Study habits among university students of accounting at Centro Universitario Temascaltepec, Mexico

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INTRODUCTION

Study habits are constant modes of action with which a student reacts to new content, in order to know, understand and apply it. The following can be enumerated: use of time, ideal conditions, disturbing elements, efficient planning of the work, correct selection of sources of information and documentation, adequate presentation of the results, observation techniques, attention, concentration and relaxation (Fernández, 1988; Núñez and Sánchez, 1991).

Training and stability are phases of the study habit. The first refers to the acquisition period while the second refers to the period in which the acts have already been achieved and are carried out frequently, easily and automatically. Habits are effective elements in the existence of students and putting them into action requires knowledge, capacity and desire (Perellón, 2014).

A student cannot develop effective study skills without good habits that argue with greater speed and depth about the knowledge and mastery of a subject. In addition, studying effectively and efficiently consists more in knowing where and how to obtain information, as well as the ability to make intelligent use of it to solve an...

Study habits are methods and strategies used by the student to assimilate knowledge, exercise his ability to avoid distractions, pay attention to the material and carry forward the efforts made throughout the process. A habit is a learned behavioral pattern that is mechanically presented to specific situations of routine type, in which the person no longer has to think or decide on their way of acting. Study habits are a set of intellectual activities that enable the subject for an easier and deeper assimilation, transformation and creation of cultural values (Cartagena, 2008).

According to Coll (1990), learning is aimed at producing some change in the way of being and acting, this must be supported in the motivation towards the study, that is to say, by learning something new through an internal force that impels the person towards the achievement of an objective. Learning goes well beyond understanding and appropriating knowledge, questioning why and what this knowledge is used for, i.e., moving to meta-learning and being willing to constantly relearn, life-long learning. That is why the teacher can advise and give some guidance to students to improve their study habits, correct their strategies and improve their learning styles.

At the international level, there is a great concern on improving the indicators of desertion, failure, student backwardness and terminal efficiency, since these are influenced by the high levels of economic inequality presented by each country, as mentioned by the Organization for Economic Cooperation and Development.

Innovating education and achieving learning are the most complex challenges facing humanity, regardless of the philosophy and purpose that moves its actors. This phenomenon is complicated because in many aspects, humans are unpredictable since diverse factors and variables that are difficult to quantify, participate and interact in the educational process. However, in spite of being complex, education is one of the most appreciated, practiced and promoted activities by the society (Escalante et al., 2008).

For several decades, education in Mexico has presented very varied problems such as high failure rates, backwardness and desertion, accompanied by low terminal efficiency (COEPES, 2002).

Higher education plays a very important role in the transformation of every society, since it is at the heart of progress in the cultural, social, economic and political spheres, and therefore, from a cultural point of view, education has a direct impact on social welfare (Bruner, 1998).

At the higher level, academic activity takes place during a period of life in which human beings are concerned about acquiring knowledge and assuming attitudes that facilitate their integration into the workplace. The professional practice of graduates entails, among other things, taking decisions at a scientific and economic level, which contribute to forging a better society. In order to assume such responsibilities, it is very important that students acquire new knowledge, behaviors or experiences of self-criticism, that they actively participate in study, work and reflection groups about their personal and social circumstances (Ander-Egg, 2001).

Therefore, higher education institutions have proposed a new concept of education, through the generation of knowledge and tools necessary to take advantage of diversity, the convergence of cultures, the large amount of information available and new discoveries brought by science and technology.

In this sense, it is necessary to continue modifying the paradigm of traditional teaching and integrate it into the paradigm of learning, in order to respond to society as well as to the labor market, since today they require professionals who are experts in their discipline, who master abilities, skills, competencies and/or generic capacities and who can successfully adapt to a world of rapid obsolescence.

The challenges facing higher education in Mexico are desertion, student backwardness, and low rates of terminal efficiency. In general figures, as a national average, it has been reported that out of 100 students who enter the University only 50 finish all the subjects of the curriculum, and of these, only 20 are titled (ANUIES, 2001).

We know that these indicators are influenced by a variety of factors, including economic, social and cultural factors. Within the latter, we can mention those related to the academia, with a number of complex aspects that influence the school success of students. Various theoretical-methodological currents have sought to identify them and specify their value in the academic development of students at all educational levels (Mira and López, 1995; Márquez, 1995).

