THE PROBLEM OF UNIVERSITY DROPOUT

[El problema del abandono de los estudios universitarios]

by

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Abstract
This article focuses on the drop out of university studies, which is as high as 50% in some degree majors. We begin with the presentation and analyses of dropout rates found in several Spanish universities. After that, using the results of national and international studies as background, along with findings from our own investigation, we present a theoretical framework that explores: the definition of dropout, its causes, explanatory models and solutions. We conclude by presenting a critical perspective of university education regarding the social role of the institution, as well as the current processes of change, particularly in light of European convergence.

Keywords
Dropout, university; higher education; student retention

1. INTRODUCTION

Higher education in Spain began an important restructuring process several years ago that can be observed in the growing number of private universities, the adaptation of studies to business/managerial demands, the necessity to align with other members of the European Union, etc. These changes require the contemplation of institutional reforms that would adapt their objectives to these new social needs without losing sight of the system’s ultimate purpose, that is, its effectiveness, as translated in rates of student success. This governing principle of all educational institutions is being increasingly questioned at the university level. Compared to other educational institutions, the university is at present one of the organizations with the highest "index of drop out", or "index of failure", as indicated by the ratio of students who enrol to
students who graduate successfully. This is shown not only by the universities’ own statistical percentages of unfinished and abandoned studies (up to 50% in some degrees), but also in reports of various scientific studies, and in social/news medias.

A quick look at state and regional newspapers turned up an abundance of headlines echoing public opinion on this issue. These included: “The drop out of university studies in Spain is almost double the European average” (KUMON, March 2006); “Spanish students are at the back of the line in Europe” (ABC, May 2006); “Half of the students who leave their studies are foreigners” (Periódico de Córdoba, May 2006); “The drop out of classrooms at 17-years-old in Catalonia is alarming” (El Periódico de Cataluña, May 2006); “4,853 students left the university in the islands” (Canarias 7, August, 2004); “The rate of failure brings remedial courses into general use” (El Mundo, November 2003). Various documents of analysis and evaluation corroborate these headlines. According to the statistics of the Council of University Coordination (Spanish National Plan for the Evaluation of University Quality, PNECU) presented in December of 2002, 26% of university students either drop out or change their course of study. Data provided by the Organization for Cooperation and Economic Development (OECD) for the same year indicate that academic failure in Spain is above 50%, referring fundamentally to rates of drop out. Other data, provided by the Centre of Research, Documentation and Evaluation (CIDE) of the Ministry of Education and Science (MEC, 1994), place the dropout rates for Spanish university students between 30% and 50%. Finally, various European reports [i] from recent years place Spain in second to last place in rates of university success. According to this report, only 44% of Spanish students are able to conclude their studies, compared to 75% in Norway, Belgium and France, and 90% in Britain. In the month of May 2006, another report published by the European Commission (Comunidad Escolar), analysing results in five educational areas, revealed that 48.6% of the students between the ages of 18 and 24 abandon their studies prematurely.

This data allows us to verify that the drop out of studies is a recent and alarming phenomenon in Spanish universities. In fact, the "dropout rate" serves as a quality indicator in numerous models of evaluation of the university institution (MEC: Catalogue of indicators of the Spanish public university system), and as an indicator in the ranking of universities (Yorke, 1998). What is happening in our universities? Are the objectives of higher education in crisis; or is it the crisis of a society that does not accept the challenges nor reach the goals of the university of the new millennium? These and other questions have motivated us to use them as an axis of reflection in this debate. “Academic surrender” by university students has serious repercussions. Among them are the great social expense of each dropout, the added expense generated by students who take longer to finish their degree, and the cost made unprofitable when a student doesn't finish. In other words, these are questions of quality, of yield of social investments, and of Spain’s current placement far below the rest of Europe at a time in which we must converge and make comparisons with other countries.

Another problem of a similar nature is the additional number of years that students invest in obtaining their degree beyond that which is assigned in the curriculum. This circumstance is being examined carefully throughout the entire process of European convergence. In fact, one of the established objectives for this revision and adaptation of university degrees, is that the duration of the studies correspond closely to the number of terms assigned for each degree major.

There is no doubt that drop out as well as the prolongation of studies are disturbing problems because of their inherent social, institutional and personal repercussions. The analysis of the phenomenon is also complex,
2. ANALYSIS OF THE PROBLEM OF DROP OUT OF UNIVERSITY STUDIES

2.1. Defining the terms drop out and prolongation for the purpose of this study.

Drop out of studies or student desertion are terms that speakers of Castilian Spanish have adopted to designate a variety of situations identified in the student’s educational process with a common denominator, that is: detention or interruption of studies before concluding them. This category includes:

• involuntary drop out (for administrative non-fulfilment or violation of regulations);
• leaving the degree program to begin another in the same institution;
• leaving the degree program to begin another in another institution;
• leaving one university to go to another to complete initiated studies;
• giving up university studies to begin training itineraries outside of the university, or to join the workforce;
• interrupting studies with the intention of returning to them in the future;
• other possibilities.

The prolongation of studies, however, is more closely linked to the traditional concept of academic failure that De Miguel and Arias (1999) define as: the difference between the time invested and the time theoretically predicted to finish one’s studies. This is one more of the many indicators, among which is also drop out, that have been defined to identify academic failure at university. Likewise, Latiesa (1992) designates two sources of failure: one, in a broad sense, referring to the rates of success, delay and drop out of studies (similar to the concept of De Miguel and Arias); and another in a strict sense, which refers to the students’ assessment (grades/marks) in the various subjects within their degree.

The situations identified are diverse, and the lack of clarity of terms frequently results in confusion and contradiction. University statistics usually identify a "case" of drop out as a student who has begun studies and, before concluding them, does not enrol in the same areas for two consecutive courses. Within this broad category, we find situations that cannot be classified as drop out of initial studies, and much less of university instruction, such as: students who complete their studies in another community or extra-community institution (an initiative currently highly motivated by their own university: the programs SENECA, ERASMUS, etc.); or students who take a break in their instructional itinerary in order to enrich it with other educational or work experiences, a common practice of youths from other areas of Europe. (The average age of Spanish university students is the lowest in Europe. Pérez Díaz and Rodríguez, 2001). Concretely, in a recent study carried out by our research team (González et al., 2005; Cabrera et al., 2005), of the total registered students at the University of La Laguna in academic courses 1998/99 (undergraduate degree) and 1999/00 (associates degree), we found that 28% abandoned their initial studies, and of these, 32.7% began another degree in the same university, and 13.2% began other studies in another university; the remaining 54.1% abandoned the university indefinitely. In a similar study based on three degree majors (Cabrera et al., 2006), we found that of those who had abandoned their studies, 66% had enrolled in another degree program in the same university (ULL- University of La Laguna) and 4.2% had gone to another university; 30% had dropped out of university. Although it is certain that these figures are
alarming, they allow the gross percentages of drop out to decrease by half. The data reflects a clear intention on the part of the student body to complete university studies, and therefore, we are not talking about university desertion, but about vocational or academic failure, when the change in degree major is provoked by a lack of success reflected by poor grades. From this perspective, the meaning of each situation of drop out can vary based on who defines or evaluates it.

For the university, however, any situation that impels a student to interrupt his/her studies must be viewed as failure because the educational objectives of the program imparted have not been achieved. The student, however, may view the interruption as success, for example, to improve a situation of dissatisfaction, such as not liking the degree major. For that reason, the definition of drop out is closely linked to the goals or perspectives that each person has when initiating a course of study. These goals don't necessarily have to coincide with obtaining a degree, but could be linked instead to the acquisition of credits necessary to obtain certifications having professional or other ends. These circumstances will be more frequent after the application of the Model of European Convergence, where the number of earned credits gains relevance (through various ways), and not the attainment of a certain degree. In this sense, there exists the paradox that a student can be in third-cycle studies without having an undergraduate or graduate degree.

But the percentage of students who abandon their chosen studies is continually growing. There exists a general consent that the high rates of drop out are indicative of low quality, and is therefore believed that the chosen university did not provide the necessary means for those who attempted but did not finish their expected degree. Certain measures must be applied before matriculation so that students can make vocational decisions in accordance with their personal profiles (previous formation, appropriate aptitudes for the subjects that they study, economic possibilities, vocational suitability of the selected studies, motivation, etc.). Measures must also be applied throughout the development of the course of study, adjusting the instructional strategies to the needs of the student (the suitability of subjects imparted to the number of credit-hours studied; materials and technologies placed within reach of the student; psycho-pedagogic support offered by the centre; etc.)

