees⁴, appeared to be improving efficiency, mainly in the academic year 2011-2012. The increased rate of students who had progressed through toward completion one of the 14 academic degrees of Social and Legal Sciences was more than 30 points (from 63,41% to 94,5%) (There was missing data for the other branches of knowledge). Health Sciences degrees vary among them. While Physical Therapy degree had an average rate of 79,60% in 2010-2011, Pharmacy degree had an average rate of 53,30% in the same period.

² Nursing, Psychology, Speech Therapy, Physical Therapy, Medicine, and Pharmacy.

³ Administration and Business Management, Accounting and Finance, Law, Economics, Geography and Territory Planning, Early Childhood Teacher Education, Primary Teacher Education, Pedagogy, Journalism, Labor Relations, Sociology, Social Work, Tourism, Tourism (Iriarte), and Tourism (Santa Cruz).

⁴ Construction Engineering, Informatics Engineering, Nautical Engineering and Maritime Transport, Marine Engineering, Agricultural Engineering and Rural Environment, Civil Engineering, Industrial Electronics and Automatic, Mechanical Engineering, Industrial Chemical Engineering, and Radio Electronics Engineering.

3. Student completion rate. Figure 3 depicts a graphic visual representation of student completion rate for five branches of knowledge within six years. It shows a general idea of the visible lines: the completion rates are low, but the graduation completion rate is yearly increasing for the examined period. Students were more likely to complete a degree in any branch of knowledge in a timely fashion. Thus, Health Sciences improved student completion rate very slowly, although it provided the highest rate among all branches of knowledge (62,44%) in 2010-2011. Nevertheless, Pharmacy had the lowest completion rate (11,30%), and Nursing (Candelaria) the highest completion rate (100%). Social and Legal Sciences degrees are improving along time: 26,94 mean percentage of students intended to attain one of the 14 degrees in 2005-2006, and the average had grown to 36,10 percent over five years, from 2005-2006 to 2010-2011. The branch of knowledge Arts and Humanities comprises eight degrees⁵. Students about this branch of knowledge were the most successful in completing their degrees in that period: from a mean percentage of 14,73% in 2005-2006 to a mean rate of 25,04% in 2010-2011. Meanwhile, Engineering and Architecture completion rates were increasing nine percent in five years.

4. Student dropout rate. Researchers tracked students through their undergraduate careers for six years. Figure 4 describes the evolution tendency for the five branches of knowledge. Concerned the university governing body for the high rates of dropout, it appeared that the academic year 2010-2011 was a “turning point” for reducing student dropout. It also seemed that the degrees of Arts and Humanities made great efforts made to reduce dropout (from 49,95% in 2005-2006 to 28,20% in 2010-2011). In spite of that, Philosophy degree had the highest dropout rate (37,80%) in 2010-2011, while Spanish Language and Literature degree had the lowest dropout rate (16,90%) for the same period. It followed students enrolled in Sciences, which was composed of four titles⁶ (from 44,70% in 2005-2006 to 25,05% in 2010-2011). Chemistry degree had the highest dropout rate (31,60%), while Biology had the lowest dropout rate (17,90%) in the same academic year. Health Sciences almost keep the same student retention rates over the six years. In this case, Medicine degree had the lowest dropout rate (5,40%), whereas Speech Therapy had the highest rate (23,90%). Engineering and Architecture revealed that they were slowly reducing student dropout in 2010-2011 (from 27,10% in 2005-2006 to 25,60% in 2010-2011).

5. Student attainment rate. According to the Spanish Ministry of Education, Culture and Sport, attainment rate is the “percentage ratio between the number of credits obtained the and number of credits presented.” The general attainment rate for students enrolled at the ULL was 91,37 percent of the academic course of 2013-2014. Also, women had higher percentage ratio (92,37%) than men (88,00%) (Ministry of Education, Culture and Sport 2016). Figure 5 displays great means of academic attainment for all knowledge branches in seven years. Social and Legal Sciences showed an improved average rate of almost ten points in six years (from 55,95% in 2005-2006 to 65,02% in the academic year 2011-2012). Journalism had the highest average rate (87,70) during the school year of 2011-2012, and Sociology had the lowest attainment rate (46,00%) in the same period. The national average rate for this branch of knowledge was 68,82 percent in the academic year 2010-2011. Meanwhile, Health Sciences degrees display a continuous and ascending effort of achievement. Students improved the rate average to earn a degree (from 70,00% in 2005-

⁵ Fine Arts, Spanish Language and Literature, Classical Studies, Philosophy, Geography, and Territory Organization, History, Art History, and Applied Studies in French-Speaking.

