



REVISTA

# CÁTEDRA

## The vocational identity of the initial and terminal level in the teaching careers of the Faculty of Philosophy, Central University of Ecuador

*La identidad vocacional del nivel inicial y terminal en las carreras de docencia de la Facultad de Filosofía, Universidad Central del Ecuador*

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## Abstract

The Faculty of Philosophy, Letters and Educational Sciences faces the challenge of ensuring that students choose a career in which their vocational identity enables their successful completion, so it has the need to have information to assist the decision making of institutional managers. The objective was to characterize the vocational identity of the initial and terminal level of the students of the seven careers of the Faculty of Philosophy of the Universidad Central del Ecuador, period 2022. A conceptual review of vocational identity was carried out and methodologically the research was based on positivism, quantitative approach, ex post facto, cross-sectional, comparative type. The population consisted of 941 students from seven careers of the Faculty. The Vocational Identity scale was used as a research instrument. It was found that there are statistically significant differences in vocational identity between the initial and terminal levels, likewise for the sex variable, men have greater vocational identity than women, the career Pedagogy of Experimental Sciences of Mathematics and Physics, and the career of History and Social Sciences had the highest levels of vocational identity, while the lowest scores of vocational identity were found in the career of Psychopedagogy. It was concluded that vocational identity is affirmed as the levels of study advance. The results will support the establishment of academic strategies to avoid desertions and improve the exit profile of future teachers.

## Keywords

Psychological characteristics, initial teacher training, vocational identity, graduate profile, entry profile, entry profile.

## Resumen

La Facultad de Filosofía, Letras y Ciencias de la Educación se enfrenta al reto de lograr que los estudiantes escojan una carrera en la que su identidad vocacional posibilite su culminación exitosa, por lo que tiene la necesidad de disponer información que coadyuve a la toma de decisiones de los directivos institucionales. El objetivo fue caracterizar la identidad vocacional del nivel inicial y terminal de los estudiantes de las siete carreras de la Facultad de Filosofía, de la Universidad Central del Ecuador, periodo 2022. Se realizó una revisión conceptual de la identidad vocacional y metodológicamente la investigación se basó en el positivismo, enfoque cuantitativo, ex post facto de tipo transversal, comparativo. La población estuvo compuesta por 941 estudiantes de siete carreras de la Facultad. Como instrumento de investigación se empleó la escala de Identidad Vocacional. Se encontró que hay diferencias estadísticamente significativas en la identidad vocacional entre el nivel inicial y terminal, así mismo por la variable sexo, los hombres tienen mayor identidad vocacional que las mujeres, la carrera Pedagogía de las Ciencias Experimentales de la Matemática y Física, y, la carrera de Historia y Ciencias Sociales tuvieron los mayores niveles de identidad vocacional, mientras que los puntajes más bajos de identidad vocacional se encontraron en la carrera de Psicopedagogía. Se concluyó que la identidad vocacional se afirma en la medida que avanzan los niveles de estudio. Los resultados apoyarán a establecer estrategias académicas para evitar deserciones, y mejorar el perfil de salida del futuro docente.



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## Palabras clave

Características psicológicas, formación inicial docente, identidad vocacional, perfil egreso, perfil ingreso.

### 1. Introduction

The mission of the Faculty of Philosophy, Letters and Educational Sciences is to train teachers of basic education and high school in various specialties, with scientific, axiological, and academic foundations according to the demand of Ecuadorian society, this requires of its applicants certain characteristics that allow them to fulfill the functions and tasks that demand the exercise of the teaching profession. Its implications are of enormous transcendence when considering that its work is directed to the integral formation of children and young people according to the policies of the Ministry of Education of Ecuador.

The nature of the problem is associated with the decision to select a professional career based on: 1) aptitudes, 2) interests, 3) vocational identity, 4) opportunities, and 5) the family and social context that contribute to an adaptation that allows overcoming the levels of demand of the teaching career. The difficulties in the training of future teachers are represented in the lack of vocational identity, low perseverance, and their dedication to the academic achievements of training. In addition, a fundamental obstacle is that the School does not have a systematized process associated with vocational identity, since the admission profiles are based on external processes managed by the Secretariat of Higher Education, Science, Technology and Innovation (SENESCYT), and the access profile for teaching careers is not specified, so the challenge of this research is to generate useful information to guide decision-making on curricular development and to strengthen vocational identity, attitudes and aptitudes required by the teaching profession.

