

University College, mobility and innovative spaces for pre-professional training of Granma students

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ABSTRACT

At the University of Granma, work is done so that students enter the selected career with attitudes and motivations to remain and graduate. The purpose of the article is to socialize the experiences in mobility and the innovative spaces used in the pre-professional training of the students of the University College. The use of Theoretical methods such as the Historical-logical and the Analytical-synthetic, Empirical methods such as Observation, Survey and Interview; as well as, the Statistical method allowed as main results the proposal of educational actions by work directions.

Keywords: Mobility; Innovative spaces; University College; Pre-professional training

Introduction

Universities are currently implementing procedures to regulate access to university careers. The recruitment of the best students at the preceding level makes it possible to ensure the future work force of the companies. In Cuba, several ways are used. The first is through entrance exams that regulate the granting of access to the most demanded

careers, the second offers the winners of competitions access to careers related to the subjects, and the third is through the University College.

Arias *et al.* (2021, p. 382), when evaluating the insufficiencies in the functioning of the University College, analyze that it is necessary to carry out transformations, since not all faculty members meet the established requirements, students select careers without evidence of motives and stable interests. The training scenarios sometimes do not comply with the external regime, the school organization and the dynamics of the teaching-educational process remain the same as in the pre-university and the vocational training and professional orientation activities are not carried out with quality.

Hence, it is solved as a research problem: the completion of training at the high school level of young people selected to continue studies at the University, from a system of educational influences that hierarchize vocational training and professional orientation towards the career, limits the proper functioning of the University College in an environment that favors the preconditions for academic success.

The objective of the article is to socialize some of the experiences in mobility and innovative spaces used in the pre-professional training of students of the University College of Granma.

The antecedents of this entrance route date back to 2008, with the project carried out at the University of Havana, with high school students to guarantee a stable enrollment in the careers of Exact and Natural Sciences. This experience has been extended to other universities in the country. At the University of Granma (UDG), the University College opened its doors in the 2016-2017 academic year.

Development

Mobility and innovative spaces in the pre-professional training of students.

For Ruíz and García (2010, p. 244), a key aspect for the consolidation of the new type of society and for the university is the mobility demanded, on the one hand, by information and communication technologies..., which have broken down spatial and temporal coordinates in any relational context. And, on the other hand, the new economic order that

demands unprecedented flexibility from citizens in all their actions, which translates, for example, into the demand for competencies related to mobility in formative, pre-professional, professional or cultural contexts throughout life.

The University of Granma works in the pre-professional formative context of students, the University College and uses for them the scenarios of the university, Campus, Municipal University Centers (CUM), Teaching Units (UD), Basic Labor Entities (ELB), among others, which by their characteristics favor the approach of students to the selected careers.

From 2016 to 2019, the students of the University College move for two years to the university and without ceasing to be pre-university enrollment they take the subjects of eleventh and twelfth grade, participate in national competitions, become familiar with university life and deepen in the subjects of the selected discipline. As a result of COVID-19, mobility takes place only in the twelfth grade, since the academic and school calendars do not correspond. This situation influences the changes to be made as of 2021.

The University of Granma organizes the operation of the University College on the basis of four directions of work, proposed by Arias *et al.* (2021): Recruitment and Selection of the best students, Development of the Complementary Program of Vocational Training and Professional Orientation towards careers, Development of the University Propaedeutic Course and Pedagogical Delivery, attending to the plan of places and careers prioritized for local development, which facilitate students to stay and be trained as bachelor in their pre-university institution and moving towards other scenarios.

This mobility is assumed as the set of displacements made by teachers and students of the University College, in a physical or virtual context with professionals of the pre-university institution of origin, methodologists of the municipal directorates of education and specialists of the Base Labor Entities, united by the comparability, interactivity, competitiveness, flexibility, cooperativity and transparency in these educational conditions.