One factor that influences the high rates of academic failure in Mexico is the inadequate development and use of study habits at the university level. This problem generates learning difficulties that affect the quality of education manifested by students during their academic formation and influence the previously exposed indicators (Tinto, 1992).

According to Vélez-Ramírez (2008), since Aristotle the term study habits has been linked to education, proposing that man must be educated taking into account his habits and his powers or his natural or superior faculties: intelligence and will. On the other hand, it designates study "habits" as those induced (acquired) dispositions, which allow man to conduct himself well or badly with regard to passions. Habits are "virtues" or forces of the human being, that perfect the condition of which it is a virtue; "the virtue of man is the habit by which man also becomes good and by which he properly executes his own function". This is how one speaks of acquired habits. Such habits, according to the perfection of intelligence or will, are called intellectual habits.

Considering that the high rate of academic failure in both compulsory and complementary subjects is constant, in spite of the activities carried out in some educational programs; the analysis of study habits and their
relationship with the development of cognitive skills themselves has been motivated, and can be stimulated through the pedagogical strategies that each teacher uses (Perrenod, 1996).

Vildoso (2003) showed that "learning through a process of comprehension and research about all the elements that enter into relation with the learned object, cannot be forgotten, neither with time, nor with circumstances, forming part of the mental structure for all life". Low academic performance arises because the student does not know how to study, since he neither organizes his activities nor does he have adequate working methods or study techniques that allow him to learn.

One of the most frequent reasons presented to explain the low academic performance of students, at all levels of the educational system, is the lack of study habits such as: proper use of time, reading and making good use of what is read, such as taking notes, sketching, properly using the center of access to information, among others. According to Santiago (2003), this situation causes a lot of time to be lost and, at the same time, causes discouragement and frustration among students. It is for this reason that many researchers have dedicated time to investigate the development of alternatives to support the student and to provide him with tools that allow him a better academic development.

Kancepolski and Ferrante (2006) reported that study habits aim to achieve learning, it is understood from a cognitivist position as "a process of comprehension, integration, assimilation, accommodation and interaction between the subject and the environment. In this sense, the student's capacity to think, perceive and relate facts or ideas is determinant and when this is not achieved, learning cannot be achieved. Generic abilities cannot be taught with manuals, neither by repeating, nor by memorizing, because they are acquired in practice, with experience and are always being renewed.

It is necessary to understand that context also intervenes in the student's way of life, considering that the environment in which the student develops influences the acquisition in the first years of life, the habits that he will use in the future; the context being, in turn, one more educator. A particular characteristic of habits is that, once the habits are formed, the actions are executed without retraining them again and in a constant way (Leontiev, 1969; quoted in Márquez, 2003).

The changes achieved in the student not only refer to the aspect of how he knows the information, but also involve the set of habits, skills, abilities, attitudes, aspirations, ideals, interests, concerns, achievements, among others, that the student must acquire and make his own. That is to say, the fact that there is an effect on school performance does not only refer to the quantity and quality of knowledge acquired by the student in school, but to all the manifestations of his life.

There are students who regularly have problems in acquiring knowledge, with them it is necessary to implement alternatives that improve their academic performance, one of them is to improve their study habits. Normal students are catalogued as those who do not present any difficulty to excel, even though the tasks are difficult. The great advantage is that they correctly use diverse learning techniques such as learning strategies, study habits, among others (Sánchez, 2002).

A subject who has grown up respecting limits, routines and habits will not present many difficulties when faced with the task of acquiring the habit of studying. However, those who have not known routines, limits or order will find it very difficult to acquire a habit of study that demands concentration and attention (Hernández, 2000).

At present, the topic is of great relevance since higher education institutions propose a new educational paradigm, through the development of knowledge and tools necessary to take advantage of diversity, the convergence of cultures, the large amount of available information and the new discoveries that science and technology provide. Therefore, if the student does not have a solid base of study habits, it negatively impacts on the activities carried out both in their academic, personal and professional training (Covey, 2009; Bajwa et al., 2011; Cartagena, 2008).

