Academic formation and formative research integration management for the culmination of studies process in Higher Education.

Lorna Cruz Rizo
School of Languages and Linguistics
Universidad de Guayaquil, Guayaquil, Ecuador
and
Eneida Catalina Matos Hernández
School of Languages and Linguistics
Universidad de Guayaquil, Guayaquil, Ecuador

ABSTRACT

Given the up-dated international difficulties in the completion of studies process, theoretical and practical studies developed in this field are surprisingly scarce.

Particularly, there has been a limited quantity of students that support their diploma thesis after completing their credits at the School of Languages and Linguistics at the University of Guayaquil. Consequently, this paper faces the problem of the insufficiencies in the culmination of studies process in relation to the management of the academic and scientific formation.

Thus, the objective is: to improve the completion of studies or degree-obtaining processes in university education, through the implementation of a praxiological proposal of academic formation and formative research integration. Accordingly, the author’s experiences systematization is the methodology mainly used.

The essential logic for the management of the academic formation and formative research integration was revealed as the main proposal, therefore this is the solution to the problem diagnosed. This is based on a curricular structure, in which each of the subjects was interrelated to each of the essential stages of the scientific research. As main results obtained, the students were able to solve real-life problems diagnosed at educative institutions, also they drew up the draft of their theses.

Key words: Completion of Studies, University Education, Academic Formation, Formative Research, Real-Life Problems.

INTRODUCTION

Internationally, higher education has been demanded to respond to social needs. Universities can no longer graduate professionals who are not able to respond to the increasingly complex and emerging problems coming from their living contexts.

Endless would be the list of authors who have attempted into this subject from different perspectives: management, curriculum design, university processes’ dynamics, methodology of university teaching, teaching-learning assessment, link with community development, pre-professional practices and specific didactics, among others.

However, there is a process that has been excluded from the numerous scientific researches done. Taking into account an exhaustive bibliographical search done by the authors of this paper, it is possible to state that, up to now, the culmination of studies process in higher education has not had sufficient theoretical or praxiological insights.

Thus, this paper paves the way for further research on the topic, giving a praxiological approach as the solution to the insufficiencies in the culmination of studies process in relation to the management of the academic and scientific formation.

THEORETIC- TEMPORAL LOCATION OF THE CULMINATION OF STUDIES PROCESS

Some of the few studies developed in this field, include J. Padilla, D. Rodriguez & C. Concepción [1] who referred to the implementation of actions directed to the organization, development and evaluation of the students preparation for the culmination of studies, related to the articulation among students, professors and tutors.

However, from this researchers’ perspective, a proposal with a deeper level of scientific essentiality is needed, for it to be functional in a diversity of university courses, as far as they share a similar nature and the whole teacher’s role is played by only one person, avoiding fragmentation in the formative process.

That is why, in general terms, it is stated that the scientific historical antecedents supporting this process are diffuse, because the culmination of studies (referred to grade, third level or university formation, as it is referred to in different countries) or degree-obtaining process has mainly had legal insights. These legal papers have had the aim of establishing the normative, requisites and procedures in which a university student would obtain its university diploma.

However, in the bibliography researched, there are not enough studies referred to the theories, theoretical models, principles,
concepts, strategies or any other scientific construct, that help to understand and explain the essence of the culmination of studies process.

In this way, this research aims at the solution of the theoretical and methodological shortcomings that, from the higher education pedagogy, are slowing down the improvement of the culmination of studies process, and, consequently the necessary university responses to the social demands.

Thus, this research aims at improving the culmination of studies processes in higher education, through the implementation of a praxiological proposal based on the academic and research integration management.

In this paper, the culmination of studies is defined as the process in which university students are trained to show theoretically and practically all the learning they have acquired during all their university studies, for the resolution of problems and professional tasks, as an important element of their professional performance, showing their competencies in the use of the specific scientific- professional methods that support their profession.