In the following section we will pause to analyse what personal, family, institutional and social elements have been identified as participating variables in the educational process causing a student to abandon studies. The grouping of drop out into categories would permit us to define different types of drop out with more accuracy. But given the shortage of empiric data on related variables, such as follow-up studies on students who abandon undergraduate degrees, we will refer to drop out in the broadest sense, that is: when a student begins a degree program and abandons it before obtaining the minimum requirements needed to obtain a certification that guarantees their training in the discipline. With the term “prolongation”, we will refer to situations in which the student invests more time working toward obtaining a degree than that which was foreseen in the original plan of studies.

2.2. Prevalence of drop out: statistics and reports from Spain

The oldest study on university desertion known in Spain is that of Rubio García-Mina (1968), which analyses a group from the superior technical schools in Madrid, from 1960 to 1966. From this follow other detailed studies, such as that of Benedito Antoli and Vicens et al. (1970), which examines the group that began their studies in 1968 at the University of Barcelona. Later, the works of professor Latiesa (1986, 1992), Saldaña (1986), Thrown (1986, 1990) González,
Moltó and Oroval (1988), and Salvador and García Valcárcel (1989), dealing primarily with engineering students, along with various reports from MEC, which begin to establish the theoretical basis used to analyse the phenomenon in the Spanish context.

However, these studies were preliminary approaches to an incipient phenomenon, coinciding with certain institutional reforms and social changes, such as: the access of a larger percentage of students to university schooling; the implementation of the Law for the General Ordering of the Educational System (LOGSE, 1990); the reformation of University Studies Plans; new demands from higher education (new methodologies, new technologies, and practical training in companies); etc. The absence of a connection between compulsory education laws and university study plans, plus the lack of a strong link between these and the business world, joined with other institutional factors that were not well enough adjusted to the characteristics of the new student. These conditions resulted in the large increase in the number of delays and dropouts, mainly in technical degrees, which required the implantation of introductory courses by some universities. Overcrowding and the high rate of delay resulted in greater restrictions on access, and therefore in a saturation of humanities and social sciences majors. The problem has yet to be resolved, as is reflected in the continual annual increase in the percentages of drop out in all universities, generally within all degrees, although the differences in rates of drop out between some degrees continue to be significant.

At the moment, virtually all institutional and social sectors are discussing the problem of university drop out. The changing of degree majors, the drop out of studies to begin other instructive itineraries, and the investment of many more years to finish a degree have been normalized as a characteristic of higher education by society at large. Paradoxically, this last aspect is seen by some as a sign of social prestige (more time means more difficulty; more difficulty means the studies have greater social importance), and no social sector is questioning that most university degrees require a dedication of 100% more time than was predicted. On the other hand, there are many who believe that we must refrain from saturating the labour force, and therefore limit from within the university by adding difficulties (from which come common pejorative expressions, such as “the professor from hell”).

Are these half-truths? Are they unfounded lies? The reality is complex and there is a lack of inter-degree and inter-university comparative studies, and of pre- and post-enrolment monitoring to indicate: what the students’ vocational decisions are based on; what the causes are, by degree, of the high rates of drop out and prolongation of studies; and what a student does after abandoning a degree. At present, the most ample report available is one issued by the Conference of Deans of Spanish Universities (CRUE) (see table 1), where they give the percentages of drop out by general area of study from a large number of Spanish universities in the same year. However, we must be cautious with the interpretation, given that the type of drop out they are referring to is not specified. Normally, this type of statistics only takes into account drop out within the degree major. Research studies show how a high percentage of students abandons a degree major, but then continues studying in the same university in another degree major.
Table 1. Rate of drop out-Course 2002/03. Report of CRUE (Hernández Armenteros, 2004)

<table>
<thead>
<tr>
<th>UNIVERSITY</th>
<th>HUMAN.</th>
<th>SOCIAL.</th>
<th>EXPERI.</th>
<th>HEALTH</th>
<th>TECHNIC.</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALCALA DE HENARES (MADRID)</td>
<td>17</td>
<td>7</td>
<td>26</td>
<td>14</td>
<td>15</td>
<td>21%</td>
</tr>
<tr>
<td>ALICANTE</td>
<td>12'12</td>
<td>10'76</td>
<td>10'57</td>
<td>3'64</td>
<td>9'66</td>
<td>10'41%</td>
</tr>
<tr>
<td>ALMERIA</td>
<td>20</td>
<td>8</td>
<td>5</td>
<td>4</td>
<td>7</td>
<td>8%</td>
</tr>
<tr>
<td>AUT. BARCELONA</td>
<td>30'36</td>
<td>18'66</td>
<td>28'32</td>
<td>15'56</td>
<td>30'95</td>
<td>22'71%</td>
</tr>
<tr>
<td>AUT. MADRID</td>
<td>7</td>
<td>4</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>BARCELONA</td>
<td>46</td>
<td>30</td>
<td>39</td>
<td>14</td>
<td>31</td>
<td>33%</td>
</tr>
<tr>
<td>BURGOS</td>
<td>19</td>
<td>17</td>
<td>13</td>
<td>5</td>
<td>15</td>
<td>15%</td>
</tr>
<tr>
<td>CÁDIZ</td>
<td>4</td>
<td>12</td>
<td>3</td>
<td>2</td>
<td>17</td>
<td>8%</td>
</tr>
<tr>
<td>CARLOS III MADRID</td>
<td>29'81</td>
<td>35'57</td>
<td>28'99</td>
<td>42'98</td>
<td>36'83%</td>
<td></td>
</tr>
<tr>
<td>CASTILLA-MANCHA</td>
<td>5'10</td>
<td>4'90</td>
<td>6'60</td>
<td>0'50</td>
<td>9'30</td>
<td>5'79%</td>
</tr>
<tr>
<td>DE SEVILLA</td>
<td>13</td>
<td>15</td>
<td>13</td>
<td>10</td>
<td>16</td>
<td>14%</td>
</tr>
<tr>
<td>EXTREMADURA</td>
<td>15</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>GIRONA</td>
<td>11'12</td>
<td>10'77</td>
<td>11'12</td>
<td>3'22</td>
<td>8'98</td>
<td>10'25%</td>
</tr>
<tr>
<td>HUELVA</td>
<td>45</td>
<td>22</td>
<td>18</td>
<td>33</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>JAÉN</td>
<td>21</td>
<td>26</td>
<td>24</td>
<td>27</td>
<td>27</td>
<td>25%</td>
</tr>
<tr>
<td>JAUMEI CASTELLON</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>7</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>LA CORUÑA</td>
<td>19</td>
<td>15</td>
<td>21</td>
<td>4</td>
<td>12</td>
<td>14%</td>
</tr>
<tr>
<td>LAS PALMAS DE GRAN CANARIAS</td>
<td>22'40</td>
<td>16'30</td>
<td>11'90</td>
<td>3'10</td>
<td>18'10</td>
<td>16'30%</td>
</tr>
<tr>
<td>LEÓN</td>
<td>21</td>
<td>13</td>
<td>9</td>
<td>6</td>
<td>12</td>
<td>24%</td>
</tr>
<tr>
<td>PAIS DE OLAVIDE</td>
<td>28</td>
<td>25</td>
<td>6</td>
<td>3</td>
<td>27</td>
<td>27%</td>
</tr>
<tr>
<td>POLTCA VALENCIA</td>
<td>27</td>
<td>22</td>
<td>50</td>
<td>11</td>
<td>27</td>
<td>27%</td>
</tr>
<tr>
<td>POMPEU FABRA</td>
<td>26</td>
<td>21</td>
<td>11</td>
<td>32</td>
<td>22%</td>
<td></td>
</tr>
<tr>
<td>PTCA CARTAGENA</td>
<td>5'90</td>
<td>7'50</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUBL. NAVARRA</td>
<td>7'78</td>
<td>5'92</td>
<td>6'68%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SALAMANCA</td>
<td>16</td>
<td>15</td>
<td>16</td>
<td>11</td>
<td>15</td>
<td>15%</td>
</tr>
<tr>
<td>SANTIAGO DE COMPOSTELA</td>
<td>42'42</td>
<td>22'65</td>
<td>30'75</td>
<td>12'85</td>
<td>18'31</td>
<td>26'69%</td>
</tr>
<tr>
<td>VALENCIA</td>
<td>15'26</td>
<td>8'17</td>
<td>5'73</td>
<td>5'74</td>
<td>5'77</td>
<td>8'59%</td>
</tr>
<tr>
<td>VALLADOLID</td>
<td>14</td>
<td>18</td>
<td>8</td>
<td>5</td>
<td>18</td>
<td>16%</td>
</tr>
<tr>
<td>VIGO</td>
<td>8'10</td>
<td>7'20</td>
<td>4'90</td>
<td>3'90</td>
<td>7'40</td>
<td>7%</td>
</tr>
</tbody>
</table>