The main contribution of this study lies in the analysis of the factors that determine vocational identity. In addition, the results are intended to guide the decisions of the faculty authorities and the performance of teachers in the classroom. The manuscript describes by means of a valid and reliable instrument the level of vocational identity. The study answers the following questions: what is the level of vocational identity of the students of the initial and terminal levels of the careers of the Faculty of Philosophy, Letters and Educational Sciences; what are the differences between sexes of the initial and terminal levels of the studied variable, in the seven careers of the Faculty of Philosophy, Letters and Educational Sciences, period 2022; and what are the differences between sexes of the initial and terminal levels of the studied variable, in the seven careers of the Faculty of Philosophy, Letters and Educational Sciences, period 2022?

In order to answer these questions, it should be considered that vocational identity as a psychological characteristic is important in the choice of a university career, so this article aims to disseminate the results of the study of characterization of vocational identity,

Consequently, this research formulated the following objectives and hypotheses:

#### 1.1 Objectives

- To characterize the initial and terminal level vocational identity of the students of the Faculty of Philosophy, Letters and Educational Sciences of the Universidad Central del Ecuador in the period 2022.
- To establish if there are differences between sexes and initial and terminal cycles of the students of the Faculty of Philosophy, Letters and Education Sciences of the Universidad Central del Ecuador in the period 2022.



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- To identify the levels of development of the vocational identity of 1st and 8th cycle students of the Faculty of Philosophy, Letters and Educational Sciences of the Universidad Central del Ecuador in the period 2022.
- - To group the levels of vocational identity according to the careers of the Faculty of Philosophy, Letters and Educational Sciences of the Universidad Central del Ecuador in the period 2022.

## 1.2 Hypothesis

- H1. There are statistically significant differences between sexes in the vocational identity of students of the Faculty of Philosophy, Letters and Educational Sciences of the Universidad Central del Ecuador in the period 2022.
- H2. There is a higher level of terminal vocational identity than the initial one in the students of the Faculty of Philosophy, Letters and Educational Sciences of the Universidad Central del Ecuador in the period 2022.

From the social point of view, it is considered that this research will have a positive impact, since it involves all the elements that intervene in the educational process, especially the professionals responsible for professional orientation and selection. It will guide the development of curricular planning and teaching-learning processes that are taught in the classrooms by the teachers of the education careers of the Faculty of Philosophy, Letters, and Education Sciences of the Universidad Central del Ecuador.

This research contains the following structure: introduction, objectives, hypothesis, theoretical reference, methods and instrument, participants, instruments, design and data analysis, results, discussion, conclusions, thanks and authors and researchers.

## 2. Theoretical reference

Vocational identity refers to a person's understanding and development in relation to his or her vocation or career. The identification of this involves the exploration and understanding of one's skills, interests, values, and personal goals in order to make informed decisions about choosing a profession or job that is satisfying and meaningful. In addition, it involves self-awareness and reflection on one's strengths, weaknesses, passions, and purpose. Also, it involves research, and acquiring information about different career fields, employment options, and career paths. As a person develops his or her vocational identity, he or she becomes more familiar with the options available and feels more confident in choosing a path that aligns with his or her interests and goals.

In this regard, it is stated that:

Vocational identity includes the motives and interests that help a person decide what he or she wants to do in life. Theoretically, a well-formed vocational identity will help decide the job that brings the most satisfaction to a person, and at the same time these coherent and satisfying vocational decisions for the person could possibly increase his or her psychological well-being (Gutierrez, 2021, p.7).

It is important to note that vocational identity is not static but can evolve and change throughout life as individuals acquire new experiences, skills, and perspectives. Also, there may be times of uncertainty or reassessment of vocational identity, especially during major transitions, such as entering the workforce or changing careers.



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According to Bohoslavsky (2007), he noted that "the chooser is not just choosing a career. He is choosing what to work with, he is defining what to work for, he is thinking about a meaning for his life, he is choosing a how, delimiting a when and where, that is, he is deciding his personal fulfillment" (p.14). When choosing a professional career, decisions are made that imply the integral development as a person and as a professional in search of self-realization.