In this sense, comparability is aimed at the evaluation and satisfaction of students, family, actors and managers, of the activities carried out during the four directions of work of the University College. This makes it possible to compare, analyze and evaluate indicators such as: enrollment selection, quality of activities, results, career entry, permanence and graduation.

The interactivity of the students with the managers (municipal coordinators of the University College) and the actors (full or part-time university professors, graduates of the career and prestigious professionals) of the formative process and the displacement towards the different contexts of pre-professional training during the development of the activities of the Vocational Training and Professional Orientation Program, the development of knowledge and familiarization with the career through the four subjects (University Culture, Learning to Learn, English and Infotechnology) of the University Propaedeutic Course) allows the development of interpersonal relationships and the establishment of behavioral norms.

Cooperativity is evidenced in the interaction between actors and managers, in the relationships established among them and with society for the operation of the University College, which demands a relationship with the students' families, the institutions of origin, student organizations, the community and the teaching scenarios of the formative process.

Competitiveness is externalized in the professional competences related to mobility in the previous formative contexts that demonstrate not only in the academic structures of each faculty, CUM/FUM to efficiently respond to the demands of the labor force of the municipality and the province of Granma; as well as, to the increasingly changing needs of the Granma society and the formation of basic professional competences (Galdeano & Valiente, 2010): Competence in linguistic communication, Mathematics, for knowledge and interaction with the physical world, social and citizenship, cultural and artistic, learning to learn, information processing and Personal autonomy and initiative.

These basic competencies are considered by Arias *et al.* (2022) to be important for the training and pre-professional development of students at the University College:

1. Competence in linguistic communication. It facilitates the use of oral and written language as a vehicle for learning and expression and control of behaviors and emotions. For the development of this competence, the strategy of Mother Tongue is used and the study of English as a second language, the development of communicative skills, the types of texts most used in the selected career reach great formative relevance. The written report. Extra-class work. The most effective learning strategies to regulate independent cognitive activity and learning dynamics, self-preparation, and self-management of learning, taking class notes and independent study.

2. Mathematical competence. For the use of numbers, basic operations, symbols, forms of expression and mathematical reasoning for the creation, interpretation and understanding of reality.
3. Competence in knowledge and interaction with the physical world. Allows interacting with the environment to predict consequences. To show care and respect for oneself, to seek improvement as a way to correct the living conditions of oneself and others. It also allows the study and understanding of university life in the brigade and in the student residence.
4. Social and civic competence. It allows reflection so that students are able to put themselves in the place of others, respect differences in beliefs, cultures, religions, respect ideas and principles, promote knowledge of disciplinary regulations, civic duties, civic participation, responsibility and coexistence to accept and develop human, constitutional and democratic values and rights.
5. Cultural and artistic competence. It provides learning, appreciation and respect for the different cultural and artistic manifestations, since general elements of history of higher education in Cuba, history of the University of Granma, history of the University College, role of students in the training process, normative panorama of higher education, integral training of the university student and integral performance evaluation, panorama on the history and functioning of the FEU, the Movements of Student Assistants and High Teaching Achievement are acquired.
6. Competence for learning to learn. It affects in making learning a constant need throughout the pre-professional training through vocational training and professional orientation activities, in the approach to the professional model, in learning to be, to learn and to face the problems of the profession for the search of adequate partial solutions.
7. Competence for the treatment of information. It guarantees from the subject Infotechnology the use of the Information and Communication Technologies and its application in the university dynamics, use of the interactive platform, intranet and mail. Develops skills to access information and communication technologies, search, transmit information and transform it into knowledge.
8. Personal autonomy and initiative. This competence develops initiative, creativity, talent, and entrepreneurial spirit, the ability to choose and ask questions during

activities, taking responsible initiatives both personally and socially. This involves working on personal values such as dignity, freedom, self-esteem and the ability to face problems.