Together with this statistical report, we rely on some more recent studies (Table 2) such as: Escandell and Marrero (1999), dealing with students of U. Las Palmas de Gran Canaria of eight promotions (1989 at 1997); Cabrera et al. (2005), of an entire promotion of the University of La Laguna; Albert and Toharia (2000), on students of economics; Report from the Office of Planning and Quality, of the Universidad Autónoma of Barcelona (2005); Rodríguez Marín et al. (2004) analysis of data from the universities Miguel Hernández of Elche, Murcia and Jaén; Pérez Boullosa (1994) of the University of Valencia; Vallecillos and Pérez (1996) on mathematics students in the University of Granada; De Miguel and Arias (1999), on a group from the University of Oviedo, among others.
Table 2. Rates of drop out from research reports by Areas of Knowledge

<table>
<thead>
<tr>
<th>UNIVERSIDAD</th>
<th>HUMAN</th>
<th>SOCIAL</th>
<th>EXPER</th>
<th>HEALTH</th>
<th>TECHCN.</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>U. A. BARCELONA</td>
<td>31'5%</td>
<td>19'8%</td>
<td>29'5%</td>
<td>14'2%</td>
<td>29'9%</td>
<td>23'3%</td>
</tr>
<tr>
<td>(O.Plan y Qualitat, 2005)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. ALMERIA</td>
<td>33'8%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Rodríguez Marín, 2004)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. DE OVIEDO</td>
<td>35%</td>
<td>47%</td>
<td>11%</td>
<td>50'5%</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>(De Miguel y Arias, 1999)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. DE VALENCIA</td>
<td>22%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Pérez Boulooa, 1994)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. ESPAÑOLA</td>
<td>46'36</td>
<td>31'24</td>
<td>37'32</td>
<td>21'20</td>
<td>40'35</td>
<td>35'2%</td>
</tr>
<tr>
<td>(Consejo Univ. Luxan, 1998)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. LA LAGUNA</td>
<td>15'9%</td>
<td>50'7%</td>
<td>10'9%</td>
<td>11'1%</td>
<td>11'3%</td>
<td>28'7%</td>
</tr>
<tr>
<td>(Cabrera y col. 2005)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. LAS PALMAS</td>
<td>18'5%</td>
<td>37%</td>
<td>50'5%</td>
<td>4'2%</td>
<td>40'25%</td>
<td>9'23%</td>
</tr>
<tr>
<td>(Escandell y M, 1999)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. MIGUEL HDEZ</td>
<td>18'4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Rodríguez Marín, 2004)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. MURCIA</td>
<td>26'9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The averages of drop out are located around 26.39%. In some cases there is no correlation between official statistics (Report of CRUE) and the results of research studies, as in the case of the University of Almeria, which alerts us once again to the caution that must be taken when analysing certain statistics. Also, this type of data must be interpreted together with the access procedures and the characteristics of the given programs -- information which is not available. An analysis of dropout must necessarily take into account: the time the drop out occurs (beginning, middle or near-end of course); the characteristics of the degree that is abandoned (level of requirements); and the decisions that are made after leaving. These might include: a) beginning other studies in the same university, b) beginning other or the same studies in another university, or c) abandoning university education altogether. Let us analyse a little more carefully these last three elements.

a) When does drop out of studies occur? Without a doubt, the highest percentages of drop out represent first-year students. In our studies (González et al., 2005; Cabrera et al., 2006), 14.7% of the students in the studied group had previously begun another degree, and therefore had previous experience of drop out of university studies; of those who abandoned, 17.6% did so between the first and second year of studies (60.5% of the cases of drop out). In general, statistics cite an average of 26% of the cases of drop out as occurring in the first year at university. Some specific studies carried out in Spain place the figures between 15% and 20% (De Miguel and Arias, 1999; Office of Planning and Quality of the University Autónoma de Barcelona, 2005). Various statistics compiled in reports issued by the framework National Evaluation Plan, place average percentages at 16% among first-year students.

In a study carried out at the University of Girona, Corominas (2001) concludes that drop out takes place in the first year due primarily to inadequate academic choices, low academic performance, not having passed the minimum credits, un-motivating subjects, and little effort and commitment to studies. All of these variables are usually related to the restricted access to a large number of degrees. Feldman (2005), in the United States, also verified that one third of first-year students abandon their studies. Nevertheless, accord-
ing to a report by the Office of Analysis and Planning of the University of La Laguna (Gabinete de Análisis y Planificación de la Universidad de La Laguna) (Muñoz, 2005), there is no correlation between the degree chosen as a first option and the rate of academic performance. Our research group confirmed this fact again in another study of vocational behaviours of university students (Bethencourt et al., 2005). However, our interpretation is that the student who has a low grade on the entrance exam will automatically exclude him/herself beforehand from those degrees in which it is perceived impossible to obtain placement. Another explanation would be that the student who has a strong vocation struggles to gain admittance to the desired degree program, which explains why the number of dropouts is inferior in the more closed systems (e.g. Health Sciences). According to Latiesa (1992), it is not coincidental that the rates of drop out are lower in countries with more selective systems, and higher in those with a more open system.

b) Which degrees are more often abandoned? According to the statistical data (Tables 1 and 2), the branches of knowledge where higher indexes of desertion are registered are the humanities, followed by technical training and experimental sciences. These data coincide with several reports from the Consejo de Universidades ( Universities Council) on Performance Indicators that reveal the following: humanities degree programs present the lowest rate of prolongation (15%), but the highest in drop out (43%); engineering registers the highest rate of prolongation and also of drop out (40%); health sciences present the lowest rates of prolongation and drop out. Some research reports, such as the one prepared by the Universidad Miguel Hernández on rates of academic success and failure [ii], reveal that health science and humanities degree programs have the highest success rates and engineering the lowest. Without a doubt, this constant demands that each degree be treated specifically, and likewise implies a need to identify the causes by degree program.

At the moment we do not have differential explanatory data, but nevertheless, certain evidence allows us to approach an explanation. All the results conclude in registering high rates of drop out in the humanities and technical fields; technical degree programs are associated with high levels of academic failure, but this is not the case in the humanities. In fact, the average number of years spent in technical studies in Spain is more than double the number predicted, while the humanities degrees take approximately one more year to complete. In the scientific and technical degree programs, and especially in Superior Technical Engineering, the incidence of drop out is concentrated in the first course, while in humanities it is distributed more throughout the entire course of study. Without a doubt, this confirms the hypothesis that the high level of difficulty of certain degree majors, or the low level of preparation of a newly entering student, set the stage for drop out. These are circumstances that universities must take seriously by: 1) modifying the selection processes, or the educational programs and teaching processes; or, 2) by either adapting the teaching to the characteristics of the student, or by selecting students with capacities adequate to the current teaching practices.

In the degree majors of Humanities, drop out not only takes place in more diverse ways (at any moment, with temporary interruptions, etc.), but it is also less closely associated with academic failure. The data from qualitative studies with smaller samples identify certain constants: less restricted access (lower cut-off limits on entrance exams, or unlimited access) encourages the enrolment of students who fail the more difficult degrees or who have no possibilities of being admitted into other degree programs [iii]; the direct consequence of educational overcrowding is a very saturated labour market. If we unite all these indicators we have a process that begins with inadequate vocational choices, continues by developing a
bleak outlook on future professional possibilities, and finally ends in a strong demotivation that causes the drop out of studies, or the deceleration of studies throughout life.

c) Where do students go after dropping out of their studies? The third element of this debate questions what students do after abandoning their degree, and this necessitates individualized follow-up studies. The references we have available (Corominas, 2001; Cabrera et al., 2006) indicate that approximately 60% begin other university studies in the same or another university, but one cannot forget that they take with them an experience of failure. But a large number of students are expelled from the university system. If we keep in mind that the population of the public university system in Spain constitutes 1,303,000 students, and that the average of drop out is approximately 25% (325,750 students), we are therefore faced every year with 130,300 youths and their families frustrated in their intents to obtain a higher education. Regardless of the fact that the same causes may give rise to different situations, the consequences for the student and for society are not the same (nor are they for the university), and the responsibilities for them should be shared more equally.

2.3. Comparative analysis with other countries

This situation, although with distinguishing nuances, is similar on other areas of the globe. According to UNESCO (2004), through the International Association of Universities (IAU), this reality is observed in 180 countries. In the rest of Europe, the phenomenon of university drop out began much earlier than in Spain, reaching figures of up to 45% in Austria. In previous years, this has also occurred in other industrialized nations such as Japan and the United States. According to Reissert and Schnitzer (1986), who analysed the situation in Germany, it was the incorporation of all social classes in a university that caused overcrowding in many degree programs, and, as a consequence, the only job opportunities available after graduation were in administration. This situation discouraged students from concluding their studies, knowing that they would not be able to work professionally, thereby losing economic and social recognition. Reissert and Schnitzer (1986) later confirmed that many of the students who dropped out encountered more difficulties finding work than those with degrees, and therefore returned to the university. According to the report by American College Testing (1999), every year the percentage of students who abandon their studies or change universities increases -- results obtained through analysing the data of evaluations of those enrolled in College. In 1998, the rate almost reached 27% (28.6% in public universities and 22.8% in private); while the rate of students who finished their bachelor's degree (undergraduate degree) in less than five years decreased to around 52% (43% public universities and 56.3% private) (Corominas, 2001).

