Student Mentoring Program, "A valuable experience at FAREM-Carazo"

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ABSTRACT

The mentor program began in 2016, in the first semester with first-year students and basic subjects such as: Language and Literature, Introduction to Physics, Introduction to Chemistry and General Mathematics, as an initiative of management of degree teaching, together with the teaching departments of UNAN-Managua.

One of the most common problems encountered by a first-time student in the university environment is his profound ignorance of it, especially if we take into account the radical change in methodology of work and study with which he is confronted, which further complicates their integration into university life.

One of the measures taken at UNAN-Managua, specifically in the Regional Faculty of Carazo, is the implementation of the mentor students program, whom with their availability have allowed the project to be successful in this first semester of 2016, improving the quality in the students, therefore, the academic performance in the faculty.

This article describes in detail the experience carried out in the FAREM-Carazo, on the implementation of the mentoring program. In the Student Mentoring Program, students of higher levels help and guide other students with some academic problems, this is carried out under the supervision of teachers, so that they can overcome those problems; experience shows that the objective of improving quality and academic performance has been reached.

It should be emphasized that the Department of Educational Sciences and Humanities was the leader of this program carried out by the coordinating team and led by the Methodological Unit. Most of the mentors were the students of the same department who are being trained to be teachers, except for two students from the Department of Science Technology and Health who...
took the challenge and fulfilled it completely (a second year student of Industrial Engineering who worked with the subject Introduction to Physics and a third year student of Clinical Bio-analysis who worked with Introduction to Chemistry).

1. INTRODUCTION

The National Autonomous University of Nicaragua, through the Vice-rectorate of Teaching, promotes the “Mentoring Students Program”, finds its foundation in the Educational Model, Normative and Methodology for Curricular Planning, specifically with its Epistemological Grounding (p.25). It expresses that “not all people learn at the same pace”, “knowledge has a social, interactive and constructivist character” and, finally, that “knowledge is not transmitted, but is constructed in practice.”

In this sense, the Pedagogical Model (p. 31) expresses that the teaching-learning process focuses on the student and the development of procedures, skills, strategies and techniques that allow them to learn to learn [...]

Through the Program, student attention and coverage were provided, and therefore, the improvement in the quality of learning. This was carried out by the coordinating team together with the Methodological Unit that is responsible for providing tools in didactic methodologies, teaching strategies and didactic planning, training process that allowed mentor students to take the lead of their university colleagues in reinforcement of the contents of greater difficulty.

The subjects to be followed up for the first semester of 2016 were: Language and Literature, Introduction to Physics, Introduction to Chemistry and General Mathematics, student mentors were selected by career coordinators, whom considered academic excellence, availability for mentoring program, leadership and positive attitude towards teaching, as the most important selection criteria.

2. OBJECTIVES OF THE PROGRAM IN THE FAREM-CARAZO

a. To promote the program of student mentors through the teachers who teach the subjects that are the ones of monitoring contemplated in the program.

b. To train student mentors in didactic strategies, planning and classroom management for a good performance in the development of mentoring.

c. To provide didactic material to the student mentors that allow a good performance of the didactic activity.

d. Follow-up mentoring students in the development of their didactic activities with their mentored students.

e. Assisting mentored students for success in subjects with learning disabilities.

3. THEORETICAL FRAMEWORK

This section describes the theoretical basis of this work, begins with the mentor student and its importance in the development of competencies of the new university students, and ends with the differences between student mentor and assistant student and their utilities in the development of competencies in the students.
3.1. Mentoring student and its importance in the development of competences of the novel university students

The University in its social and academic function seeks the formation of integral professionals capable of making well-timed contributions to the reality in which they are, also the quality and efficiency of education is to a large extent dependent on the level of preparation of its teachers, the quality that is acquired in professional training and in the actual exercise of teaching, but at the same time, the dedication and motivation of students towards learning. Teachers should be able to collaborate in the process of adapting the new students to the university environment, to avoid abandonment and student failure.

