

Students' Integration in a Technical Degree through a Tutorial Program

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Abstract - Going to University is a challenge for our students, who have difficulties in integration to academic life, due to their learning needs and their ignorance about functional aspects of our institution. The Polytechnic University of Valencia started promoting its University Program of Tutorial Action to give support to students in their learning process. Inside this Program, each School has adapted it to the needs of its own degree. In this paper the development of the tutorial action in the School of Building Management for the degree of Technical Architect is explained, and its efficiency for students' integration and pedagogical consequences is analysed. Working teams have been organised, formed by first course students, teachers and other courses students, acting like tutors. Working team sessions follow a planning structured in four phases. Our experience has shown that the Program has been very useful to promote first course students' integration in the University. On the one hand, the Program is on the side of autonomous work of students. On the other hand, due to its importance for our future professionals, critical and reflective nature has been stimulated. Moreover, the feedback has been also an important question, showing us our problems in teaching.

Index Terms – Integral training process, tutorial action, university integration.

INTRODUCTION AND OBJECTIVES

Going to University is a challenge for our students, who have some difficulties in integration to academic life, due to their learning needs and their ignorance about functional aspects of our institution. Aware of this; the Polytechnic University of Valencia started promoting its University Program of Tutorial Action to give support and to focus students in their integral learning process. Through this Program, academic excellence, integral training and careful attention to all the students of the University are promoted, favouring the students' integration in all the activities of the University. As our University is a very big one, with thirteen different schools, more than thirty degrees and more than thirty thousand students, the general Program is structured in different ways in each one of the Schools which want to take

part. This is how the School of Building Management has adapted it to the needs and characteristics of its own degree, Technical Architect.

In this paper the development of the tutorial action in the School of Building Management (SBM) for the degree of Technical Architect is explained, and its efficiency from the point of view of students' integration and pedagogical consequences is analysed.

The general structure of the Program implies that there should be a Responsible person for each School, preferably a member of the directive equipment, and some working teams, formed by first course students and teachers and other courses students, acting like tutors.

In our School's case, professors in each team are working in multidisciplinary pairs and they are teaching in different years of the degree. Besides, first year students in each team belong to the same academic group, so their problems with subjects, timetables, teachers, and exams are similar.

One of the main points that are explained in this paper is the criteria that have been followed in order to organize the working teams in the SBM, as well as the main topics that have been studied in each working session and the meetings temporization. Moreover, advantages for students of this program are analyzed, as a tool for integration in the University and for development of cognitive, attitudinal and personal capabilities.

To finish, feedback has been also analyzed, and the importance that the Program has for the SBM as a way of direct communication between students and staff in the common Project of learning-teaching.

DEVELOPMENT

As it has been said in the introduction, the SBM started its own Tutorial Program some years ago; then, the experience has helped it evolve analyzing the specific needs and trying to give them a response. One of the main characteristics of the SBM is the high number of students that goes to the School each year: nearly four hundred. This fact, in addition to the high rate of students that have to do the year over, leads us to deal with very numerous groups in the first

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course, which makes it difficult for teachers to pay attention enough for each one of the students.

Moreover, a study of rates of students academic performance, efficiency and given up has been carried out for each one of the subjects of the degree, showing up that the worst rates correspond to the subjects followed by students during the first year at the University.

I. Creation and structure of the working teams

Due to the characteristics above mentioned, the first decision that has been taken in order to start with the Tutorial Program in the SBM, has been that the responsible person for the Program should be the Vice Dean of Students, acting like the contact person between the rest of the directive team and the students.

The next step in the design has been the definition of the structure of the working teams which are involved in the Program. As it has been said before, each working team is formed by novel students, professors and experienced students. On this basis, there are some questions which appear regarding the participants' selection and the characteristics which they should have. From the beginning it was established that the three kinds of members should participate voluntarily.

Despite of this, we must say that the possibility of planning an obligatory participation in the Program for the first year students was carefully analyzed in order to palliate the high rate of students that give up their studies, which is one of the main objectives of the Program. In some cases the reason of giving up is that they realise that they have chosen the wrong degree, but in other cases the reason is that they feel that they have failed trough the university life, and in this cases is where the tutorial action could have a positive influence. This fact leads us to think about an obligatory participation, to help all the students to participate properly in the academic life. On the other hand, it is important to point out that to achieve an effective tutorial action the personal attention is needed. Then, as we have too many first year students, it would make necessary to have a great number of teachers willing to participate as tutors. And this is the reason why finally the participation of students was decided to be voluntarily accepted. Nevertheless, the participation is stimulated with the recognition of elective credits for students (this is a type of credits of the degree which correspond to different academic or cultural activities that students can choose). From the beginning of the Program, the number of participants has increased a lot, arising now the number of 200 students approximately.

In addition, to organize the groups, the students in a working team are also students from the same academic group, due to diverse reasons: to favour their awareness of colleagues, to take benefit of the common timetable to find time for the meetings and also because their problems with courses, teachers, exams, etc could be the same.

