

# From dropout to continuation in a higher education course

TERESA ALBUQUERQUE

teresa.albuquerque@fmd.ul.pt

Faculty of dentistry of the University of Lisbon (FMD-UL)

**ABSTRACT:**

The study<sup>1</sup> set out to ascertain how students, who begin a Higher Education course which is not their first option, adapt to the Faculty and why they do not drop out.

Data was obtained by means of questionnaires and semi-structured interviews given to students who had entered Higher Education for the first time in 2004/2005.

The findings indicated that students began to understand the profession, the type of population they are likely to work with and the type of work they may perform through the practical academic activities carried out during the course. Student involvement in the course and their pedagogical relationship were seen to be the most important factors in their decision to stay on the course.

**KEY WORDS:**

Higher Education, Dropout, Continuation.

## INTRODUCTION

The first year of Higher Education is problematic for many teachers and students at the University. Academic failure, dropout and the apparent lack of student motivation in many cases are cause of concern for the country and its institutions, and not only worrying, but also frustrating for teachers and students. In addition to the extremely high failure rate<sup>2</sup>, universities are confronted with a progressive reduction of students owing to socio-demographic factors.

In an attempt to find the root of some of these problems — the fact that students mainly get into low priority courses has been considered, where the 1st year at university is used to “bide time” just to get a course transfer — which also justifies dropout to a certain extent. Failure is frequently explained as a result of disinterest, lack of motivation, students’ difficulties in fitting into the Faculty and even their difficulties in managing learning and study methods (Tavares *et al.*, 2000).

Measures taken by the Ministry of Science, Technology and Education have proved the importance of dropout on requesting studies that will make it possible to typify the causes of failure/dropout in Higher Education, by means of decree law no. 6659/99 — 2nd series, so as to implement preventive measures and ways of promoting academic success in order to tackle school dropout.

This study is part of a research project which is concerned with the factors of success/failure among

1st year students in Higher Education and focuses on the issue of academic dropout. Academic dropout has been defined as ceasing to frequent a course in which one is enrolled before its conclusion, obtaining a transfer to another course or dropping out of the faculty and/or university.

This situation is one of the problems in the Oral Hygiene course of the FMD-UL, as the annual average of 1st year dropouts from this course since 2001 has been 8.3%. This course has been chosen as the field study and an in-depth study has been conducted with a view to offering a contribution to the identification of strategies, be they prevention or intervention, in order to minimize the number of students who prematurely drop out of their courses.

A number of authors defend that student experiences during their 1st academic semester may alter their initial expectations and intentions (Pinheiro, 2003; Santos, 2000; Schlossberg *et al.*, 1989; Tavares *et al.*, 2000). The complexity of situations and environments in which students are immersed during their transition and adaptation phase in Higher Education has been found to have implications on their decision to remain in or drop out of their courses (Ferreira *et al.*, 2001; Nico, 2000; Pinheiro, 2003; Schlossberg *et al.*, 1995; Soares, 1999).

In the analysis of higher education course dropout/continuation, dropout was found to be more frequent and probably more voluntary in the early months after entry. Tinto (1975, 1989b) found that more than half the dropout cases are among students enrolled in the 1st year.

The dropout phenomenon may be understood from both an individual and institutional perspective. On an individual level, dropping out of a course may represent failure to accomplish an aim, a lack of interest or ability to satisfy the academic work. On an institutional level, the same phenomenon may affect the organization, academic programming and, in many cases, institutional prestige (Tinto, 1989a, 1993). By conjugating these perspectives, some studies point to a need for early intervention which is based on the assumption of identifying the problems associated with this phenomenon (Duran & Diaz, 1999; Mendes *et al.*, 2001). These latter authors have identified some of the problems: unsuitable choice of course — through decisions influenced by friends, relatives or trends and not through vocation; very low entry qualifications; inadequate student integration in intellectual and social faculty environments; poor teacher-student relationship. Others, (Pascarella, 1982; Pascarella & Terenzini, 1980; Pascarella *et al.*, 1986; Tinto, 1975, 1987, s/d), on the other hand, highlight the fact that a student's decision to continue in courses increases when there is: good student adaptation to the new reality; when the teacher-student relationship is positive, when there is academic and social support of teachers and peers; when students believe in their own success and when they feel involved and valued by the institutions where they attend courses.