⁶ Chemistry, Physical, Biology, and Maths.

2006 to 79,81% in 2011-2012). Nursing degree had the highest rate of attainment (89,30%) in 2011-2012 and Pharmacy degree the lowest rate (61,40%) for the same period. In the meantime, the national average rate for Health Sciences was 79,63 percent in 2010-2011. The Figure 5 also shows that Engineering and Architecture, no matter how difficult, is improving one point its average rate in six years. Nevertheless, while the national attainment average rate was of 51,90 percent in 2010-2011, the ULL attainment average rate was 43,74 percent in the same academic year. Civil Engineering degree had the highest average rate (59,30%) in 2011-2012, while Radio Electronics Engineering degree had the lowest average rate (31,30%) in the same academic year.

Second Stage: Results Are Applying the SWOT Analysis

A textual narrative synthesis of the findings was used that meet the requirements of the framework (strengths, weaknesses, opportunities, and threats). The EGC mapped the reflective textual evaluations and conceptual insights of the QC members in a two-by-two matrix (Table 1) (Thomas, Chie, Abraham, Raj, and Beh 2014).

Table 1. The basic two-by-two matrix of SWOT analysis adopted by the EGC

	Strengths	Weaknesses
Opportunities	Attain occasions that equal the strengths	Reduce weaknesses to reach opportunities
Threats	Use strengths to decrease weaknesses to threats	Avoid weaknesses to escape from sensitivity to threats

Moreover, the EGC identified six quality central themes involved in some degrees of the five branches of knowledge to be evaluated: students, teachers, training program, resources and infrastructure, and institutional. Then, they focused the main weaknesses and threats (external analysis) and strengths and opportunities (internal analysis) of the six central themes in some academic grades of the branches of knowledge.

1. **Students. Weaknesses:** “Underutilization of academic tutoring by students, which leads them to inadequate educational decisions.” Threats: “Newly students access to university studies with training deficits required for performing in disciplines, as well as some fundamental transversal competencies such as oral communication, reading and writing.” Strengths: “Student perception of high levels of satisfaction with the development of some training programs.” Opportunities: “Some degrees are in high demand for newly admitted students.”
2. **Teachers. Weaknesses:** “The student workload often exceeds the provisions of the teaching guide of the subject matter.” Threats: “Culture changes rejection by some university teachers.” Strengths: “Increasing awareness by institutional management members and faculty regarding the development and quality of academic degrees.” Opportunities: “High social recognition of technological innovation in teaching, use of language and external practices required to support the mandatory principles of university degrees in the Canary Islands.”

3. **Training program. Weaknesses:** “Subject matters are detected inappropriately located in the curriculum.” Threats: “Short social and academic value of postgraduate degrees as a way of accessing the labor market.” Strengths: “The ULL has decreased dropout rates in most degrees.” Opportunities: “Firms demand much more attention to building multidisciplinary high-profiles.”
4. **Resources and infrastructure. Weaknesses:** “Equipment and logistics unfeasibility for meeting projected development degree planning.” Threats: “Gradual decline in capital budgeting in higher education that limits or reduces innovation in teaching.” Strengths: “Wide range of extracurricular activities in colleges: congresses, conferences, workshops, courses, etc.” Opportunities: “Developing international strategic partnerships and excellence in research and scholarship as a framework to expand possible market possibilities for students.”
5. **Institutional. Weaknesses:** “Excessive number of examination calls and accumulation of tests in short time.” Threats: “Weak or no public review and evaluation system of teaching quality in higher education.” Strengths: “The ULL campus of international excellence is a network project of research and technology.” Opportunities: “Europe 2020 and Innovation Smart Specialization Research and Strategy are European policies that focus on R and D + i as engine out of the crisis.”