Aguilar, 1983 quoted in Márquez (2003), stated that "the act of studying means habit of studying", a student culture that develops through the repetition of small acts that, if they are sequenced so much, transform habits into actions in front of the study situation. These habits serve as an important methodological tool that contributes to integral formation, which drives intellectual development, gradually orienting the student to have a more independent and self-managed attitude to their learning.

Hernández (2000), calls study habits "general skills for study activity", which include both the search, processing and fixation of information, whether oral or written. This includes the organization of time, communication and support for problem solving. An element to consider is to convince students to appropriate a self-regulation of their behavior, which contemplates a previous planning of their performance, the control or monitoring of its execution and the evaluation of its results with the specific contents of the subject in question. Already, during the execution itself, the student will have the possibility of manipulating directly his object of knowledge. This is the reason why in this stage it can be offered help, as it requires it, with habits of study, in function of his particularities and task demands. Here the teacher acts as a guide, mediator and orientator in the strategic or regulatory use of the learning processes.

In the learning process, the subject must acquire a series of skills and contents that are internalized in their mental structures, can be applied in different situations as resources to acquire new knowledge. In order to achieve these behaviors, the school must provide students with working methods that involve study techniques for acquisition, interiorization and permanent application in their studies (Perellón, 2014).

This research uses the notion of study habits in the sense of the different actions undertaken by the student repeatedly to acquire knowledge through his class notes,
textbooks, web pages or any source consulted for this purpose, with the purpose of reaching a goal that he has set for himself (Pozar, 2002).

However, experience has shown that a significant number of university students obtain low academic results. Not all students successfully face the new challenges posed by the University: greater demands, planning and organization of academic work, greater dedication to study, autonomy and field and library research, among others (Hernández, 2000).

According to Escalante et al. (2008), they mentioned that the success or failure of studies depends largely on study habits, which are formed by the following variables:

a) Hygiene Strategies: Here are the acts that maintain and promote physical and mental health.

b) Conditions of Materials: It considers all the resources and materials necessary to address the contents proposed in our subjects, in addition to considering the physical space and its characteristics.

c) Study Strategies: They are the method of study that the person uses to acquire knowledge. Creating the habit of study integrates will, motivation and psychological isolation.

d) Study Capacity: They are the mental actions that we must possess and dominate to improve learning, and include the following: the observation, the association and the synthesis.

Many of the problems related to success in school revolve around good study habits and expectations in relation to homework. In this sense, parents play an important role in providing their children with the environments and materials necessary for the study to be a successful activity.

The previous approach, was oriented to know the conditions of the students incursion in the study, in order to identify the diverse forms of organization and planning, environmental situations, as well as the techniques and habits that favor the academic success.

Students' school failure can be influenced by not attending classes, being late to class, not doing homework, not investigating, not reading, and not accepting any kind of additional support from peers and teachers.

**Objective**

To determine the level of utilization of study habits by second, fourth, sixth and eighth semester students of the Accounting licenciature of the University Center Temascaltepec.

**METHOD**

**Context of the research**

The present research was carried out with 143 students of both sexes in the second, fourth, sixth and eighth semester of the Accounting Degree of the Temascaltepec University Center of the Autonomous University of the State of Mexico, from rural areas, semi-rural and urban with ages ranging from 18-21 years. The sample size was not calculated as the principal wanted to know the results of all the students.

The validated tool, Inventory of Study Habits (IHE) of Pozar 2002 was used, with a quantitative approach to calculate the level of use of study habits. The reliability of the Inventory of Study Habits instrument for professional studies, for the scales of environmental conditions of study, study planning, material use and content assimilation have reliability coefficients of 0.965, 0.951, 0.934 and 0.951, respectively. The validity coefficient of the instrument for professional studies is 0.840.

A descriptive study was applied to the present research, which was used to analyze how study habits and their components manifest themselves. These studies described the frequency and most important characteristics of a variable.

The research was of a non-experimental type, since the subjects to be studied were not manipulated, it was also transactional because the information was obtained in a single moment (Sampieri et al., 2006).

It was formulated as an alternate hypothesis: Students of the Accounting Degree of the Temascaltepec University Center have a high level of normal use in their study habits.

**Development of the research**

First, authorization was obtained from the Honorable Governing and Academic Councils of the Temascaltepec University Center, to enter classrooms and groups of students to apply the Inventory of Study Habits (IHE) instrument, according to the date and time authorized in writing by the highest authority. Also, information related to undergraduate students of Accounting by semester were obtained.