Having found an increase in the number of students who drop out of the Oral Hygiene course before concluding it (out of the total number of students who entered the course from 2001 onwards, 23.8% requested a course transfer at the end of the 1<sup>st</sup> year and 9.5% failed in the 1<sup>st</sup> year and dropped out), it became important to try to understand the reason for a considerably high school dropout rate.

In 2001, the Oral Hygiene professional course (OH) became a baccalaureate, having doubled its student intake. Absenteeism, failure and dropout increased. For the first time worker-students, pre-requisites and student entry, in the context of application to Higher Education, increased, where students chose the course as their 5<sup>th</sup> or 6<sup>th</sup> option. Also, for the first time, there ceased to be specific vocational tests for access to the course and a large percentage of the new students have no idea about what the course involves and what its professional outlets are.

When considering the applications for the academic years 2001/2002, 2002/2003 and 2003/2004, only 19% of the students who entered the OH course chose it as a 1<sup>st</sup> option, 22% chose it as a 2<sup>nd</sup> option; 22% as a 3<sup>rd</sup> option; 16% as a 4<sup>th</sup> option; 6% as a 5<sup>th</sup> option and 14% as a 6<sup>th</sup> option. In other words, most vacancies have been occupied by students who do not choose the course as their 1<sup>st</sup> option. This discrepancy between the course they wish to frequent and the course they manage to get on may be one of the dropout factors in this course, as well as in others.

The research, which is partly presented here, focused primarily on the study of the “Non School Dropout” factors of students placed in courses representing low priority in their choice. Studies that have already been carried out (Tavares *et al.*, 2000; Tinto, 1975) point to the multifactoriality of reasons for adaptation and school success. From the perspective of justifying a possible prevention/intervention program for this new population, it also became necessary to characterize it, recognize its needs, difficulties, expectations and motivations. So, the aim was to identify the data of 1<sup>st</sup> year student reality in the OH course which may then be considered in reflection and debate on how the FMD-UL can work towards the permanence and success of its students, by raising two main issues:

1. What favors the continuation of students on a course that is not their 1<sup>st</sup> option?
2. What are the effects of the first semester on the change of attitudes in the student towards the course and Faculty attended?

## METHOD

The study was carried out with students who had enrolled for the first time in the first year of the OH course of the FMD-UL, among a total number of 30 students, whereby the following data collection instruments were used:

- Questionnaire for the characterization of all students.
- Semi-structured interviews with ten students who offered to be volunteers.

- Adapted questionnaire to identify factors that contribute to the successful adaptation of 1st year students at the Faculty (Questionário de Adaptação ao Ensino Superior — QAES [Questionnaire on Adaptation to Higher Education], Lemos *et al.*, 1999).

This triangulation of information has rendered the results more trustworthy, while fully understanding that the limitations of an instrument may have been obscured by the use of another.

The questionnaire for the characterization of students was filled in during the first lesson on the first day of classes in the 1st semester of the OH course, covering a total of 30 students. With closed-response questions (Likert scale) and open-ended responses, the questionnaire was made up of 32 questions grouped into four dimensions:

1. Demographic and school characterization, covering items related to gender, age, residence, means of income and channel for entry into Higher Education.;
2. Student decisions and intentions on entry into Higher Education, with questions related to the factors that influenced their choice of 1st option course and the course they are currently attending, satisfaction with entry into Higher Education and intention to change course;
3. Difficulties and expectations foreseen by students;
4. Expectations of academic performance as university students.

At the end of the 1st semester, semi-structured interviews were given to ten voluntary students so as to further the information already collected from the characterization questionnaires, identification of expectations and factors leading them to give the course up or continue.

