Diagnosis of study habits in engineering students in material innovation

Diagnóstico de hábitos de estudio en estudiantes de ingeniería en innovación de materiales

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Abstract

The beginning of a university career is an opportunity that is given to young people when accessing higher education in Mexico, for the student it is hard work and at times it is saturated with difficulties, which manage to resist with motivation, and study habits that help students to finish the university career. The overall objective of this research is to analyze and promote habits to develop the Action Plan Tutorial of the next school year to promote activities that are in line with the interests of students. It is a cross-sectional descriptive investigation through surveys, since variables are not manipulated by naturally targeting phenomena or facts. To carry out this research, a simple sampling was carried out with second and fourth semester students of the Engineering degree in Material Innovation of the UMSNH (Universidad Michoacana de San Nicolás de Hidalgo). Description of the instrument. Study habits test, admits to appreciating and detailing study habits; which can be managed in groups and/or individual, in an average time of 15 minutes, consists of 20 items. With regard to the questioning if, do you study periodically and not just before the exam? 47% of students refer to only studying from time to time, while 32% study almost always. Environmental condition factors, study planning, material utilization, content assimilation, and sincerity of study habit scales generally show a low-to-normal moderate utilization level trend. Study habits in their different factors require improving the degree of use.

Resumen

El inicio de una carrera universitaria es una oportunidad que se les brinda a los jóvenes al acceder a la educación superior en México, para el estudiante es un trabajo arduo y en momentos está saturado de dificultades, mismas que logran resistirse con motivación, y hábitos de estudio que ayuden a los estudiantes a finalizar la carrera universitaria. La presente investigación tiene como objetivo general analizar y promover los hábitos para elaborar el Plan de Acción Tutorial del siguiente ciclo escolar para promover actividades que sean acorde a los intereses de los estudiantes. Es una investigación descriptiva transversal mediante encuestas, ya que no se manipulan las variables fijándose de forma natural en los fenómenos o hechos. Para realizar la presente investigación se efectuó un muestreo simple estratificado con estudiantes de segundo y cuarto semestre de la carrera de Ingeniería en Innovación de Materiales de la UMSNH (Universidad Michoacana de San Nicolás de Hidalgo). Descripción del instrumento. Test de hábitos de estudio, admite apreciar y detallar los hábitos de estudio; el cual se puede administrar en grupos y/o individual, en un tiempo promedio de 15 minutos, consta de 20 ítems. Con relación al cuestionamiento si, ¿Estudias periódicamente y no sólo antes del examen? 47% de los estudiantes hacen referencia que solamente estudian de vez en cuando, mientras 32% estudia casi siempre. Los factores condiciones ambientales, planificación del estudio, utilización de materiales, asimilación de contenido y sinceridad de las escalas de hábitos de estudios muestran de forma general una tendencia de nivel de utilización de normal bajo a normal moderado. Los hábitos de estudio en sus diferentes factores requieren mejorar el grado de utilización.

Study habits, Students, Higher level, Engineering

Hábitos de estudio, Estudiantes, Nivel superior, Ingeniería

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Introduction

The beginning of a university career is an opportunity that young people are given when accessing higher education in Mexico, for the student it is hard work and at times it is saturated with difficulties, which they manage to resist with motivation, and habits of study that help students to finish the university career. Likewise, the great change from upper secondary education to higher education for certain students is a complex experience, since the work is excessive, the study programs with enormous amounts of content, the number of subjects enrolled, the number of exams, final assignments, tasks, schedules and the family, economic and social context, all these variables can influence the completion of university studies. To develop the present work, a cross-sectional descriptive research was carried out, using the survey technique on study habits with 25 items on the liker scale. A simple stratified sampling was carried out with second and fourth semester students.

Development

Habits are behaviors that individuals assimilate through repetition. There are habits in correspondence with health, food and study, among others. It is important to note that habits benefit without hesitation, the achievement of goals as long as they are worked on appropriately at different stages of life. Habit, from the etymological perspective, is the usual way of being and, by extension, the set of constant skills that, when nature and culture concur, respond to a certain persistence of our reactions and behaviors. The habit is the set of routines and the ways to distinguish, appreciate, conceptualize, resolve and think (Perrenoud, 1996).

Theoretical framework

Habit is a behavior achieved by reproduction and transformed into an automatic intervention, while memory and inclinations are ways of storing the past. The periods of habit are formation and permanence. The first is described as the acquisition time and the second is the period in which the actions have already been achieved and the actions are formalized in a habitual, easy and involuntary way (Velázquez, 1961).

Study habits are the methods and strategies that a student uses to assimilate knowledge, their ability to prevent entertainment, attention to explicit material and the energies that they formalize throughout the process (Cartagena, 2008).

Authors such as Bajwa, Guijar, Shaheen and Ramzan (2011) indicate that a student is unable to use effective study skills, even if he does not have good habits and they analyze that a subject assimilates very quickly and in depth in correspondence with study habits. At the same time, they insist that effective and efficient learning lies more than memorization of facts, in being aware of where and how to acquire substantive research and the ability to create use of it.

The habits that a student has can be lost, but they can also be increased or recovered (Díaz and García, 2008). The gain of habits demands training, so the change that it involves is not easy work, since it has to be motivated by a higher intention, by the willingness to submit what one wants today to what one will seek later. Study habits are defined as the methodologies and strategies that a student manages to apply in order to cope with a large number of learning contents. The study habit demands enormous amounts of effort, discipline, and dedication. In addition, it is nourished by impulses that manage to be formed by the perspectives and motivations of the student who wants to learn.

Improving the learning and academic performance of students, mainly in higher education, has an essential role in the development process in society. The motivation of the students is decisive, so it is necessary to develop a better scope of the elements of academic motivation; It is feasible that the different social context manages to be one of the aspects that influence motivation and academic self-concept (Isiksal, 2010).