Díaz, Jaime and Céspedes (2023), state that the competences to be acquired by students (knowledge, skills, values) aimed at their professional training must guarantee the sustainability of their formative process in correspondence with the requirements of lifelong education, regardless of the mobility that knowledge must have according to the practice and the contexts in which the subjects develop.

In the development of competitiveness, transparency is used, as in the whole formative process, from the information and socialization to the municipalities of the general and specific plan of places for the University College, in sharing the same orientations for all the municipalities of Granma and ensuring the pedagogical management of the four work directions, in the clarity of the process of recruitment and selection of enrollment, compliance with the established procedures, not accepting preferences when applying the previously established requirements to students in the recruitment and selection process, adjusting to the places approved by the Provincial Directorate of Work.

The mobility of University College students in pre-professional training contexts for vocational training and professional orientation activities before entering university is closely related to the innovative spaces, which are identified as open and flexible spaces that promote culture and collaborative work, the development of creativity, social and communicative skills and thinking.

In the innovative spaces of the University College there are different interactions between the subjects, that is, students, managers and actors of the formative process, and all the components of an active, flexible and organized learning system.

An active innovative space is a learning environment in which human beings, the pedagogical actions of those involved in education and a set of knowledge that mediate the interaction of biological, physical and psychosocial factors in a space that can be physical or virtual are mixed.

An innovative space is flexible when it allows adapting the learning environment to the conditions and characteristics of the students, the educational scenario itself and the social-economic context.

An innovative space is organized when it complies with the work directions of the University College, with the established system of actions, dates and schedules, but also delimits those responsible, participants, guests, and place, plans the activity and its stages and takes into account the stimulation.

In this sense, the mobility of students towards innovative spaces such as physical, formal, informal, virtual or mixed learning environments converge as an important complement in the pedagogical management of the University College.

Innovative spaces of the university and CUMs/FUMs as a function of the University College:

The physical space is the entire environment surrounding the student, which is not only focused on the student, but also on the content of familiarization with the career. The classroom, in the University College has to be re-thought, re-structured and adequately organized for the new methodological and technological requirements as a place of meeting and social relationship. The teacher must have the necessary material to develop his activity, in an adequate environment and furniture, and the activities must be agreed upon.

In this sense, it is important the use of traditional blackboards, digital blackboards, educational platforms, cell phone, Tablet, creation of WhatsApp groups, Telegram, as well as, the use of other applications and communication platforms allow the teacher and students to be in constant connection with the group and with students from other colleges and even with graduates of the University College, who have entered and remain in the career. This interaction with the university community facilitates sharing learning projects with local entities and teaching units and turning the university into a pre-professional meeting point.

The formal space may coincide with the physical space; it takes place in an institutionalized educational system structured by the Professional Model, study plans, disciplines and subjects. It generally takes place in the classroom, in the laboratory, in the areas, Campus or in the CUM, scenarios where these spaces are organized and planned.

The informal space is in an extracurricular environment. Activities related to student life and its organizations, as well as cultural, artistic, sports, excursions, visits to historical sites, literary workshops, discussions, among others, which, by their creativity or interests,

students and teachers can plan, such as, for example: the commemoration of historical dates or relevant anniversaries such as:

January 28. Birthday of José Martí Pérez

April 4th. Anniversary of the UJC

November 6th. FEEM Anniversary

November 17th. Student's Day

November 26th. Monitor's Day

The virtual space is a digital space, in which various aspects are interrelated: communicational, pedagogical, technological, with which students self-manage learning and learn from the nature and philosophy of blended or distance education. It is then up to the managers to design and develop interactive materials that are adapted to the technology to be used and that facilitate the independent study of the students.

The mixed space is a didactic space where formal and virtual spaces are used and a stimulating environment is created for the development of all capacities, habits, skills and knowledge of the students, as well as autonomy and self-determination that favors motivation, security, responsibility and commitment for optimal levels of participation.

Among the spaces for simulation and linkage with reality are: laboratories, practice workshops, meeting rooms, classrooms, comfortable theaters, equipped rooms, marketing, engineering, community counseling centers, young computer club, video rooms, workshops and laboratories.