However, while the figures in the rest of Europe seem to continually decrease, in Spain they increase every year. All of the reports and balance-sheets on educational outcomes have us trailing behind the rest of Europe, mainly in performance rates, but also in rates of drop out.

According to recent declarations by Francisco Michavila, the director of the UNESCO Professorship of Management and University Politics at Polytechnic University of Madrid (UPM), there is a 30% rate of drop out of studies in Spanish universities, compared to that of 16% in the other 15 countries of the European Union. Some research reports present other perspectives. Latiesa (1992), after a comparative analysis, concluded that the rates of drop out in Spain are similar to those of other countries (between 30% and 50%), such as France, Austria, and the United Status. They are somewhat lower in Germany (20%-25%), Switzerland (7%-30%), Finland (10%) and the Netherlands (20%-30%). Some percentages are not very kind to the university
system. Different studies developed in Central Europe and United States (Albert and Toharia, 2000; Orazem, 2000; Callejo, 2001; Escandell et al. 2002; Last and Fulbrook, 2003; Ryan and Glenn, 2003; Orfield, 2004; Feldman, 2005; among others), give evidence of similar figures, but they were all carried out on specific populations (ethnic minorities, the handicapped, highly competitive athletes, education-at-a-distance programs, etc.), which justifies a higher rate of desertion. On the other hand, the evolution of the percentage of the Spanish population, aged 25 to 64, with university studies (25%) reaches the average of the OECD countries (24%). Although it is true that this percentage is only superior to those of Portugal (11%), Greece (18%), France (23%) and Germany (24%).

In the different countries analysed, drop out appears to be associated with an increase in the availability of university access to all citizens. This objective responded to the need to increase social capital through higher education, making it necessary to open the university to all social levels. The problem, according to Zabalza (2002), arose from not foreseeing that the enrolment of heterogeneous groups with varied needs (other expectations and social/labour motivations, other capacities, the incorporation of women, adults that return to studies, etc.) required that university institutions be provided with the necessary infrastructures to answer to these people. Hence, the tendency is to associate drop out with low resources and a lack of quality teaching. However, in Jacques Attali’s report (Attali, 2000), the quality of French education is praised, with an increased enrolment in higher education, but they recognize that there is a 34% rate of dropout in the first year, and 40% throughout the duration of studies. The same report attributes a considerably inferior quality to the United Kingdom’s system, a country in which many more Europeans study than in France (Pérez-Díaz and Rodriguez, 2001).

What is very clear is that we cannot compare, using the same criteria, disparate university systems with diverse teaching models, where private education acquires different support, and when the expenditures in higher education are dissimilar. These circumstances, together with forms of teaching and student experiences, will vary among centres, universities and countries, in spite of recent developments in international criteria throughout the ambit of the most developed countries (UNESCO, OECD, or EUROSTAT of European Union).

For this reason, comparisons with Central and South America are useless. In Argentina, statistics from the 1970s and 80s show percentages of drop out as high as 84% in some degrees (Sposetti and Echeverría, 2005). In El Salvador, degrees like chemistry and mathematics exceeded 50%. In Paraguay, where the increase of students accepted into higher education in the last 3 decades is considerable, they register similar percentages, despite the fact that only 9% of the university-age population gains admittance (Galeano, 2001). In all the Latin American countries, the causes are for the most part economic (38%); dropping to 31% for performance difficulties. In Mexico, Díaz de Cossio (1998) completed a study in which he found percentages of 25% in the first semester, reaching up to 46% toward the end of the period of studies.

2.4. Analysis of Spain in the European Framework of Higher Education

At this time, one cannot analyse any aspect of higher education without contemplating the guidelines for the Process of European Convergence in which we are participating. Hence, we cannot deny that the current rates of drop out appear as an obstacle in the struggle for comparison, given that one of the five fundamental educational areas for the European Union is the reduction of early school drop out, including higher education. Spain, with a percentage of academic delay at 30.8%, is one of the European countries.
where more students take longer to finish studies, preceded only by Portugal (38.6%), and Malta (41.2%). The European Union has proposed to reduce the rates of drop out to 10% by 2010; in other words, according to the report of the European Commission (May of 2006), to reduce to 2 million students the six million who currently abandon studies in Spain. Since the average number of students entering annually into Spanish university is 200,000, a reduction of 20% would constitute 6,000 potential dropouts that would have to remain in their studies in order to reach the European objective, and this is not attained by new study plans alone.

These global political and economic decisions then require the implication of the respective governments; not always an easy task. And so, we proceed to ask ourselves what plans the Ministry of Education and Science have in mind to reduce drop out: give even greater power to the student? Upon entrance, the student occupies centre stage in the educational system, transforming into the main character, where he/she should adopt an active and committed role in his/her own learning process. It seems a good place to start, but do students have the necessary capacities to construct meanings and to negotiate their own learning process? If the answer is negative, what are the universities going to do, and more concretely, what will the professors do to strengthen this autonomous learning? Are university teachers prepared to assume this new role? We have all witnessed the failure in the installation of these constructivist methodologies in LOGSE, for being unaccompanied by a "sensitisation" and previous training of the faculty, and the minimum infrastructure required. In the university’s case, would the desire to teach disappear with an overloading of our curricula with basic secondary-education skills when the student doesn't come equipped with them?

On a second level, the agreement of Bologna determines the organization of degrees by majors in three or four years, presenting them as pertinent degrees for the job market, and guaranteeing an appropriate level of qualification. How is this level measured? Will the answer have educational ends or be more likely to respond to the economic and social model that Europe proposes to confront economic demands? Without a doubt, the conversion of a degree into a basic technical training adequate for a position of employment would, in itself, lead to a slow down in university desertion [iv]. But we must also keep in mind that up-to-date specialized scientific training would have to be moved into graduate degree programs, and thus, we find ourselves returning to an elite higher education dedicated to those with more social opportunities and greater economic possibilities. Almost without realizing, we are changing the role of universities. Traditionally, the European university has maintained the focus of its activities on science and research, and its application and innovation were consequences of this. We face two antagonistic positions now: do we defend the scientific character of the university, or do we opt for a university in the service of economic and managerial development of capital?

These are some of the arms with which universities must compete, and to a much lesser extent with parameters of the development of knowledge. Proof of this is the ever increasing trend of student exodus in both private and public universities, above all from those that have agreements with private companies and can offer rapid job placement [v]. However, private universities do not give out information on the levels of success/failure of their students, nor how they interpret them. Much of the data is unknown that would allow us to make a comparative analysis based on the government’s criteria of quality. Prudence is required in the interpretation of information provided by the media, and it is cause for reflection that in the evaluations of Spanish universities carried out over the past several years by the newspaper El Mundo, only seven of the eighteen private institutions of higher education that exist in Spain figure
in the ranking used for the evaluation. After subjecting the public universities to the same evaluation (with the same indicators), it was found that of 48 schools, 32 reached this ranking, and they appear to be the best in teaching the 50 degree majors that students demand the most. So, one would have to look for other explanations for the increasing tendency of students to choose a private university over a public university. On the other hand, ascertaining the true causes of drop out becomes a necessity, because, for example, in the El Mundo report, Madrid and Catalan universities reach the highest ranking, but the Catalan universities also generate higher indexes of drop out. It seems that the problem not only resides in the institution, but in the vocational decisions and capacities of the student as well.

Another of the goals stated in the Declarations of Bologna is to secure the transfer and recognition of qualifications. The first requires that Spain create similar conditions to those of the European Union. When comparing Spain’s investment in innovation, we find that we are trailing behind, as shown by the report of European Innovation Scoreboard (2005), where Spain is labelled, together with Poland and Malta, as "lagging behind with a very basic development", as compared to Sweden, Finland and Germany, which are designated as "leading countries". The investment in innovation materials in Spain is very low, and is an indicator of what has happened to investment in education. In spite of this, efforts are being focused on designing plans for common studies, ignoring the fact that the attainment of some common educational goals requires many more elements, and therefore an increased financial investment in order to create the conditions necessary for their introduction.

