

# ΣΟΦΙΑ—SOPHIA

## Dropout and permanency in higher education: An application of Grounded Theory

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## Abstract

Being academic dropout an important problem for education systems and for the society in general, this study intends to understand the pedagogic factors which impact both dropout and permanency of students in the Industrial Engineering Program at Francisco de Paula University UFPS. It is a comprehensive research, theoretically founded on the Student Integration Model (by Tinto), which uses the Grounded Theory as support (Strauss & Corbin, 2006). Results show motivation as the fundamental factor that promotes academic and social integration of students, which ends up in adaptation to the university life. This motivation process is promoted by relationships established by the students with their circles of friends, and it is directly influenced by pedagogic actions developed by their teachers, the program, and the university.

**Keywords:** School dropout, motivation, pedagogy, grounded theory, education sciences.

## Introduction

The phenomenon of academic dropout in higher education has become a relevant problem for education systems throughout the world. This is due to multiple causes and it represents a high cost in the economic, social and personal terms. Statistics about dropout show overwhelming data and are the best representation of the magnitude of the problem. According to the latest regional report of the International Institute for Higher Education in Latin America and the Caribbean (IESALC, for its initials in Spanish) published in 2006, only 43% of students who start their college studies reach graduation (Ministry of National Education (MEN) 2009). Countries such as the Dominican Republic, Bolivia and Uruguay reach figures that exceed 70%; on average, Latin America countries have a rate of 44.5%.

In Colombia, the dropout rate per cohort currently reaches a value close to 46% (System of Prevention and Analysis of Dropout in Higher Education Institutions (SPADIES, for its initials in Spanish), 2013), considering the university, technological and technical levels. It should be clarified that the dropout rate per cohort involves tracking the history of students who withdrew for any cause in a particular cohort, differing from the gross dropout rate that is calculated per academic period and includes all students of the institution of higher education.

The high figures in the Latin American countries generate serious reflections on the effectiveness of the strategies adopted in educational policy. For example, given the increased coverage of higher education in Colombia, the results show a marked contrast to the pursued objectives of equity, democratization, and quality.

Researchers Swail, Redd, and Perna (2003) conducted a classification of activities intended to improve student retention in five categories: recruitment and admission programs, financial support, academic services, curriculum and instructional programs, and student services.

Of these categories, the one that refers to the programs related to the curriculum and the instruction stands out for its importance in the programs for improvement of students' permanence, because it incorporates the pedagogical dimension. The studies carried out on dropout provide sufficient evidence about the influence of the pedagogical component in the processes of integration of the student with the educational institution, results that corroborate the theoretical proposal of Tinto (1975, 1993). It is very important to mention that the latest contributions of Tinto (2006) consider that the construction of significant learning environments in the classroom, as well as student participation in academic communities, increase the probabilities of persistence and permanence. It is remarkable the importance given by this researcher to the pedagogical practices when considering that the determinants for the permanence can be found in the classroom.

Moreno, Pedraza and Pineda (2010) developed a mixed-cohort study in Colombian higher education institutions with the objective of identifying and analyzing pedagogical actions that favor the permanence of students. The results of the study allow to identify that one of them is the bonding and commitment of the students with their academic and social formation and their participation in learning communities. The teacher-student relationship within these communities fosters the students' commitment to their intellectual and personal training, as well as making them feel recognized and accepted. For higher

education institutions, an ideal teacher should possess disciplinary knowledge, investigative skills and be open to dialogue and communication with students.

The aforementioned studies reveal the importance that the pedagogical dimension acquires in the search for solutions to the complex phenomenon of dropout. It is worth mentioning that in our country, there have been very few studies that explore the roles that pedagogical practices can play in creating meaningful learning environments and contexts, as well as their contribution in aspects such as the development of cognitive skills and superior thinking, development of emotional and communicative skills, or moral and spiritual development.

The existing literature on investigative work regarding dropout, persistence and permanence is abundant in explanatory studies that identify determinants of academic, individual, socio-economic and institutional type. The results of these studies support decision making in governmental and institutional policies, which generally ignore the multiple dimensions involved in the problems of student dropout.