UNAN-Managua is conscious of this social work in its Educational Model and establishes as a function “to train professionals and integral technicians from and with a scientific and humanist conception of the world able to interpret social and natural phenomena with a critical, reflexive and purposeful sense to contribute to social development“ (UNAN-Managua, 2011, p.19).

However, teachers find students living in a different environment, who conceive the world differently and are born in a digital environment, where advances in technology are part of their lives and that incorporate them into the classroom activities. It is not strange to observe cell phones of the latest generation, tablets, and access to the Internet as something common, in that sense, anyone must be aware that today’s university students are the first generation of digital natives (Rodríguez 2015, page 100) and this generation of students have their own characteristics that identify them. The scholar continues, who are at the same time the most connected and the most solitary and isolated that have passed through the classrooms.

In addition, to the academic functions the teachers have the function of collaborating in the adaptation of the new students to the university environment because they are foreigners to the ways of working and the university culture.

The new students do not know the ways of working and the university culture and this makes it difficult for them to adapt to university life. The image and the idea that most of them have of the University respond fundamentally to stereotypes of a model of University that does not correspond with the present reality of this Institution (Rodríguez, 2015, page 106).

Having this situation, the figure of the mentor student emerges, senior students of the career, with particular characteristics and vocation of service, collaborates with their classmates with greater learning difficulties, because they are already adapted to the university environment and at the same time they have mastery of its field of study and should only be prepared in the management of learning strategies.

A mentor is someone who helps somebody to learn something that has not been learned or somebody who would learn more slowly or with more difficulty if having to do it on his/her own (Car, 1999). In this sense, this student acts as a tutor or adviser of one or more students with problems of assimilation of learning in the area that has the most dominion. The mentoring provided by the mentor focuses mainly on overcoming the learning problems of the tutored students; therefore, the Mentor Student must have excellent command of his field of study and must know effective strategies of learning.
It is clear that mentoring provides the opportunity to match those students who for any reason have not assimilated a given content and thus power their intellectual development and learning. In the same sense, Ruiz de Miguel et al (2004, p.92) defines mentoring as a continuous feedback process of help and mentoring between the mentor (upper-level student who holds the knowledge and skills necessary to help) and a student or a group of new students, in order to alleviate their needs and optimize their development and learning potential.

It is important not to confuse the role of mentoring with the functions of student assistants or assistants, who are students who assist or collaborates the teacher in his or her duties, whether in management, teaching, research or academic extension.

3.2. Differences between student mentor and student assistant

It is important to note the difference between a student called a student-helper and a student mentor. The latter performs his function without any economic interest, only humanist, in order to collaborate with his companions, and a student-assistant in Nicaragua goes beyond humanism, because he receives financial aid; Therefore, a mentor student has much merit since it fulfills the mission of the University to train professionals who are integral and humanistic who think about the common good.

However, there is no need to detract from the student-assistant program, as it is a powerful intervention tool that allows us to experiment and improve social skills through our own practice (Andrés and Barrios, 2006, p. 315). That is to say, in their functions they have been very helpful in the university work, here at FAREM-Carazo, they provide collaboration in the laboratories, management tasks, very little in the teaching work, a function that was performed by the mentor students.

4. WORKING METHODOLOGY

The methodology proposed for the development of the workshop was active and participatory, based on the learning by doing approach, in which participants were the managers of their knowledge and appropriated them with the help of the facilitator teacher.

This workshop started with a self-assessment on didactic strategies, in which the participants reflected on the didactic strategies they knew and those that could be applied with mentored students.

In the second session, aspects of the form of planning that were to be considered for the mentoring process were taken; also characterized a good mentor as a responsible person, as a leader and above all, a humanist with a spirit of service.

The evaluation was objective, removing subjective influences, the criteria were simple, based on participation, assistance and significant contributions.

5. DEVELOPMENT

The Program was developed during the first half of 2016 in three main phases:

First phase: Meeting with career coordinators

The main objective of this phase was the selection of student mentors, by the coordinators of
career in Language and Literature, Natural Sciences and Physics-Mathematics.

**Second phase: Selection of mentor students and proposal of mentored students**

The selection of the mentor students took into account the criteria established in the program, which consisted of being outstanding students, with a spirit of service and teaching vocation. This presents the initial proposal of 31 students. See Table 1.