DISCUSSION AND CONCLUSION

Overall, this chapter resumes the CEG’s efforts to capture essential information to guide the core quality assurance and improvement of the academic degrees at the ULL: (a) tailoring indicator rates according to the CEG members’ sense of university excellence; (b) clear and transparent structure of quantitative indicators with detailed rates for each branch of knowledge; (c) use of two related method approaches (statistical process control and SWOT analysis) to accommodate different institutional aims, as suggested by URASHE (European Association of Institutions in Higher Education) in 2012; (d) deactivating fear by inspiring confidence among college faculty, academic administrative staff and students; (e) adequate training of CEG members in Aneca programs, such as Verifica and Acredita, interview skills and competencies in giving constructive feedback, and (f) reflection to engage peers in professional and institutional quality debates.

Seven conclusions are drawn based on the review of the five indicators (success, efficiency, completeness, dropout, and attainment), and SWOT framework. First, the findings demonstrate that Health Sciences was the only branch of knowledge that was improving success rates in the last three years. It seems that college students’ satisfaction with degrees are important because it can contribute to student success, particularly in Physical Therapy degree. In this level, significant curricular changes are taking place as students are demanding a transitioned path: from master’s degree to the standard of the doctoral degree, as it happens abroad (Rapport, Stelzner, and Rodriguez 2007). This idea means that Physical Therapy students will persist at ULL in their engagement with further academic courses and degrees.