Therefore, it is necessary to develop a comprehensive research that allows the construction of knowledge on this topic in Latin America, which contribute to the formulation of theoretical models that address this issue from different perspectives, especially from a more human vision. In this sense, the development of the present study was motivated by the desire to collaborate in the generation of this knowledge that is so necessary for the understanding of the phenomenon of academic dropout in the local context of the city of Cúcuta, specifically in the program of Industrial Engineering of The University Francisco de Paula Santander, a state institution that currently has approximately twenty thousand students.

The Industrial Engineering Program of the University Francisco de Paula Santander was created in 2006, it is one of the academic programs that has the greatest demand on the part of young North de Santander students; it currently has 850 students. At present, this program is developing the self-evaluation process in order to obtain from the Ministry of National Education the High Quality Accreditation. The most recent data (Spadies, 2013) indicate that the rate of dropout by cohort at the University Francisco de Paula Santander reaches 57%, a figure that exceeds the national average of 46%. On the other hand, in the Industrial Engineering Program, the dropout rate per cohort is estimated at 41%.

This article presents the results of the analysis of pedagogical factors and their influence on the phenomena of dropout and academic permanence in

the Industrial Engineering Program, a comprehensive study that used the qualitative methodology of the Grounded Theory.

## **Materials and methods**

The structure of the research design consisted of the following phases: preparatory, fieldwork, analysis of the information and preparation of the final report. These stages do not present a linear sequence. On the contrary, their behavior is cyclical in nature, as each phase may eventually overlap with the others and collaborate in their reformulation and restructuring (Rodríguez, Gil & García, 1996).

### **Preparatory phase**

The research was built on three supporting lines: ontological, epistemological and methodological (Jaramillo & Murcia, 2008). From the ontological perspective, it was assumed the systemic ontology when considering the object of study as a structure or system with a high level of complexity. Epistemologically, the study was based on the post-positivist paradigm; this establishes that knowledge is the result of a dialectical process between the research subject and the object of study (Martínez, 2006). The theoretical support lines of the study were composed by the Theory of Symbolic Interactionism, the Grounded Theory and the theoretical developments of Vincent Tinto. Finally, the methodology assumed in the study was the one indicated by the Grounded Theory, derived from the Theory of Symbolic Interactionism, which allows the understanding of the meanings of human experiences to generate an inductive theory over a substantive area (Glaser & Strauss, 1967).

A delimitation of the population was made considering the students of the first three semesters of the Industrial Engineering Program (415 students). It should be made clear that, for the purposes of this study, the first semester is understood as the academic period corresponding to the first semester of 2012.

The selection of the participants was made through intentional sampling, and during the development of this process, thirteen (13) students of different academic performance were chosen, in order to have the greatest possible variability in the information, as established by the methodology of The Grounded Theory.

Technique of information collection: The interview was chosen in depth considering that it essentially allows interaction with the subjects of the research, facilitating access to the reality of human experiences in order to understand their meanings (Carrero, Soriano & Trinidad, 2006). The interviews were carried out collectively.

## Field work

In order to consider maximum variability in the sample, potential informants were initially classified based on their grades average in three categories of academic achievement: high, medium and low. A total of five (5) group interviews were conducted for a total of thirteen (13) students. The sizes of these groups were two, three and four students. The groups were selected by the researcher according to the affinity observed among the students, knowledge acquired as a consequence of having been their teacher, and in such a way as to cover the entire range of variability established for academic performance. The interviews were carried out in the library Eduardo Cote Lamus of the University Francisco de Paula Santander, and they were recorded with authorization of the participants.

The processes of data collection and analysis were developed simultaneously, following the logic of research that uses qualitative methods. For this reason, once the interviews were finished, the transcription process was carried out in order to perform the analysis established by the Grounded Theory. The sampling process itself received feedback from the results of these analyses, which generated substantive codes that indicated to the researcher the need to choose the appropriate participants in order to collect the necessary information to continue with the application of the Constant Comparative Method, and this way to reach the theoretical saturation.