Historically, the culmination of studies process in Ecuador, has been faced in differently by a diversity of institutions in higher education. In this respect there are no other references than the ones included in the multiple curricula.

It is not until the Law on Higher Education [2] is approved in the year 2010 that there is a holistic and coherent regulation of the higher education system in Ecuador and its principal and functional logic are defined, to guarantee the right to high quality higher education, including the culmination of studies.

More specifically, the Reglamento al Régimen Académico (Academic Regime Regulations) [3] establishes the curricular organization units, in which the curricula in Ecuadorian Higher Education is structured: basic, professional and culmination of studies unit. This last level allows the academic validation of knowledge, skills and performance developed during the university courses for solving professional problems. The main result of this end-of-studies unit is the development of a research paper or taking and passing a final test.

Consequently, a theoretical-practical perspective is presented in here for the implementation of this process in line with major international educational trends, contextualized to the specific conditions of Ecuadorian universities, from the Guayaquil University (UG).

**PHYSICO- CONTEXTUAL ENVIRONMENT OF THE CULMINATION OF STUDIES PROCESS**

The UG is the biggest state university in Ecuador, it was officially created in 1897, it offers 95 different university courses and a total number of 69,919 students registered. In this institution, the School of Languages and Linguistics attached to the Facultad de Filosofía, Letras y Ciencias de la Educación has as main objective to train competent professionals in English language teaching-learning process with a socio-critic, systemic and complex approach to intervene in the pursuit of educational scientific solutions to socio-humanistic problems, with commitment and professional ethics that meets the demands of contemporary intercultural society.

In this formative context, the gap between the students who enrolled this university course, the ones who graduate (manage to overcome the necessary credits through the approval of the subjects of the curricula) and those who finally obtain their university degree, has been in a sustained increase.

The All But Dissertation (ABD) syndrome as a world trend that affects the culmination of studies process in universities around the world, has also being affecting this context.

From the interpretation of the results of a survey applied to a sample of 50 students that finished their credits up to the school year 2014-2015, it is possible to state that they used to postpone their dissertation act due to different causes, such as: insufficient mastery of the investigation methodology, limited process of personalized guidance for the completion of studies, limited training in the scientific writing style, methodological- didactic deficiencies that hampered creative design of proposals as solutions to the research problems diagnosed.

Similarly from a sample of 80 theses, that were finally presented to the Academic Committee, previous to the dissertation act, the following difficulties were evidenced: inconsistencies in the general essential logic (design) of the research, difficulties in scientific writing, especially in paraphrasing, short and long quotes. They also showed limitations in: critical and scientific argumentation, theoretical, empirical and statistical methods, techniques and research instruments and insufficient scientific interpretation of the data obtained through the tabulation of the empiric instruments applied.

That is why, it was necessary to design a theoretical and practical construct able to better up the end of studies process through its immediate implementation during the culmination of studies curricular unit in the ninth and last semester of the university. In this way, this research is focused in the methodology of the systematization of experiences, as the process in which a new scientific knowledge is built through the interpretation of the concrete results obtained by means of the implementation of actions containing an academic and research character.

This methodology articulated theoretical methods as the analysis synthesis and inductive-deductive. Similarly, empiric techniques as the survey, the interview and the documents review were used. For the design of the academic formation and formative research integration management, the structural-systemic method was used to tear apart the process in each of its constituent parts and reveal their functions.

**ACADEMIC FORMATION AND FORMATIVE RESEARCH INTEGRATION MANAGEMENT IN THE CULMINATION OF STUDIES CURRICULAR UNIT**

It could be considered that there is not an invariable vision of what should teaching be and consequently, educational research, as this implies a particular perspective of society, human beings and teaching-learning processes, which leads to different perspectives on how to face educative research. [4]

In this way, this culmination of studies process in which a research paper in educational sciences has to be developed, becomes a complex process, due to the very epistemic nature of pedagogical sciences, so the research should be guided in a logical, consistent and systemic way. [5]
The structure of this process was based on what is established in the Instructivo de Transición de la Ejecución de la Unidad Curricular de Titulación, [6] however a new educational management logic was revealed, from the most essential needs of the School of Languages and Linguistics.