3. EVALUATION OF THE PROBLEM

In this section, it is necessary to differentiate between the theories herein that have attempted, conceptually, to offer an explanation for the problem of university drop out, and the empirical data derived from a great many research projects that demonstrate the multi-causality and multi-dimensionality of a phenomenon made up of diverse factors and perspectives. Therefore, we will first make a brief description of the explanatory models, and later, briefly present the entire group of variables that have been identified in the various research projects.

3.1. Theoretical explanatory models

When evaluating academic drop out in higher education, different models and explanatory theories have been proposed, which we group into four main foci: the adaptation model, the structural model, the economic model, and the psycho-pedagogic model.

a) The adaptation model

The model of adaptation has been developed to a greater extent and has been used as a reference in a large number of studies and investigations. According to this model, drop out takes place due to insufficient student adaptation and integration in the school and social atmosphere of university education. Based on Drukheim’s concept of anomia (Girola, 2005), it is used to describe the lack of an individual’s integration into the context (social, economic, cultural or organizational). Within this model of adaptation it is necessary to spotlight the contributions of Vincent Tinto’s Theory of Persistence, which constitutes a basic reference for analysing the processes of positive integration of students into the context of university education, and has been considered the most important when explaining drop out.

Tinto’s theory (1975, 1989, 1993) explains the process of persistence in higher education as a function of the level of adjustment between the student and the institution, acquired through academic and social experiences (integration). Tinto (1987) suggests that good integration is one of the most important fac-
tors for persistence, and that this integration depends on: experiences during the duration of university studies, experiences previous to university access, and individual characteristics; factors that are all, one must acknowledge, susceptible to politics and university practices. Later studies (Pascarella and Terenzini, 1991) confirmed the impact of academic integration on persistence; consequently, persistence has often been seen as a measure of the level of student integration.

Tinto evaluated the degree of academic integration by grades/marks, and the social integration by the level of development and frequency of positive interactions with peers and faculty, as well as by the degree of participation in extra-curricular activities. With this data he discovered that integration along those two dimensions produced in the student a very strong commitment to the institution, thereby increasing persistence. For this reason, he argued that insufficient interactions with peers and professors, and differences between predominant values of the other students, generated a high risk of drop out; that is, students who feel like they do not fit in the university environment, nor have a sense of belonging to the community, tend to isolate themselves and to abandon their studies when they find other ways to invest their time, energy and resources that have more benefits and fewer costs (Tinto, 1975). In later works, Tinto (1993) emphasizes the importance of learning communities that facilitate cooperative work, considering that students learn more together than apart, as well as classroom evaluation techniques that stimulate dialogue about learning.

Tinto’s theory makes manifest the necessity for universities to assume a proactive role in the process of student integration. In accordance, many universities have included in their orientation programs “welcome sessions” for new students, which have demonstrated an increase in persistence (Koutsoubakis, 1999). These orientation activities have been used to: 1) help new students make the transition from secondary education to university education; 2) orient them toward the services and culture of the university and campus; and 3) integrate the new students within an intellectual community of students and faculty. Hashway, Baham, Hashway and Rogers (2000) have provided evidence that the completion of remedial education programs increases in one year the rates of retention of students with a high risk of drop out. Positive effects have also been demonstrated in students who complete a transitional summer program (Wolf-Wendel, Tuttle and Keller-Wolff, 1999).

This theory has been widely contrasted by numerous empirical studies designed to evaluate certain aspects of it; aspects that had not been kept in mind by its promoter. In keeping with this, researchers have analysed the imbalance between the needs of the student and the satisfaction he/she finds in the university environment; the discrepancies between the student’s expectations and his/her achievements; and the weakening of commitment and the student’s initial expectations regarding the university environment have been studied in depth (e.g. Spady, 1970). In a more recent study, basing his work on this Theory of Persistence, Landry (2003) finds significant relationships among a group of psychological variables such as self-sufficiency, motivation, positive expectations concerning results and an assertive intention to complete university studies. Metz (2002) also uses this theory to explain the university student’s continuity of studies until completely finishing his/her degree program. As for the critics, some authors have pointed out that the theory of persistence is especially conceived for students in traditional academic situations. This is true of classes that require the student’s physical attendance in the classroom, but it is not valid for other situations of higher education that are increasingly proliferating, such as, education-from-a-distance, online or e-learning via the Internet (Rovai, 2003). Neither does it seem useful to study the dropout of older students, for whom social
and academic integration in the university is less likely to have an influence (Bean and Metzner, 1985). In like manner, Yorke (1998) suggested that Tinto’s theory says relatively little about the impact of external factors on the shaping of students’ perceptions, commitments and reactions.

Another theory integrated in this adaptive model is Student Exhaustion (Attrition) by Bean and Metzner (1985), which attempts to explain the process of exhaustion in non-traditional university students, defined as those over 24-years-old who do not live in a university residence and who attend university part-time, or any combination of those three factors. These students are not as influenced by the social atmosphere of the institution, and they are more strongly oriented toward the academic opportunities (special courses, certification, degrees). Older students have different support structures than younger students, and consequently, have limited interaction with other groups within the university community. However, they have more support outside the academic environment because their reference groups (peers, friends, family, employers or business colleagues) are outside of the institution. This reality contrasts with that of traditional students whose most important support group consists of the peers and faculty who are inside the campus.

Nora (2002) analyses the interrelations that are produced by the “rites of passage” explained in Tinto’s student integration model (1993), and the support that students receive from their "significant others", contemplated in Nora and Cabrera’s (1996) model of student adaptation. According to the author, from this interrelation comes a series of factors that directly impact: 1) integration and social and academic experiences; 2) the levels of commitment to achieve academic and institutional goals; and 3) the decision to drop out or to remain enrolled in university studies.

Finally, Holland (1966) presents another theory related to the adaptation model, which establishes a connection between personality types and environmental adaptation (RIASVC = Realist, Investigator, Artistic, Social, Venturesome and Conventional). For Holland, the possibilities of adaptation and personal success depend on the characteristics of each student's personality, that is, certain characteristics favour adaptation while others do not. And so, when dealing with the theme of drop out, it is necessary to study the way in which the student interprets reality in order to determine his/her degree of adaptation or maladjustment. Along these lines, the works of Seligman (1990) on learned optimism, suggest that the optimistic student operates with a positive attitude about his/her capacities and resources, influencing the conditions of the university environment to optimise it and find situational opportunities that permit success. In relation to learned optimism, self-sufficiency and self-esteem, psychological studies from recent years have dealt with the concept of hope (Snyder, 2002). It seems that having high hopes consistently corresponds to academic success, physical health, and psychological adjustment. In our research (Álvarez et al., 2005), results show that university students who graduate in the prescribed time-frame differ from those who abandon studies in that they have a higher level of satisfaction with their degree major. That positive emotion present in states of satisfaction is typical in happy people, a process that is also under study in recent years by the worldwide “positive psychology” movement, (Seligman and Csikszentmihalyi, 2000; Csikszentmihalyi, 2003; Lyubomirsky, King and Diener 2005; Seligman et al., 2005; Shmotkin, 2005), showing that happy people are more successful throughout the different stages of life, demonstrating more skills for reaching success, which in turn generates excitement or positive feelings.

b) The structural model

This second explanatory model proposes that university drop out is the result of contradictions in various subsystems (political, economic and social) that make up the social sys-
tem in its entirety and ultimately influence the decision of the student to drop out. Relevant studies along these lines maintain a critical position regarding the role that the university carries out in the reproduction of social conditions. As an example, Thomas (2002), starting from Bourdieu and Passeron’s (1977) concept of “institutional habit”, suggests that the university institution tends to reproduce the norms and habits of one social group in particular, limiting the possibilities for students of other social origins.

From this perspective, it is understood that drop out is a phenomenon inherent to the social system in its entirety, which makes it difficult to isolate the true and specific reasons that lead students to drop out (Luján and Resendiz, 1981). The difficulty in isolating the real causes results in a tendency to put greater emphasis on structural or extracurricular variables, such as socio-economic stratum, parents’ occupations, family income, fluctuations in the labour market, etc.

c) The economic model

For the followers of this model, drop out is due to the student’s choice of an alternative way to invest time, energy and resources that could offer greater benefits in the future than would the cost of staying at the university (Schultz, 1961; Becker, 1962 and 1964; Thurow, 1973). This position is based on the theory of human capital, which states that an individual will invest time and monetary resources in education only if the benefits obtained are sufficient to cover the costs of the education, and if higher education is at least as profitable as alternative uses of those same resources.

Albert and Toharia (2000) investigated the drop out of university studies of 29,811 Spanish youths, between 1992 and 1999, using data from the Active Population Survey (EPA) in their longitudinal version. They analysed the influence of gender, economic situation, age, type of studies (short, long or post-graduate), area and characteristics of study. They concluded that the student who drops out, does so after analysing:

- the costs related to their education and their predicted future income;
- the proportion of the expense set aside for acquiring knowledge and abilities, and that designated for “culture”, which can be considered as personal consumption or satisfaction;
- the period during which they will receive the benefits that are a result of the education received;
- alternative projects and their evaluation.