According to Santana and Viguera, effective vocational identity should be sectorized based on the context of complexity, recognizing that it is not pertinent to apply standardized and unified solutions, but rather to generate an approach that respects and recognizes the individual differences of students. This procedure is carried out through the search and analysis of data on educational and work opportunities in a welcoming environment that allows decision making about a responsible future and gives people full autonomy to initiate and carry out personal and professional development projects, from the contextual insertion of personal, socio-cultural nature and the context in which they perform (Santana and Viguera, 2023, p.7).

The identity vocation includes two concepts with a deep psychological meaning: identity and vocation. The first is defined as a subjective conception of the self and a determinant of personality according to psychoanalytic theory. On the contrary, in Gestalt it is considered as a set of characteristics that determine the behavior of a person with a sense of belonging to a social or cultural group. Therefore, in this research it was considered that identity is a personality characteristic modifiable with time and space according to the experiences of a person, that is to say, it is dynamic and subjective. The second concept is vocation, which is determined by the interest, aptitudes, and pleasure of carrying out an activity that as a result the person achieves satisfaction in doing it. It was also considered as "the particular disposition of each individual to choose the profession or trade he/she wishes to study and practice, according to his/her aptitudes, psychological and physical characteristics, motivations and socioeconomic and cultural frames of reference" (D'egremy, 1982). (D'egremy, 1982, p. 20).

The vocational provides a solid basis for the academic and professional orientation of students. It helps them select areas of study and careers that align with their interests and goals. This helps to avoid choosing careers that are not right for them, which could lead to dissatisfaction and lack of motivation in the future. According to Matthews et al., (2019).

Professional identity requires a well-defined training, since there are variables that will be present within a complex process, in which students acquire skills, knowledge and attitudes necessary to be part of a group or discipline (p. 4).

A well-developed vocation aligned with an individual's interests and values contributes to their job satisfaction and overall well-being. Students who choose a career that they are passionate about and allows them to use their strengths and skills tend to be happier and more satisfied in their professional lives. Vocational identity education helps avoid impulsive choices or outside influences, which can lead to unsatisfactory careers. Vocational education promotes the holistic development of students by helping them to better understand themselves, make decisions aligned with their interests and values, and develop the skills necessary for a satisfying and rewarding professional life.



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### 2.1 Vocational identity at university

Vocational identity in the university is an important aspect for the personal and professional development of students. It implies the consolidation of a vocational option consistent with their interests, abilities, and values, as well as the commitment to their academic training and future projection. Vocational identity in college can be influenced by various psychosocial factors, such as family support, institutional climate, job opportunities, social expectations, among others.

In this sense, Gálvez (2018) states that:

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Some studies have analyzed the process of formation and evolution of vocational identity in the transition from school to university and in the first years of university life, finding that there are different levels of vocational maturation according to the degree of exploration and commitment to a vocational option.

González et al. (2023) pointed out that the "process of choosing studies, among other reasons, is due to the existing gaps in the information to which they have access, as well as the guidance received from their families" (p. 254).

### 2.2 Importance of vocational identity

Vocational identity is important because it contributes to finding a purpose in life and feeling fulfilled in our work. When a person has a clear vocational identity, he or she feels motivated and committed to his or her work, which translates into better performance and greater personal satisfaction.

Gonzalez et al. (2020) state that:

The importance of vocational identity in the choice of career in the pre-university student begins with the knowledge of why? and for what? he/she wishes to study, in addition to the need to know the particularities of the career that express: his/her future work location, the subjects to be studied by study plan and years, how it is evaluated, who will be some of the professors, among others (p. 4).

In addition, vocational identity also contributes to making important life decisions, such as choosing a career or a job. When you have a clear vocational identity, you affirm that you are prepared to choose a career or job that matches your skills and values, which increases your chances of success and self-fulfillment.