Thereafter, teachers and students were made aware of the aim of the research, as well as their valuable collaboration and participation in the implementation of the instrument.

Then, a detailed explanation was provided to each group of students by the researchers on how to provide answers to the answer sheet by relying on the booklet of questions in their contents of environmental conditions of study, study planning, use of materials, assimilation of content and sincerity, until all students understood its application.

The IHE of Pozar (2002) is a test designed to detect the extent to which students know their trade. It consists of 90 elements organized into eleven factors, distributed by scales, as follows:

Scale I. Environmental conditions of study: It has 18 elements that compile the conditioning of the environment surrounding the student, such as personal, physical environment, academic behavior and performance.

Scale II. They are twelve elements that inquire about the planning of the study. This includes schedules of all the activities, in addition to contemplating resting spaces, the organization of the materials and elements necessary for the study.
Scale I. It is the use of materials that, through 15 elements, establishes the handling of books, readings and abstracts.

Scale IV. Content assimilation: consists of two factors and 15 elements to determine both the degree of memorization and the personalization that includes personal and team work.

The structure of the Inventory makes it possible to know pedagogical strategies with elements of the learning that the student applies such as planning activities, organization and use of study materials, in which the student's willingness and commitment to learning is fundamental.

IHE methodology, according to Pozar (2002)

For each of the basic scales:

There is a total direct score by scale, involving all the items that integrate it.

Correction and scoring

The total direct score depended on accomplishment of the correction of each of the scales, as follows:

To make the correction of scale I (Environmental conditions) on the first page of replies, the template was placed so that the first column of circles overlapped over the student's answers in the right margin of the page, and that in the first and last circles (of smaller size) appeared the numbers 1 and 30.

Any response from the subject that matches any circle in the template was considered a good response and received the score printed above. The score for that page was added to the points obtained by the answers that appeared in the circles and their total was recorded in the corresponding box that exists in the lower margin of the page.

On the same page, the other scales (II, III, IV, and S) were followed and the results were recorded in the spaces available for that purpose in the lower margin of the page.

The same procedure was followed with the following pages of replies (in the reference circles where numbers 31 and 60 appeared on the second page and 61 and 90 on the third page) with the results in the lower margin.

The direct score (P.D.) for each of the scales was obtained by adding those obtained on the three pages, and the result was recorded in the second column of the profile box on the cover of the issue.

Preparation of the profile and interpretation of the results

In Tables 6 to 10 of the IHE manual of Pozar, in the central part are the direct scores corresponding to each of the scales, and in the columns on the right and left, their correspondence with a rating scale.

The grading column is simply a nine-point scale, built from the typing data, which helped the researcher to classify the student with reference to the normative group that served for the typing. In the profile (cover of the test copy) five subjective rating values are grouped: Bad, Unsatisfactory, Normal, Good and Excellent.

The use of the scale tables was based on the direct scores recorded in the second column of the Profile box. In the first place, the scale for each student, that is, the normative group in which the results were compared, was determined, taking into account the type of studies currently being carried out by the student (bachelor's degree).

The direct score obtained by the student was then searched in the table and in the column of Scale I, the corresponding rating was entered in the first and last columns of the table and moved to the profile box making it a clear sign on the Scale I line, at the height of the corresponding rating.

Then the same was done with the other Escalas. Once all the grades were recorded, they were joined with straight lines; the resulting broken line is the profile corresponding to that student.

Subsequently, to the information collected and organized, analysis was done with the statistical package SPSS version 21, calculating the descriptive statistics to obtain the total direct score per semester. Subsequently, this result was related to the manual scales and finally its level of utilisation of the Pozar IHE scales was obtained.

RESULTS

Once the information obtained in the field was collected and organized, the information was processed and the following results were obtained:

Scale of environmental conditions

The behavior of the level of use of study habits in their scale of environmental conditions by students in the second, fourth, sixth and eighth semesters who presented a moderate Normal utilization level with direct scores of 23.2, 25.6, 23.3 and 25.9, respectively.