However, the economic model has scarcely been developed as it is not considered to be very realistic. It is unlikely that students would be able to explore at any given moment profits that might come to be sometime in the future if they choose another option rather than to study. For this reason, studies that have been carried out under the economic aegis tend to have a normative/positivist character, rather than that of social investigation.

In spite of these limitations, for us the problem of dropping out of university studies cannot be separated from the economic or institutional finance factor. If we analyse what the government of Spain spends for the costs of education, compared to that of other members of European Union, we see that we trail behind the rest with an investment of approximately 4.5% of the Gross Domestic Product (GDP), far less than the 6% other countries spend. This insufficient investment effort on the part of administrations and public powers in the Spanish government to date, has had, without a doubt, negative repercussions on the quality of the public system of higher education. Everyone knows the polynomial “investment-education-development” that is currently being applied to the decline, contrary to the interests of the Spanish people and society. If we also compare the investment in Research and Development (R&D), we observe
that the position of Spain is lagging behind. The Bricall Report has already touched heavily upon the need to allocate more public funds for the educational system; more specifically, to infrastructure, technical equipment, and teaching staff (improving the professor/student ratio to that similar to the rest of Europe), and to administration and services (currently at half of what universities in other European countries have). The report recognizes that the majority of the work normally carried out by Administration and Services Personnel (PAS) (institutional management, pursuit of external practices, administration of projects, etc.), is carried out in Spain by the professorship.

The objective facts of Spain’s low economic investment in education are perceived by the public. According to a study in 2004 by the National Agency of Evaluation of Quality and Accreditation (ANECA), 65% of Spanish citizens consider the public resources dedicated to higher education to be scarce. The autonomous communities that regard their universities as having the worst investment and readiness of resources are: Asturias (62.8%), Madrid (59.1%), Canaries (57.2%), Galicia (56.1%) and Cantabria (54.4%). Older people and those with restricted access to the university are more concerned with the scarcity of resources, as opposed to youth under 24 who consider them sufficient.

From this perspective, we agree with Zabalza (2002) when he affirms that investments in higher education are increasingly further away from the university’s objectives, demanding a rapid search for funds through self-financing. University management models come closer each day to resembling those of private businesses, linking the production of knowledge to economic and business development. In this sense, “the university has passed from being a cultural asset to an economic asset.” Because of all this, an increase in economic resources is constantly being proposed with ever greater intensity and urgency, as well as an effective use of resources to diminish low student performance.

d) The psycho-pedagogic model

This model comes from the theoretical and empirical work of our research group. We believe that this problematic phenomenon must be contemplated from a more global and wider perspective, and present this model for its discussion and replica. Its essence is formed of different aspects of the adaptation and structural models, plus other dimensions of a psycho-educative nature not included in these, which we, along with other authors, have verified. In our studies we have analysed the personal, institutional and social factors of students who abandon their studies, and have systematically found that psychological and educational variables are what most determine their success or failure. Through a revision of scientific literature, we have found previous investigations that confirm the existing relationship between the decision to drop out and psycho-pedagogic variables, such as: learning strategies, the capacity to delay rewards, the quality of faculty-student relationships, the capacity to overcome obstacles and difficulties, the ability to maintain clear long-term goals, the ability to firmly establish the direction or course of the future, the ability to complete academic goals and graduate early, etc.

To illustrate the works that have been carried out and fit within the psycho-pedagogic model, we can point to studies such as that of Ryan and Glenn (2003) that demonstrate the effectiveness of using learning strategies to obtain an increase in retention rates of newly enrolled university students. Wasserman (2001) finds significant differences in psychological and evolutionary variables between university students who drop out and those who continue. Also, Kirton (2000) analyses factors that influence academic persistence of first-year university students.
In many university degrees students find themselves with a multitude of problems and difficulties, such as: too many courses, overload of material to be learned, deadlines on homework and demanding academic assignments, an overwhelming exam schedule, etc. Such difficulties become a challenge that students must learn how to face successfully in order to find satisfaction and to feel good in spite of these negative circumstances. This psychological fortitude is becoming an instrument of control from several psychopedagogic perspectives. Along these lines, a promising alternative strongly emerging over recent years is the paradigm of Resilience. This stems from the idea that people have the capacity to overcome difficult situations if they acquire the specific skills necessary to do so (Henderson and Milstein, 2005). Resilience is a construct that has received very little attention in the research on university dropouts, but one that can provide good explanations of the psychological mechanisms that operate in persistent students (Lightsey, 2006).

In second place, we have study strategies and activities. The empirical results demonstrate that students who complete their studies in time differ from those who drop out, with respect to their work ethic. We verified that, in general, they differ more in the maintenance of a continuous, extensive and up-to-date study activity, than in the use of specific study strategies or techniques (González et al, 2005). These results partially coincide with the discoveries of Yip and Chung (2005) who found that in university environments, students with high academic performance differ from those with low performance, only in variables such as concentration and motivation, but not in the use of techniques such as diagrams, key words, examples, comprehension, organization, or elaboration.

Students who reach university education present a certain uniformity in terms of having a repertoire of specific techniques and study strategies. Not in vain have students been through a process of filtering and selection throughout their previous schooling; have been equalized in terms of their form of and capacity to study. Nevertheless, a larger heterogeneity is observed in attitudes and ongoing efforts throughout the entire timeframe of university studies. In this respect, the persistent student, in accordance with his/her psychological characteristics, is able to maintain good study activity over an extended period of time, assuring the attainment of academic success. In other words, the persistent student can learn and wants to learn, and to pass, unlike the student who drops out, who usually lacks perseverance, tenacity and dedication.

Based on these results, it seems that the profile of the student with a higher probability of graduating successfully would include the greatest number possible of the following features:

- the persistence necessary to complete the degree in spite of obstacles;
- motivation toward the degree studied;
- the capacity for effort in support of future achievements;
- abilities that fit the demands of the degree;
- satisfaction with the degree studied;
- the ability to delay rewards;
- the ability to overcome difficulties;
- long term goals;
- the ability to firmly establish a course for the future;
- perseverance in maintaining established plans;
- perseverance in daily work;
- attendance in classes and tutorials;
- the ability to ask professors questions during lectures;
- habits of reviewing studied topics;
- staying current with the subject material; and among others.
3.2. Causes of drop out

In the empirical investigation into the causes of university dropout, the following types of variables have been identified: psycho-educative, evolutionary, family, economic, institutional and social.

a) Psycho-educative

At present, psycho-educative factors undoubtedly have greater explanatory weight and influence on drop out or prolongation of university studies. As we have already shown, these characteristics have been identified in numerous studies as those most related to the student’s decision to drop out (González et al, 2005; Last and Fulbrook, 2003). On the contrary, students with high motivation and positive expectations of their academic performance do not consider dropping out, and usually reap academic success (Landry, 2003).

For some students, adapting to university life constitutes a challenge and a personal commitment that requires them to be strong and seek the help necessary to achieve the goals they have set. However, many others fail in their intent and quit halfway through, adding to the long list of those who fail. So we find that the student with a psychological profile favourable to the confrontation of obstacles adapts better, and consequently, persists more in his/her studies. In keeping with this, Kirton (2000) found that the perception of the university environment and academic self-efficacy had a great influence on the academic persistence of first-year university students during their first semester. Through statistical analyses of hierarchical regression, Kirton identified five factors as the most influential in the student’s decision to continue studies and achieve academic goals; these factors were: academic self-efficacy, educational values, perception of the university environment, university support and attachment to peers.

b) Evolutionary

The stage of life students go through spanning a university education is complex, and often they arrive lacking the necessary maturity. It has been identified that university students have serious deficiencies in the areas of developing competence, handling emotions, developing autonomy, establishing identity, free interpersonal relationships, developing goals and developing integrity (Reisser, 1995).