The academic-researching articulation achieved a curricular structure in which each of the subjects designed for this curricular unit is integrated to each of the essential stages of the scientific-educative research developed simultaneously by the students in general-intermediate educative institutions.

The academic process, developed in classrooms to achieve its practical articulation with the research that would finally contribute to the degree thesis, was totally centered in problem-solving and participative teaching methods, because when the students arrive to this stage of their university course, they have already acquired the necessary knowledge and develop the skills required in the curriculum of the career. Therefore this unit does not include entirely new knowledge, but problem-solving systematization spaces are generated for the implementation of appropriate professional resources focused on generating creative solutions to real-life educational problems.

The academic-research articulation was boosted by the gradual construction of the degree thesis in relation to the subjects: Research Methodology, Epistemology, Integrative Subject and Scientific Writing.

**Graphic 1**

Academic formation and formative research integration management for the culmination of studies.

Through the comparative analysis of the data obtained from this paper review, the following results were obtained in each of the indicators used:

1. Research rationale quality increased in a 42%, which implies a satisfactory trend in this indicator.
2. Scientific writing quality increased in a 22%, especially in what refers to short and long quotes so as to reference citations. This minimum increase result is caused by the insufficiencies in general writing skills, which slow down the scientific writing development, thus a deeper and longer educational improvement is demanded.
3. Theoretical, empirical and statistical methods techniques and instruments increased in a 49% in relation to pertinence and coherence. This indicator result implied a substantial influence for quality improvement as a consequence of the management process implemented.
4. Scientific interpretation of the data obtained improved in a 48%. The increase in this indicator is an evidence of the fact that the whole academic-research management has been effectively influencing on students’ scientific analytical processes.

These results are summarized on the following graphic:

**Graphic 2. Results of the comparison between the first and the second revision of the theses based on difficulties percentages.**

Then, it is possible to state that there has been a substantial decrease of the difficulties observed, which is considered by theses researchers as a satisfactory trend in the quality improvement of the formative research process of these university students from the culmination of studies, obtained through the implementation of this integrative management.

**METHODOLOGY-EPISTEMOLOGY: A RESEARCH-CURRICULAR DIALECTICS**

Research Methodology and Epistemology are interrelated subjects, each of them is not strictly limited to its own disciplinary spaces, but they behave in a dialect unit for science
construction, with no content boundaries. The first mentioned mainly contributed to the essential categories of the research process, the types of scientific research, methods, techniques and instruments as ways of creating scientific knowledge. The secondly mentioned subject contributed to the students’ formation through the academic treatment of the universal research logic, the processes of scientific discussion through the different forms of knowledge, the scientific knowledge dynamics and its justification process.

This articulation implied that each of these subjects needed to retake the other’s contents to have a viable, concrete, feasible, creative, up-dated and pertinent curricular process.

Although one of the aims of this curricular unit is the theoretical and practical systematization of the contents already appropriated during all the previous university years and thus, there should not be introduced totally new aspects, at the moment in which this proposal was implemented, Epistemology was not previously included in the curriculum, so it was necessary to introduce some essential concepts, definitions, categories and basic relations that constitute the theoretical-structural basis of the cognitive activity during the construction process of the research project.

Thus, wires were made for the construction of this theoretical-structural basis. They were useful for the development of debates during the collaborative activity of the students, and at the same time contributed to the derivation of each core content, enhancing its integration with the other subjects of the culmination of studies unit through epistemological inquires that marked the essentiality of the contents to be shared, particularly linked to the research topics of the students. Some of these inquiries were: which is the relation among science-research and epistemology?, what is scientific knowledge?, how is scientific knowledge produced?, how are scientific statements supported?, which are the different criteria for science demarcation? Where is Pedagogy located in the epistemological spectrum?