Study planning scale

In this scale, it was identified that in the second semester the students presented a level of Normal Low utilization, while the fourth, sixth and eighth semesters presented a Moderate Normal level with direct scores of 10.8, 13.9, 14.6 and 14.5, respectively.

Scale of use of materials

The degree of use of study habits based on their scale of use of materials; students in the second semester had a Low Normal utilization level and the fourth, sixth and eighth semesters presented a Moderate Normal level with values of 17.1, 19.7, 20.2 and 21.1, respectively.

Content assimilation scale

In this scale, a Normal Low score was identified for students in the second, fourth, sixth and eighth semesters.
with direct scores of 16.1, 15.9, 16.4 and 17.4, respectively.

**Scale of sincerity**

In this scale, students in the second, fourth, sixth and eighth semester presented a Moderate Normal level of utilization with scores values of 18.1, 19.3, 18.8 and 18.3, respectively.

**DISCUSSION**

After analyzing the information with respect to other researches, the following discussion was structured:

**Profile of study habits of the scale of environmental conditions**

The results of this research are superior to those obtained by Torres et al. (2009), which reported that students show an unsatisfactory degree of normal use with respect to the environmental conditions of the study. It is worth mentioning that the educational model they apply is a curricular approach centered on the student, which seeks to develop the capacity of the student to think for himself, to formulate questions and to find solutions to the problems of his profession.

The differences found between one research and another may be due to the educational model being worked on at the Temascaltepec University Center, which is based on constructivism, centered on the student and with an integral formation being similar to that reported by Torres et al. (2009), which is centered on the student. The student profile considers certain aptitudes and attitudes for constructing the knowledge of any subject, as observed in students who correctly apply study habits.

Another aspect that influences the results is the school environment, which is affected when there is not a good interaction between peers and teachers (Vygotsky, 1978). In the same way, it is necessary to have an adequate and comfortable space that allows concentration to study (Ausubel and Robinson, 1969).

Another factor that intervenes in the results found is the academic behavior of each student within the classroom, since some students do not express their doubts about technical terms or about the discipline, and they do not make notes nor are they participative.

This is related to the theories of Piaget (1969) and Vygotsky (1978), who pointed out that knowledge is not inherited or acquired by direct transmission; for both, knowledge is a construction of context.

Piaget spoke about the role of play, experience and social transformation in cognitive development, and values the importance of cooperation and cognitive conflict that arise when students interact in educational activities, as a means to facilitate cognitive and moral development. It argues that education should be oriented towards providing the environment and the means to nurture the subject’s curiosity and exploratory activity that leads to meaningful learning.

The foregoing coincides with cognitive theories, which recognize that environmental conditions favor learning. The explanations and demonstrations given by the teachers of the concepts make the information entry routes for the students, and the exercise of skills also promotes learning to learn. At the same time, these theories debate that mere educational factors do not fully account for student learning (Bruner, 1988).

Profile of study habits in relation to the study planning scale

The results of this research are superior to the findings of Torres et al. (2009), who reported that students show an unsatisfactory degree of normal utilization. The same behavior was observed by Martínez and Torres (2001), in their study titled "Analysis of study habits in a sample of university students" where they applied a student-centered educational model, and found that students show an unsatisfactory degree of normal utilization in relation to the scale of study planning.

The differences found between the present research and others can be explained by a better organization of the academic activities of the Accounting students of the University Center Temascaltepec, since these are organized develop activities inside and outside the classroom. Besides, some have no other way to use their time, therefore they spend more time organizing their academic activities, as well as developing a personal and group study schedule, taking into account that the class schedule and curriculum is flexible, which allows them the freedom to plan and organize their academic activities inside and outside the classroom.

Piaget (1969) stated that the tasks or activities that students carry out inside and outside the classroom or school are directly influenced by the social context in which they live and coexist, which is directly reflected in their learning and academic performance.

**Profile of study habits of the scale of use of materials**

The results of this research are inferior to the findings of Torres et al. (2009), Martínez and Torres (2001) and Escalante et al. (2008), who reported that students show a high normal use grade, well high and normal high, respectively.

The differences between research findings are due to the socioeconomic level of each family, which is directly influenced by the geographic region. As stated at the beginning, the Temascaltepec University Center is located in the southern region of the State of Mexico, where a low degree of schooling is prevalent among parents, who have incomplete primary, primary, and secondary schooling, as well as a small group of families with higher education; this together with the low economic level, since the activity of most families occurs in the agricultural sector with family or backyard emphasis.