Wasserman (2001) upholds that higher education helps students satisfy their evolutionary needs, direct and control the different phases of their lives, and locate the necessary resources to make life-changes. But those students experiencing personal conflicts related to their current evolutionary stage are observed to be affected as well on the academic plane, and tend to abandon their studies, given that they usually develop depressive behaviours that often cause them to drop out (Hirsch and Keniston, 1970). In Wasserman's (2001) study, 25 students who left the university for psychological or personal reasons were compared to another 25 students who continued their education, complying with their evolutionary tasks, attribution styles and personal reasons. The results of the study suggest the potential value of proactive interventions on students who are at high risk of dropping out for psychological or personal reasons.

c) Family

In searching for the causes of drop out some studies have observed that family pressure is a determinant with great influence. From academic-vocational decision making to the mo-
ment of receiving grades/marks, many parents put so much pressure on the student that he/she cannot withstand it and ends up dropping out. In a study carried out in Wisconsin on university students aspiring to a teaching degree, Root, Rudawski, Taylor and Rochon (2003) found that family pressures carried a great weight in the students’ decision of whether or not to drop out, above all in men. The necessity to reproduce the professional roles of the parents and continue at the head of the family business causes parents to pressure their children to study specific degrees, and then they expect high academic performance. Sometimes, when there is disagreement and the students are not able to live up to the expectations of their parents, there arise situations of intergenerational conflict that lead to dropping out or the changing of degree majors. It has been shown that family responsibilities constitute another important obstacle in the educational process, and are also related to this type of variables. Moortgats (1997) found that socio-economic factors and family responsibilities in caring for small children have a negative effect on retention, especially in the case of women.

d) Economic

Among others, economic factors have been great determinants of the drop out phenomenon in the Anglo-Saxon student. In Spain, although it is identified as an influential variable, it is not the most important. Bradburn (2002) demonstrated that the necessity to work, and other financial reasons, were some of the important causes of drop out; in his study, only 4% identified or suggested academic problems as the cause of their dropping out.

In the context of economics one must point out that aid offered to students in the form of scholarships constitutes a significant factor in the possibility of retention. This is made clear by Ishitani and DesJardins (2002) who investigated drop out behaviours of university students in the United States. In their study, the point in time the drop out occurred was examined throughout a 5-year period, and it was discovered that the effects on students of the influential drop out factors changed during that timeframe. It was also found that the dropout rates varied with the quantity and duration of the financial aid on which students depend.

The economic difficulties of some families or the shortage of financial aid for study forces some students to work a job while attending school, which in some cases provokes situations of incompatibility that cause university drop out. Sinclair and Dale (2000) found that 68% of students were working part-time in 1999/00, compared to 43% three years earlier (academic year 1996/97). It was observed that these students worked more than 16 hours a week, although in informative pamphlets intended to foment retention, students are counselled to limit working hours to 12 per week. It was proven that these situations influence the students’ decision of whether or not to continue in the university. Relating to the effect of economic issues on drop out, Ozga and Sukhmandan (1998) found that economic difficulties are a strong factor influencing early retreat. Simply stated, students at a low economic level drop out with more ease than those at a high level.

e) Institutional

Institutional variables, above all those related to the characteristics of studies, academic resources and faculty, have been those most questioned by public opinion when considering the problems of drop out and prolongation of studies. Spanish university policies are considered to have focused on accepting the largest possible number of people, without analysing the new profiles and needs of the students (career goals, abilities, capacities, etc.), nor offering the necessary resources to assist the entire student body.

When examining the institution’s role in the student’s decision to drop out, Thomas (2002)
attributes a great deal of responsibility to the faculty, as well as to the teaching methods and evaluation models used, citing the distant relationships teachers establish with their students when they need a more personalized treatment. Thomas believes that the faculty's practices, together with the institutional structure that tends to reproduce a certain social culture, are factors that provoke the student to drop out. We also verified this influence (Cabrera, et al, 2005), although the statistical results showed that the degree program and faculty-related variables had less power to predict university dropout than the variables of the student. In this context of variables we find that certain faculty characteristics such as "motivate the student", "keep in mind their opinions on the subject", and "discuss the progress of the class" are revealed as the most critical aspects in university teaching that contribute to the students’ persistence and finalization of their studies.

Our results coincide with previous studies that show that when the university faculty implements teaching practices that promote active learning, these practices have beneficial effects on social integration, institutional commitment and student persistence (Braxton, Milen and Sullivan, 2000). Likewise, in a revised study, Barefoot (2004) stresses the necessity for studies on drop out to pay more attention to the classroom experience, in which the professorship plays a dominant role.

As for the variables referring to the characteristics of the degree studied, we find that students who drop out perceive: that the coursework within the degree was highly demanding; that there was little information and support during the course; a lack of good relationships with peers; and, little practical training (Cabrera, et al 2005). In this respect, we find that the ideas and expectations that students have about their degree major, the level of requirements and the relationships among their classmates, are predictive variables for academic success or failure. These are aspects that should be kept in mind in the institutional acts of providing students with information and orientation both before and during their stay at the university.

\[f\] Social

We don't have consistent studies that have proven the direct relationship between drop out of studies and certain social characteristics and aims of the university. However, theories of university teaching point toward important current situations such as: a close relationship with economic and productive social activity when deciding what to teach; a new model of professional competencies, including experience with business training and employers; the emergence of a group of agencies and educational institutions that are much more agile than the university, offering the same services in a manner that is much more adapted and accessible to the labour market; the development of technologies for long-distance communication, particularly the Internet; low employment expectations due to high unemployment rates among those with college degrees that have provoked a lack of motivation and low performance when students combine studies and work; changes in educational politics on a global scale; etc.

The Belgian professor, Nico Hirtt, expert in educational politics of the European Union, believes that this whole destabilization of the university is produced by the intent to adapt the educational system to the demands of a capitalist economy, which he calls, "Social Mercantilism of the University." For Hirtt (2003), we are moving from an era of education for the masses to an era of mercantilism, from which is clearly deduced that educational ends are shifting from being a service for the citizen to being a service for economic development. Therefore, it is fitting to ask if we are passing from a qualitative period of higher education to a quantitative period in which only the needs of the labour market have priority. Doubtlessly, an excessive quantity with access to education generates on the
rebound an excessive quantity of failure, but while educational systems do not open themselves up to a larger diversity of perspectives and needs, this reality can be considered a new form of hierarchical selection.

In the eleventh conference of the European Association for International Education that took place in Maastricht, in December, 1999, some participants indicated that industrialized countries were entering into a post-growth phase (Pérez Díaz and Rodríguez, 2001). In fact, the number of students in higher education has begun to decline in recent years, and the average duration of studies also begins to decrease. The declarations of Bologna serves an obvious example, where although minimum degrees of four years are guaranteed, it is preferred that students graduate and go directly into the labour market.

Finally, we coincide with Braxton (2002) when he establishes that the causes, and therefore, the effective solutions to the problematic phenomenon of university drop out will be made clear by combining the three basic dimensions involved: the psychological, the sociological and the organizational.

4. PERFORMANCES

The confirmation of the problematic phenomenon of drop out of university studies has logically led many universities to design, implement and evaluate programs and strategies to increase their rates of persistence, to improve retention and to reduce student exhaustion (attrition). In programs of preventive intervention designed to avoid dropout, as many systematic approaches have been taken as systemic. There exist those that combine psych-educative assessment with the application of institutional politics that affect the admission and integration of the student body.

The concern for the elimination of the drop out phenomena is also shown in the appearance of:

- a) study centres such as the Centre for the Study of College Student Retention (http://www.cscsr.org), a leading institution in the international field of investigation, diffusion and advice on the causes of and solutions to the problem of university drop-out.

- b) strategic lines such as those of the Mauricio Gastón Institute, at the University of Massachusetts-Boston (E.U.N.A.), who consider the study of the Latin population's dropout among their high-priority lines; or the work of IASAS (International Association of Student Affairs and Services, http://iasas.ehs.ufl.edu) who published in May, 2001, with the collaboration of UNESCO, the manual entitled: The Role of Student Affairs and Services in Higher Education: A Practical Manual for Developing, Implementing, and Assessing Student Affairs Programmes and Services, which contains a specific section dedicated to the retention of university students.

- c) the edition of scientific monograph journals from the international field, such as the Journal of College Student Retention: Research, Theory and Practice; or approaching the topic in monograph as is done in the magazine New Directions for Institutional Research, number 125, (2005) titled: “Retention in Higher Education: A Selective Resource Guide” by Adam and Gerald.


All of these publications focus the debate on analysing the factors that contribute to drop-
out, as well as in demonstrating the effectiveness of certain efforts dedicated to increasing retention and student success.