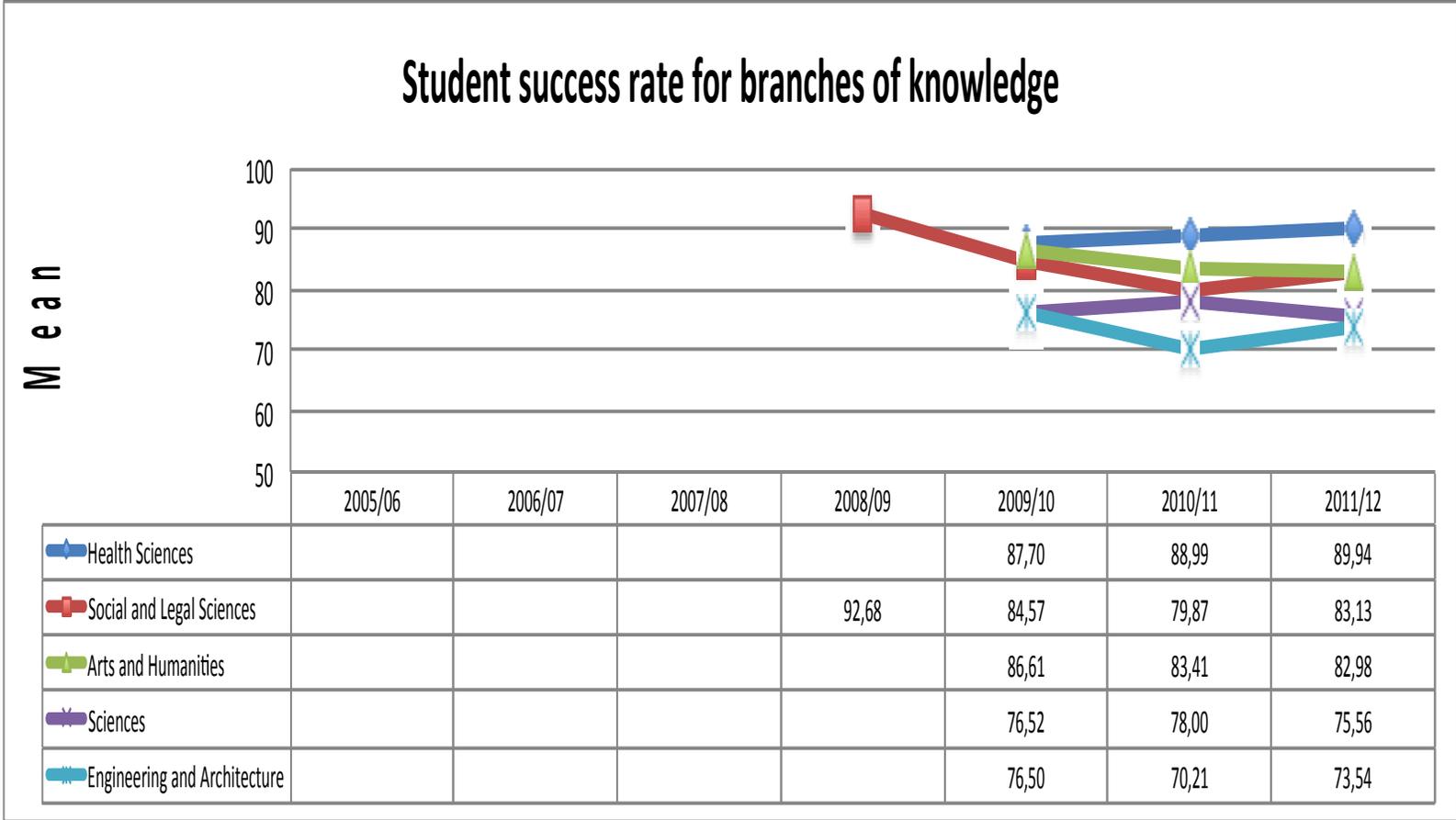


Figure 1. Means of student success rates for five branches of knowledge.