The QAES was applied during the first week of classes in the 2nd semester of the OH course, covering the students from the 1st year who had not yet given up the course, among a total of 26 students. The items of the questionnaire were related to: socio-demographic characteristics; secondary school performance and access to Higher Education; study skills; appreciation of method content

in 1st semester subjects; opportunities for integration in a university context; satisfaction with relational and social environment; problems experienced and subsequent degree of concern; overall life satisfaction; perception of secondary and higher education performance; self-assessment of study skills; satisfaction with performance in the 1st semester; perception of adaptation to the University and course motivation.

The data collected from the characterization questionnaire by means of Likert scale questions were subject to statistical processing of a descriptive nature, given the reduced number of subjects under study. As far as the open-ended questions of this questionnaire and the interview content are concerned, all the information was subject to a content analysis technique (Bardin, 2004). The data collected through the QAES was also analyzed through descriptive statistical processes, and some comparative, relational and frequency analyses were also carried out.

## RESULTS

Out of the 30 students covered by this study, who had entered the 1st year of the OH course for the 1st time, 86.67% were female and 13.3% male. The average age was 20 years, the minimum being 18 years and the maximum 25 years. Only 63.3% of these students had applied to Higher Education for the first time, the other 36.7% had applied more often, 81.82% of whom having frequented other Higher Education courses without finishing them. It is worth mentioning that 26% of all participants had dropped out of other Higher Education courses.

The decision to frequent Higher Education had been strongly influenced by parents and friends (60%) and peers and friends (22%), while 10% were of the opinion they had not been influenced by anyone; the rest (8%) had been advised by health professionals.

The factors that influenced the choice of 1<sup>st</sup> option courses were mainly vocation (27.1%), the value of the course in the labor market (25.9%) and the potential interest of the course (20%). The rest of the responses were spread out over factors such as: family or friends with the same qualification (7.1%),

family or friends taking the same course (7.1%), prestige of the course (7.1%) and ease of entry (5.9%). However, it was also found that the OH course was only a first choice for 35.7% students. In other words, the majority (64.3%) of students were taking a course that had not been their first choice. Other first choices favored a number of courses in the area of Health Sciences, the most popular of which were Nursing (17.9%) and Dentistry (10.7%).

The main concerns anticipated by the students were related to the social environment, the fear of “not getting along with peers” being the biggest worry displayed, followed by fear of establishing relationships with teachers. The difficulties referred to by the students with the academic environment showed their “fear of not adapting to the environment”; “not being able to integrate in academic life”; “limited availability for extra-curricular activities” and “a lack of union among courses from the same faculty”.

As far as the Oral Hygiene course itself is concerned, the type of difficulties students expected to encounter were related to “the time for requesting a course transfer”; the fact of “not liking the course”; “lack of motivation due to taking the course” and the “desire to change”. Perhaps the desire to change was at the root of the fact that 62.1% of the total number of students who responded to the questionnaire (at the beginning of the 1st semester) displayed the intention to change course.

Nevertheless, experiences during the 1st semester and involvement in course activities seem to have brought about a change in student attitudes, intentions and expectations in relation to peers, teachers and faculty course. This was inferred through the percentage differences in the intentions to change course registered between the beginning of the 1st and 2nd semesters. At this time only 30.8% of students maintained the intention to change course.

Students were surprised by some facts encountered during the course of the 1st semester:

i) Regarding the faculty, students were positively surprised by its small size, the fact that it had few courses and few students per class, thus, making the academic environment more familiar; the ideas that classes would be held in large amphitheatres with many students, that the people in

the institutions were older and that the freshman introduction activities might not be very pleasant emerged positively as thwarted expectations at the end of this first semester;

- ii) The course was a pleasant surprise for the students who had not had any initial expectations, particularly the clinical and community components. The fact that the course involved hard work with a series of mid-term evaluations pleased the students, since while on the one hand it seemed like a prolongment of secondary school to them, on the other it obliged them “positively” to study and keep up with the subjects, not only studying for the exams;
- iii) Contrary to the expectations they had had in relation to the teachers being old, distant and “pouring out” subject matter, the students demonstrated appreciation for the good working relations they established with them, their availability, informality and ways of teaching;
- iv) The constant and unexpected support of students at a more advanced stage in the course and the good relationships among class peers were, equally, very positive factors;
- v) The main factors referred to for dropping out of the course were, primarily, low self-esteem, family influence, the idea of having low manual skills and fear of practical lessons.