These wires led to the creation of epistemological cores for the debate that fostered the construction of the structural theoretical basis needed for the process of scientific research. During the educative process it was also built, by the very students, a guide for the epistemological analysis of the scientific discourse, to the same extent in which essential scientific ideas were valued and synthesized. This let the students evaluate their learning achievements during their research project in a process of self-assessments, co- and hetero-evaluation.

This guide was synthesized in the following analysis indicators that functioned as guides for the contents, which in Graphic 1 are represented by the first stage of the process given by the relation established between Research methodology and Epistemology:

- Know how to debate about the conceptual and methodological content of their particular science in a dialectic relation with the nature of the scientific problem researched and the rest of the categories of the research design, emphasizing in critical-interpretative analyses, taken as epistemic and methodological synthesis.

- Know how to find and support conceptual and methodological similarities and differences among educational sciences, Pedagogy, Didactics and any other science that support scientifically the object studied, always keeping the epistemic nature of educational research.

- Know how to elaborate scientific conclusions and recommendations distinguishing among the interpretations made, from the scientific identity of the researcher.

- Know how to make reference to the literature consulted, as an indicator of the topicality and scientific relevance of the bibliography reviewed.

This epistemological analysis guide was useful to evaluate the quality of the research project being built. The interdisciplinary relation developed together with the rest of the subjects of this end-of-studies curricular unit, permitted, at the same time, the scientific observation, comprehension, explanation and interpretation of the professional essentailities and their implementation in educational scenarios through the design of the thesis project, which became the joint axes for the academic research management.

That is why this research was characterized by an essentially praxiological nature where the research practice was imbribated with the theoretical-structural basis being built, which was revealed in the different theoretical foundations of the theses.

Together with this dynamics, the subject Research Methodology emphasized the contextualization of the conflict situation, its causes, the problem of the investigation, the objectives (general and specific), the research inquiries, the problem’s justification, the types of research, methods, techniques and instruments, so as the tabulation process and analysis and interpretation of the results obtained.

This subject had an essentially practical, participative, systemic and interdisciplinary nature, because it rettook the contents already appropriated by the students in the previous university years and applied the new epistemological knowledge simultaneously built. The workshops done allowed revealing the gradual progress in the elaboration of the degree thesis.

This subject, together with the rest, proposed the students the four big fields of communicative performance (speaking, writing, listening and reading) as wide research objects which, at the same time, are coherent with the statements of the Common European Framework [7] and the National Curriculum Guidelines [8] and its specifications. This made it possible to target the theses projects to these four essential cores of scientific research in correspondence with the feasibility analysis and the research lines of the School of Languages and Linguistics.

From these essential research nuclei, the students selected one of these skills, according to the results of the diagnosis they made at the educative institutions and in the scientific inquiry process they précised the particularity that singularized each of their research, which later became the independent variable of their problems.

This organizational structure of the theses projects in these four essential research nuclei also permitted the selection of the tutors according to their scientific potentialities in each of the communicative skills.

This process empowers the research pyramid, where teachers-tutors could produce generative research incorporating into their
research process the results of formative research conducted by their mentees in these degree theses.

INTEGRATIVE SUBJECT: A HOLISTIC- CURRICULAR PERSPECTIVE OF THE PROFESSIONAL PERFORMANCE

Integrative Subject offered a holistic vision of the essential contents developed during the entire university course with research ends. It is centered in a transdisciplinary perspective where all necessary knowledge, skills and values were integrated around the solution to a real-life problem emerged from the students pre-professionals practices.

These contents are holistically integrated in this subject for the first time, to develop a professional researching competence because they were taught in a mainly fragmented way in independent subjects during the previous years.

Complementarity is assumed in here, as a principle it: “stresses the human inability to exhaust reality with a single perspective, view point or approach, i.e. with a single attempt to capture it. The richest description of any entity (...) could be achieved while integrating in a coherent and logical whole the contributions of different persons, philosophies, methods and disciplines” [9]

In this way, the student is able to assume the complex approach [10] as the only viable thought and action alternative to provide integrative and coherent responses to the problems of their educative-teaching practice.

