DIAGNOSTIC TECHNIQUES, EDUCATIONAL COACHING, AND GROUP DYNAMICS FOR IMPROVING TEACHING ON COLLEGE STUDENTS

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Abstract

The objective of this research is to increase the interaction between college students to optimize their integration, performance and motivation. The methodology is based in the application of techniques of cognitive coaching education (USA), dialogic educational coaching (Spain) plus group dynamics adapted to the learning process. The phases of the research are:

a-Tools Diagnosis: Application of sociometric, anagrams, interviewing techniques, and recordings to students (to build a profile on the interactive structure of the group), and evaluative reports by teachers.

b-Application techniques and coaching techniques for both students and teachers: There are two modes:

- b.1) "Techniques of Cognitive coaching education" (between coach and teacher) based on "planned Conversation", "Comment" and "Reflective Conversation" (proposed by the researcher Donna Dildy).
- b.3 Group Dynamic for integration and for the learning process: "Phillips 66", "Blind Football", "Role Play".
- c- Information Collection, balance and Conclusions: In the conclusions, it will be set if the techniques mentioned in the "b" phase allow integration of students, through a questionnaire, whose results will be analyzed and thus, to measure the effectiveness of the techniques described above.

Keywords: Coaching, Education, Group Dynamic, College Student.

1 INTRODUCTION

This research aims to achieve a better understanding of students about themselves and the group, seek greater integration, optimize performance and motivation of students. The selected group is composed of students from 1st pedagogy of Francisco de Vitoria University, and comprises a total of 52 students (Course 2014-2015). It is important to note that this course has as main objective to study the social context in which people show their social actions aimed at teaching and learning in an educational context. Moreover, this course also aims to help students learn the basics of theoretical frameworks to interpret social phenomena. Finally, it is intended that students achieve learn the necessary techniques for the diagnosis of social groups, and learn the use of group dynamics. Finally, the results obtained allow greater knowledge of the student group. This information will be used by other teachers to implement teaching procedures that enhance motivation and academic performance of students. As noted, this research presents the following sections: the diagnostic phase, application of techniques, data collection, data processing and conclusions.

2 DIAGNOSTIC

Before performing the diagnostic process, the research team conducted several planning meetings. Finally we decided to use a test for the development of a "sociogram" and a test for the development of a "enneagram"; these two tests were applied with the following objectives: 1) To detect interactions among students, and thereby identify subgroups. To this end, the "sociometric" test was applied to identify social interactions to perform academic activities; 2) Detect potential behavioral profile. The "enneagram" was used for the latter purpose.

2.1 Sociometric Techniques

The question used to produce the "sociometric" test was: What person in the group you choose to perform academic activities?. After applying the "sociometric" test results are shown in the following chart (See Fig.1). It is important to clarify that for reasons of confidentiality, we have replaced the names and surnames of students, by numbers. For the representation of the sociogram were used conventional symbols: a triangle for men, for women a circle, arrows to represent the choice of one individual over another, and for reciprocal elections, a horizontal line through the middle with a small vertical line.)

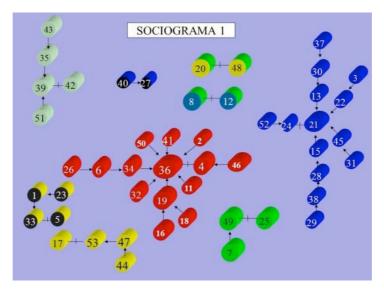


Fig. 1 Sociogram

These results allowed to form new groups; for this the information on the subgroups identified in the "sociogram" is used. Finally, this strategy allowed us to establish new relationships among students to perform tasks and activities.

2.2 The Enneagram

The researchers' model Russ Hudson and Don Richard Riso (Both researchers working on "The Enneagram Institute") was used to implement the "Enneagram". This resource allowed us to detect behavioral profile that could have students in the study group. It is important to clarify that the "Enneagram" is a resource used in some companies to develop professional skills, teamwork, motivate employees, and is intended as a guide to the potential behavior of an individual, which provides information about the cognitive processes ,the emotional processes and possible ways of acting. This proposal is signaled by Balart, M., Leandro Fernandez [1], in his article "Selfmanagement: a key factor trainer" published in Mentoring & Coaching and Business University.

For the specific case of this study, as noted above, we have gone to on-line test offered by researchers Richard Riso and Russ Hudson. This proposal establishes 9 "eneatipos" reformer, helper, achiever, individualist, loyal, enthusiastic, challenging, and peacemaker. (For more information on this proposal, see http://www."Enneagram".com/.) The application of this tool provided the following distribution, according to the 9 "eneatipos" model Riso-Hudson: 1 reformer, one winner, one individualistic, one researcher, 3 loyal, enthusiastic one, two challengers, 4 peacemakers, and 38 helpers.