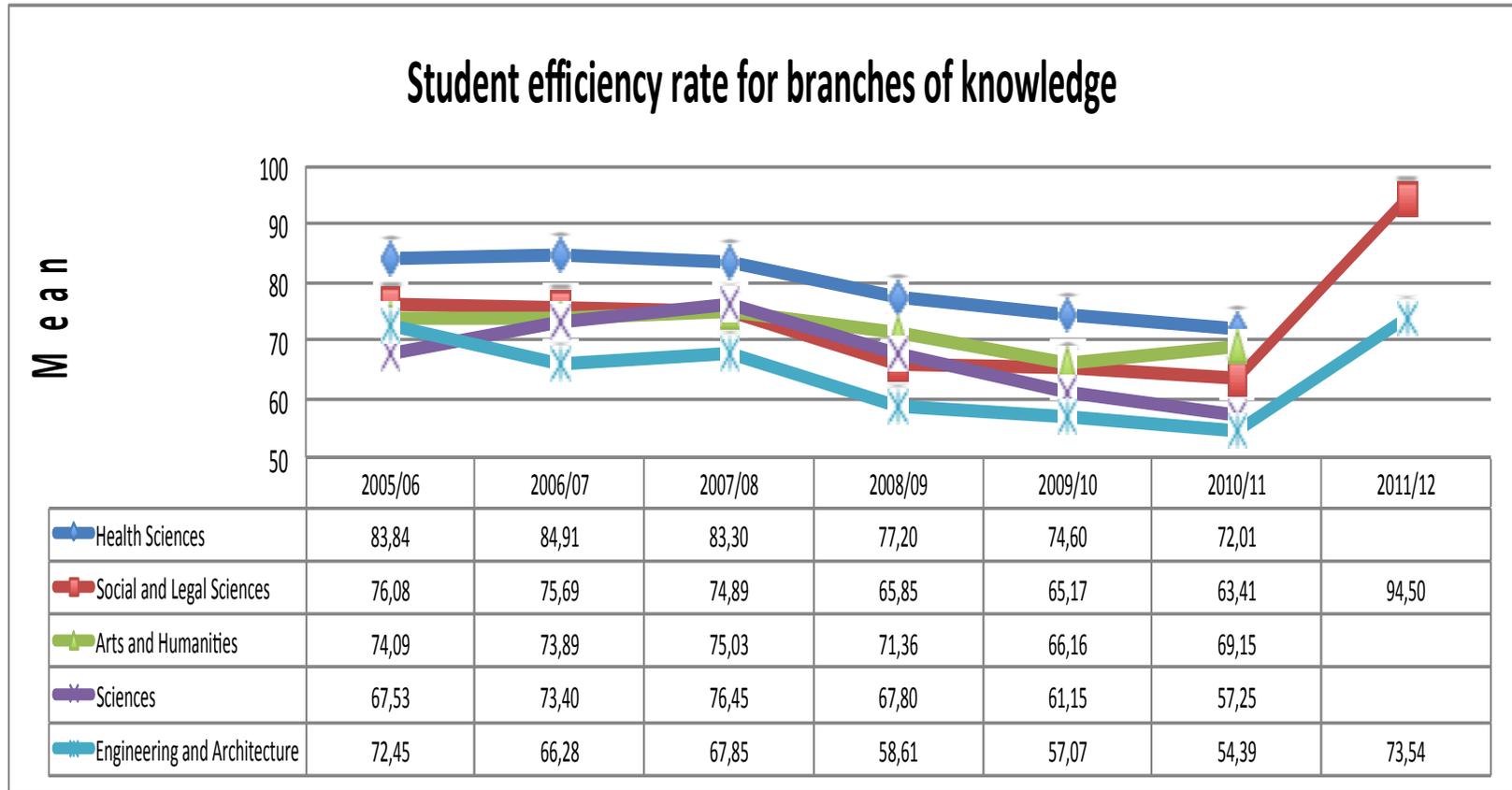


Figure 2. Means of student efficiency rates for five branches of knowledge.