### 2.3 Vocational identity in teacher training

According to Ortega and Fuentealba, vocational identity is an important issue in teacher training since teachers need to have a clear vocation for teaching and feel committed to their social function in order to be able to perform their work effectively. The teacher in training begins to discover his or her professional work from the different experiences in school



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classrooms: observation, analysis of classes and educational institutions, generation and application of teaching and learning sequences, classroom management, course leadership, among others (Ortega and Fuentealba, 2019, p. 118).

Teacher training seeks to foster the vocational identity of future teachers through reflection on their role as educators and on the values and principles that should guide their teaching practice. It also seeks to develop skills and competencies that will enable them to perform effectively in the classroom and in the educational community.

According to Day (2006), he states that:

the development of one's professional teaching identity is seen as an ongoing process of clarifying what one believes about teaching-learning and, particularly, about oneself as a teacher, in order to establish one's roles and purposes, consistent with professional ethics (p. 330).

In this sense, Gómez et al. (2022) point out that:

today, the role of teachers is not only limited to that of instructors and subject specialists, but they must also act as educators and problem solvers, be able to maintain fluid and constructive communication with families and mediate in conflict situations (p. 396).

Vocational identity allows them to find a purpose in life and feel fulfilled in their work, which translates into better performance and greater personal satisfaction. The world of work is dynamic and constantly evolving due to technological, economic, social and cultural changes. Some important aspects of the world of work include:

- **The labor market** is the space where supply and demand for employment meet. It comprises the availability of jobs and job seekers. Factors such as supply and demand, competition, economic trends and labor policies affect the labor market.
- **The labor world** involves the planning and development of careers and career paths. People seek opportunities for growth, promotion, and professional development. The International Labor Organization (2023) states that "increasing productivity is a key part of any strategy to promote formal work, through actions in key areas such as education, innovation, business climate and urban planning" (p.92). The demands of professionals are focused on the performance of efficiency for the fulfillment of their functions within the organization, based on innovation and management.

Decision making is a process that involves selecting among different options or alternatives available. It is a crucial skill in all aspects of life, including the professional arena. Start by clearly identifying the problem or decision you need to address. Understand the situation, the objectives you want to achieve, and the key factors involved. Gather all relevant and necessary information to make an informed decision. Do your research, ask questions, look for data and consider different perspectives. The more information you have, the more informed your decision will be.

Rubio and Gonzalez (2018) state that:

Vocational decision making is a process that most adolescents go through at the end of secondary education. It is a moment of vital transition that implies, as subjective work, reviewing one's own school and personal path in order to be able to build some alternatives for the future. In some



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cases, these alternatives may be quite clear, since academic, personal and social backgrounds support, for example, the continuation of university studies or higher education (p. 2).

Decision making involves a certain degree of uncertainty and risk. Not every decision will result in the expected outcome, but every decision is an opportunity to learn and grow. Also, trust your intuition and your ability to make informed decisions based on your knowledge and experience. Making a career decision is a personal and unique process. Take the time you need, be patient with yourself and seek support if you need it. As you gain more information and clarity, you will be closer to finding a career that aligns with your interests.

Choosing a career based on vocation does not guarantee that you will not face challenges or difficulties, but it can provide you with a greater satisfaction and sense of purpose in your work. Take the time to explore your interests and evaluate your options before making an informed decision.

Currently there are several situations that students must take into account when entering college, if you add to this the doubts typical of youth, the pressure and the different difficulties that occur for entry into higher education, then there is no doubt that the choice of career is another of the most relevant and decisive and unique, taking into account that such a choice can mean dissatisfaction between job responsibilities and lack of commitment to it (Andrade et al., 2018, p. 374).

If you have a defined vocational path, that's great. Having a clear direction gives you a solid foundation to advance your career. Vocation to teaching is a topic that has been the subject of debate in society and in the educational community. Teaching can be viewed as both a vocation and a profession. Some argue that vocation is necessary to be a good teacher, while others argue that technical-pedagogical training is more important.

Teaching vocation has been defined as a natural inclination to engage in the professional activity of teaching with enthusiasm, commitment, and confidence in the power of education. According to López-de-Herrera et al., (2020) "teaching as a profession emerged as a consequence of experiences in previous professions and as a late vocation. It was associated with greater emphasis to the idea of service, help and commitment, than, to a technical-professional concept." (p.49).