Then, the student is able to systematize theoretical and methodological aspects related to philosophy, linguistics, pedagogy, foreign languages didactics, psychology, sociology, literature, history or other necessary sciences, achieving a conscious attitude, emanating from the research practice in real contexts, in the absence of borders between sciences.

This subject was organized around the research project in two big content cores, identified with receptive skills (reading and listening) and productive skills (speaking and writing). These two wide groups, then, in their inner subdivisions, coincide with the four big nuclei of the scientific organizational structure proposed to the students in Research Methodology, achieving in this way a functional interdisciplinary relation between these subjects.

In this process, both subjects agglutinated around the research topics selected by the students, providing them with the necessary tools to intervene in the educational practice.

This subject is also interrelated to Epistemology, because it facilitated the teachers- to-be the integrative understanding of the complex scientific nature of their professional performance, contributing in this way to achieve their graduate profile, through the four pillars of knowing, doing, being and living as teachers committed to the social improvement.

It is important to recognize that the academic- research integration management process, inside this Integrative Subject, implies a challenge for the teachers who dictate it, because as a sine qua non condition they should have a deep mastery of the profession’s essentialities and an up-dated development of the diversity of sciences that support their profession, the same as a deep didactic training, so as to allow them to promote this subject’s functional integration from the university classrooms to assist students- researchers in the creation process of a variety of theoretical frameworks and research proposals.

WRITING OR NARRATIVE? A TEXTUAL ARGUMENTATIVE CONSTRUCTION FOR THE COMMUNICATION OF RESEARCH RESULTS

The Reglamento al Régimen Académico [3] refers to the need of developing communicative skills for enhancing academic and scientific narratives. However, this term “narrative” has been identified indistinctively with terms such as: thesis, scientific text, research report and some other similar ones.

It is the interest of this article to precise that, according to the authors of this paper, it should be understood by narrative, the result of the systematic scientific, academic and professional textual production, during a wide period of time, which becomes an expression of the evolution and consequent variations in the epistemological and praxiological maturity of the producer.

Thus, a narrative could characterize any source of its production: individuals or groups of researchers -from a diversity or professions- or they may even come to characterize trends in the scientific production at institutions, enterprises or others, that -as big human groups- have been generating cyclically their own wisdom. [5]

In this way, an undergraduate or graduate thesis is not a narrative itself, but it is still a research memory or report which becomes part of the narrative of the author or of the people involved in its production and, at the same time, it is part of the narrative of the institution to which they belong.

A narrative, then, is generated by means of the socialized construction process of knowledge, which in a holistic way, reflects its evolutionary history and generates a culture of the scientific production.

Thus, students were trained in the construction of texts, through justification, scientific criticism, valuation in its interrelation with the hermeneutic processes of comprehension, explanation and interpretation. Then, obviously, it is far from a narrative and fully identifies with an argumentative text.

In this subject, training in scientific writing was deployed through process writing, privileging scientific style. So, in respect to lexis and grammar, writing was exercised to ensure that the written expression could be suitably adapted to the precision and accuracy of scientific thought.

Teachers emphasized the need for unambiguous and specialized words and abstract expressions that serve, for example, to summarize, to explicitly express relations of existence, possibility, necessity, causality, purpose, etc., which were set within the worked constructs.

Also, the stylistic construction of the textual syntax was potentiated, focusing attention on the correct use of compound sentences, passive voice and subordinate clauses until fourth grade, preferably using certain interrelating conjunctions.

It is pertinent to outline that the students were able to systematize in their praxis the writing process of their theses, from the academic- research context based on the American Psychological Association (APA) [11] rules, sixth edition in accordance to the regulations established at the Faculty.
Then, the bases were laid for students to join the much needed process of epistemic communication of the results of their research, revealing to the international academic community, the most significant aspects showed in their theses. Guidance on publications indexed in databases of international prestige, which could accept scientific articles of exploratory, descriptive and purposeful nature was also shared with the students, taking into account that these are the types of research they are used to develop during their culmination of studies process.