As regards students’ perception of the degree of adaptation to the University, at the beginning of the 2nd semester students, in general, considered themselves to be well adapted. Students who consider themselves to be “very well adapted or well adapted to the institution” were found to be among those for whom the course had not been a first choice (93.3% *versus* 81.8%). When the students were divided on the basis of their intention to continue or not on the course, those intending to leave seemed to be less satisfied with the 1st semester (37.5% reported to be satisfied or very satisfied *versus* 52.5% of those with no intention of leaving) and less satisfied with life (87.5% reported to be satisfied or highly satisfied *versus* 88.9% of those with no intention of leaving); nevertheless, it is worth mentioning that more than 50% of these students felt “very satisfied” or “satisfied” with life and considered themselves to be “very well adapted or well adapted to the institution”.

As far as the problems experienced by the students are concerned, attention and concentration were the most mentioned, followed by anxiety, difficulty with studies and poor physical health. Curiously, there are more 1st choice students with bio-psychological problems, with the exception of poor physical health with a slightly higher percentage in students who entered the course through other options. On the other hand, there are more depressed and anxious students displaying attention and concentration problems among those intending to drop out of the course, in comparison with those who wish to continue. The students intending to drop out of the course point more frequently to experiencing problems in their relationships with boy/girlfriends, financial difficulties, as well as difficulties related to their studies, adaptation to the institution and to being away from their family environment.

Analysis of the data collected through the interviews enables us to understand how student involvement in the course is central to the decision to continue. They come to understand more clearly what the course and profession is about, the type of population with which they will work and the type of work they will perform professionally, such as Mercuri, Silveira and Polydoro also observed (1998, quoted by Mercuri & Polydoro, 2004) through the activities carried out.

The factors referred to by the participants for continuing with the course focused, primarily, on the course itself, the relationship with teachers and peers, as also referred to by Pascarella and Terenzini (1980). The students spoke favorably of the practical lessons, the diversity of the population with whom they worked throughout the course and their anticipation of performing clinical consultations during the course. The importance of support and good informal relationships established with class peers and older peers was also strongly mentioned. Among the positive factors they attributed to the course, they showed particular appreciation for the practical clinical and community lessons at the beginning of the 1st semester. The fact that attending theory classes and studying was indispensable, owing to consecutive continuous assessment throughout the course, they felt obliged to spend longer periods at the institution and to keep up to date, which gave them the

pleasant feeling that the experience had become a prolongment of their secondary education.

## DISCUSSION

As far as choice priority of the course is concerned, the findings obtained in this study of students entering the first year of the Oral Hygiene course at the FMD-UL reinforce what has been found in terms of the difficulties in access to Higher Education often beginning with the actual course choice, frequently made not on the basis of choice but elimination and the occupancy of vacancies by students with better marks for entering Higher Education. These facts lead many students to take courses for which they have no particular vocation and with which they are often unfamiliar. The analysis of Tinto (1993) was taken into account, especially when he states that there are young adults who enroll on courses which are low in their choice priority, since they have higher marks than those who opt for them as a first choice, thus, those who do enter are potential dropouts who will leave the vacancies unoccupied, hence, reducing the number of students who take these courses.

As regards the “Oral Hygiene Course”, the difficulties these students anticipate show the provisional nature of their intention to continue with the course, thus, revealing *à priori* their fear of difficulties associated with a lack of motivation and desire for change in relation to the course and even the point of requesting a transfer to another course. These results are apparently in keeping with what Silveira and Polydoro (1998, quoted by Mercuri & Polydoro, 2004) suggest when they point out that primarily the belief they are in a temporary condition that will be overcome by an internal reorganization of the institution (transfer or change of course) or the accumulation of credits on entry to another course (outside the institution) is what leads students to enroll on non-preferential courses.