*Table 1. Initial proposal of mentor students.*

<table>
<thead>
<tr>
<th>SUBJECTS ATTENDED</th>
<th>NUMBER OF STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry and Biology</td>
<td>4</td>
</tr>
<tr>
<td>Physics and Mathematics</td>
<td>17</td>
</tr>
<tr>
<td>Reading, writing and spelling techniques</td>
<td>10</td>
</tr>
</tbody>
</table>

However, during the development of the program only 17 mentor students fulfilled their assignment

**Third phase: Mentoring and follow-up process**

The careers attended belonged to the three departments of Education Sciences and Humanities (Natural Sciences, Mathematical Physics, Social Sciences, Language and Literature, Pedagogy and Psychology); Economic and administrative sciences (Business Administration and Marketing); Science Technology and Health (Industrial Engineering and Systems Engineering), a total of 119 students participated. See table 2.

*Table 2. Statistical report mentoring students, I Semester 2016.*

<table>
<thead>
<tr>
<th>SUBJECT ATTENDED</th>
<th>CAREERS</th>
<th>MENTOR STUDENT</th>
<th>MENTORED STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V  %</td>
<td>M  %</td>
<td>V  %</td>
</tr>
<tr>
<td>Introduction to Chemistry</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Natural Sciences (G1)</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Natural Sciences (G2)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sub total</td>
<td>1</td>
<td>33</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Physics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Sciences</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mathematical Physics</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Sub total</td>
<td>1</td>
<td>50</td>
<td>1</td>
</tr>
<tr>
<td>General Mathematic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Engineering</td>
<td>1</td>
<td>100</td>
<td>-</td>
</tr>
<tr>
<td>Systems Engineering (G1)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Systems Engineering (G2)</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Business Administration</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Psicology</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sub total</td>
<td>5</td>
<td>100</td>
<td>-</td>
</tr>
</tbody>
</table>
It is important to note that during the monitoring process, the mentor students had registration, follow-up and reporting formats to measure the progress of the program.

6. RESULTS OF THE APPLICATION PROCESS

The implementation of the Mentor Alumni Program was carried out during the first half of 2016, with the following achievements and difficulties.

6.1. Main achievements

In relation to mentor students

a. Qualified and motivated students to help their classmates achieve success in a particular subject.

b. Improvement in teacher-student interaction, regarding the need for joint planning, among them, of the accompaniment sessions.

c. Improvement in the teaching practice of the mentors of the careers of Education Sciences.

d. Institutional recognition, as they became known in front of the university authorities and the student body as mentors students.

e. Timely delivery of teaching materials and management of the spaces where the mentor was to be practiced.

In relation to mentored students

a. Improvement in their academic competences in relation to the subject in which they had difficulties.

b. Excellent academic results, since it allowed them to acquire the learning in a more significant way to be the same colleagues of the faculty who at the same level of students shared their knowledge in a disinterested way.

<table>
<thead>
<tr>
<th>SUBJECT ATTENDED</th>
<th>CAREERS</th>
<th>MENTOR STUDENT</th>
<th>MENTORED STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>V</td>
<td>%</td>
<td>M</td>
</tr>
<tr>
<td>Language and Literature</td>
<td>Social Sciences</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Pedagogy</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Language and Literature</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Marketing</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Business Administration</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>English</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Natural Sciences</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Sub total</strong></td>
<td>3</td>
<td>43</td>
<td>4</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>10</td>
<td>57</td>
<td>7</td>
</tr>
</tbody>
</table>
c. Students learn in a better way in an atmosphere of friendship, affection and encouragement.

6.2. Difficulties encountered

a. Non-attendance of some mentoring students.

b. Planned activities coincided with mentoring sessions.

c. Commitment breach made with student mentors (the grant was not awarded to all mentoring participants as promised)

REFERENCES


Rey, Car. (1999). Alcanzando el Futuro: el papel de la mentoría en el nuevo milenio. Available at: www.mentors.ca
