593 Digital Publisher
CEIT
ISSN 2588-0705

La formación de habilidades investigativas en estudiantes de la Universidad de Especialidades Espíritu Santo (UEES) de la Maestría en Gestión Educativa (MGE)

The training of research skills in students at the Universidad de Especialidades Espiritu Santo (UEES) of the Master's Degree in Educational Management (MGE).

Yeimer Prieto-López,
Unidad Educativa Bilingüe Torremar / Universidad Espíritu Santo (UEES) - Ecuador
yprieto@torremar.edu.ec

Mario Fabricio Ayala-Pazmiño
Unidad Educativa Bilingüe Torremar / Universidad de Guayaquil - Ecuador
mario.ayalap@ug.edu.ec

Renato Esteban Revelo-Oña
Universidad Central del Ecuador
rrevelo@uce.edu.ec

doi.org/10.33386/593dp.2021.1.456

V6-N1 (ene-feb) 2021, pp. 182-188 | Recibido: 03 de diciembre de 2020 - Aceptado: 19 de diciembre de 2020 (1 ronda rev.)

RESUMEN

El objetivo principal de esta investigación es desarrollar una nueva concepción teórica innovadora para la formación de competencias investigativas en los estudiantes de la Maestría en Gestión Educativa (MGE) de la Universidad de Especialidades Espíritu Santo (UEES). Se utilizó un enfoque cualitativo y los criterios de expertos. Las entrevistas con expertos posibilitaron la elaboración de la propuesta para dar solución al problema científico relacionado con las limitaciones de los estudiantes en sus competencias investigativas, así como un mejor tratamiento teórico y fáctico en las tutorías virtuales.

Palabras clave: entrenamiento, competencias de investigación, investigación científica, proceso de enseñanza aprendizaje

Cómo citar este artículo:

APA:

Prieto, Y., Ayala, M., & Revelo R. (2021). La formación de habilidades investigativas en estudiantes de la Universidad de Especialidades Espíritu Santo (UEES) de la Maestría en Gestión Educativa (MGE). 593 Digital Publisher CEIT, 6(1), 182-188. https://doi.org/10.33386/593dp.2021.1.456

Descargar para Mendeley y Zotero

ABSTRACT

The main objective of this research was to develop a new innovative theoretical conception for the formation of investigative competencies in students of the Master's Degree ina Educational Management (MGE). A qualitative approach and the expert criterion method were used. Interviews with experts made possible the elaboration of the proposal to provide a solution to the scientific problem related to the limitations that are manifested in the students in the training and development of investigative competencies, as well as a better theoretical and factual treatment in the virtual tutorials developed by the researchers and addressed to the MGE students of the Universidad de Especialidades Espiritu Santo (UEES).

Key words: training, research competencies, scientific research, teaching and learning processes

Introduction

In academia, research is a crucial element. Universities and professors share responsibility for exceptional dedication in this area. They are specialists of the highest level in a scientific discipline, which require the capacity and research habits that enable them to increase their specific knowledge and provide students with the tools offered by science to solve problems.

In this context, let us remember that research takes multiple forms, but only two apply to the context of teaching-learning: formative research and productive knowledge research. The relationship between teaching and research has always existed. It goes through the often-political decision of what is the educational model that our universities apply. Research almost always considered as "scientific" refers to postgraduate training in master and doctoral degrees. Still, we miss that period in which the student must not only learn to investigate but also take pleasure in research. It is important to emphasize that formative research is a teaching strategy and an invaluable tool for any teacher who claims to be essentially a trainer. Let us not forget that there are also different types of universities and that some are exclusively for research.

It is necessary to consider the professional-pedagogical performance of university teachers to meet the demands of today's society. Besides, the research processes carried out in universities have an interdisciplinary approach as a distinctive quality. Not only does this responsibility apply to the subjects of research methodology and dissertations, but a multidisciplinary approach is worked on. Scientific research appears with the human being's development to meet social, cultural, and technological needs. For this purpose, science participates in the inquiry and solution of problems, facts, events, and phenomena, of short and comprehensive scope, of a less or greater degree of complexity, generating the need to deepen its study to carry out research processes that manifest themselves using techniques and methods in the search for knowledge. The United Nations Organization for Education, Science and Culture (UNESCO) in the World Declaration of Higher Education on Higher Education in the 21st Century: Vision and Action of October 9, 2008, states: "Article 1. (c): promote, generate and disseminate knowledge through research and, as part of the services it is to provide to the community, provide appropriate technical skills to contribute to the cultural, social and economic development of societies, fostering and developing scientific research (...)" 1. (UNESCO, 2008, p. 6). Furthermore, scientific research, as a fundamental part of the life of higher education institutions, is aimed at raising solutions to the problems that society demands. Hence, Bentley and Meek (2018) stated the concept, also articulated by Henao et al. (2018), that universities are essential in the training of researchers because no other institutions can do so, and society, in general, will not be up to the task in the absence of higher education institutions.