Emphasizing that vocation is a task, which demands from each person a constant effort of realization, a firm will that guides the steps and illuminates that inspiration that leads to one's own construction in and from the relationship with others (Romero, 2020, p.40). Self-evaluation and reflection on one's own teaching practice can help teachers develop their vocation and improve their teaching. Teaching can be a challenging and stressful profession, but it can also be very rewarding and have a positive impact on students' lives.

### 3. Methods and instruments

For the development of this research the "positivist paradigm" was selected (Hernández and Mendoza, 2018, p. 673) the same examined the reality from the objectivity of the analysis of the initial and terminal vocational identity of the students of the Faculty of Philosophy of the Central University of Ecuador, starting from the basic description to determine a correlation between the two moments of the variables investigated, through the quantitative measurement of the presence of the variables and conclude on the hypotheses raised.



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The scientific method was adopted, which guarantees the reliability of the results, and it also established a logical process from the statement of the problem, review of the existing literature, collection of information and procedures for the analysis of the information to issue scientific conclusions on the variables investigated.

The research had a correlational scope (Hernández and Mendoza, 2018. p. 700), which facilitated testing the hypotheses raised, using inferential statistics of the data collected through a test of exploration of the vocational identity.

### 3.1 Participants

The research population consisted of 941 students from the 7 courses of study, from the first semester and eighth semester, who have received the entire initial training process prior to graduation as professionals in the Education Sciences courses. The students of the seven courses of study were considered. Students in intermediate semesters were excluded from the study. The sample used was intentional, considering the inclusion and exclusion criteria mentioned above.

### 3.2 Instruments

The vocational identity scale is a tool used to measure the degree of clarity and stability of a person's vocational identity. It is composed of 20 items and is developed throughout life and is influenced by personal, social, and cultural factors.

It is composed of several interrelated elements, such as interests, values, skills, personality and experience. The scale responds to career goals, satisfaction with current job and stability of career choice. The results of this scale can help individuals to better understand their vocational identity and to make more informed decisions about their career and professional life.

### 3.3 Procedure

The data collection procedure follows the following steps:

- On-site verification of information sources.
- Contact with the academic managers of the center and the university.
- Obtaining informed consent from the students selected for the study. Prior to the application of the instruments to the samples selected for the study, the process of socialization of the research and the purposes it pursues will be carried out with the students involved in such a way that, in knowledge of the work to be done, they by their own rights and will can give the researcher the Consent for its realization through a signed document so as not to violate any right or susceptibility of the students. In this process the endorsement, support and participation of the Ethics Committee of the Central University of Ecuador will be requested, as well as the directors of the career for the application of the instrument that was done online.
- Application of the evaluation instruments outside class hours in the places established in the same Faculty. For the application of the instruments that will allow the collection of the empirical information needed in the research, a calendar was drawn up according to the availability of the students during working hours, with the previous authorization of the professors of the class to be held at that time. The calendar was made known to the directors of the faculty and of each of the careers for their corresponding authorization, cooperation and support.
- Distribution of the application of the instruments in an average time of 20 minutes.



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### 3.4 Design and data analysis

In the development of this research an ex post facto research design of cross-sectional and comparative type is used, which allowed us to collect data at a single point in time, and to compare students according to sex-gender, at the beginning and at the end of their university studies, and according to the type of career.

The data were analyzed through descriptive statistical techniques that allowed the construction of statistical tables by variable and its dimensions, the calculation of the arithmetic mean and standard deviation for quantitative variables, while for categorical variables they were calculated as percentages.

Likewise, inferential statistical techniques made it possible to contrast the differences in vocational identity according to the sex/gender of the students and the comparison of the students of the first and eighth semesters, by means of Student's t-test, as well as the comparison of the careers through the analysis of variance, ANOVA, of one factor.

## 4. Results

The results are presented in accordance with the objectives of the study: first the differences between sexes are examined, then between first and last semester students, and finally the differences between careers, taking in all cases vocational identity as a study variable.

	<b>Male Students</b>	<b>Femenine students</b>	<b>Contrast test of means</b>	
Variable	<i>M (DS)</i>	<i>M (DS)</i>	<i>t(939)</i>	<i>P</i>
Vocational Identity	36.16 (4.39)	35.06 (5.28)	-3.32	.001

Table 1. results of the t-test for mean difference between male and female students in Vocational Identity.