## Analysis of the information

The interviews were transcribed and analyzed using the Atlas.ti software, version 5.2. Each interview provided data that were classified by open coding, comparing each incident and establishing categories. The procedure indicated by the Constant Comparative Method allowed the search for similarities and differences in the information to obtain properties and dimensions of the different categories that were being generated. These results guided the search for information through the selection of new participants in order to achieve theoretical saturation (Carrero, Soriano & Trinidad, 2006). It is important to mention that throughout the process of analyzing the information, theoretical and analytical memos were introduced, which were related to situations of relevance that were discovered during the development and analysis of the interviews.

This coding process initially allowed us to obtain a list of families of substantive codes. Subsequently, as the research progressed and with the application of the Constant Comparative Method, it was achieved a greater knowledge of the properties of the categories and their regularities, which led to a higher level of abstraction that allowed the emergence of conceptual codes by combining, reducing and integrating categories.

This transformation from substantive to conceptual codes became the fundamental stage of the analysis, because it was sought to make sense of the various relationships that had emerged between categories and the creation of a structure that would support all the analysis made up to that point. This period of great relevance in the investigation led to the discovery of the central category, which in this study is also indicated by an “in vivo” code (Glaser, 1978). From the discovery of the central category, two processes were recognized as inseparable, which are interconnected and facilitate the understanding of the actions and interactions that occur in the context of university life. Finally, the central category and processes allow the integration of conceptual codes into a theoretical model or structure that gives meaning to the reality of the studied phenomenon.

## Results

The combination, reduction and integration of the categories allowed the emergence of conceptual codes and the discovery of the central category with its “in vivo” code “My life project”. Two processes were identified: motivation and adaptation, which help in understanding the complexity of the analyzed phenomenon.

Analysis based on conceptual development allowed the construction of a theoretical model or structure. Everything begins with the high-school-to-college transition that involves choosing the Industrial Engineering career. In essence, the transition is a process of uncertainty that involves several factors, especially subjective ones. Then comes the new life in the university, where interaction takes place with the academic, social and structural reality of the institution. It is the space and time where and when students’ motivation and adaptation processes are developed, methods that are supported by the pedagogical actions of their teachers, their program and the university, but especially by the relationships that the students establish with their closest circles of friends, which becomes a motivating factor of motivation for study and self-improvement.

The motivation process played a transcendental role in the development of this research and became the key factor for understanding the studied reality. Motivation is the fundamental factor that drives the work and academic and personal development of the students, culminating with their adaptation to university life. In this sense, it is an individual who is aware of his/her construction process as an autonomous and structured being, who strives to achieve his/her goals, “his/her life project” and begins to see the perspective of his/her actions. This vision involves the perception of the teacher, the Industrial Engineering Program,

the University Francisco de Paula Santander and the students themselves. Finally, all this reality is immersed in an educational process whose purpose is the formation and development of the human being; it is here where the reality of the other is recognized and the moral action of the educator appears, contributing to the development of a humanist project based on understanding and solidarity (Gadamer, 2000).

## **Discussion of results**

The university scenario presents a cultural, social and academic reality that poses the students the challenge of generating strategies that allow their adaptation. Personal progress and approaching the desired goal depend on successfully achieving this adaptation. As for the social reality, the student is part of a heterogeneous population of young people with diverse ways of thinking, feelings and acting. During the first semester, the students take the first step in their process of social adaptation, which consists of forming circles of friends, with whom they share goals, tastes, lifestyle, mental models, class time and study time. It is remarkable the influence that groups or circles of friends have in the process of adaptation or linking to university life.

This influence becomes more relevant when considering the main challenge students face, which is to respond to the academic demands of the program and the university. There is not only a need to achieve new learnings, but to overcome the evaluation of them. It generates a dynamic in the young that leads to the construction of their autonomy through effort, discipline of study and self-motivation, in order to achieve academic success. In addition, it is here that the most favorable strategy for the academic adaptation of young people is visualized, which consists in seeking support in their close circle of friends. The group study mode allows them to unite in order to share knowledge, be generous and supportive, encourage them to study, and overcome difficulties. In this way, the collaborative work appears as support for learning and academic improvement.