This has a direct impact on the student, who, at first, has no reading habits, lacks books at home and public libraries
in his community or school, with the consequence that they do not know how to use appropriate bibliographic materials for their tasks.

In addition, it has been detected that some students perform faulty reading and do not consult sources of information from public or private institutions, in addition to the fact that some wait for their classmates to carry out the activities and provide them with information.

What has been said so far coincides with the results of Bruner (1988), who mentioned that intellectual progress is determined by the activity developed inside and outside the classroom or school, through the use of information sources, instruments, tools and technologies that evolve in parallel with social development and, therefore, have a direct impact on the education of society.

Profile of study habits on the content assimilation scale

The results in this criterion are lower than those presented by Torres et al. (2009), who reported that students show a high degree of normal utilization. The same behavior can be seen in the results obtained by Martínez and Torres (2001), in the sense that the students show a moderate degree of normal use.

The differences in the information contained in the referenced researches are due to the fact that the students do not understand the contents before memorizing. Therefore, as Piaget indicates, assimilation is not achieved, which is the process of response to a stimulus situation using established schemes, nor accommodation, which is the change in response to the recognition that existing schemes are not adequate to achieve the current purposes of knowledge. In addition to the direct influence of study habits and learning strategies used in studies prior to university, as well as the educational model applied in previous levels, which is based on behaviorism, which privileges the role of the teacher as a reproducer of knowledge without considering study habits and didactic strategies that facilitate significant learning and the construction of knowledge.

A very important antecedent is that made by Piaget (1969), who pointed out that each intelligent act is characterized by the balance between two polar tendencies, which are precisely assimilation and accommodation. In assimilation the subject incorporates events, objects or situations into existing thought forms, resulting in organized mental structures. In accommodation the existing mental structures are reorganized to incorporate new aspects of the outside world, and during this act of intelligence the subject adapts to the requirements of real life, but, at the same time, the mental structures maintain a constant dynamic.

Vygotsky (1978) considered that the assimilation and accommodation of knowledge can be more easily achieved through collaborative work between peers; that is, by forming small groups of students to identify the most capable, who are entrusted with the task of resolving doubts of their peers regarding a specific topic. Therefore by using a language common to the group they can be more easily understood by their peers, thus generating assimilation and accommodation of knowledge. He also maintained that the only education that is useful to the student is the one that moves his development forward and directs it.

Piaget (1969) pointed out that students struggle to maintain a balance between assimilation and accommodation, as they have order and meaning in their experiences. The student easily achieves this balance; he also argued that students are intrinsically active and exploratory in trying to impose order, stability, and meaning on the experience, whether inside or outside the classroom, with teachers, or in society.

Profile of study habits on the sincerity scale

The results of our research are superior to those reported by Martínez and Torres (2000), that students show a low degree of normal utilization.

The differences found between the investigations may be due to the responsibility and maturity with which the students replied in both investigations.

The above may be due to the fact that in this investigation, the investigators gave them a detailed explanation of the purpose of the investigation, as well as instructions on how to answer the instrument and the importance of making the answers as truthful as possible.

Vygotsky (1978) agreed with the above mentioned, commenting that if a student explained in detail on a specific topic, and he is made aware of the importance he has at a personal or group level, the student responds in a participatory manner with reliable answers to the questions that are made on the subject explained or studied.

CONCLUSIONS

After processing and analyzing the obtained information, the following conclusions were reached:

Students of the Bachelor’s degree in Accounting from the Temascaltepec University Center of the Autonomous University of the State of Mexico, presented a level of use of normal study habits in the four scales. This means that the education provided generated competencies for metacognition based on their study habits.

In order to study these students, it is important that they concentrate. It is remarkable that before beginning the study, the basic necessities of sleep, feeding and/or relaxation are taken care of in order to concentrate to the maximum, as well as to count on all the materials to develop the planned academic activity united with excellent conditions of the place of study.

It is important that teachers know these results in order to implement improvement strategies that will have a positive impact on the study habits of students in the Accounting department of this University Center and
therefore in this academic training.

REFERENCES


