Integrative teacher: a collaborative work experience among higher education teachers

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Abstract- The adaptation process to university life shows some complexity in first year students, where the methodological change they experience may represent a gap in the new academic environment where they must integrate. The Integrative Teacher Project, seeks to generate a synergy between the teaching-learning process of different subjects offered in the first year of the university, achieving through collaborative work, a structured and organized planning that allows to develop the required competencies, ensuring the permanence of these students in their academic programs. In the present work, the level of satisfaction regarding to the implementation and results obtained with the figure of the integrative teacher is exposed, through the perception of first semester teachers who participated in the project.

Keywords: collaborative work, faculty, higher education, university, university students.

1. Introduction

During the students' teaching – learning process, the professorate's integral and coordinated work is required.

The collaborative work between professors generates processes of innovation and improvement of educational institutions (Krichesky and Murillo, 2018). Is a process in which an individual would be able to learn more than it could learn by itself due to the interaction among the members of the group, empowering of this way the construction of knowledge (Revelo — Sánchez et al.,2018). Teachers' professional development can be done independently and autonomously, however, their formation might not happen in isolation but through cooperative and community interaction between colleagues (Vaillant, 2016).

Currently, teamwork could be considered as a more common need among current organizations, including those in the educational field, whose purpose is to be able to face a changing and sometimes unpredictable reality (Walss et al.,2008). Some of the lessons that have been learnt about collaborative work between professors, is how difficult is practicing it, either the structure of the organizations or the lack of skills linked to teamwork (Krichesky and Murillo, 2018). In this way, collaborative relationships must be understood as a path for teachers to leave their" comfort zone" and establish common goals (Molina and López, 2019).

Within the educational context, collaborative work constitutes an interactive learning model, that involves students, in addition to demanding effort, talent and skills to achieve the goals (Revelo – Sánchez et al "2018). Regarding the role of teachers, collaborative work is a professional development strategy, in which they can share experiences, in addition to analyzing and researching their pedagogical practice (Vaillant, 2016). Collaborative work is derived from the institutional culture, to achieve common objectives (Molina and López 2019).

The self-regulation of the learning community is a very important aspect in their life. In the educational field, team learning is the process by which teachers are grouped and develop the ability to work together to achieve the results they expect.

Krichesky and Murillo (2018), in their work named "La colaboración docente como factor de aprendizaje y promotor de mejora. Casos de estudio", mention that under certain conditions, collaboration can become a very attractive work alternative for teachers, as well as, an improvement strategy. This can also become new opportunities for professional development, based on reflection that is shared between peers. Collaborative learning is a system of interactions that promotes reciprocal influence among the team members, it is a gradual process in which all the team members are committed to each other's learning, and it results in positive collaboration (Revelo – Sánchez et al., 2018).

Also this kind of work generates training and learning between colleagues, this is known as "feedback", because each teacher contributes their knowledge to the group, creating a learning community, in which the members contribute and receive knowledge by using their own experiences (Montaño et al., 2017).

Among the main principles that allow the development of collaborative work between teachers should be borne in mind:
a) The union of the group's efforts to solve the problems presented by the students, b) Implement innovative actions in which each member of the group contributes as an individual and complementing the group actions, c) The permanent dialogue and communication that is generated in the group.

The purpose of collaborative work is to help, stimulate and motivate the participation of each member of the community, ensuring professional and personal growth, which contributes to the development of the entire team. Collaborative work is a process of social construction, in which each individual learns more than it would learn on its own, due to interactivity with other members of the group (Navarro & López, 2017).

2. Context

A new student's success or failure to the higher education studies, has two distinct and related variants, on the one hand, there are the studies, which undoubtedly are complemented with the integration into university life, and closely linked with the student's personal development; For this, it is essential that universities take an active attitude towards the arrival of new students, by answering questions like: ¿what must be the institutional position regarding the new students?, ¿ how do they consider them?, ¿what predisposition do they receive them with?, ¿how do they guide them?, ¿how do they engage with them?; with responses as diverse as today's students' interests, who are different in expectations, origin and in their implication (Michavila Pitarch, 2015).

Faced with this situation, the present research describes the practices assumed by a Latin American university with a broad academic trajectory, it has given prominence to the implementation of participatory and collaborative educational methodologies between teachers, to support the new students' adaptation process. The integrative teaching project is based on the constitution of teacher teams, which share the common objective of improving the new students' integration, through planning and coordination, based on collaborative work.