What is (the factor) that moves the students to unite to survive the demands of the academy, achieve the improvement and continue with the development of their life project? How is it generated the force that drives these young people to move forward? It is important to understand that the fundamental process that underlies the strategy of collaborative learning is motivation, which becomes the factor that drives the student's academic and personal development and a key to understand the whole process of adaptation to the university world.

When we analyze the reasons that mobilize young people towards collaborative learning, toward solidarity, generosity, commitment and the satisfaction

of serving others, we come to the recent discoveries of neuroscience that indicate that reason does not exist separated from feelings and emotions, but constitute a cognitive-affective system (Damasio, 1994). Moving forward a little more, we come to the concept of intrinsic motivation, which is defined as: "The desire to engage in an activity by its own essence, that is, only for the satisfaction it gives" (Kohn, 1993: 87). Unlike the extrinsic motivation, where the incentive that guides the behavior is independent of the activity performed, in the intrinsic motivation, this is inherent to the activity itself and does not need reinforcement. In addition, it has been determined that the emotional support and the ability to establish personal relationships operate as constraints of intrinsic motivation (Deci & Ryan, 2000).

Damasio (1994) has proposed the hypothesis of somatic markers in order to explain the approximation that human beings make to their immediate social domains. Somatic markers are feelings that are generated by emotions and are related to decision making in the face of social life. There is a deep relationship between mind, emotions, affection and long-term foreseeing.

Despite the diversity of theoretical perspectives presented by a construct such as motivation; trying to understand and discover the reasons that drive us to action; and to continue struggling for our success; in the case of students, achieving both adaptation and an academic degree are closely linked to this long-term foreseeing, and the perception that only through perseverance and commitment to maintain that attitude will success be achieved. It is a rather complex situation where it occurs the interaction of the individual with society, and motivation manages to release the latent capacities of the human being that lead to change and personal transformation.

The processes of motivation and improvement of the students are directly influenced by the pedagogical actions developed by their teachers, the program and the university. Thus, the nature of these actions is decisive to achieve the understanding and identification of the complex relationships that occur during the process of adaptation to university life.

The pedagogical practices of teachers have a considerable effect on the motivation of Industrial Engineering students. Pedagogical factors such as meaningful content of learning, methodology adopted in classes, clarity of exposition, relationships established with the student, promotion of collaborative learning and metacognition, nature of tasks and assignments, orientation and accompaniment of student work, among others, all of them exert a profound influence on the process of academic adaptation of students to university life, mainly because they have a considerable effect on motivation and linking.

The learning contents and methodologies implemented by the teachers in their classes are associated with significant experiences, which are very important for the students because they allow them to find a meaning to the study carried out, which leads to motivation and interest to continue advancing along the learning and training path. The methodologies used by teachers can be very valuable for the creation of environments and significant experiences to the extent that they encourage participation, interaction, collaborative learning and the development of higher thinking processes.

The clarity in concepts is directly related to the use of pedagogical and didactic strategies that facilitate the understanding of the different subjects that are studied; it is a relevant factor because it involves the construction of knowledge, the development of cognitive structures by the student.

The relationships established between teachers and students are associated with intellectual and human development. The dynamics of these relationships takes on great importance because the formative processes are based on the understanding and recognition of the others, the possibility of being impressed by their reality. Due to the fact that understanding the other (person) is made possible through the intermediation of language (Gadamer, 2000), it is through a pedagogical dialogue between the teacher and the student how a project of humanity can be built, because one's own individuality is overcome to hear to each other, to eliminate the distances and to work jointly in order to reach common goals. This deeply human experience is transcendent and reaches levels of aesthetic experience (Gadamer, 2000), in such a way that pedagogical practice as a moral choice of the teacher claims the essential nature of education as a forger of horizons of possibility and meaning for humans.