In universities, investigative training processes allow the interaction of teachers and students, each from their research role, to promote learning that would enable solutions to problems related to careers and demands of the professional profile. Sáez López et al. (2013) said that a university's training researchers' mission must be organized, logical, and significant; professionals must be trained in research competencies. The investigative training process should be developed holistically and flexibly so that the student acquires the ability to address social problems and orient his research toward solutions for those problems. Lacking such a process, research training must be done from a pedagogical/theoretical perspective rather than a strictly practical one.

Ecuador's Organic Law on Higher Education (LOES), in article 107, states that higher education should respond to the expectations and needs of society. Also, it should consider global scientific, humanistic, and technological development and cultural diversity. Therefore, higher education institutions should orient their research competency training toward enabling students to address local, regional, and national development needs, innovation

593 Digital Publisher CEIT ISSN 2588-0705

and diversification of professions and academic degrees, and trends in the local, regional, and national job markets, and national science and technology policies.

Development, Analysis, and Discussion

Previous research has shown the potential to improve written culture at all schooling levels, especially in the university context. Most systematized studies have suggested that the problem of reading and writing in higher education requires institutional and non-individual policies. Therefore, in this article, we will review the role of teachers and their influence on students within the process of developing research skills caused by difficulties in reading comprehension and poorly written production. From these theoretical approaches, we will focus on the development and training of research competencies. We attempt to answer the following question: How to contribute to developing research skills in the professional-pedagogical performance of students of the UEES Master's Degree in Educational Management?

To guide the logic to follow in the research, the following scientific tasks were performed: To inform the training of investigative competencies during the professional practice of students of the Master's Degree in Educational Management (MGE); to determine the historical background of the training of investigative competencies through vocational training of MGE students; to diagnose the professional research performance of MGE students and to develop a theoretical conception for the training of research competencies in them. Therefore, the training of investigative competencies during the vocational training of students requires establishing interdisciplinary relationships between the knowledge associated with scientific research and those related to the teaching processes' direction – learning of the subjects Research Methodology, Academic Writing, and Dissertation. The relevance of the study is given in the usefulness of the model for the development of research competencies with an interdisciplinary approach as an alternative that allows teachers to be prepared, with a more comprehensive view from training processes, and solve the problems of the teaching-research-assistance relationship.

The authors, after the systematization performed, assume that a university teacher should develop three primary functions: understand research methodology, be able to guide students' research, and allow the improvement in both students' professional and human work. Research assumes trends in training and skills development in higher education. There is now a trend in different societies and all areas of labor, related to labor resource skills, in consumer societies for labor market control, and in Ecuador in particular, to achieve efficiency in human resources, which improves the quality of services offered, mostly if they are related to the quality of life of the population. Since the 1980s, industrialized countries have given great impetus to skills-based education and training, with successful results mainly in Australia, Canada, France, the United States of America, and the United Kingdom.

These competencies, referred to by Westera (2001), constitute a system of knowledge, skills, values, and qualities of personality that are mobilized according to individual and social needs, as well as the motives, interests, and attitudes of the professional, which allow satisfactory performance in the exercise of the profession; and that can only be evaluated through performance, considering social demands. The systematization accomplished in competencies as defined by Añorga (2018; 2019) and Añorga et al. (2019), expressing that it is the set of knowledge, skills, habits, and competencies researcher must deploy daily regarding work action, family, and community.

That definition is valid because it considers intellectual elements and ethical and knowledge skills, as well as values and attributes that are important in the training and development of professionals in the field of higher education. This systematization of competencies allows establishing common elements such as suitability, organized behavior, action, know-how, and mental structures directed in the dimension of know-how, making it easier for them to adjust to what is aspired in higher education. The

competencies, as assumed by the researchers, have several classifications, within which are labor and professional; labor is the property of skilled workers, who are trained through training studies and are applied to specific tasks; professionals are exclusively people who have completed higher education studies (technological or professional), characterized by their flexibility, approach of unforeseen events, problem confrontations, and high levels of complexity.

During the elaboration of the theoretical conception, modeling was used because as it arises, a theoretical notion is a simplified reproduction of reality, which fulfills a heuristic function since it allows to discover and study new relationships and qualities of the object of study. Modeling is precisely the process by which models are created to investigate reality.

Contribution of the Theoretical Conception

The theoretical conception considers the objective needs of an era of Ecuadorian society and becomes an alternative solution to the problem of the area of education and educational management in the university context, constitutes a solution to a practical problem of reality, and in the development of the proposal, improves the management of permanent and continuous education of teachers. Interdisciplinarity enables teamwork and a person's commitment to a collectivity to solve social practice problems (Londoño & Castañeda, 2010). In it, one finds expression of the historical element, which conditions every social phenomenon, and the formation of man cannot be analyzed outside the historical context in which it develops. The pedagogical basis is that in the process of designing the conception, we propose that development responds to the internal regularities of the process in question, without implying the non-consideration of socio-educational influence, as well as that training is considered more linked to the frequencies of the educational process at its base. Both categories--formation and development--involve the consideration of man as a being: biologically, spiritually, individual-community, and historically conditioned.