In the case of the students covered by this study, the alteration of expectations throughout the first academic semester of the course and faculty was quite positive. The course favorably surprised the students who had no initial expectations at the outset, particularly the practical component of the

course. The data collected in this study ties in with that from the study carried out by Soares and Almeida (2001) where the students who were favorably surprised and realistic in their expectations regarding peer relations and investment in course-related activities, stood out from those whose expectations were moderate or completely thwarted by their university experience. The former presented better indicators in terms of study methods and time management, also in vocational development, adaptation to the institution and involvement in extra-curricular activities.

As far as the OH students are concerned, they were favorably surprised by the fact that the faculty was small, had few courses and few students per class, thus, making the academic space more familiar. Anticipation that classes would be held in large amphitheatres with many students, that the people in the institutions were older and that the freshman introduction activities might not be very pleasant emerged as thwarted expectations at the end of this first semester.

The findings suggest that, to a certain extent, the quality of the university context encouraged these student opinions and, as mentioned by Chickering (1969), the role played by the size of the organization contributed to this through its institutional aims, the interactions established between students and members of the university community, teacher practices and services and programs made available to students. Furthermore, the findings in the case of the OH course suggest that academic experiences often exceeded initial expectations and the emergence of “surprised students” is just as defined by Baker and Schultz (1992, quoted by Soares & Almeida, 2001).

These findings enable us to verify that practical lessons, the professionalizing aspects of the course, the teacher/student ratio, the size of classes and the faculty are positive factors which are able to change the more negative initial experiences. Students demonstrated their appreciation for the good working relations established with the teachers on account of their availability, informality and ways of teaching.

The information gathered on the possible factors that lead students to remain on a course which was not their 1st choice supports those previously mentioned. Greater emphasis is given to the importance of good relations established between teachers and

peers, a good faculty atmosphere and the professional activities to be developed after the course has been concluded. Such data ties in with the component of Astin’s model (1993, quoted by Santos, 2001), which suggests that continuation in school is strongly associated with student and peer relations and interactions between students and the institution.

The main causes referred to as being at the root of course dropout were mainly personal factors related to the low self esteem of students, such as fear of practices, fear of hurting peers, fear of hurting people, fear of not being capable. A number of research studies corroborate such data, in that such personal perceptions of a lack of ability and performance difficulties are seen to be important in the academic adjustment and accomplishment of students (Barros & Almeida, 1991), and the experience of these problems has negative implications on academic performance, often leading to an increase in rates of school dropout (Rickinson & Rutherford, quoted by Santos, 2000). Such evidence points to a need for the creation of special support structures for students who cyclically display apprehension, insecurity and shyness in practical lessons, since such difficulties may potentially favor dropout and failure.

Family influence also proved to be important in the decision to change course, as well as the fear of not being able to work in the professional area after finishing the course.

It is worth mentioning that some of the reasons that motivate the dropout situations referred to in the literature (Mendes *et al.*, 2001) were not verified with the students in this research study, since the absence of professional outlets and financial costs, inherent to higher education attendance, were not referred to as factors leading students to drop out of this course.

Although the population of this research study only presents data representative of itself, it does, however, present an identical proportion and sequence in the distribution of its problems in comparison with the study developed with 14 undergraduate courses at the Faculty of Science of the University of Porto by Lemos *et al.* (1999), applied to a sample of 494 1st year students.

Through the collected data, one may observe that there are more students with problems of a psychological nature among those intending to leave,

whereas those who entered the course in “other” options, rather than the first, do not present the same problems. Once again, this supports the need for an identification of students’ intentions on entering a course so that, preventively, social and academic support may be given to those who will potentially present more problems. Throughout this study, there were no major differences found in the degrees of satisfaction and dissatisfaction, in the various dimensions evaluated in adaptation to Higher Education, among the students of 1st choice and other options. The differences were found between those wishing to leave and those wishing to continue.

Therefore, all the students may be regarded as potential “deserters”, since some of those who chose the course as a first option consider the possibility of leaving, while students who entered with

lower options consider continuing, which was not observed in the study by Mendes, Lourenço and Pile (2001), where dropout was seen to be a typical characteristic of students whose course had not been their first choice.