Within the framework of this project, the creation of teacher's integrative role, has the purpose of promoting collaborative work and integrate the planning that do the teachers of the first cycle of the career, with the objective that all the subjects which are offered in this cycle have a structured, organized planning that develops the required competencies.

This experience has been contextualized in Ecuador, a country where the university system has undergone a great transformation in recent years, focusing on the experience perceived by a group of teachers who have new students in the face-to-face modality in different disciplinary areas, during the 2020-2021 academic year, with the objective of knowing their perception of the project results, as a means to assess its operation.

3. Description

Professors from the first cycles of all careers of the Universidad Técnica Particular de Loja, face to face modality, participated in this project during the academic year 2020-2021.

The project is based on the functions that have been entrusted to the integrative teacher, which consist of: 1) create a working group with all first cycle teachers and promote interdisciplinary and team work; 2) Coordinate the integrated planning of contents and number of activities proposed in all the subjects teaching plan that are taught in the first cycle of the university career; 3) Ensure the permanence of firs cycle students in the career and in the university; 4) Work in a coordinated way with new students' student mentors, in order to solve the difficulties detected in the students.

The tasks done during the development of the project, followed this order: 1) Monitoring the integrative teacher's fulfillment activities; 2) Design a questionnaire to evaluate the achievements obtained as a result of applying the project; 3) Application: computerization of the online questionnaire, which was uploaded to the survey tool; 4) Statistical data analysis; and 5) Final report and improvement proposals.

The selected research methodology was non-descriptive and not experimental, because neither the object of study is not changed nor the variables are directly intervened, only the measurements are registered (Kerlinger and Lee, 2002). The survey study was chosen, based on a qualitative data collection instrument, and the online survey format was used.

The questioning was organized into three content units: (1) General information (gender, years of experience and degree); (2) Integrative Teacher's development; (3) Teaching project general assessment.

Sample

The present study is based on a first cycle teacher's population, of all face to face careers at UTPL during the year 2020-2021.

A non-probabilistic sample of 138 teachers from 29 careers was used, where the participants voluntarily responded to the questionnaire.

The variables for the present study were defined based on the functions established within the project, for which a 15-item questionnaire was made with a five-degree Likert scale associated with values of: (1) Unsatisfactory; (2) Unsatisfying; (3) Regular; (4) Satisfactory; (5) Very satisfying.

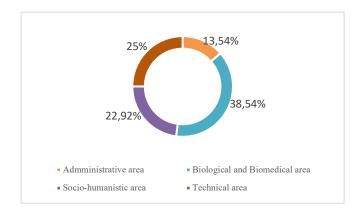
4. Results

4.1 General data

The results show equity regarding the gender of the teachers who participated in the satisfaction survey, it registered 48% of women and 51,69% of male gender.

Regarding the experience within university teaching, there is a greater concentration of teachers with more than 10 years of experience, they represent 41,58% of the participants in the survey, followed by 24,75% with 3 to 6 years of experience, finally, 17,82% and 15,84% are teachers from 0 to 2 years and 7 to 6 years of experience respectively.

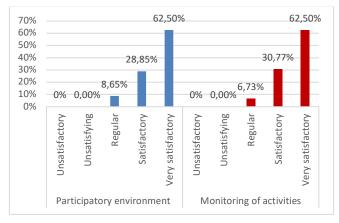
Graph 1 shows how the participation of teachers in the satisfaction survey is composed by areas, where the result is influenced by the number of careers they are composed. In this way, the Biological and Biomedical area reflects a greater participation with 38,54% and the Administrative area registers the lowest participation with 13,54%.



Graph 1. Teachers who participated in the survey, by area and career.

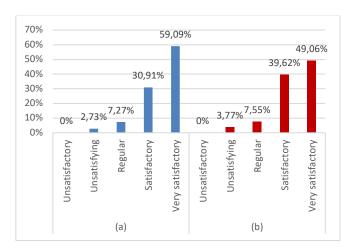
4.2 Integrating Teacher development

Graph 2. The perception of the teachers who participated in the satisfaction survey, in regard to promoting a participative and confidence environment to express proposals that promote the effective work within the project, as well as, compliance with the meetings planned to follow up on the activities proposed within it, they are valued in a more than 60% percentage as very satisfactory, at the same time, there are no ratings classified on the scale neither unsatisfactory nor unsatisfying.