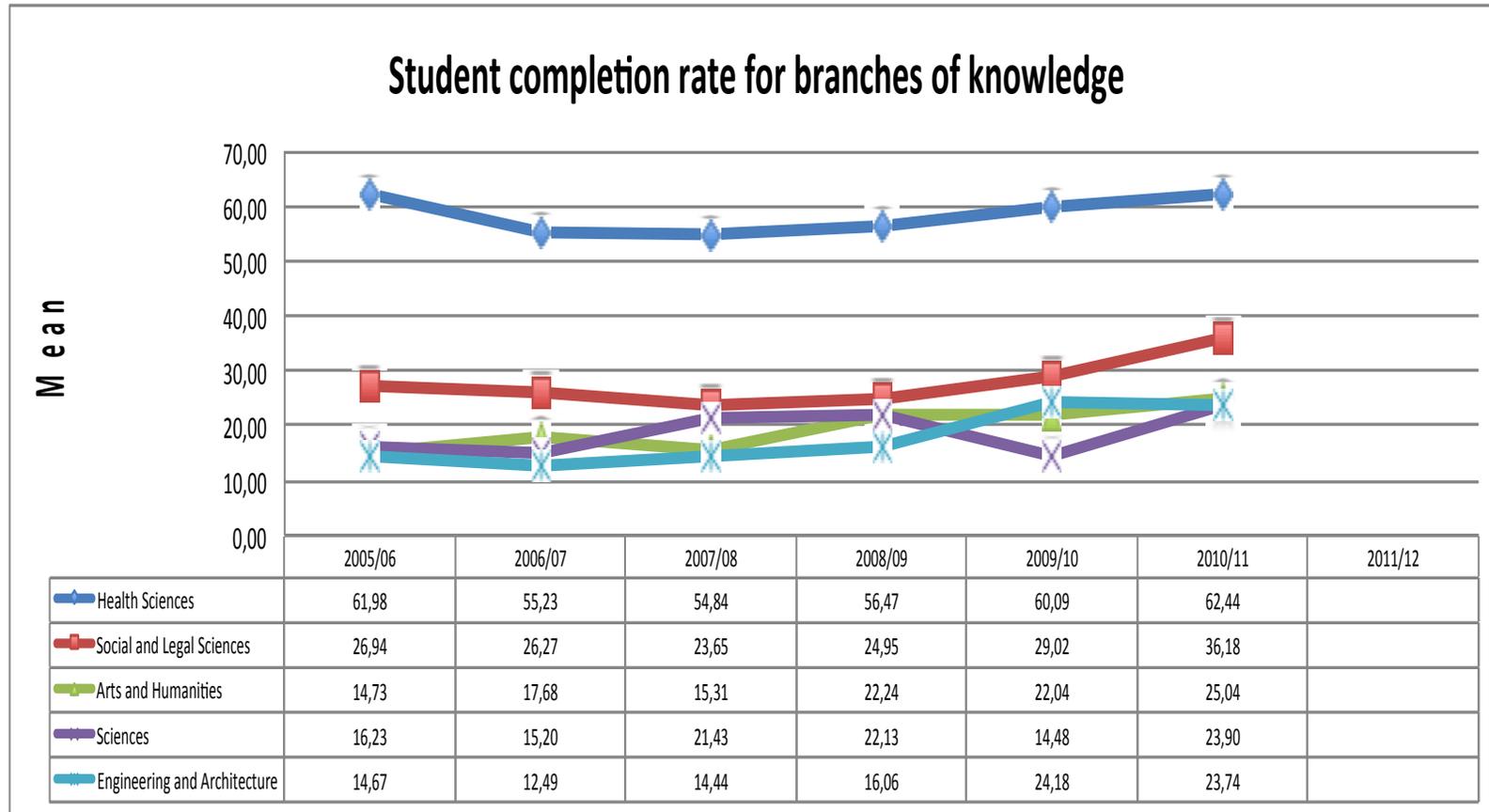


Figure 3. Means of student completion rates for five branches of knowledge.