The efforts undertaken have included various periods in the educational process of the student, with the purpose of increasing retention rates and academic performance. After reviewing a wide variety of programs that different universities throughout the world have applied toward the purpose of increasing retention, we can identify the following types of efforts:

a) Efforts that favour social and institutional adaptation. This type of effort attempts to promote the social life of the university student body with programs that are aimed at organizing recreational and cultural events, along the lines set out by Forbes and Wickens (2005) for English students. Other efforts of this type have been directed at getting to know the institutional culture (Kuh, 2002), identification and development of the psychological processes that underlie social and academic integration (Bean and Eaton, 2002), or keeping in mind the different characteristics of different cultural groups of students when designing the efforts (Taylor and Miller, 2002).

b) Efforts toward student recruitment. Forbes and Wickens (2005) have shown the effectiveness of efforts dedicated to recruit students of non-traditional backgrounds.

c) Programs of university tutoring. Forbes and Wickens (2005) released a model of skills-training targeting newly admitted students, by means of academic tutors. Other experiments along these lines having the same effectiveness are those of Pagan and Edwards-Wilson (2003), Kuh (2002), Gloria and Kurpius (2001). In Spain, we spotlight examples such as the experiments put into practice by the University of Alcalá de Henares (Lázaro, 1997; Álvarez and Lázaro, 2002), the University of La Laguna (Álvarez, 2002; Álvarez and González, 2005), the University of Seville (Álvarez Rojo, 2002), etc.

d) Programs offering information and pre-university guidance on the characteristics of the degree majors. Watson, Johnson and Austin (2004) have demonstrated the effectiveness in increasing retention, of offering realistic and specific information about the profession related to each degree major before studies are initiated.

e) Programs offering advising and support to the student, above all by offering training in learning strategies and psychological support (Arnold, 2000). Along these lines, Ryan and Glenn (2003) present the development of these activities not only in counselling centres such as the Spanish Services of Information and University Orientation (SIOU), but also in programs of curricular infusion.

f) Institutional efforts. Along these lines we find numerous experiments in the organizational redesign of universities, where strategic lines of action are contemplated along with the incorporation of resources and infrastructures necessary for their development. Deserving of special recognition within these efforts are those people involved in practical training, professors, and others who are directly responsible for the execution of the efforts, for example, the creation of “campus leaders” and the training of “retention facilitators” in student-help endeavours. This type of work has been brought to light by authors like Moxley, Major-Durack and Dumbrigue (2001), Braxton and Meaghan, (2002) and Berger (2002). Other specific efforts used in Anglo-Saxon universities that may or may not be effective in Spanish universities, are experiments with “learning communities” such as the one put into practice by the University of Maine (Johnson, 2001), or taking advantage of local “Y” organizations (Rullman, 2002).
g) Retention guides, such as that of Braxton and McClendon (2002), which, after debating institutional practices for improving the social integration of university students to ensure their retention, present 20 recommendations for the implementation of these practices, grouped into 8 domains: academic advising, administrative practices and politics, recruitment, faculty development, system of faculty rewards, programs offering information and orientation to the student, life in student-residence, programming of student-related matters.

h) Efforts specifically aimed at the student in on-line courses. Here we highlight the work of Chyung (2001), who’s program has demonstrated a high level of effectiveness in reducing student exhaustion, obtaining improvements in motivation, attention, trust and satisfaction.

Of the above-mentioned efforts/activities we emphasize for use in Spanish universities, those of pre-university information and orientation, and those of academic and psychological support, either through university tutorial programs or through curricular infusion. In recent years there has been an insistence on the need to establish a tutorial system within the framework of university education, as a factor of quality designed to optimise the learning process, improve academic performance and prevent dropout. Aside from assessment of the student’s learning process, tutoring covers an important gap in the entire scope of personal and social development. If teaching must ultimately contribute to the integral development of the student, it cannot remain based solely on content-matter, but must also develop other competencies for social and professional development. This is the view of the project Tuning, which describes a model of competencies related to: “knowing” (map of academic knowledge), “making” (map of abilities and dexterities), and “being” (map of attitudes and responsibilities). In this way, competencies like group work, analytic thought, oral and written communication, organization and planning, information management, adaptation to new situations, problem solving, etc. will be fundamental to the student’s academic, personal and socio-labour development, with tutoring as a contributing strategy. Therefore, tutorial work accompanied by professors from diverse subjects becomes one of the cornerstones needed to support the new educational model of credits, ECTS (European Credit Transfer System), of the European Framework for Higher Education.

Other examples of efforts currently in practice in Spain are those designed to favour the transition processes from secondary education to university-level education, such as open house events, orientations, student advisor programs, etc.; those focused on adapting the educational level of new students (propaedeutic classes, introductory-level courses, etc.); efforts focused on the improvement of educational profiles (observation of graduates); and those focused on the improvement of university teaching.

5. CONCLUSIONS

There are many specific circumstances that are currently converging toward the emergence of a new university model, one that will affect the organizational aspects of the institution as well as the teaching that it imparts. In its most immediate social dimension -- the connection established with the student -- there has never been such a notable "approach-estrangement." So this creates the following paradox: On one hand, there has never been such a great devaluation of the Spanish university’s functions and resources, and neither have there been registered such high numbers of drop out and prolongation of studies. On the other hand, the university acquires more and more social attraction, as it opens up an infinite number of possibilities beyond the traditional practice of degree development, including: summer programs, extension programs, other training such as sports, cultural, computer, adult-education, courses of...
continuing education, etc. From this ample offer, universities compete with one another in search of clients, through: university-study fairs, various publicity and marketing endeavours, institutional delegations in other cities and in other provinces outside the university’s district, etc. However, in the race to occupy first-place in prestige, the basis of which consists of the number and type of students, we forget that the rate of drop out is an indicator of institutional quality, and that we must offer all the necessary means to pay attention to and help the student with difficulties.

Although the different studies have identified a group of variables relating to the student (psychological and educational characteristics) as more influential in the phenomenon of drop out, we cannot ignore that the interactions of these variables within the context are what produce decisive results. To the same extent that the university increasingly opens its doors to a wider diversity of students -- a practice that will undoubtedly continue to grow -- necessary procedures and resources must be put into place so that all students get the same results. In this respect, we must pay attention to the problem of drop out, primarily from within the institution, with efforts that foment the resilience of the student body. As we have shown, measures directed at imped ing student desertion have been highly developed in the last decade in other countries of Europe and North America having similar problems. If these practices have shown effective results, we cannot delay any longer, but must use them as a reference, independent of the fact that we continue with the analysis, since the problem of drop out has a strong contextual component that the Spanish university cannot ignore. These programs are highly promising because they include in their activities efforts directed at strengthening students in their areas of deficiency, which are needed to achieve a better university adaptation. These include fomenting student interest and motivation in the degree major, study strategies, and the psychological strength that helps them overcome obstacles and delay rewards, etc.

All of this has lead, in the fight against drop out, to creating a high-priority focus of attention on the processes of transition to higher education and integration into university life in the first year. Offering students a realistic perception of university life should be an objective to achieve if we want to increase student retention. However, after an analysis of the phenomenon in our immediate context, we conclude that the problem of dropout in Spain will be difficult to solve if the public administration, the respective governments and society as a whole, do not increase their investment efforts in higher education. On the other hand, the second effort should come from the professorship. We are aware that we cannot request more volunteerism from the faculty, but we are also convinced that both drop out and the prolongation of studies require that the faculty undergo a process of sensitisation and change toward the new challenges of higher education, and toward the new demands and necessities of the student.

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[ii] Rates of university academic success and failure: identification and analysis of psycho-educational related variables in a sample of Spanish students.
[iii] According to data in a study carried out by Hernández Armenteros (2000), 30% of the new students registered in public institutions (minus UNED), did not study his / her degree of first choice. In this academic year, 2005-06, 100% of the pedagogy students in the University of La Laguna, where we teach, said that they studied pedagogy because they had not been admitted to another degree program. It is also true that all had become highly motivated in their studies within the degree and they no longer wanted to change.

[iii] In fact, current data indicate that those who register the lowest rates of drop out are the candidates for diplomas (Diploma is a three-year degree), above all those with a clearly professional profile.

[v] In Spain, in the academic year 1994/95 there were 1,344,386 students in public universities and 52,086 in private universities. Ten years later, in 2004/05, the figures in public universities remain almost stable, while they nearly tripled in private universities, climbing to 138,972 students.
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This article focuses on the drop out of university studies, which is as high as 50% in some degree majors. We begin with the presentation and analyses of dropout rates found in several Spanish universities. After that, using the results of national and international studies as background, along with findings from our own investigation, we present a theoretical framework that explores: the definition of dropout, its causes, explanatory models and solutions. We conclude by presenting a critical perspective of university education regarding the social role of the institution, as well as the current processes of change, particularly in light of European convergence.

En este artículo se analiza el fenómeno problemático del abandono de los estudios universitarios, que alcanza hasta el 50% en algunas titulaciones. Para ello, partimos de la presentación y análisis de los porcentajes de abandono de distintas universidades españolas. Posteriormente, al amparo de distintos estudios nacionales e internacionales, y nuestros resultados de investigación, elaboramos un perfil teórico que contempla: definición, causas, modelos explicativos y soluciones. Finalmente, ofrecemos una perspectiva crítica de la enseñanza universitaria, en relación al papel social que esta representa, y en relación a los actuales procesos de cambio, sobre todo el proceso de convergencia europea.