After performing the above diagnosis, the teacher and the student group participated in a number of strategies. The application of these strategies are carried out under the following characteristics and objectives: a- The technique of "cognitive coaching" was applied to the professor, seeking greater efficiency in teaching. b- The "group dynamics" were used with students. The main objective was to increase process of student learning and motivation to study, in addition to its integration into the group

3 APPLICATION TECHNIQUES OF "COACHING EDUCATION COGNITIVE"[2].

The "cognitive coaching" along with "instructional coaching" and "literacy coaching" have been developed in the US, and being used in primary and secondary education. The "cognitive coaching", aims to reduce teacher isolation and improving efficiency, increasing teaching strategies, and exploring the resources you have and have not used. As for your organization comprises three phases: a- "Planned Conversation"; b-process monitoring (data collection); c- "Reflective Conversation" [3]. Based on the above steps, according to the proposal designed by the American researcher Donna Dildy in his work entitled *Action Research: Cognitive Coaching as a Vehicle to Improve Teacher Efficacy* was applied the strategy of "planned conversation" first which consists of a series of questions that the coach makes the teacher [3], in order to clarify objectives, the potential pace of the lesson, and the possible behaviors of the students when performing a task or lesson. In this sense, the "Planned Conversation" -based on the questions posed by the researcher Donna Dildywas conducted among a professor who teaches in that course (who plays the role of "coach") and subject teacher with following questions and answers:

1. What is the purpose of the lesson? R- "Understanding the issue on the sociology of the curriculum and its relationship with teaching"; 2. How will you know if this objective is met? R- "Through a rapid assessment to the formulation of oral questions"; 3 How do you help students to achieve the objectives? What strategies could be used? R- "By the projection of videos and reading printed materials"; 4. What information would you like to get about your students? R- "It would be important to record data on the attitude and general behavior during class by the students, and the ability to concentrate".

As for the "reflective conversation" made based on data collected by the "coach" in the class, are the following: With respect to the behavior of students, the professor "coach" collected the following data: a- Appropriate use of electronic devices; b-Proper behavior; c-Students sitting in the last row of the classroom, fewer scholars. He finished "reflective conversation" with the following questions posed by the teacher - "coach", the teacher of the course:

1-How do you feel about the lesson taught? R-"Well, because I believe that they have met the objectives"; 2-What possible relationships between decisions and behaviors of the professor and student performance? R- "I think more information is needed to perform a more complete assessment". 3- What new learning can get from this? R- "From the information provided, there are aspects of student behavior that one unknown, because while one is teaching a lesson you can't control everything happens in the classroom and among students. But with this method one can detect, and find ways to more effective transmission to the learning process". 4- How has benefited from this conversation? R-"The conversation itself is a benefit. Also detect positive and negative elements, to correct and improve educational work".

4 APPLICATION OF EVALUATIONS STRATEGIES AND GROUP DYNAMICS

The strategies and group dynamics were used to motivate and stimulate the students learn. In this sense, there were activities into the classroom, and activities out the classroom. Moreover, the strategies and group dynamics were useful because show its applicability in the professional field. To demonstrate or indicate this situation, the researchers used a questionnaire then of all activities. The results are in the part number five. Then we described each strategies and each dynamics.

4.1 Roleplay

This dynamic of group was held on October 14, 2014. For its implementation, the teacher asked several students to perform a series of actions in the classroom. This activity will be sought to reinforce the learning process of the subject based on the concepts of role and status. It also sought to encourage participation. The actions taken by the students consisted of getting up on a chair, will sit on a desk, or lying on a table, and pronounce any phrase - indicated by the teacher - accompanied by a specific movement. After completion of the action, the professor asked the students why they had executed the orders. In the majority of the respondents indicated that they had carried out of respect for the teacher's authority. Then, the teacher explained that the implementation of these actions could be seen as an example in which a person with some authority exercises its status through the role, in a specific social space.

4.2 Continuous assessment in groups

The class session was held on November 6, 2014. From the results obtained in the "sociogram", groups of 5 or 6 students were organized for the professor. Then, he conducted an evaluation that consisted of the following: a - He distributed a text to all students; b- The theme was associated with poverty child in Spain; c- The students should then discuss the content with reference to a series of questions provided by the teacher; d- The students had to write a report about the content of the article.

The aim of this strategy, in addition to the assessment was to show the potential usefulness of "sociogram" as a tool to understand the structure of a social group, detect subgroups, social interactions, and finally, organizing sub-groups work.

4.3 Creating a group dynamic

During the month of December 2014, students were organized into groups to perform the following task: they must create a group dynamic. The main objective of this activity was: make students participate in developing their own knowledge. A second objective was: that students get a skill that can be applied to the exercise of their profession.

Group dynamics must meet the following conditions: 1- To be referred to an issue of "History of the West" (subject to be studied in the second term); 2- The dynamics would be headed to college students -however, may also be directed to elementary students "-; 3- Students must submit a report with the following contents: the purpose, development, and resources; 4- The dynamics should be applied in the second term (2014-2015 school year) in the subject "History of the West"; 5- Should evaluate their effectiveness.