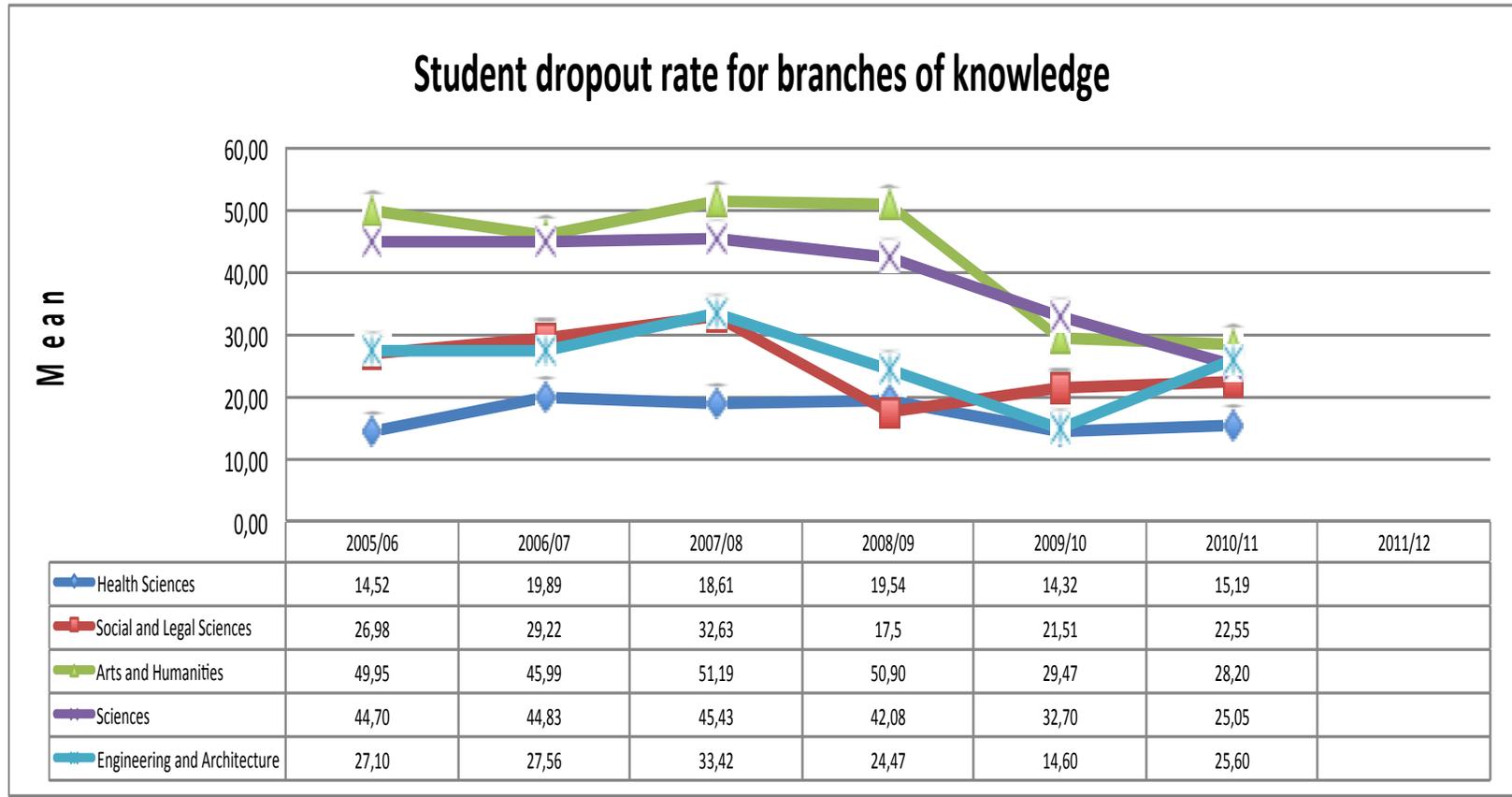


Figure 4. Means of student dropout rates for five branches of knowledge.