The pedagogical actions developed by the program and the university also influence the motivation processes of the students. These are focused on academic, cultural and sporting activities, with the aim of promoting adaptation to university life. The communicative processes that are established between the Industrial Engineering Program, the university and the students are of great importance due to the need of having adequate information regarding the reality of the institution and its activities, which leads to the appropriation and to the sense of belonging for both the institution and the program. There is another equally relevant front that is related to the professional support given by the program and the university to the students and the management developed to achieve the link with the social and work environment. This set of activities is associated with training and professional development activities that are indispensable to face the reality of the working life.

The student's work with a view to achieving self-improvement, educating oneself, building oneself as a structured, reflective and autonomous human being, is part of a life project that indicates the path to follow in order to achieve success as a person and as a professional. In this sense, the students possess a foresight of their actions that is determined by the perception they have of their teachers, the program, the university and themselves, as human beings in permanent formation. This finding of research is interesting because it leads to a joint vision, a common project of building humanity that is based on the university's educational plan.

Students perceive the ideal teacher as a pedagogue, a guide, a person who guides and illuminates the path that leads to knowledge. This is first and foremost a humanist who recognizes and perceives the students as human beings who wish to form and advance in their process of personal construction.

How should the university and the Industrial Engineering Program be in accordance with this prospective vision of the students? What are the processes that should be developed to achieve the goals desired by these young people? First of all, the university and the program must be responsible for the intellectual and human development, seeking to prioritize the academy, creating a cultural level and an appropriate coexistence that allow the integration and adaptation of its students. It is a conception of the university as an institution committed to the development of pedagogical actions, to modify schemes and behaviors that are the reflection of a city that has a very low cultural level and a very critical atmosphere of coexistence, a consequence of multiple causes such as the harmful effect of the media; lack of political, social, trade and economic leadership; contempt and disrespect for laws and rules of coexistence; among others. For the university and the program, all of them represent a challenge for forming integral citizens with an academic and human potential that allows them to carry out the transformations the society needs, and that appear explicit in the mission of the institution.

Finally, what is the vision of the self? What is the prospect of the work that they develop as university students? The recognition of the self as an indispensable condition of the formative process (Campo & Restrepo, 2000) is an indicator of the construction of the student's life project, of the need to walk the path that leads to the desired goals, the search for autonomy and the intellectual, moral and spiritual improvement of the individuals who find a meaning to their existence through the educational act. It refers to the human being as a possibility, as a permanent construction, a project of life that becomes a common project of humanity

when others, their colleagues, are considered; who also walk on that path that is traced by education.

## Conclusions

The interpretative analysis on which the methodology of the Grounded Theory is based on allowed the understanding of the influence of the pedagogical factors on the phenomena of dropout and permanence of the students of Industrial Engineering in Universidad Francisco de Paula Santander. This understanding was obtained because the research was aimed at unveiling the meanings that the pedagogical practices, as well as the training actions developed by the program and the university, have for the students.

The motivation process played a transcendental role in the development of this research and became the key factor for understanding the studied reality. This is the fundamental factor that drives the work and the academic and personal development of students, which ends up with their adaptation to university life. In this sense, the totality of pedagogical factors involved in the actions carried out by teachers, as well as by the program and the institution, must be oriented towards the liberation of the latent capacities and the human potential of students through the promotion of their motivation. Facilitating this process is a human and ethical responsibility that leads to the transformation of the individuals who find meaning to their existence through the educational process, thus allowing them to develop their life project.

The following difficulties were identified by students in their adaptation process to the university: lack of knowledge and fear of university life; lack of previous knowledge in basic science subjects, plus a history of low academic performance; the challenge raised by the academic requirements of the program; and finally, the deficiencies observed not only in the pedagogical practices of teachers, but also in the actions and processes developed by the program and the university.

Upon entering the university, students face a social, academic and cultural reality that is unknown for them, and for which they must generate strategies in order to achieve adaptation. Analyses made it possible to recognize the following strategies: personal effort and improvement; formation of circles of friends; and the support given by the pedagogical actions of teachers, the program and the university.