Note. *N* students = 376, *N* female students = 565; *M* = Mean; *SD* = Standard deviation, in parentheses.

As can be seen in Table 1 the male students score slightly higher than the female students; although this difference is small it becomes statistically significant ( $t= 3.32$ ,  $p= .001$ ).

Table 2 presents the results of the t-test for difference of means between first (1) and last (8) semester students.

First semester students score lower (35.10) in vocational identity than last semester students (35.96). These differences are very small, although they become statistically significant ( $t= -2.64$ ,  $p= .008$ ).

	<b>Cicle 1</b>	<b>Cicle 8</b>	<b>Contrast test of means</b>	
Variable	<i>M (DS)</i>	<i>M (DS)</i>	<i>t(939)</i>	<i>P</i>
Vocational Identity	35.10 (5.12)	35.96 (4.76)	-2.64	.008

Table 2 Results of the t-test for the difference of means between levels of beginning and end of studies in Vocational Identity.

Note. *N* semester 1 = 501, *N* semester 8 = 440; *M* = Mean; *SD* = Standard deviation, in parentheses.

Tables 3 and 4 provide the results related to the vocational identity of the students of the different careers of the Faculty of Philosophy and Educational Sciences of the UCE.



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Table 3 presents the descriptive statistics, mean and standard deviation, for each of the seven careers.

<i>Career</i>	<i>Media</i>	<i>Standard deviation</i>	<i>N</i>
Pedagogy of Chemistry and Biology	35.20	4.94	184
Computer Science Pedagogy	35.86	4.59	124
Mathematics and Physics Pedagogy	36.59	4.09	113
Language and Literature Pedagogy	35.00	5.39	116
Pedagogy of Languages	35.43	5.18	105
Pedagogy of History and Social Sciences	36.38	4.69	144
Psychopedagogy	34.37	5.41	155
Total IV	35.50	4.97	941

Table 3. Descriptive statistics, means and standard deviations, for each of the careers on the total score of the Vocational Identity questionnaire.

As can be seen, there are slight differences between the mean scores obtained by the students in the different careers. Thus, the highest score is obtained by the Pedagogy of Experimental Sciences in Mathematics and Physics, followed by the Pedagogy of History and Social Sciences, while the students of the Psychopedagogy program are those who obtain a lower score in vocational identity. The Language and Literature and Languages careers occupy an intermediate position.

Table 4 summarizes the results of the analysis of variance, ANOVA, of one factor carried out to establish whether there are differences between the means of the different careers.

As can be seen, there are significant differences between the means ( $F= 3.46$ ,  $p= .002$ ,  $p= .002$ ).

<b>Variable</b>	<b>Source</b>	<b>SC</b>	<b>gl</b>	<b>MC</b>	<b>F</b>	<b>p</b>	<b>Sense of differences</b>
Sense of differences	Between	506.77	6	84.46	3.46	.002	3>7,1,4; 6>1,4,7; 2>7,1; 5>1; 3=6=2; 1=2=4=7;
	Inside	22758.46	934	24.36			

Table 4. Results of the one-factor ANOVA to establish differences among the seven Faculty Careers in vocational identity.

*Note: Careers: 1= Pedagogy of Chemistry and Biology; 2= Pedagogy of Computer Science; 3=Pedagogy of Mathematics and Physics; 4= Pedagogy of Language and Literature; 5=Pedagogy of Foreign Languages; 6=Pedagogy of Social Sciences; 7=Psychopedagogy; 8=Pedagogy of Social Sciences; 9=Pedagogy of Social Sciences; 10=Pedagogy of Social Sciences; 11=Pedagogy of Social Sciences; 12=Pedagogy of Social Sciences; 13=Pedagogy of Social Sciences.*

An a posteriori analysis of the differences between group/career means indicates the direction of these differences; students in the Mathematics and Physics Pedagogy career (3) obtain significantly higher scores in vocational identity than students in the Psychopedagogy career (7), Chemistry and Biology Pedagogy (1), and Language and Literature Pedagogy (4).