In this way, students were motivated to begin transiting, with the help of their tutors, through the complex stages of international publication in prestigious journals.

**CONCLUSIONS**

**Final and prospective considerations: coaching in the culmination of studies process.**

In general terms, in the four subjects the following teaching methods were used: project method, method by tasks and research method. Teachers became the students’ companions in this culmination of studies process. They also established a systematic and transdisciplinary process of assessment that evidenced the students’ achievements in the scientific research to get their university degree.

This assessment process did not include traditional written exams, but a final integrative evaluation of all the subjects that consisted on the discussion of the first draft of their theses.

The results obtained in this academic formation and formative research integration management for the culmination of studies process are encouraging. The total amount of the students registered in the culmination of studies curricular unit were able to hand in the registration forms of their theses with the necessary coherence and precision: the 83% passed the revision of the Academic Committee without objections and 17% passed this process with improvement suggestions.

Learning achievements were also evidenced in the scientific construction of the project; critical use of bibliographic sources consulted for the justification of the construction process of scientific knowledge, development of analysis and synthesis processes for the elaboration of summaries of ideas from other authors which enhanced its reconstruction and critical evaluation, establishment of comparisons of concepts, definitions, classifications, theories given by different authors in relation to the same research object which enhanced the scientific generalization and set the scientific concept of diversity from the various criteria of science demarcation already established by scientific communities; epistemological assumption of a defined position according to the scientific paradigm assumed by the researchers; recognition that the concepts, definitions, relationships, theories and concepts assumed play an essential role in the construction of scientific knowledge and need to be justified; collective construction of a guide for the epistemological analysis of scientific text, useful to evaluate the scientific knowledge construction process; development of creative transformative proposals for solving professional problems; wording consistent with the scientific style of partial reports of the research results and adequate use of methods, techniques and theoretical, empirical and statistical instruments.

However, up to now there are students that have not still being able to hand in the final version of their thesis, due to difficulties in the systematization of the tutorials they should have received after finishing the hours-classes planned for the subjects above described. That is why it is necessary to assume a new approach in relation to the tutorials of theses, which should go beyond the traditional review of the written report usually performed.

Thus, the authors of this article are proposing to train teachers in the up-dated processes of educational coaching, so that their work could transcend into a constant and personalized support to the students, where not only they will provide guidance regarding the research itself, but they would also motivate their tutored students to persevere in the process of completion of studies, beyond the difficulties that might appear.

Assuming the methodology of educational coaching in this area implies developing between teachers and students a professional and emotional commitment that must result in raising the quality of the process: “because it is understood that the application of coaching transports people from where they are today to where they want to be tomorrow, being the coach the facilitator of this trip” [12]

The authors of this article consider that this proposal should be implemented because, as it is stated by B. S. Mirón & J.B. Mundina [13]: “It is based on personal goal settings and in the implementation of a series of planned actions that allow the individual to implement certain ways of being and acting.”

It is also necessary to ensure the scientific up-dating of teachers in relation to the complex approach from the pedagogical sciences and enhance their flexibility to integrate parts of a process that can no longer remain fragmented, into a single whole.

Likewise, teachers should get involved in the generative research institutional processes; otherwise they could be dealing in classes with a process that is far from their professional performance: only who performs in the same professional field that he promulgates, would be able to go deep on it, without fear to the risks of uncertainty.

Finally, it must be stated that this praxiological research has revealed an essential logic for the management process of the completion of studies in higher education based on the integration of academic and formative research.

These research results are feasible to be generalized to a variety of university courses, having as an essential condition the mastery of the profession in its interrelation with the given university curriculum, so that this proposal could be contextualized.

**REFERENCES**