The ability and effort of courses and institutions to accomplish student involvement so as to reinforce in them the desire to continue should be geared towards all students.

However, for fuller appreciation of the issue under study, we recommend the carrying out of longitudinal studies to investigate alterations in university student attitudes and reasons for their existence over several years of course and post-course duration, so as to define interest focuses and crucial points requiring potential need of support on the part of institutions, peers and teachers.



## ENDNOTES

1. This article is based on research developed by the author within the scope of a Master degree in Higher Education Pedagogy at the Faculty of Psychology and Educational Sciences of the University of Lisbon (Albuquerque, 2006).

2. Universidade de Lisboa em Números. Retrieved 20/12/06 from [http://www.ul.pt/downloads/universidade\\_em\\_Numeros\\_2005.pdf](http://www.ul.pt/downloads/universidade_em_Numeros_2005.pdf)

## BIBLIOGRAPHICAL REFERENCES

- ALBUQUERQUE, T. (2006). *Da Intenção de Abandono à Intenção de Permanência num Curso de Ensino Superior que não o de 1ª Opção*. Universidade de Lisboa (Master dissertation).
- ALMEIDA, L. S. (1998). *Adaptação, rendimento e desenvolvimento dos estudantes do Ensino Superior: estudo junto dos alunos do 1º ano da Universidade do Minho*. Braga: Universidade do Minho, Centro de Estudos em Educação e Psicologia da Universidade do Minho.
- BARDIN, L. (2004). *Análise de Conteúdo*. Lisboa: Edições 70.
- BARROS, A. & ALMEIDA, L. (1991). Dimensões sócio-cognitivas do desempenho escolar. In Leandro S. ALMEIDA (org.), *Cognição e aprendizagem escolar*. Braga: APPORT, pp. 87-97.
- CHICKERING, A. W. (1969). *Education and Identity*. San Francisco: Jossey-Bass.
- DURÁN, J. & DÍAZ, G. (1999). *Análisis de la deserción estudiantil en la Universidad autónoma metropolitana*. México: UAM.
- FERREIRA, J. A.; ALMEIDA, L. S. & SOARES, A. P. C. (2001). Adaptação académica em estudante do 1º ano: diferenças de género, situação de estudante e curso. *PsicoUSF*. [online], jun., 6, 1 [quoted 19th January 2006], pp. 01-10. Retrieved February 2006 from [http://www.scielo.psi.bvs.br/scielo.php?script=sci\\_arttext&pid=S1413-82712001000100002&lng=pt&nrm=iso](http://www.scielo.psi.bvs.br/scielo.php?script=sci_arttext&pid=S1413-82712001000100002&lng=pt&nrm=iso)
- LEMONS, M. S.; LENCASTRE, L.; GUERRA, M. P. & PEREIRA, D. J. C. (1999). O Sucesso no Primeiro Ano do Ensino Superior: Análise de um Instrumento para Jovens Universitários. Paper presented in *II Seminário de Investigação e Intervenção Psicológica no Ensino Superior*, Aveiro.
- MENDES, R.; LOURENÇO, L. & PILE, M. (2001). *Abandono Universitário: Estudo de caso no IST*. Retrieved October 2005 from [http://gep.ist.utl.pt/files/comunica/artigo\\_comunicacao10PAG.PDF](http://gep.ist.utl.pt/files/comunica/artigo_comunicacao10PAG.PDF)
- MERCURI, E. & POLYDORO, S. A. J. (orgs.) (2004). *Estudante Universitário: Características e Experiências de Formação*. Taubaté: Cabral Editora e Livraria Universitária.
- NICO, J. B. (2000). A adaptação do(a) estudante à Universidade: porque não também o contrário? In R. SOUSA; B. SOUSA; E. LEMOS & F. C. JANUÁRIO (orgs.). *III Simpósio — Pedagogia na Universidade*. Lisboa: Reitoria da Universidade Técnica de Lisboa, pp. 55-63.
- PASCARELLA, E. T. (ed.) (1982). *Studying Student Attrition*. New Directions for Institutional Research, 36. San Francisco: Jossey-Bass.
- PASCARELLA, E. T. & TERENCEZINI, P. T. (1980). Predicting freshman persistence and voluntary dropout decisions from a theoretical model. *Journal of Higher Education*, 51, pp. 60-75.
- PASCARELLA, E. T.; SMART, J. C. & ETHINGTON, D. A. (1986). Long-term persistence of two-year college students. *Research in Higher Education*, 24, 1, pp. 47-71.
- PINHEIRO, M. R. M. (2003). *Uma época especial: suporte social e vivências académicas na transição e adaptação ao Ensino Superior*. Unpublished PhD thesis. Faculdade de Psicologia e de Ciências da Educação. Coimbra: Universidade de Coimbra.
- SANTOS, L. (2000). *Adaptação Académica e Rendimento Escolar: Estudo com Alunos Universitários do 1º ano*. Braga: Universidade do Minho.
- SANTOS, L. (2001). *Adaptação Académica e Rendimento Escolar: estudo com alunos universitários do 1º ano*. Braga: Grupo de Missão para a Qualidade do Ensino Aprendizagem, Universidade do Minho.
- SCHLOSSBERG, N. K.; LYNCH, A. Q. & CHICKERING, A. W. (1989). *Improving Higher Education for Adults: Response Programs and Services from Entry to Departure*. San Francisco: Jossey-Bass.
- SCHLOSSBERG, N. K.; WATTERS, E. B. & GOODMAN, J. (1995). *Counseling Adults in Transition*. New York: Springer.
- SOARES, A. P. (1999). *Desenvolvimento vocacional de*