4.4 "Blind football" and "Phillips 66"

The "Blind football" and "Phillips 66" were held in November and December, 2014. The purpose was academic and the idea was show two dynamics to exemplify the theoretical issue, the concepts, and the useful application. Moreover, there was an integration purpose, because the "blind football" and the Phillips 66 seek the social interactions, the solidarity, and the integration. In this sense, the groups dynamics was useful. Moreover the "blind football" was fun.

5 RECOPILATION AND DATA ANALISYS

In the third phase the researchers used a questionnaire, and it was applied to forty four students. The questionnaire has thirteen test questions, and a second part with write questions. The objectives of the questionnaire were: a-To know if the student's knowledge increased; b- To know if the student's motivations were important for to do the academics homework; c- To know if the dynamics and strategies would be useful in their career; d-To know the student's opinion about his participation in the knowledge construction process; e- To know if the strategies were useful to the integration process into the group.

About the knowledge increase, the students in the question number one of the questionnaire, get a 77% (the rating five and six) (See Fig.2). The question is about a best learning. It's possible that the group dynamic can to be a good tool, because the question number four gets low rating (The question number four is about the no recommendation of the dynamic). Then about the student motivation, if they develop their own knowledge, apparently they are satisfied, but the results are regular. The question number eight -about this problem- gets a 24% (rating four) and 36% (rating five). As to the useful of strategies and dynamics for the career, question number nine gets 25% (rating 6) and 40,9% (rating 5). The valuation is partially successful, but it's necessary more research and "...developing emotional and social skills in the educational background of the students" [4].

About the integration processes, the percentages are interesting, because the question number five about the group's work has the best percentage with 68% (rating 6). Similarity, question eleven gets 50% (rating 6). Apparently, the use of strategies and dynamic are useful for the integration. Moreover the strategies and dynamics are funny: we can see the percentage of twelve's question with 58.6% (rating 6) (See Fig.2). Those tools certainly "...allow the student to obtain the essential emotional skills to become a person who is capable of directing his life in all areas: personal, family, social, academic, professional" [5].

A-In class issued on October 14, 2014, a role play was performed in order to explain the issue referred to Role and Status.	1	2	3	4	5	6	NS/NC
1-Think that with the completion of this dynamic could achieve greater understanding of the topic?		1	2	5	15	19	2
2-Did this dynamic only allows a moment of fun and entertainment?	2	10	7	6	9	10	2
3 Did this dynamic allows the integration of the group?	1	1	1	10	15	14	2
4-Did this dynamic is negative therefore recommended not be used?	27	3		2			2
B- In class issued on November 6, 2014, based on the results obtained by the "sociogram" and "Enneagram", groups of 5 or 6							l
students organized to perform a continuous assessment which should read a text on child poverty and answer three questions.	1	2	3	4	5	6	NS/NC
5-Do you think that the relationship with the group in which he had to participate was postive?			2	3	7	30	2
6-Does the previous organization of groups by teachers, may be adequate in terms of achieving a better understanding of other							l
students who do not usually get together for academic activities?		1	1	3	17	20	2
7-Do you think this type of organization has led to greater integration of the group?	3	2	4	10	10	16	2
C- During the month of December 2014 organized groups of 4 to 7 students to conduct an evaluation that consisted of creating							l
and organizing a group dynamic related to a subject of history, and that will be implemented during the 2nd half of 2015.	1	2	3	4	5	6	NS/NO
8-This type of process allows the student to achieve the construction of their own knowledge?		1	4	13	16	9	1
9-Did this dynamic allows the acquisition of a skill or knowledge that can be useful for the future course of their career?	1	2	5	6	18	11	1
10-This dynamic can be entertaining, but provides no knowledge relevant to your career?	12	11	9	8	2		1
D-During the months of November and December the following group dynamics were performed: "Football blind", "Phillips 66"							l
and "Role Playing", in order to exemplify the agenda item referred to theories of social group, group dynamics and curriculum			П				1
theory. It also sought to incorporate students into the process of knowledge construction.	1	2	3	4	5	6	NS/NO
11-These activities help establish a team spirit and cooperation and integration .	1		1	4	16	22	
12-These activities allow to achieve a moment of entertainment.		2	2	5	10	25	
13-They have an important academic value, since not complement the knowledge gained in class.	18	7	4	8	5	2	

Fig. 2 Questionnaire Data

6 CONCLUSION

First of all, we think that the groups dynamic and the strategy are useful in understanding the social group structure. If we can understand the structure, we can decide about organization resources, decision making behavior, and the professor can design his lesson. In this sense, the coaching is very useful because the professor can increase teaching strategies. Also social diagnostic is vital, and the group diagnosis, using social diagnosis tools like enneagram and sociogram.

About the data and results, the strategies and dynamics for the integration were more useful. But the strategies and dynamics for motivation for develop their own knowledge were less efficient. Finally the strategies and dynamics for the student's knowledge were regular.

We think that is necessary to increase the research and use the digital tools and the gamification strategies. We can see that the university students are "digital natives" and need modern tools because these tools have been incorporated in their culture.

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