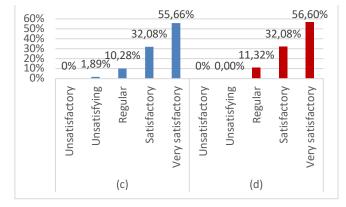
Graph 2. Assessment of participatory environment and monitoring of activities.

Graph 3. The assessment obtained by the integrative teacher's figure is shown, in activities related to: (a) Form an interdisciplinary group and promote teamwork with all first-cycle teachers of the degree and (b) Propel the participation of the teachers' group, by promoting activities to improve the learning level of first cycle students. In these activities no dissatisfaction is identified in the participating teachers and, tha values classified on the unsatisfactory scale is relatively low, and the highest percentage is distributed between very satisfactory and satisfactory, and 90% of the participants fall into these two ranges.



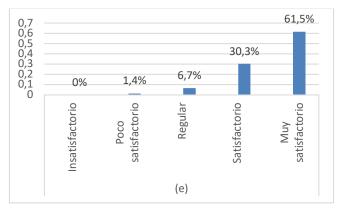
Graph 3. Activities a & b valuation.

Graph 4. This graph represents the assessment obtained regarding activities such as: © Coordinate the integrated planning of contents and number of activities proposed in the teaching plan of all activities taught in the first cycle and (d) Promote the integration of the teachers group in the review of the time dedicated to the activities proposed in the teaching plan, avoiding work overload. In both activities, the perception is quite acceptable, since about 90% of the evaluation is distributed between satisfactory and satisfactory, furthermore, no dissatisfaction is observed on the part of any of the participants and there is a low percentage of unsatisfying.



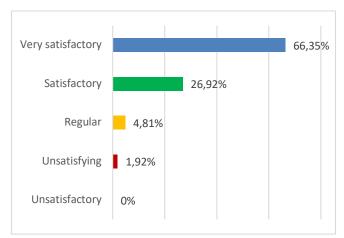
Graph 4. Activities c & d valuation.

Graph 5. The assessment obtained in the activity: (e) Interchange of ideas for the management and resolution of problems raised in firs cycle students in order to ensure their permanence in the career, mostly concentrated between very satisfactory and satisfactory at 61,5% and 30% respectively, completing between these two assessments 91,8% of teachers.



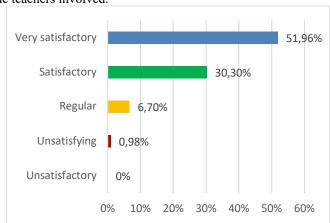
Graph 5. Activity "e" valuation

Graph 6. The teachers who participated in the survey perceive positively the work done by the integrative teacher, where 66,35% of them, consider it very satisfactory and, 26,92% as satisfactory, these two perceptions being the ones with the highest concentration of responses, furthermore it is important to mention that, within the assessment, a level of dissatisfaction on the part of the participants is no identified.



Graph 6. Perception of the work done by the integrative teacher

Graph 7. Finally, the general assessment of first cycle teachers, regarding the results obtained with the implementation of the "Integrative Teacher" project shows that a percentage equivalent to 51,96% consider it has been very satisfactory, achieving between this assessment, and the satisfactory assessment, a positive perception of at least 90% of the teachers involved.



Graph 7. Perception about results obtained.

5. Conclusions

Under the project proposal, it is evident that horizontal collaborative work between teachers assigned to first-year subjects shows very satisfactory levels in terms of establishing a participatory environment and giving way to the monitoring of planning activities, which shows the effectiveness of the project, being the most noteworthy to promote teamwork directed to establish strategies to improve the new students learning.

Facing the new students' permanence at university, the teachers' collaborative work has successfully influenced it, solving the problems presented due to the transition from high school to university.

Having a leader such as the integrative teacher who coordinates the activities planned by first-year teachers, have helped the development of the curricular projects of each career, guaranteeing an integration and balance between the distribution of activities.

Undoubtedly, this experience can be transferable to other university contexts, in which the objective besides to reinforce the new students insertion processes, can be oriented to strengthening the teaching-learning process at other levels through vertical interdisciplinary work.

The timely follow-up of the proposed activities within the project, as well as the results assessment obtained, are practices that should prevail in programs with similar characteristics in order to achieve the proposed objectives and promote continuous improvement.

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