- jovens adultos: A exploração, a indecisão e o ajustamento vocacional em estudantes universitários*. Master dissertation. Braga: Universidade do Minho.
- SOARES, A. P. & ALMEIDA, L. S. (2001). Transição para a Universidade: Apresentação e validação do Questionário de Expectativas Académicas (QEA). In B. D. SILVA & L. S. ALMEIDA (orgs.), *Actas do VI Congresso Galaico-Português de Psicopedagogia*. Braga: Universidade do Minho, pp. 899-909.
- TAVARES, J.; SANTIAGO, R.; TAVEIRA, M. C.; LENCASTRE, L. & GONÇALVES, F. (2000). Factores de sucesso/insucesso no 1º ano dos cursos de licenciatura em ciências e engenharia do Ensino Superior. In A. P. SOARES; A. OSÓRIO; J. V. CAPELA; L. S. ALMEIDA; R. M. VASCONCELOS & S. M. CAIRES (eds.), *Transição para o Ensino Superior*. Braga: Universidade do Minho/Conselho Académico, pp. 967-973.
- TINTO, V. (1975). Dropouts from higher education: A theoretical synthesis of the recent literature. *A Review of Educational Research*, 45, pp. 89-125.
- TINTO, V. (1987). *Leaving College: Rethinking the Causes and Cures of Student Attrition*. Chicago: The University of Chicago Press.
- TINTO, V. (1989a). Definir la deserción: Una cuestión de perspectiva. *Revista de la Educación Superior*, 71. ANUIES, México, pp. 33-51.
- TINTO, V. (1989b). Una reconsideración de las teorías de deserción estudiantil. *Handbook of theory and research*. New York: Agathon Press, pp. 359-384.
- TINTO, V. (1993). *Taking Learner Retention Seriously: Rethinking the First Year of College*. San Francisco: Jossey-Bass. Retrieved June 2005 from <http://soeweb.syr.edu/Faculty/Vtinto/Files/AACRAOSpeech.pdf>publications/magazine/v4n2/bunderson.asp
- TINTO, V. (s/d). *Taking Student Retention Seriously*. Retrieved January 2006 from <http://soeweb.syr.edu/faculty/vtinto/files/takinhgretentionseriously.pdf>
- VEIGA SIMÃO, A. M. & FLORES, M. A. (2006). O aluno universitário: aprender a auto-regular a aprendizagem sustentada por dispositivos participativos. *Ciências & Letras*, 40 (Jul/Dec), pp. 229-251.

Translated by Tânia Lopes da Silva