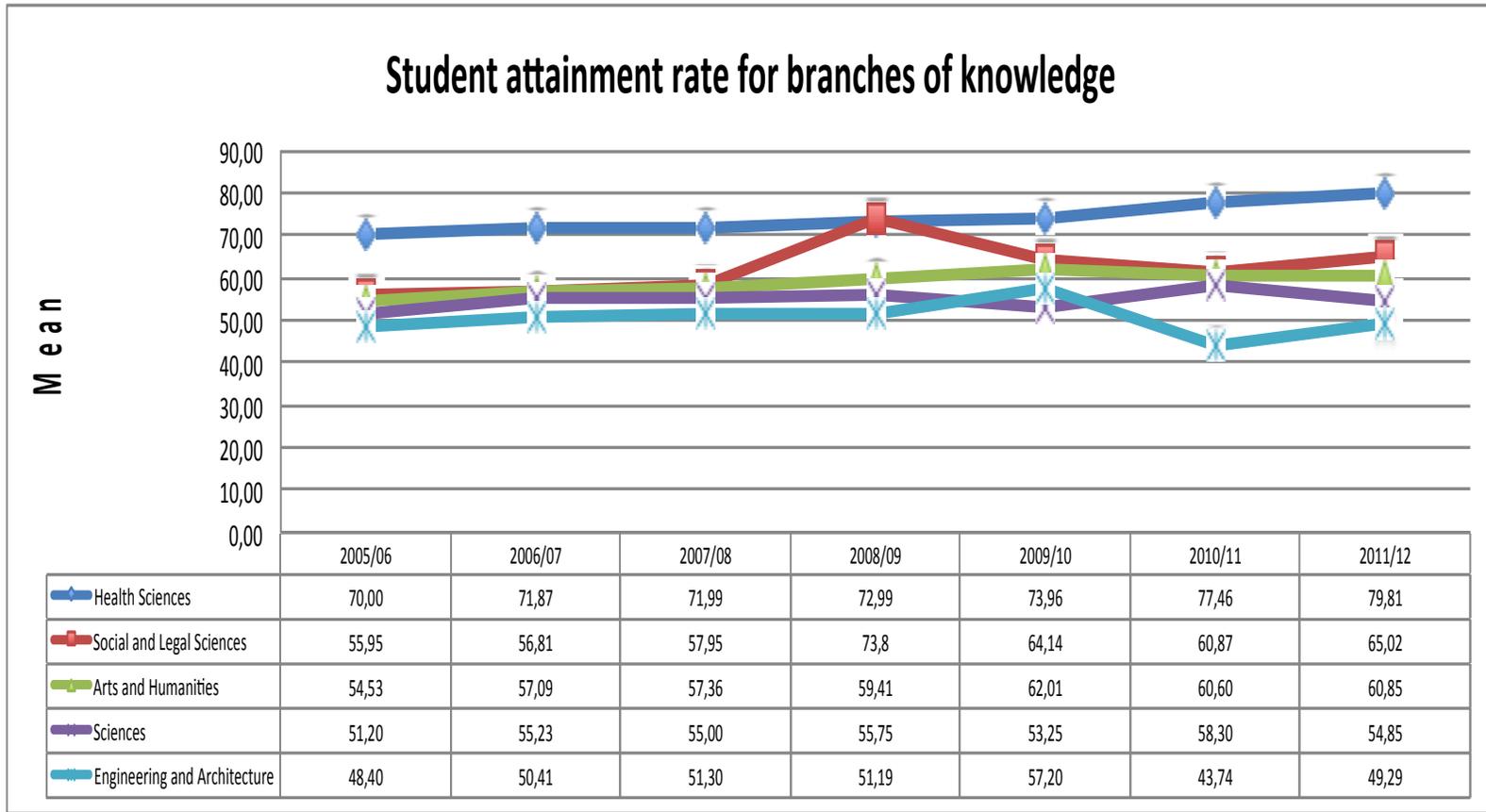


Figure 5. Means of student attainment rates for five branches of knowledge.

Second, the attrition rates in Engineering undergraduates continue to be an area of concern. This moderate “inefficiency” should be used to inform the redesign of curricular and business practicum, particularly the relationship of students’ entry characteristics and measures of academic integration to engineering educational outcomes (Marra, Tsai, Bogue, and Pytel 2015). The ULL community should explore other pathways for Engineering students to be successful and the branch of knowledge efficient.

Third, data from Figure 3 show that graduation rates across degrees ranged from just around the five-year Pharmacy (11,30%) to the four-year Nursing (100%) in the branch of knowledge of Health Sciences. Of great concern is the extremely low rate of completion for the population of the branch of knowledge Arts and Humanities, particularly in the Art History degree (8,10%), although students enrolled in this branch of knowledge were raising the completing rate in 2010-2011. Besides, Engineering and Architecture was increasing the percentage of degree holders, although the number of graduates is still small. If the ULL has to change the tendency to this branch of knowledge has to follow one of the two routes suggested by Morris (2012, 168): “Growing enrollments or more completions.”

Fourth, as advised by Donhardt (2013, 207), “first-year undergraduate attrition represents the greatest loss in sheer numbers from the entering class.” Unfortunately, data on student’s first-year academic performance of branches of knowledge are not available. Philosophy degree had the highest dropout rate (37,80%) in 2010-2011. Correspondingly, Arts and Humanities had the uppermost dropout percentage among all branches of knowledge (28,20% in 2010-2011). To reverse this dropout trend, we assume that the ULL needs to make a greater determination to detect the early failure and provide support to students who are at risk of withdrawing from classes. Also, we call for a deeper way of laying down philosophy courses with unambiguous concern on the aims of philosophy in social and educational domains.

Fifth, Health Sciences degrees displayed a continuous and ascending effort of attainment. In parallel with it, Social and Legal Sciences showed an improved average rate of almost ten points in six years, while Engineering and Architecture were improving only one point its average rate in the same period. The different degrees were Nursing that had the highest rate of attainment (89,30%) in 2011-2012 and on the other side of the coin Radio Electronics Engineering that had the lowest average rate (31,30%) at the same time. The struggle, therefore, to improve degree attainment and reduce the striking disproportions in rate average that lead to greater degree inequalities of all kinds should be taken place mainly within the ULL aims and policy. How did women attainment rates in the ULL compare with men rates? More young adult women than men have university degrees.

Sixth, the proposed improvement measures are aligned with the strategic lines of the ULL and the criteria on which the program quality assessments based its principles, according to the “Protocol for Re-accreditation of the Spanish Network of Agencies of Higher Education’s Quality Assurance.” Among other improvement measures, the CEG proposed the following: “Setting up specific access exams for each degree,” “Monitoring and reviewing teaching methods implemented in subjects with high failure, dropout and success rates,” “Reduce the number of students per group.”

Finally, seventh, it is possible for the ULL to define a structured improvement plan for learning and student achievement, such as the “First Year Experience Program.” It seems in line with Nadelson, Semmelroth, Martinez, Featherstone, Fuhriman, and Sell (2013) that revealed a mixture of influences of students’ expectations and decisions to attend the

University. Finally, other studies support improvement plans for learning and student achievement, and development models of shared leadership and peer involvement that are relevant and sensitive to contextual environments (Alegre de la Rosa, and Villar Angulo 2015).

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