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Students in group 6 (Pedagogy of History and Social Sciences) have higher scores in vocational identity than students in careers 1 (Pedagogy of Experimental Chemistry and Biology), 4 (Pedagogy of Language and Literature) and 7 (Psychopedagogy).

The students of career 2 (Pedagogy of Computer Science) obtain significantly higher scores than those of career 7 (Psychopedagogy) and 1 (Pedagogy of Chemistry and Biology).

The students of the careers 3 (Pedagogy of Mathematics and Physics), 6 (Pedagogy of History and Social Sciences) and 2 (Pedagogy of Computer Science) are the ones who obtain higher scores, with no significant differences among them.

On the contrary, the students of careers 7 (Psychopedagogy), 4 (Pedagogy of Language and Literature) and 1 (Pedagogy of Chemistry and Biology) have the lowest scores, with no statistically significant differences among the three groups.

## 5. Discussion

When we consider Vocational Identity as a formation process integrating the motivations, interests and needs that are manifested and to which special interest must be devoted in the professional orientation process, it is considered that the processes exert similar effects on all the persons subject to their influence, establishing a unity within the diversity of persons or students who opt for a teaching career. However, the results of the research establish a significant difference due to the sex of the students, showing that the level of intensity of the Vocational Identity of men is significantly higher than the level of intensity of female students.

This result allows us to conclude that male students have more focused and directed their interests and inclinations towards what they intend to be in the future, giving greater security and confidence to the choice of the professional career and with very high probabilities of achieving success in their professional training. The vocational identity in the University faces great challenges, the teacher and even more the student is responsible for obtaining day by day deeper knowledge that assures a greater specialization in the disciplinary field, since semester by semester the integration of knowledge and experiences required by the teacher for the future professional practice becomes more complex.

The results found in the research confirm the basic theoretical approaches. That is to say, vocational identity is affirmed as the levels of study of the career progress. Students in the first semester obtain a lower score in vocational identity than those in the last semester. This result allows us to establish that the levels of vocational identity are consolidated as the novices of professional training advance, that is to say, it goes from less to more identifying with the future professional career.

Therefore, the development of professional teaching identity is considered a continuous process of clarification of what one believes about teaching-learning and, particularly, about oneself as a teacher, to establish one's roles and purposes, in coherence with professional ethics. Vocational identity in teacher education is important because teachers need to have a clear vocation for teaching and feel committed to their social role to be able to perform effectively in their work.

The findings of the research show that the students of the different teaching careers do not have the same levels of vocational identity, establishing basically three groups due to the level of vocational identity. The first group with the highest levels of vocational identity is made up of Mathematics and Physics Pedagogy, History and Social Sciences Pedagogy and Computer Science Pedagogy, which, although there are differences among them, these are



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not statistically significant. The second group with medium levels of vocational identity is formed by the Languages Pedagogy career. The third group, with the lowest levels of vocational identity, are the Chemistry and Biology Pedagogy, Language and Literature Pedagogy, and Psychopedagogy careers.

Hypothesis 1 was verified in which it was proven that there are statistically significant differences by sex in the vocational identity of the students of the careers of the Faculty of Philosophy, Letters and Educational Sciences of the Universidad Central del Ecuador in the period 2022. Hypothesis 2 was tested in which it was shown that there is a higher level of terminal vocational identity than the initial one in the population investigated.

It should be noted that the careers with the highest level of vocational identity are Pedagogy of Mathematics and Physics and Pedagogy of History and Social Sciences, while the career with the lowest levels of vocational identity is Psychopedagogy.

## 6. Conclusions

At the end of the research, it can be concluded that:

- Vocational identity is affirmed as the levels of study of the career progress, i.e., low levels at the beginning and higher levels at the end of the career. Although the differences are minimal in the scores, it was observed that there are significant statistical differences between students at the initial and terminal levels.
- The sex of the students is a determining factor in the variation of the levels of vocational identity, with higher levels found in men than in women. The levels of vocational identity of the students of the various teaching careers differ; this may increase according to the academic formation of the specialty of the careers.
- The highest level of vocational identity was found in the students of Pedagogy of Experimental Sciences of Mathematics and Physics, as well as in History and Social Sciences, while the lowest scores of vocational identities were found in the career of Psychopedagogy.

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