While, the research spaces are: the library, the computer lab, the browsing rooms, for research work in small groups, consultation of digital collections, document collections, books and journals, together with the advice and company of an expert librarian or laboratory technician that favors the development of skills in the use and access to information.

There are also spaces for interaction, collaboration and digital connectivity through: UDG wifi, the pages of each faculty, career, the ftp of the career to access information and conduct debates, form online discussion groups, seminars, debates and acquire learning experiences, apply web 2.0 with wikis, blogs, free software, everything depends on the objectives pursued by mobility in the University College, the means available, interests and expectations.

Pre-professional performance spaces are very important, among which are identified: pre-university educational institutions, faculties, Municipal University Centers, teaching units and basic labor entities that allow to establish the relationship with the practice, to take advantage of opportunities, work experiences.

There are open, creative and multidisciplinary spaces, formal and informal, virtual or face-to-face, social networks or one-to-one connection to favor the exchange of ideas among students from different careers, about disciplines and subjects to interact with reality and obtain practical experiences.

These spaces must provide the University College students with the necessary conditions to: discover, understand, problematize, model, simulate, practice, learn and assimilate educational subjects. They must provide essential elements that encourage teaching that stimulates the development of valuable skills and competencies, of knowledge that the student needs to know, the knowledge that must be taken into account for professional life.

Hence, among the main obligations and attributions of the coordinator of the career collective, in Resolution No 47/22, it is stated in Article 135.2. paragraph e): “to watch over the adequate fulfillment of the work program developed for the vocational training and professional orientation of the students; as well as for the communication actions planned as part of the educational strategy of the career” (Ministry of Higher Education, 2022, p. 30).

Importance of mobility and innovative spaces

The use of information and communication technologies is an essential element in the learning spaces of the students of the University College in Granma by incorporating elements that facilitate collaboration, interaction, physical and virtual mobility, including simulation and modeling of reality and, above all, dialogue between students and teacher.

For students residing in the mountains, these processes of exchange and online academic recognition through the WhatsApp group allow them to take a subject of the university propaedeutic course virtually at a distance, to carry out vocational training and professional orientation activities in the teaching unit or basic labor entity closest to their area of residence.

The University College is not static, it is a space of change, where a propaedeutic, novel and innovative learning is achieved, which trains students in values such as personal autonomy and collaboration with a common purpose: familiarization with the selected

career and university processes, the use of innovative teaching methods and the use of various forms of evaluation. It is a space for pre-professional training where new forms of accompaniment or tutoring are used from mobility and innovative spaces:

Peer tutoring is applied with students from different groups and careers, so that they learn from each other and each one has the opportunity to play the role of teacher towards the others so that they join together, cooperate with technological means and solve learning activities or tasks, which develops better attitudes in the relationships the career or by career groups.

Peer tutoring is applied to produce benefits from the emotional and psychological experiences of students of the same career who participate in the University College activity. It increases their confidence by modeling socially approved behavior, increases their self-confidence, and they feel useful by cooperating with each other and with the professor.

The recognition of the results achieved in these forms of accompaniment or tutoring, develop the responsibility to help with the learning of one or more peers and himself. They facilitate the awakening of interest and excitement in the student as a tutor, conferring a high sense of responsibility, but at the same time increasing better attitudes towards learning and reaffirming knowledge and skills.

Conclusions

The University College in Granma stands out for the mobility and innovative spaces used in the pre-professional training of students. As an academic structure, it guarantees from the Recruitment and Selection of the best students, the Development of the Vocational Training Program and Professional Orientation towards the careers, the Development of the University Propaedeutic Course and the Pedagogical Delivery, a more solid preparation to face university studies in correspondence with the demands of the local development. It is a space of pre-professional formation where teachers attend to the formation and growth needs of the students and implies new forms of educational and instructive accompaniment.