The theoretical conception is implemented in research methodology and degree classes, either in postgraduate courses, presentations, workshops, tutoring, training or during the Master's Degree in Educational Management at UEES. It is based on the principles of Advanced Education enunciated by Añorga (2018; 2019): a) the relationship between social relevance, objectives, motivation (includes work activity, personal and social interests); b) the link between rationality, creativity, and the quality of the result (has productivity); c) the connection between the scientific nature of the content, cognitive research, independence, and new knowledge production (includes de-schooling); d) the relationship between forms, technologies, and their creditability; e) the link of theory with practice in the formation of values; f) the connection between the system approach and its expressions: branch, sectoral, and territorial, and g) conditionality between undergraduate, essential, and specialized training.

The theoretical conception also supports the design of research competencies in elements identified by researchers during a systematization carried out to thesis workshops and virtual tutoring in four groups of the Master's Degree in Educational Management on the protocolization of intellectual production activities. The proposed theoretical conception is based on the historical-cultural approach to human development developed by Vygotsky (2012) and other followers, by relying on developer learning, regarded as the exclusively human form of knowledge and always an interactive process. It is mediated by the existence of a culture that the subject makes his own (from the mastery of objects, the ways of acting, thinking and feeling, and the ability of the capacities they embody), as well as the existence of others, which makes communication, cooperation, and joint activity the characteristic of this generic form of learning.

For this reason, the theoretical conception for the development of research skills, which is proposed, has as a distinctive element the interdisciplinary approach, since the research skills defined for teachers of health technologies should facilitate

593 Digital Publisher CEIT ISSN 2588-0705

the integration, enrichment, and cooperation between knowledge and technological procedures with the different disciplines, as well as the professional growth of teachers. It should be considered that this approach enriches the training processes in which it manifests itself. Researchers at this point understand that the ongoing and continuous preparation of human resources in students of the Master's Degree in Educational Management cannot be developed on the sum of isolated facts of each science, but must be designed, planned, and controlled and is based on the identification of learning needs, which are logically identified, contextualized, and customized.

Conclusions

The historical-logical study and executed systematization made it possible to determine the theoretical foundations underpinning research skills and professional-pedagogical performance in the context of students of the UEES Master's Degree in Educational Management (MGE). The results obtained from methodological triangulation to instruments developed from the variable's parameterization allowed the diagnosis of inadequacies in developing research competencies that negatively influence the professional improvement and technical-scientific work of MGE students at UEES. The theoretical conception aimed at the development of research competencies with an interdisciplinary approach that was designed can be flexible, dynamic, interdisciplinary, progressive. It contributes to the pedagogical and professional research performance of MGE students at UEES. The contribution to the sciences emerges from the relationships of hierarchy, coordination, and subordination that are identified from the theoretical conception for the development of research competencies with an interdisciplinary approach and enrich the theory of advanced education. The assessment of the expert criterion results and the initial and final performance test for its partial application enabled the successful evaluation of the theoretical conception for the development of research competencies with an interdisciplinary approach.

References

Añorga, J. (2018). *Glossary of terms of advanced education*; 2018, p.20-22.

Añorga, J. (2019). Alternative Educational Paradigm for the professional and human improvement of labor and community resources. *Advanced Education. On Electronic Support*; 2019.

Añorga, J., Fernández, M., Valcárcel, N., Reinoso, C., & Borges, M. (2018). Towards the search for humanism in Advanced Education. *Havana, Cuba: Higher Pedagogical Institute "Enrique José Varona"*.

Bentley, P. J., & Meek, V. L. (2018). Development and future directions of higher degree research training in Australia. In *Doctoral Education for the Knowledge Society* (pp. 123-146). Springer, Cham.

Henao, J., Fries, L., & Marín, G. (2018). The analysis of discourse and literacy: Critical reading to an opinion column. *Arboleda Aparicio, J.C. (Ed.), Collection Ibero-American Pedagogy Reflections and Pedagogical Resources* (pp. 51-66). Cali (Valle del Cauca): Redipe.

Londoño, D. & Castañeda, L. S. (2010). Basil Bernstein and the language-education relationship: The case of the Semester of Strengthening of the University Institution of Envigado. *Lasallista Research Journal, 8*(2), pp. 18-32. Caldas: Lasallista University Corporation

Sáez López, J. M., Ruiz, J. M., & Cacheiro González, M. L. (2013). Reviews and practice of college students regarding access to scientific knowledge: A case study in two Spanish universities. *International Review of Research in Open and Distributed Learning*, *14*(5), 51-68.

Vygotsky, L. S. (2012). *Thought and language*.

MIT Press.

Westera, W. (2001). Competencies in education: a confusion of tongues. *Journal of Curriculum studies*, *33*(1), 75-88.

UNESCO, (2008). *World declaration of higher education for the twenty-first century*.