Talking about students of the last courses, let's say "tutor students", those who wanted to participate are asked to follow, at the beginning of the year, a specific training course, offered by the Institute of Education Sciences of the

University. In this course, they are given support material from the pedagogical point of view and also from the formal one. To stimulate these students to participate, some elective credits are recognised also for them.

At last, all the teachers in the SBM were invited to participate in the Program. "Tutor teachers" have also to participate in a training course offered by the Institute of Education Sciences, which is mainly focused on the tutorial help as an integrating tool of the learning-teaching process. It is important to point out here that the participants are teachers from different knowledge areas involved in the degree.

Finally, during this years, eight working teams are participating, each one of them formed by: two teachers, six "tutor students" and twenty-five first year students approximately.

II. Planning of the working meetings

Working team sessions follow a planning throughout the whole year structured in four phases: needs detection, objectives selection, objectives based work and evaluation. In the first step, during the first month of the course, the first meeting is convened for each one of the working teams, the development of the Tutorial Program is explained and the needs of students are detected. The most common ones according to our experience are:

- University services adaptation.
- Information about the degree (main objectives, professional aspects...)
- Information about subjects followed during the first year.

During the second phase, each team of tutors starts to plan objectives according to the needs of the group, and the common ones are:

- To offer information to the students about the requirements of the degree.
- To meditate with the students upon their deficiencies.
- To aware students to develop an appropriate methodology of study.
- To use the study groups as an strategy

During the third phase, the work is based on the above mentioned objectives, developing the following points:

- To offer information of the evaluation system.
- To help students to plan a methodology of study and to do the exams.
- To help the students to learn to take decisions.
- To stimulate the students to attend the courses organized by the Institute of Education Sciences, that are designed specially for them.

At the end, during the evaluation phase, the following actions have been carried out:

- To analyze the academic situation of each student, i.e. credits passed and difficulties that they have found.
- To offer information about the subjects of the second year of the degree.

- To evaluate the Tutorial Program.

Some interesting material has been prepared by the Institute of Education Sciences and is available for teachers and students during the whole year [1]. Moreover, students are encouraged to visit the web site of the SBM [2] to learn to get information in an autonomous way, as well as to use a teaching tool consisting on a platform called PoliformaT in which on line materials and news of each subject are available. To get information about the topics analysed by each working team, as well as to allow members to keep in touch on line, a web site is also available for participants in the Tutorial Program [3].

III. Development of the Tutorial Program

Some difficulties to develop the Program have been showed up during this year and previous editions.

First of all, it has been difficult to find the common available hours for the 30 members of each working team to carry out the meetings. To alleviate this effect the proposal to each group was to organize, apart from the meetings in group, a serie of individual sessions or sessions in smaller groups, answering to the student's demand.

Some groups have given expression to difficulties when trying to find a place in the School for the meetings. Although by the moment no definitive solution has been found, actually infrastructure works are going to be finished and a place for the meetings of the working teams is going to be available.

Some teachers have pointed out that sometimes it is not easy for them to give an appropriate response to the problems raised by students, due to their personal nature. In this cases, the general recommendation is to inform the students about the Psychological Guidance Office and to encourage him to visit it, where psychologists and pedagogues are working together to help them.

If we think about the academic level, teachers have detected that some students have problems with cross curricular issues of the degree, such as written and spoken language. In these cases, teachers have recommended them to attend to specific training courses offered by the Institute of Education Sciences to suit their needs, which are free of charge for students. We have to point out here that the integral training for students is one of the goals of the European Highest Education Area [4], and these tutorial actions contribute as a tool for adapting our students to the new model of education involved.

In the field of the subjects of the degree, although the information collected is varied, some common problems have been also observed in each case and actually possible solutions are been debated.

IV. Proposals for improvement and evaluation of the Program

Through the whole year some meetings between tutors and the responsible of the Program take place, to evaluate regularly the working system of the Program.

After their participation during one year, students fill up a

survey about the working system, and they also find there an open place to make suggestions. Although in general the level of satisfaction is high, we are trying to give a response to all the proposals for improvement. By way of illustration, as it has been said before, a place for meetings is going to be provided.

Both students and teachers have to make a final inform at the end of the year, where they collect the work that they have done, the level of participation of students, in what extent objectives have been covered and expectations fulfilled, and the personal proposals for improvement

CONCLUSIONS

Our experience has shown that the Program has been very useful to promote first course students' integration in the School and University, avoiding the feeling of loneliness. On the one hand, the Program is on the side of autonomous work of students through their capacity of taking decisions and their cognitive abilities development, such as searching and analysing information.

On the other hand, due to its importance for our future professionals, critical and reflective nature has been stimulated.

Moreover, the feedback has been also an important question, showing our problems in organization and development of teaching. Some difficulties in the studies have been detected and the possible solutions have been analyzed in each case. Organization problems of some subjects that have been showed up have been very important for the directive equipment of the School, in order to take some decisions regarding it.

One of the main points that is still under discussion is how to ensure the quality of tutorial action, so this is one of the researches that we would like to develop in the future.

To finish, we hope the Conference to be the appropriate forum to discuss with colleagues of other universities about similar experiences.

ACKNOWLEDGMENT

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