Daily practice shows that the study habit represents an outstanding mechanism for academic success for academic objectivity. It manages to be explicit as the study of methods and forms that facilitate the acquisition of more complex daily knowledge (Téllez, 2005). In this way, study habits concern being related to the peculiarities of the career, and with the explicit objectives of academic work, specifically.

In the tutoring, a pedagogical correspondence different from that instituted in teaching in front of large groups is developed, in this case the educator takes the role of guide in a relaxed and friendly setting (Latapí, 1998). Research on study habits in students is a principle that fosters spaces for progress aimed at working on the execution of workshops that support students in developing skills and strategies to optimize their study habits, while working with the paths academic to place students in their academic and work projection.

University tutoring is an opportunity to offer orientation and guidance to university students, in such a way that they manage to develop intellectual, cordial, personal and also social levels, which are central to promoting comprehensive training. It is essential to underline that university tutoring channels and activates the relations of university students both in the administrative, educational, organization and service areas; likewise, it allows the intervention of the student in the integral formation.

On the other hand, Amor (2012) mentions that it is essential to reflect that the academic training of the students corresponds to be focused on their learning, but assuming a committed university professor (tutor) of the subjects, which stimulates the motivation of the students and recording the efforts made to correct and achieve innovation and promotion to the tutorial function is an action carried out by university teachers, focusing on the guidance and counseling of students in their subjects.

The benefits of academic college tutoring are as follows:

- a) Increase the quality of the educational process through individualized attention to the difficulties that influence the disadvantages of the student's school performance, in order to optimize learning situations, develop values, attitudes, habits and skills that favor the integrity of their professional and human training.
  - b) It strengthens a quality educational practice through better communication between students and teachers, based on the recognition, perspectives and specific problems of students in order to develop options that can have a favorable impact on their academic, private and professional training.
  - c) Reduces dropout rates and university academic failure.
  - d) Establish educational environments of familiarity that allow to have a favorable influence on the student's academic performance.
  - e) It favors to optimize the learning situations of the students, through the study and collective reflection of the training developed in the tutorial process.
- University tutoring is an opportunity to provide guidance and guidance to university students, in such a way that they manage to develop intellectually, personally, socially; for development and comprehensive training.
- It also favors individualizing the education of the university system. In the teaching process at the university, it allows students to prepare themselves in the maturity of their knowledge and attitudes.
- University tutoring moderates and strengthens the relationships of university students, both in the administrative and educational environment, in the organization of services; on the other hand, it allows the active contribution of students.
- The objective of this research was to know the study habits in students of the Engineering in Materials Innovation career at UMSNH.
- Specific objectives:
- Analyze the habits to develop the Tutorial Action Plan for the next school year
- Promote activities that are consistent with the interests of students.

Methodology

It is a cross-sectional descriptive investigation through surveys, since the variables are not manipulated by looking naturally at the phenomena or facts. To carry out this research, a simple stratified sampling was carried out with second and fourth semester students of the Engineering in Materials Innovation career at UMSNH (Universidad Michoacana de San Nicolás de Hidalgo).

Description of the instrument

Study habits test admits to appreciate and detail study habits; which can be administered in groups and / or individually, in an average time of 15 minutes, consists of 20 items.

Analysis of results

The research was carried out with 47 students of both sexes from the Engineering in Materials Innovation career at UMSNH, in the second and fourth semesters; students are from rural, semi-rural and urban places. From the interior of the republic and the state of Michoacán.

The ages of the students range from 19 to 26 years old. The percentage of students according to gender 32% female and 68% male.

Regarding the question if, do you study periodically and not just before the exam?

Graphic 1

47% of the students refer that they only study once in a while, while 32% study almost always.

Regarding the questioning, do you check multimedia objects (TV, Internet, cell phone, etc.) while you study?

38% of the population mention that from time to time they check multimedia objects, while 32% check multimedia objects (TV, Internet, cell phone, etc.) from time to time.

Do you sleep 7-8 hours regularly?

34% of students almost always sleep between 7 to 8 hours, while 32% sleep between 7 and 8 hours.

On the other hand, in relation to yes, do you do physical activity regularly?

28% of students do physical activities periodically from time to time and 32% do physical activity all the time.

Do you assume costs of resources and time?

In reference to the question, if you assume costs of resources and time?

47% of the students indicated that almost always, 28% occasionally and 23% always assumes the resources and time.

Do you procrastinate using other activities as a refuge to avoid facing the study? 36% of students procrastinate once in a while, 34% almost never, while 17% almost always do.

Conclusions

A diagnosis of study habits with which students enter the degree is essential, this will admit knowing strengths, weaknesses and opportunities. In correspondence to formalize tutorial action programs. In order to strengthen study habits with courses - workshops, prepared by experts from the Faculty of Psychology of the Universidad Michoacana de San Nicolás de Hidalgo.

The results obtained in this research lead to approve the hypothesis that second and fourth semester students do not have sufficient study habits.

Through academic tutorials, a program is proposed that allows students to develop attitudes and aptitudes for study. Discover in a timely manner students with low grades, poor academic performance or with personal problems. In order to invite them to Personal Growth, Life and Career Planning Workshops.

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On the other hand, it is important that higher-level students have educational spaces such as study circles and self-learning workshops that facilitate the acquisition and strengthening of appropriate study habits.

It is timely at first that educators guide students in relation to different study techniques, as well as the use of these so that they optimize their time in their studies to achieve an adequate academic result. Also, make talks on planning and organization of time, using study techniques and management of educational resources; by the tutor teachers aimed at students who have inadequate study habits and attitudes.

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