During the first semester, students begin their process of social adaptation through the formation of circles of friends. But this not only facilitates social adaptation, it also contributes significantly to academic adaptation, because it serves as support to respond to the academic requirements of the program. In this way, collaborative

work appears as support for learning and academic improvement. It is a strategy based on solidarity that invigorates the processes of study and integration, fostering motivation, the key process in this study, which is closely related to the students' process of adaptation.

The structural and academic reality of the university is a fundamental factor for adaptation and permanence, due to the influence that the pedagogical practices of the teachers have and the formative actions of the program and of the university on the motivation of the student. From the information gathered through the interviews, it can be said that teachers' practices play a relevant role in the creation of meaningful learning environments, understanding fostering, development of cognitive processes, counseling and accompanying actions, contribution to intellectual and human development, as well as in the students' motivation and relationship with the university reality. Thus, the pedagogical relationships established between teachers and students become the fundamental factor of the academic and human training process that leads to the adaptation of students.

It is convenient that teachers develop contents and implement methodologies in their classes that encourage participation, interaction, collaborative learning, development of higher thinking processes and generation of meaningful learning environments, which are very important for students, because they allow them to find meaning in their study, which leads to motivation and interest in moving further along the path of learning and training. Students express the need to relate the contents taught in class with the applicability of knowledge.

Clarity in concepts is directly related to the use of didactic strategies that facilitate the understanding of the different subjects that are studied; it is a relevant factor because it involves the construction of knowledge, the development of cognitive structures by the student. Deficient pedagogical and didactic actions lead to demoralization and demotivation for studying academic subjects. For this reason, it is recommended the design and planning of didactic strategies aimed at the formation of critical disciplinary thinking that involves the development of four dimensions: language and argumentation, problem solving, metacognition and motivation.

The relationships established by teachers and students become a factor of great transcendence because the formative processes are based on the understanding and recognition of others, on the possibility of being impressed by the reality of others. In this sense, it is necessary for teachers to implement, in their pedagogical practices, strategies aimed at the

generation of environments that favor dialogue, trust and personal interaction. In this way the pedagogical act that involves the dialectical teacher-student relationship allows the appropriation of knowledge and the transformation of individuals. Students perceive the ideal teacher as a pedagogue, a guide, a person who guides and illuminates the path that leads to knowledge. This pedagogue is first and foremost a humanist who recognizes and perceives students as human beings who wish to form themselves, who want to advance in their process of personal construction.

The tasks and activities assigned to the students should be designed in such a way that they contribute to the development of intellectual capacities and processes of higher thinking, which acquire a great importance in the process of integral formation of a professional who must perform in the globalized and post-technological world of the 21st century. These activities express the capacity of the teachers to generate interest and motivation for learning.

The desired image of the teacher as a person who accompanies and guides, that is, as a pedagogue willing to observe the anomalies in the development of the educational process, and to stop and reflect in order to make a proper reading of reality; that image can be appreciated in the statements of the students when they express the need to receive adequate guidance in the process of learning by the teacher, to be guided by the correct route to knowledge.

The pedagogical actions developed both by the Industrial Engineering Program and by the university also have a considerable influence on the generation of motivation and interest in students. Academic, cultural and sporting activities, communicative processes, relations established by the program and the university with the social and work environment, together with the support and professional support given to the students, all (of them) constitute significant motivational activities that directly affect the permanence and the formative process.

The university and the program must be responsible for the intellectual and human development, trying to prioritize the academy, creating a cultural level and an appropriate coexistence environment that allow the integration and adaptation of its students. It is a conception of the university as an institution committed to the development of pedagogical actions to modify schemes and behaviors that are the reflection of a city that has a very low cultural level due to multiple causes. For the university and the program, it represents the challenge of forming integral citizens with an academic and human potential that allows them to carry out the transformations the society needs, and that appear explicit in the mission of the institution.

It is imperative that the university and the program establish more efficient communication processes, so that the necessary information be available, favoring the processes of academic and social integration. It is a worrying situation because the students say that they do not know the guidelines of the program and the university, the research policies, the information systems and the advances made in the accreditation processes, among others. This situation must be very present in the development of the self-evaluation processes for accreditation purposes that the institution advances today.

The actions that are considered most necessary for training and professional development are those that involve the management of the program and the university, in order to achieve the link with the social and industrial context of the region. It is a generalized conception of students, who demand an institutional commitment for the university, in order to provide support in different activities such as professional practices and industrial visits. On the part of the program, the students consider that it should be promoted teaching methodologies in teachers that emphasize the applicability of the subjects taught, because there is a great interest in knowing the labor reality that must be faced by an industrial engineer.

## References

- Campo, R & Restrepo, M. (2000). *Formación Integral, modalidad de educación posibilitadora de lo humano*. Bogotá D.C, Facultad de Educación, Pontificia Universidad Javeriana. [ Links ]
- Carrero, V; Soriano, R & Trinidad, A. (2006). *La construcción de la teoría a través del análisis interpretacional*. Madrid: Centro de Investigaciones Sociológicas. [ Links ]
- Damasio, A. (1994). *Descartes Error. Emotion, Reason, and the Human Brain*. New York: Grosset/Putnam. [ Links ]
- Deci, E.L. & Ryan, R.M. (2000a). *Intrinsic and extrinsic motivations: classic definitions and new directions*. *Contemporary Educational Psychology*. 25, 54-69. [ Links ]
- Deci, E & Ryan, R. (2000b). *Self-determinations theory and the facilitation of intrinsic motivation, social development and well-being*. *American Psychologist*. 55(1), 68-78. [ Links ]
- Gadamer, H. (2000). *Educar es educarse*. Barcelona: Paidó [ Links ]s.

- Glaser, B & Strauss A. (1967). The discovery of grounded theory: strategies for qualitative research. New York: Ald. publishing. [ Links ]
- Glaser, B. (1978). Theoretical Sensitivity: Advances in the Methodology of Grounded Theory. Mill Valley, C.A: Sociology Press. [ Links ]
- Jaramillo, L. & Murcia N. (2008). Investigación Cualitativa “La Complementariedad”. Armenia: Editorial Kinesis. [ Links ]
- Kohn, A. (1993). Punished by rewards. The trouble with gold stars, incentive plans, A.s, Praise, and other Bribes. Boston: Houghton Mifflin Company. [ Links ]
- Martínez, M. (2006). La Investigación Cualitativa (Síntesis Conceptual). Revista de Investigación en Psicología. 9(1); 123-146. [ Links ]
- Ministerio de Educación Nacional (MEN). (2009). Deserción Estudiantil en la Educación Superior Colombiana. Elementos para su diagnóstico y tratamiento. Bogotá [ Links ]
- Moreno, I; Pedraza, A. & Pineda, C. (2011) Efectividad de las estrategias de retención universitaria: la función del docente. Educación, 14(1); 119-135. [ Links ]
- Rodríguez, G; Gil, J & García E. (1996). Metodología de la Investigación Cualitativa. Granada: Ediciones Aljibe. [ Links ]
- Ministerio de Educación Nacional. (2009) Sistema de Prevención y Análisis a la Deserción en las Instituciones de Educación Superior Bogotá: Universidad de los Andes. Disponible desde: [http://spadies.mineducacion.gov.co/spadies/consultas\\_predefinidas.html?2](http://spadies.mineducacion.gov.co/spadies/consultas_predefinidas.html?2) [ Links ]
- Swail, W; Redd, K & Perna, L. (2003). Retaining minority students in higher education: A framework for success. ASHE-ERIC Higher Education Report. Jossey-Bass San Francisco: Market Street, [ Links ]
- Tinto, V. (1975). Dropout From Higher Education: A Theoretical Synthesis of Recent Research. Review of Educational Research , 45, 89-125. [ Links ]
- Tinto, V. (1993). Leaving College: Rethinking the Causes and Cures of Student Attrition (2 ed.). Chicago: The University of Chicago Press. [ Links ]
- Tinto, V. (2006). Research and practice of student retention: What is next? Journal of College Student Retention, 8(1); 1-19. [ Links ]